



Towards the design of a Reflexive Regulatory Framework to “Reduce and Control Emissions from Land Deforestation and Degradation and Enhancing Carbon Stocks” (REDD+):
A perspective from Select Developing Countries

By:

Ngaya Anael Munuo
(BA, BA (Hons), MPhil (Law) UWC)

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Supervisor:

Prof. Jan Glazewski, Institute of Marine and Environmental Law, University of Cape Town

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Abstract

REDD+ has emerged as one of the governance approaches to address climate change. It calls for developing countries to take part in a second commitment period for a post-2020 climate change regime under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC) and outside the UNFCCC. The goal of REDD+ is that host countries will receive, *inter alia*, financial compensation if they choose to conserve their forests rather than convert them to non-forest land use. Such compensation is for significant emission reductions which are reasonably attributable to human activities. This implies that REDD+ implementation at a domestic level will require allocation of burdens and benefits. In light of this implication, many scholars suggest that the design of the policy and legal framework to this effect must strike a balance between equity, environmental effectiveness and cost-effectiveness (commonly referred to as the 3Es) to be deemed successful.

Against this background, this thesis questions: what is the optimal (and feasible) model legislative framework sufficient to implement REDD+? It argues that REDD+ should be defined as a self-regulatory system. This view directs attention toward a distinctive regulatory framework. Thus the thesis suggests that one possible legal framework that holds that potential in Tanzania and Indonesia is reflexive law. The research draws on international best practice and numerous innovative governance models from different fields and proposes essential elements to substantiate its position.

This study reflects REDD+ developments up to 31 December 2015.

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Dedication

To Munuo's Family.

Declaration

I, Ngaya Anael Munuo, declare that “Towards the design of a Reflexive Regulatory Framework to “Reduce and Control Emissions from Land Deforestation and Degradation and Enhancing Carbon Stocks” (REDD+): A perspective from Select Developing Countries” is my work and that it has not been previously submitted in whole, or in part, for the award of any degree or qualification at any university. All the sources used, referred to or quoted have been duly acknowledged.

Ngaya Anael Munuo

Signed.....

31 December 2015

List of Abbreviations

3Es	Equity, Environmental-Effectiveness and Cost-Effectiveness
AAUs	Assigned Amount Units
AFOLU	Agriculture, Forestry and other Land Uses
AWG-LCA	Ad Hoc Working Group on Long-Term Cooperative Action
CBD	Convention on Biological Diversity
CBFM	Community Based Forest Management
CCBS	Climate, Community and Biodiversity Standards
CDF	Clean Development Fund
CDM	Clean Development Mechanism
CBDR	Common but Differentiated Responsibility
CBDR&RC	Common but Differentiated Responsibility and Respective Capabilities
CBA	Cost-Benefit Analysis
CEA	Cost-Effectiveness Analysis
CER	Certified Emissions Reduction
CFM	Community Forest Management
COP	Conference of the Parties
DC	District Commissioner
DoE	Division of Environment
EA	Environmental Assessment
EC	European Council
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
ESMF	Environmental and Social Management Framework
ERs	Emission Reductions
ET	Emissions Trading
EU ETS	European Union Emissions Trading System
FAO	United Nations Food and Agriculture Organization
FPIC	Free, Prior, and Informed Consent
FCPF	Forest Carbon Partnership Facility
FDI	Foreign Direct Investment
FIP	Forest Investment Programme
FIFA	Federation of International Football
FSF	Fast-Start Finance
GHGs	Greenhouse Gases
ICJ	International Court of Justice
INCD	Intergovernmental Negotiating Committee
IPCC	Intergovernmental Panel on Climate Change
JFM	Joint Forest Management
LGAs	Local Government Authorities
LoI	Letter of Intent
LULUCF	Land Use, Land-Use Change and Forestry
MNRT	Ministry of Natural Resources and Tourism
MoFo	Ministry of Forestry
MOP	Meeting of the Parties to the Kyoto Protocol
MRV	Measurement, Reporting and Verification
NAMA	Nationally Appropriate Mitigation Commitments or Actions
NAP	National Action Plan

NCCC	National Council on Climate Change
NDCs	Nationally Determined Contributions
NGOs	Non-Governmental Organizations
NLBI	Non-Legally Binding Instrument on all Types of Forests
NRTF	National REDD+ Task Force
JFM	Joint Forest Management
ODA	Official Development Assistance
PES	Payment for Environmental Services
PFM	Participatory Forest Management
RAS	Regional Administrative Secretary
RC	Regional Commissioners
REDD+	Reducing emissions from terrestrial deforestation and forest degradation and enhancement of carbon stocks
REL/RL	Reference Emissions Levels/Reference Levels
SAA	South African Airways
SBSTA	Subsidiary Body of Scientific and Technological Advice
SESA	Strategic Environmental and Social Assessment
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UNCCD	United Nations Convention to Combat Desertification
UNCED	United Nations Conference on Environment and Development
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
VCS	Verified Carbon Standard
VCSA	Voluntary Carbon Standard Association
VCUs	Verified Carbon Units
VER	Verified Emissions Reduction
VPO	Vice-President's Office
WMA _s	Wildlife Management Areas
WMO	World Meteorological Organization
WRI	World Resources Institute
WTO	World Trade Organization

Chapter One:

Introduction and Background

1.1 Introduction

In an effort to address climate change in a post-2020 climate change regime under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC) and outside the UNFCCC regime,¹ parties are encouraged to *inter alia* take action to implement and support policy approaches and positive incentives for activities relating to “reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks” (REDD+) in developing countries.² According to the UN REDD+ programme:³

Reducing Emissions from Deforestation and Forest Degradation (REDD) 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. "REDD+" goes beyond deforestation and forest degradation, and includes the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.

The emphasis raised by the above view is a response to the demand for compensation advocated by developing countries in exchange for allowing their forests to be treated as a climate mitigation issue. In this vein, the then Prime Minister of Malaysia (Mahathir bin Mohamad) shortly before the 1995 Earth Summit asserted:

if it is in the interests of the rich that we do not cut down our trees then they must compensate us for the loss of income.⁴

It follows that the goal of REDD+ is that its host countries will receive “positive incentives” if they choose to conserve their forests thereby reducing carbon emissions rather than

¹ Article 9 (1)-(2) read together with article 5 (2) of the UNFCCC/CP/2015/L.9/Rev.1 (hereinafter the Paris Agreement).

² Article 5 (2) of the the Paris Agreement.

³ The UN-REDD Programme. Available: <http://www.un-redd.org/aboutredd> [accessed 1 February 2013].

⁴ Humphreys D., *The politics of “Avoided Deforestation”: Historical context and contemporary issues*, (2008) at 436 citing Mahathir, B.M., (1992).

converting them to non-forest land use which emits carbon.⁵ Such compensation is for significant emission reductions which are reasonably attributable to human interventions.⁶ For REDD+ to receive such incentives, particularly under the UNFCCC process, they must be “results-based” and be fully measured, reported and verified.⁷

However, REDD+ is a phenomenon.⁸ Its definition is fluid and therefore it means different things to different countries, organisations and individuals.⁹ Some have defined it as an objective rather than a clearly delineated set of activities or actions.¹⁰ The lack of clear definition of REDD+ compounded by multi-dimensional aspects of causes of deforestation and degradation raise a problem for decision-makers to devise regulatory rules to govern the implementation of such a fuzzy concept. The leading scholars in the field of climate change argue that the implementation of REDD+ at a domestic level implies that the mechanism requires allocation of burdens and benefits by a means of a regulatory framework.¹¹ In order for REDD+ to be considered successful, the design of its regulatory framework should strike a balance between equity, environmental-effectiveness and cost-effectiveness, commonly known as the 3Es.¹²

In order to devise regulatory rules to govern the implementation of a REDD+ mechanism, this thesis defines REDD+ as a self-regulatory system (elaborated on in chapter 4). This view arises out of the core idea that REDD+ is based on incentives. The manner in which such incentives are entrenched and regulated reveals characteristics similar to “self-regulation”. The concept of a self-regulatory system directs attention toward the distinct policy implications as discussed in chapter 8. The main argument is that reflexive law holds potential to become the optimal and feasible legislative framework sufficient to give effect to REDD+.

⁵ Karsenty A. et. al., “Carbon rights”, REDD+ and payments for environmental services. (2012) *Environmental Science* at 3 and 24.

⁶ Ibid.

⁷ Decision 1/CP.16 para 73.

⁸ Voigt C., Introduction: The Kaleidoscopic World of REDD. *University of Oslo Faculty of Law Legal Studies Research Paper Series* No. 2015-22. (2015) at 1.

⁹ Angelsen A. (ed), *Realising REDD+ National Strategy and Policy Options*. (2009) at 2.

¹⁰ Angelsen A. (ed), *Moving Ahead with REDD Issues, Options and Implications*. (2008) at 11.

¹¹ Angelsen A. (ed), *Realising REDD+ National Strategy and Policy Options*. (2009). See also Luttrell, C., L. et al., Who should benefit and why: Discourses on REDD+ benefit sharing. In Angelsen A., et al. (eds.), *Analysing REDD+: Challenges and Choices*. (2012) at 141.

¹² Ibid. See also Visseren-Hamakers I.J. et. Al., Interdisciplinary perspectives on REDD+. (2012) 4: *Current Opinion in Environmental Sustainability* 587–589.

Gunther Teubner pioneered the concept of reflexive law as a response to the problem of “regulatory trilemma”. The concept of regulatory trilemma is formulated by observations of the interactions and inappropriate relation between the political system (political decision), the legal system (legal norm-making), and the social area of life (social guidance).¹³ The author explains regulatory trilemma by asserting that every regulatory intervention which goes beyond the limits of the respective self-regulation is either irrelevant or produces collapsing effects on the social area of life or else disintegrating effects on regulatory law itself.¹⁴ As noted by Black, the failure of command and control regulation (the main regulatory approach to forestry and currently considered for REDD+ in the two case study countries of this thesis),¹⁵ is precisely because it disregards the limits of self-reproduction of the involved sub-systems.¹⁶ Reflexive law seeks to structure bargaining relations so as to equalise bargaining power, and at the same time seeks to subject contracting parties to mechanisms of “public responsibility”. In this way, reflexive law opens vital new perspectives on the role of law.¹⁷ The point of departure however, is to know who or what needs to be regulated where and when. These elements have a direct bearing on the distribution of costs and benefits. These elements are discussed in chapter 4. These factors may vary in each country and therefore it is imperative to discuss them case by case as illustrated in chapters 6 and 7. In what follows, the chapter briefly discusses the general bio-physical considerations, causes of forest deforestation and degradation and policy responses, followed by potential problems likely to be caused by the implementation of a REDD+ mechanism.

Bio-physical Considerations, Causes of Forest Deforestation and Degradation and Policy Responses

The burning of fossil fuel and land use changes have emitted, and are continuing to emit, significant quantities of carbon dioxide equivalent (CO₂e) gases (hereinafter carbon) into the atmosphere.¹⁸ The contribution from fuel burning was estimated to be 26.4 billion metric tons per year in 2000-2005, and the contribution from land use change was estimated at 5.9 billion

¹³ Teubner G., “Juridification”, in G. Teubner (ed.), *Juridification of Social Spheres: A Comparative Analysis in the Areas of Labor, Corporate, Antitrust and Social Welfare Law*, (1987), 3-48 at 21.

¹⁴ Teubner G., *Juridification of Social Spheres, A Comparative Analysis in the Area of Labor, Corporate, Antitrust and Social Welfare Law*, Series A Law, European University Institute (1987) at 21.

¹⁵ See chapters 6 and 7.

¹⁶ Black J., Constitutionalising Self-Regulation. (1996) *The Modern Law Review* 24-55 at 26.

¹⁷ Gaines S.E., Reflexive Law as a Legal Paradigm for Sustainable Development. (2002-2003) 10 *Buffalo Environmental Law Journal* 1 at 3.

¹⁸ UNFCCC, Climate Change: Impacts, vulnerabilities and adaptation in developing countries, (2007) at 8. Available: <http://unfccc.int/resource/docs/publications/impacts.pdf> [accessed 2 March 2013].

metric tons per year during the 1990s.¹⁹ As a result, carbon emissions have caused a rise in the amount of heat from the sun and is attributed to climate change. The main attributes of climate change are increases in average global temperature (global warming); changes in cloud cover and precipitation particularly over land; melting of ice caps and glaciers and reduced snow cover; and increases in ocean temperatures and ocean acidity.²⁰ Carbon is directly emitted from land-use (mainly from terrestrial deforestation and forest degradation) when forest biomass is burned and indirectly after land-use change takes place, resulting in further decomposition of organic matter, soil respiration and soil degradation and erosion processes.²¹ The third Intergovernmental Panel on Climate Change (IPCC) study estimates that tropical deforestation and forest degradation contribute approximately 17 per cent of global anthropogenic carbon emissions each year.²² This contribution is more than the emissions from all cars, trains and planes in the world combined.²³ But a more recent study has lowered that share to about 12 per cent relative to the year 2008.²⁴

Conversely, avoiding deforestation and degradation as well as sustainable management of forest activities increases the sequestration of carbon both in the forests and soil. It is estimated that the world's forests store more than 650 billion tonnes of carbon, 44 per cent in the biomass, 11 per cent in dead wood and litter, and 45 per cent in the soil.²⁵ This is the reason why REDD+ is increasingly being considered a critical mitigation measure within the negotiations of a second commitment period for a post-2020 climate regime. This is particularly so as it has become increasingly clear that developed countries' mitigation actions alone are not sufficient to meet the overall objective of mitigating climate change

¹⁹ Solomon S. et al. (eds.), Intergovernmental Panel on Climate Change, *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change 2–3* (2007).

²⁰ Ibid., UNFCCC, *Climate Change: Impacts, vulnerabilities and adaptation in developing countries*, (2007) at 8.

²¹ Schulze et al., "Human influence on carbon balance and significance for global climate", in (2002) *Plant Ecology, Berlin: Springer-Verlag*, 641–648.

²² Parry M. et., (eds), Intergovernmental Panel on Climate Change Third Assessment Report. *Climate Change: Impacts, Adaptation, and Vulnerability*, (2007) at 213.

²³ Department of Energy and Climate Change, "Fast start climate change finance". (2010) *London: Department of Energy and Climate Change*, at 5.

²⁴ Arcidiacono-Bársony C. et. al., REDD Mitigation. *6 Procedia Environmental Science*, (2011), 50-59. Also see Le Quéré, C. et al., "Trends in the sources and sinks of carbon dioxide", (2009) *2 Nature Geoscience* 831-836.

²⁵ FAO., *Global Forest Resources Assessment (2010) 163-Main report FAO Forestry Paper*, Rome Italy at 11.

provided by the UNFCCC.²⁶ Therefore the trading of this carbon value represents some economic opportunities for developing countries with terrestrial forest resources.²⁷

1.2 The Problem

The international negotiations of a second commitment period for a post-2020 climate regime (elaborated on in chapters 3 and 4), have expanded to include consideration of policies and legislative frameworks that would support REDD+ activities.²⁸ But there are diverse views on what the key problems are and how to realise the goals of REDD+.²⁹ Many scholars suggest that key issues with legal implications to be addressed are the possible risks of REDD+ not achieving emission reductions, potential human rights violations, and the possible risks of REDD+ for biodiversity (the next sections elaborate on these key issues).³⁰ The addressing of these issues under REDD+ will be likely mostly a nationally-driven exercise.³¹ To this end, this study examines the case studies of Tanzania and Indonesia (elaborated on in section 1.6).

²⁶ Henry M. et. al., Implementation of REDD+ in sub-Saharan Africa: state of knowledge, challenges and opportunities. (2011) 16: 04 *Environment and Development Economics* 381-404 at 382.

²⁷ Apart from local and global climate regulation, other roles of forests are well known. Forests ameliorate weather events, regulate the hydrological cycle, provide a habitat for biodiversity, protect watersheds and their vegetation, water flows and soils, and provide a vast store of genetic information much of which has yet to be revealed. The value of forests can also be discerned from socio-economic analysis. For example, on average, forestry contributes to about 6 per cent of Gross Domestic Product (GDP) in Africa but in tropical African countries, such contribution is 13 per cent. There is also increasing empirical evidence that non-market forest use values play a particularly important role for poorer and more vulnerable sectors of the population. See Secretariat of the Convention on Biological Diversity. the value of forest ecosystems. Montreal, SCBD, 67p. (CBD Technical Series no. 4) (2001). Angelsen A. et. al., Counting on the environment forest incomes and the rural poor. *Environmental Economics Series*, Paper No.98, World Bank Environmental Department, World Bank, Washington, D.C. (2004). Emerton L., Tropical forest valuation: has it all been a futile exercise? A paper submitted to the XII World Forestry Congress, Quebec City, Canada (2003). Available: <http://www.fao.org/docrep/ARTICLE/WFC/XII/MS3-E.HTM> [accessed 2 March 2013].

²⁸ FCCC/AWGLCA/2009/8, Negotiating Text. Available: <http://unfccc.int/resource/docs/2009/awglca6/eng/08.pdf> [accessed 10 April 2013], also see Decision 1 CP.16, in Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010. FCCC/CP/2010/7/Add.1. and Convington & Burling LLP, Baker & McKenzie. Background analysis of REDD regulatory frameworks. A report prepared for The Terrestrial Carbon Group and UN-REDD Programme (2009).

²⁹ Angelsen A. et.al., *Analysing REDD+: Challenges and choices*. (2012) at 5.

³⁰ Cotula L. and Mayers J., Tenure in REDD-Start-point or afterthought? *International Institute for Environment and Development* (2009). Also see Angelsen A. (ed), *Moving Ahead with REDD: Issues, Options and Implications*; (2008). Sunderlin W.D., How are REDD+ Proponents addressing tenure problems? Evidence from Brazil, Cameroon, Tanzania, Indonesia, and Vietnam. *World Development* (2013). Lyster R, et al., *Law, Tropical Forests and Carbon: The Case of REDD+*. (2013). Angelsen A. et.al., *Analysing REDD+: Challenges and choices*. (2012). Pistorius T. et. al., Greening REDD+: Challenges and opportunities for forest biodiversity conservation. *Policy Paper*, University of Freiburg German (2011). Tyrrell T.D and Alcorn J.B., Analysis of possible indicators to measure impacts of REDD+ on biodiversity and on indigenous and local communities. *A report to the Convention on Biological Diversity*. Tentera, Montreal, Canada (2011).

³¹ Boyle J. and Murphy D., Designing Effective REDD+ Safeguard Information Systems: Building on existing systems and country experiences, IISD, (2012) Available: <http://www.iisd.org/publications/pub.aspx?id=1699>, [accessed 10 April 2013] as cited by IISD Reporting Services. Available: <http://forests-1.iisd.org/policy-updates/reddy-to-put-the-jigsaw-together/> [accessed 10 April 2013].

Potential Human Rights Violations

As REDD+ revenues become increasingly likely, government and non-government actors alike may have strong incentives to passively ignore or actively deny the land and resource rights of indigenous, traditional, and/or poor forest users in order to position themselves to claim compensation for REDD+ related activities.³² It is reported that “some indigenous communities have been strongly opposed to REDD+ from the outset.”³³ They (in their view), consider it as the latest form of western imperialism and the “commodification of nature” which will only restrict their freedom to continue traditional forest practices and lead to “land grabbing” by “carbon cowboys” who are eager to capitalise on REDD+ revenues.³⁴

A second human rights concern raised by REDD+ implementation is the prospect of increased law enforcement efforts to deal with illegal logging.³⁵ High profile “crackdowns” to deal with forest crime tend to discriminate in favor of those with the means to pay off law enforcement and judicial officials.³⁶ Subsequently, REDD+ inspired law enforcement efforts could lead to an increase in arbitrary arrest and detention.³⁷

Possible Risks of REDD+ not achieving Emission Reductions

A set of difficult issues must be addressed in order to achieve emission reductions. These are (1) additionality concerns; i.e. how to ensure that any credited emission reductions are real, that is, additional to what would happen without REDD+, (2) permanence of the offset; i.e. how to ensure that any emission reductions are permanent – that trees saved this year will not be felled in the following year(s), (3) leakage concerns; i.e. how to avoid leakage – that trees saved within a country or project area do not lead to more trees being chopped down elsewhere, (4) Monitoring, Reporting and Verification (MRV) concerns; i.e. how are emission reductions to be monitored, reported and verified (particularly if forest data are poor or do not exist)? (5) double-counting concerns, i.e. internationally-funded demonstration projects not connected to a national REDD+ accounting scheme are allowed at sub-national

³² Seymour F., *Forests, Climate Change, and Human Rights: Managing Risks and Trade-offs*. CIFOR Bogor, Indonesia (2008) at 11. Available: <http://www.cbd.int/doc/meetings/tk/redd-ilc-01/other/redd-ilc-01-cifor-en.pdf> [accessed 15 April 2013].

³³ Lyster R, et al., *Law, Tropical Forests and Carbon: The Case of REDD+*, (2013).

³⁴ Ibid.

³⁵ Tacconi, L.(ed), *Illegal Logging: Law Enforcement, Livelihoods, and the Timber Trade*. (2007).

³⁶ Larson A. and Ribot, J., “The poverty of forestry policy: double standards on an uneven playing field”, *Sustainability Science* (2007) at 8. Available: <http://www.springerlink.com>. [accessed 15 April 2013].

³⁷ Ibid., Seymour F., (2008) at 11.

levels only on a short-term basis, if not “nested” into national REDD+ frameworks, current REDD+ projects and sub-national demonstrations may not be accepted as part of the national REDD (since Phase 3 will require MRV for emission reductions),³⁸ in the current form. If accepted, they could potentially generate large-scale mismatches, accompanied by risks of double counting of emission reductions, leakage, conflicts with national rules on benefit sharing, reference levels and risks of lack of integrity in general,³⁹(6) baselines and national reference levels: i.e. the levels at which a country should start being credited for emission reductions or penalised for emissions increase, based on the interpretation of principles such as “common but differentiated responsibilities” and “relevant national circumstances”. The reference levels will have a major impact on (financial and/or technology) benefits and thus be a political issue, and (7) compliance and enforcement⁴⁰ which relates to the challenges of conceptualising carbon rights as property rights and forest law matters.⁴¹

Possible risks of REDD+ for biodiversity

While REDD+ offers powerful synergies for complementing the Convention on Biological Diversity (hereinafter CBD) goals, it also presents potential problems that could undermine CBD goals.⁴² These include (a) the conversion of natural forests to plantations and other land uses of low biodiversity value and the introduction of the growing of biofuel crops; (b) the displacement of deforestation and forest degradation to areas of lower carbon value and high biodiversity value; (c) increased pressure on non-forest ecosystems with high biodiversity value; and (d) afforestation in areas of high biodiversity value.⁴³

1.3 The Research Question

The central question to be answered by this thesis is: *what is the optimal and feasible model legislative framework sufficient to implement REDD+ in developing countries?* Following on this overarching question, a number of sub-questions arise:

³⁸ UNFCCC Decisions 4/CP.15 and 1/CP.16.

³⁹ Minang P.A. and Noordwijk M., Design challenges for achieving reduced emissions from deforestation and forest degradation through conservation: Leveraging multiple paradigms at the tropical forest margins. (2013) 31 *Land Use Policy* 61–70 at 64.

⁴⁰ Angelsen A.(ed), *Moving Ahead with REDD Issues, Options and Implications*. (2008) at 2.

⁴¹ Robles F.F., Forest Carbon Tenure in Asia-Pacific: A comparative analysis of legal trends to define carbon rights in Asia-Pacific. (2012) *FAO Legal Papers Online* 89 at 8.

⁴² Tyrrell T.D and Alcorn J.B., Analysis of possible indicators to measure impacts of REDD+ on biodiversity and on indigenous and local communities. *A report to the Convention on Biological Diversity*. Tentera, Montreal, Canada (2011) at IV.

⁴³ Secretariat of the Convention on Biological Diversity (CBD), REDD-plus and Biodiversity. CBD Technical Series No. 59 (2011) at 12.

1. What is REDD+? This question is addressed in chapter 4. This is instructive in deciding the building blocks for the optimal and feasible legislative framework sufficient to implement REDD+ which is discussed in chapter 8
2. Which principles of equity should be applied in distribution of costs and benefits? Are concepts of equity, environmental-effectiveness and cost-effectiveness contradictory? Furthermore, will the implementation of REDD+ which is equitable, environmentally-effective and cost-effective require trade-offs? To this end chapter 2 provides analysis of the principles of equity for designing a regulatory framework for REDD+. Chapter 7 in turn discusses these principles and the extent to which they are applied or proposed in the REDD+ regulatory frameworks for Tanzania and Indonesia
3. What is the place of REDD+ within international climate law and policy? This is the subject of chapter 3 which traces the history of international negotiations which gave rise to REDD+ with the view to understanding the intentions/interests of both developing and developed countries. In addition, this chapter establishes the legal relevance of REDD+. This is instructive in deciding the legal nature of the domestic regulatory framework for REDD+ in chapters 8 and 9
4. What is the property nature of carbon rights and what are the implications for the governance of REDD+? This question is the subject of chapter 5
5. What are the existing forest governance, compliance and enforcement of forest approaches in the case studies? This aspect is addressed in chapter 6
6. What regulatory nuts and bolts are envisaged in the case studies' regulatory legal frameworks for REDD+? This aspect is addressed in chapter 7
7. Should the REDD+ mechanism in Tanzania and Indonesia be regulated by the regulatory approach envisaged in point 6 above? If not, what other regulatory framework would be optimal and feasible? What might this new regulatory framework look like? This question is addressed in chapters 8 and 9.

1.4 Aim and Objectives

All of the above questions revolve around one basic issue: the distribution of costs and benefits in REDD+ activities. Thus the aim of this study is to compare international best practices and make recommendations for the optimal and feasible model legislative framework sufficient to give effect to REDD+ in two case study countries. The objectives are to:

1. Identify principles of equity that may give guidance to implementation of REDD+ activities
2. Identify the legal relevance of REDD+
3. Investigate the key governance architecture of REDD+ that reveals its definition
4. Discuss the property nature of carbon rights and implications for the governance of REDD+
5. Describe forest governance in Tanzania and Indonesia
6. Establish the regulatory approach taken or envisaged for REDD+ in each case study
7. Use the results of the above objectives to further the understanding of the limitations of the past/existing policy and laws to have sustainable management of forests and in the area of REDD+ and suggest innovative regulatory frameworks to give effect to REDD+ that holds the potential of balancing the 3E outcomes

1.5 Research Methodology

The methodology for this research was a comparative approach in a desk-based context. This entailed plurality-focused legal analysis where the concept of “law” was reconsidered from both the state and non-state actors. This entailed analysis of principles, concepts, policies, legislative provisions and regulations, international instruments,⁴⁴ interdisciplinary and institutional approaches⁴⁵ that countries have already implemented or begun implementing in

⁴⁴ The list of such instruments include: Convention on Biological Diversity (Rio de Janeiro) 5 June 1992, in force 29 December 1993, United Nations Framework Convention on Climate Change (UNFCCC) 9 May 1992, in force 24 March 1994, International Covenant on Economic, Social and Cultural Rights, 16 December 1966, in force 3 January 1976, and the Universal Declaration on the Rights of Indigenous Peoples, UN Doc.E/CN.4/Sub.2/1991/40/Rev.1.

⁴⁵ This includes bilateral and multilateral initiatives such as the World Bank's Forest Carbon Partnership Facility, the UNREDD Programme, Australia's International Forest Carbon Initiative, and the Norwegian Government's International Climate and Forestry Initiative and the approaches to develop an early voluntary carbon market.

REDD+ activities in selected REDD+ pilot projects. This analysis allows development of a conceptual framework in chapter 2. Thus chapter 7 assesses the domestic legal and policy approaches to REDD+ against a conceptual framework set out in chapter 2 in order to judge whether such regulatory framework can be an optimal and feasible model legislative framework sufficient to implement REDD+ in developing countries. The conceptual framework is also used in the assessment of how the 3Es can be assessed in the new model discussed in chapter 8, and how 3Es can be incorporated in model REDD+ law in chapter 9. The reasons for choosing this approach were motivated by the well-known view that the state-centric governance model has been inadequate and it is now well established that governance studies must constitute a plural approach.⁴⁶ Thus it was anticipated that through this approach, this study can assist the design of the optimal and feasible model legislative framework sufficient to implement REDD+. To this end, all efforts were employed to establish and maintain a neutral position for academic debate.

1.6 The Domestic Application of the Study

At present, REDD+ is being piloted in a number of developing countries on a voluntary basis.⁴⁷ However, until 2013, only Brazil, Indonesia, Tanzania and Vietnam had national REDD+ programmes/strategies that regulate the distribution of REDD+ finance.⁴⁸ This influenced the study to focus on Tanzania and Indonesia. The emphasis on Tanzania was because of the two main reasons (elaborated on in chapter 7). First, it received technical and financial support to prepare national REDD+ strategies and to pilot REDD+ activities. Secondly, Tanzania had already approved a national REDD+ strategy (in comparison to other African countries under the REDD Programme)⁴⁹ which is the main framework for implementing REDD+ activities.⁵⁰ Indonesia was selected because it had developed a national REDD+ strategy and sub-national regulations (issued by different government departments) for implementation of the REDD+ mechanism. Thus the Indonesian case study

⁴⁶ See different academic literature on: reflexive law, polycentric systems, network governance, nodal governance, responsive regulation and smart regulation in chapter 8.

⁴⁷ The UN-REDD Programme. Available: www.un-redd.org [accessed 21 April 2013].

⁴⁸ Thuy P.T. et.al., Approaches to Benefit Sharing: A Preliminary Comparative Analysis of 13 REDD+ Countries (2013) at 6. Available: http://www.cifor.org/publications/pdf_files/wpapers/wp108pham.pdf [accessed 21 April 2013]. Convington & Burling LLP, Baker & McKenzie. Background analysis of REDD regulatory frameworks. A report prepared for The Terrestrial Carbon Group and UN-REDD Programme (2009) at 11.

⁴⁹ At the time of selection, the other countries were Republic of the Congo, Democratic Republic of Congo (DRC), Zambia and Nigeria. Ibid fn 47.

⁵⁰ Tanzanian REDD reading progress fact sheet. October (2012) at 4. National REDD+ Strategy Development and Implementation Process in Tanzania. Mid Term Review, Final Report. April, (2013) at v.

reflects a dichotomy of domestic applications of regulations (elaborated on in chapter 7). Arguably, such a focus was expected to broaden the scope of inquiry in demonstrating how the country is envisioning the practical applications of such regulations at different levels.

A question might be asked about the title of the study: Why “a” perspective from select “developing countries” as they are equal partners and in line with the concept of “CBDR”?⁵¹ Historically the debate over legal frameworks for climate change mitigation has been dominated by views from developed countries. This is partly so because developed countries have largely been implementing climate change mitigation projects as part of their commitment under the Kyoto Protocol. Thus the involvements of developing countries have been minimal and deployed at point sources as part of the Clean Development Mechanism.⁵² Indeed, the views of developed countries and developing countries must be borne in mind in climate change mitigation. One author who recognises this distinction is Mumma. He notes that developed countries have predominantly seen climate change as an environmental issue while the South presents it as a development issue.⁵³ Developing countries, speaking through the G77 and China grouping, have maintained that international climate change mitigation efforts must not hinder their ability to develop.⁵⁴ In noting the paper indicating the African position in climate change negotiation, it was noted that "objectives of reducing or avoiding emissions should be understood to mean slowing the rate of growth in emissions from developing countries, not as achieving reductions in absolute terms from current levels."⁵⁵ The author argues that this position could have been strengthened by providing the reasons as to why this is important. Mumma goes on to explain in separate paragraphs that:

[carbon emissions] are strongly related to economic growth and standards of living. Indeed, in the context of the global warming debate, they have become a proxy for living standards: the higher a country's living standards, the higher its emissions tend to be, and vice versa.⁵⁶ [...] Africa is therefore not in a position to benefit significantly from [climate change mitigation] projects unless ‘additionality’ is interpreted so as to include the avoidance of future emissions.⁵⁷

Arguably the above revelations should be viewed as the core elements that form the perspective of developing countries and should inform the type of regulatory framework for

⁵¹ This concept is elaborated on in chapter 2.

⁵² For more discussion on climate change mitigation see chapter 3.

⁵³ Mumma A., *The Poverty of Africa's Position at the Climate Change Convention Negotiations*. (2000) 19:1 *UCLA Journal of Environmental Law and Policy*, at 187.

⁵⁴ *Ibid* at 187.

⁵⁵ *Ibid* at 200.

⁵⁶ *Ibid* at 204.

⁵⁷ *Ibid* at 207.

REDD+. This perspective can help to predict how the law will work in practice.⁵⁸ Thus it is the view of this study that transplanting the legal architecture for climate mitigation from developed countries may fail to take into account the unique circumstances that face developing countries.

The use of the indefinite article, i.e. “a” perspective [...] instead of “the” perspective [...], is a conscious one. While the latter seems to imply that there is a monolithic developing countries’ perspective when it comes to climate change mitigation, the former approach (which is adopted by this thesis) implies a more narrow scope of generalisation which is mainly (but, of course not completely) applicable to all developing countries. For instance, in the context of African states, Scholtz and others argue that member states have different interests, which may hinder the development of a “common interest”.⁵⁹ Likewise, Hoste noted that a political agreement reached at COP-15 between the USA, China, India, Brazil and South Africa created another division because the rest of the countries simply "took note of it", most with resignation, many with anger.⁶⁰ The lack of opportunity for the rest of developing countries to express their unique circumstances in this context is an indication of the lack of common interest.

1.7 Contribution of this Study

There are numerous publications on legal and policy issues for REDD+. What would be the contribution of this thesis? First, the thesis comprehensively covers all the major issues under the UNFCCC negotiations relevant for REDD+. Second, following from the first, it analyses such issues (see section 1.2 of the statement of the problem) and proposes a regulatory policy and legal framework option(s) for implementing REDD+ activities in developing countries. To the best of the writer’s knowledge, no detailed evaluations of these issues have been undertaken with the view to proposing a policy and legislative framework for the implementation of the REDD+ mechanism at a domestic level particularly from developing

⁵⁸ Contextual circumstances has been widely cited as indicators as to how law is expected to work in practice. See for instance Habermas J., *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy*. (1998) at 221.

⁵⁹ Scholtz W., The promotion of regional environmental security and Africa's common position on climate change. (2010) 10:12 *African Human Rights Law Journal* 1-25 at 18. Ibid Mumma A., (2000) at 205. Also see Ruppel O.C. and Ruppel-Schlichting K., The BRICS Partnership: Development and Climate Change Policy from an African Perspective. In Ruppel O.C. et. al., *Climate Change: International Law and Global Governance. Volume II: Policy, Diplomacy and Governance in a Changing Environment*. (2013) at 99.

⁶⁰ Hoste J., Where was united Africa in the climate change negotiations? Available: http://www.edc2020.eu/fileadmin/Textdateien/post_COP_15_briefing/Jean_Christophe_Hoste_-_Where_was_united_Africa_in_the_climate_change_negotiations_-_EDC_2020.pdf [accessed 1 May 2013].

countries' perspective. Therefore, the contribution of this thesis has been ultimately to identify essential elements of an optimal and feasible model legislative framework sufficient to implement REDD+ at a domestic level. Specific contributions to support this overall objective are discussed in chapter 9.

1.8 Structure of the Study

Chapter 2 discusses the conceptual framework for the study. It reviews, examines and defines REDD+ related principles and concepts necessary for allocation of costs and benefits. This chapter seeks to answer two questions. First, it inquires whether equity, environmental-effectiveness and cost-effectiveness are contradictory principles. Secondly, it investigates whether or not the implementation of REDD+ which is equitable, environmentally effective and cost-effective will require trade-offs. It begins by identifying principles and concepts that could apply to REDD+ and uses them to develop the conceptual foundations for a policy and legal framework. Further, the chapter points out the strengths and weaknesses of each of the principles and concepts without necessarily taking a position on which of the principles should be adopted when one is dealing with the question of allocating burdens and benefits in the context of the REDD+ mechanism. The chapter concludes by raising practical questions regarding these principles. Having analysed the conceptual framework, chapter 3 explores historical developments of international negotiations which gave rise to REDD+ with the view to understanding the legal relevance of REDD+. Chapter 4 seeks to define what is meant by a REDD+ mechanism. In response to this question, this chapter explores the concept of REDD+ by discussing the technical and regulatory-related aspects of preparing, consulting and standard setting, and communicating these contributions. The chapter argues that REDD+ should be seen as a “self-regulation system”. The argument advanced arises out of the core idea that REDD+ is based on incentives. The chapter also notes that such incentives will come from both public and private sectors. To this end, one of the crucial issues relevant to the debate of the distribution of costs and benefits is the issue of property rights. Thus, chapter 5 explores the property nature of carbon rights and does with a view to suggesting a self-regulatory system for the governance. Chapter 6 discusses the governance aspect in Tanzania and Indonesia. Against this background chapter 7 examines Tanzanian and Indonesian case studies to provide insights into the conditions under which the 3Es are being envisaged in the domestic regulatory frameworks for REDD+. The chapter argues that the overall implementation of REDD+ in both countries is based on command and control with limited decentred governance systems. In light of this conclusion, chapter 8 addresses how

the inadequacy of the command and control approach can be addressed by a reflexive approach. Thus, chapter 9 proceeds with the proposition of initial building blocks to be considered for a regulatory framework for REDD+. The task before such proposal is to indicate *inter alia* how such framework can take into account the principles discussed in chapter 2.

Chapter Two:

Conceptual Foundations for Law and Policy Design for REDD+

2.1 Introduction

This chapter provides a conceptual framework for an understanding of what and how different principles and concepts influence the design of a legal and policy framework. The principles (the three Es) discussed here are used to determine whether a certain regulatory approach is "optimal". Thus the chapter links such framework to the main research question in section 1.3. Further, the chapter points out the strengths and weaknesses of each of the principles and concepts without necessarily taking a position on which is to be adopted when one is dealing with the question of allocating burdens and benefits in the context of the REDD+ mechanism. This is because each principle comes with its own unique set of challenges and its application requires a consideration of the specific context. The chapter seeks to answer the questions of whether equity, environmental-effectiveness and cost-effectiveness are contradictory principles and whether these can be reconciled. More specific is the question of whether equity, environmental-effectiveness and cost-effectiveness will require trade-offs in REDD+ implementation.¹

2.2 Sustainable Development

2.2.1 General Meaning

The climate and environmental law and policy globally are based on the notion of sustainable development. The point of departure has been pioneered by the World Commission on Environment and Development (the Brundtland Commission), organised by the United Nations General Assembly in 1983 in response to rising global environmental problems. The report defines sustainable development as:

“...development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

¹ There is a general consensus in the literature that successful climate change mitigation will have to be environmentally effective and cost-effective and equitable. See Gupta S., et. al., Policies, instruments and co-operative arrangements. In Metz B. et.al. (eds.), Climate change: Mitigation of climate change. Contribution of Working Group III to the fourth assessment report of the Intergovernmental Panel on Climate Change. (2007) at 748.

- the concept of “needs”, in particular the essential needs of the world’s poor, to which overriding priority should be given; and
- the idea of limitations imposed by the state of technology and social organisation on the environment’s ability to meet present and future needs.”²

Following the Brundtland report, numerous studies³ have further analysed the concept of sustainable development. Perhaps the most coherent and well-explored concept of sustainable development is the one which identifies the constitutional elements of strong development and indicates its presence in domestic and international law.⁴ In this case, Bosselmann asks the following questions:⁵

- How do the rights to a clean and healthy environment, to economic and social benefits, relate to each other?
- And how do all these human rights relate to the “right” and need of the environment to sustain itself?
- Is environmental justice merely an issue of distributive justice among people, or should the environment itself be part of environmental justice?

To answer the above questions, Bosselmann argues that the meaning of sustainable development should expand to consist of three equally important elements: intergenerational (within the existing generation), intragenerational (between generations) and interspecies justice (between human and non-human species).⁶ This is known as the “ecocentric”⁷ (strong) approach.⁸ The ecocentric approach goes beyond the traditional conception of justice (i.e. justice within existing generations and between generations).⁹ A discussion which focuses exclusively on any of two among the mentioned elements is said to embody a “weak” conception of sustainable development (i.e. anthropocentric, an approach which favours market-based instruments). In order to migrate to the “strong” conception of sustainable

² World Commission on Environment and Development *Our Common Future* (the Brundtland Report) (1987) at 43. Also see Glazewski J., *The Nature and Scope of Environmental Law*, in, Glazewski J., *Environmental Law in South Africa*. 3rd ed. (2013) at 15.

³ For example, authors have concluded that it is unclear that “sustainable development” as such can be precisely defined as a distinct principle of international law, or even a customary norm, which is accepted as binding on all countries. Segger M.C. and Hhalfan A., *Sustainable development law: Principles, Practices, & Prospects*, (2006) at 45. See also Takacs D., *Forest carbon offsets and International law: A deep equity legal analysis* (2010) 22 *Georgetown International Environmental Law Review* 521.

⁴ Bosselmann K., “Strong and Weak Sustainable Development: Making the Difference in the Design of Law”, (2006) 13 *South African Journal of Environmental Law and Policy* 14-23 at 41.

⁵ *Ibid.* Bosselmann K., (2006) at 41.

⁶ *Ibid.* at 47.

⁷ The ecocentric approach advocates for conservation of threatened populations, species, habitats, and ecosystems wherever situated and irrespective of their use value or importance to humans. See Eckersley R., *Environmentalism and Political Theory: Toward an Ecocentric Approach*. (1992) at 46.

⁸ *Ibid.* Bosselmann K., (2006) at 47.

⁹ *Ibid.* at 47.

development, discussion must include interspecies equity (between human and non-human species).¹⁰ This movement can only be facilitated by an ecocentric approach.¹¹ The crucial issue is to establish how these factors are to be integrated.¹² This means pursuing compromises and trade-offs¹³ with the view to securing a balanced approach.

2.2.2 Application in the Climate Change Regime

The concept of sustainable development is repeatedly referred to in the climate change regime. First the ultimate objective of the UNFCCC requires the mitigation of climate change to be “within a timeframe sufficient to allow [...] economic development to proceed in a sustainable manner.”¹⁴ Second, and more explicitly, the UNFCCC provides that “[p]arties have a right to, and should, promote sustainable development.”¹⁵ Therefore such parties should cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all parties.¹⁶

The Kyoto Protocol like the UNFCCC contains provisions with reference to sustainable development.¹⁷ It provides that achieving carbon emission reductions of at least 5 per cent below 1990 levels in the commitment period 2008 to 2012 leads to promotion of sustainable development.¹⁸ But the term “sustainable development” is not defined. In the context of climate change, efforts to define the term under the Clean Development Mechanism (CDM) by providing comprehensive indicators of sustainable development were also unsuccessful.¹⁹ Consequently, Decision 11/CP.7 widely known as the “Marrakesh Accords”²⁰ characterised sustainable development as a host country “prerogative”.²¹ In attempts to assist the host countries in defining sustainable development, some have argued that the UNDP’s Human Development Index could be useful in providing economic and social indicators that

¹⁰ Ibid.

¹¹ Ibid.

¹² Ibid. Tladi D., (2006) at 79.

¹³ Ibid. Bosselmann K., (2006) at 16.

¹⁴ Article 2.

¹⁵ Article 3 (4).

¹⁶ Article 3 (5).

¹⁷ Murase S. et. al., The legal principles relating to climate change first report, *International Law Association The Hague Conference* (2010) at 25.

¹⁸ Article 2 (1) read together with Article 3 (1).

¹⁹ Murase S. et. al., The legal principles relating to climate change first report, *International Law Association The Hague Conference* (2010) at 25.

²⁰ FCCC/CP/2001/13/Add.1, Decision 11/CP.7. Available: <http://unfccc.int/resource/docs/cop7/13a01.pdf#page=54> [accessed 15 June 2013].

²¹ Murase S. et. al., The legal principles relating to climate change first report, *International Law Association The Hague Conference* (2010) at 25.

would guide the CDM to a more sustainable development path.²² In the post-Kyoto climate change negotiations, the Cancun Agreement²³ encourages developing countries to develop low-carbon development strategies in the context of sustainable development.²⁴ Furthermore, the Cancun Agreement requires that the REDD+ mechanism be implemented in the context of sustainable development and reducing poverty, while responding to climate change.²⁵ The Cancun Agreement like its predecessors avoids the definition of sustainable development but it provides safeguards and some criteria which can facilitate a sustainable development path.²⁶

2.3 Common but Differentiated Responsibilities and Respective Capabilities

2.3.1 Respective Capabilities

This background places the term “respective capabilities” within the context of “common but differentiated responsibility” (hereinafter CBDR). It is to this position that we must turn to understand the evolving and taking in a more nuanced form of CBDR that came to favour the particular notions of equity and fairness within the current climate change negotiations. Accordingly, the UNFCCC is underpinned by five principles which guide measures on how to achieve its ultimate objective. Among these principles is the fundamental subtle principle, which has resulted in the seemingly ongoing intractable negotiation process, that of CBDR.²⁷ This is particularly so because observations over the years have concluded that the stalemate of climate change negotiations has been caused primarily by the dispute of the scope of the CBDR.²⁸ This provision is found in article 3.1 of the UNFCCC that the parties “should

²² Huq S., Applying Sustainable Development Criteria to CDM Projects: PCF Experience at 8 Washington, DC: Prototype Carbon Fund, World Bank, PCF Report 10, (2002). Available: http://wbcarbonfinance.org/docs/SD_Criteria_and_CDM.pdf [accessed 5 June 2013].

²³ Decision 1/CP.16, Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention.

²⁴ Ibid, Decision 1/CP.16, para 65.

²⁵ Appendix I 1(g).

²⁶ Appendix I of the Cancun Agreement. See Decision 1/CP.16 The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention in Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010 Addendum Part Two: Action taken by the Conference of the Parties at its sixteenth session FCCC/CP/2010/7/Add.1 (Mar. 15, 2011). See also CCBA and ClimateCARE, REDD+ Social and Environmental Standards (2010). Available: <http://www.redd-standards.org/> [accessed 5 June 2013].

²⁷ Glazewski J. and du Toit L., International Climate Change Law, in, Glazewski J., *Environmental Law in South Africa*. 3rd ed. (2013) at 13.

²⁸ Rajamani L., The changing fortunes of differential treatment in the evolution of international environmental law. (2012) 88:3 *International Affairs* 605–623 at 615. See also Stone C., Common but Differentiated Responsibilities in International Law. (2004) 98 *American Journal of International Law*, 276 at 280. It has been noted that, at COP-8, the head of the European Union delegation said that “[w]e cannot just sit here through

protect the climate system [...] in accordance with their [CBDR] and respective capabilities.” It should be noted at the outset that CBDR has taken on different meanings at different stages in the climate change negotiations.²⁹

The UNFCCC does not completely incorporate the principle of CBDR as it is reflected in its founding Rio Declaration.³⁰ Whereas the Rio Declaration clearly refers to historical contributions of developed countries to environmental degradation, the UNFCCC mentions these contributions in its preamble.³¹ This is because at the time of drafting, developing countries had argued that developed “countries should take the lead in combating climate change because they – through their high per capita energy consumption – historically bear the main responsibility for the rising concentrations of GHGs.”³² However, the attempt to include language to this effect was unsuccessful, and the reference to “respective capabilities” was inserted to underline those capabilities – rather than the differential contribution to global emissions.³³ The proposal that developed countries should take the lead in combating climate change was supported by both developing and developed countries. But they disagreed on why developed countries should assume that role. Developing countries cited “main responsibility” for the climate change problem as the reason why developed countries should take the lead. Developed countries (in particular, the United States) opposed this reasoning, and instead agreed to take the lead because of their greater financial and technical capabilities.³⁴ Consequently, the wording indicating “take the lead in combating climate change” was adapted to refer directly to “respective capabilities”, not the historically unequal share of carbon emissions.³⁵

meeting after meeting, year after year, with one side of the room saying we cannot act alone, and the other side saying we cannot accept obligations." *Declaration Emphasizes Development Plan, Urges Swift Ratification of Kyoto Protocol*, 25 Int'l Env't Rep. (BNA) 1055 (2002).

²⁹ Bushey D. and Jinnah S., *Evolving Responsibility? The Principle of Common but Differentiated Responsibility in the UNFCCC*. (2010) 6 *Berkeley Journal of International Law (Publicist)* at 2.

³⁰ Rio Declaration on Environment and Development, found in Report of the UN Conference on Environment and Development, Rio de Janeiro, 13 June 1992, A/CONF.151/26/Rev.1 (1992).

³¹ Deleuil T., *The Common but Differentiated Responsibilities Principle: Changes in Continuity after the Durban Conference of the Parties. Review of European Community & International Environmental Law*. (2012) 21:3 at 272. See also Rajamani L., *Differential Treatment in International Environmental Law*. (2006) at 10.

³² Bodansky D., *The United Nations Framework Convention on Climate Change: A Commentary*, (1993) 18 *Yale Journal of International Law* 451, 498. See also Soltau F., *Fairness in International Climate Change Law and Policy* (2009) at 191.

³³ *Ibid* Bodansky D., (1993) at 503. See also *Ibid* Soltau F., (2009) at 191.

³⁴ *Ibid* Bodansky D., (1993) at 503.

³⁵ *Ibid* Soltau F., (2009) at 191.

2.3.2 Common Responsibilities

It follows from the above that both developed and developing countries have to deal with the issue of common responsibilities. The notions of the CBDR in the UNFCCC are to address the persistent challenge of how countries should share the global commons. It recognises that there are global resources, such as the atmosphere, which human society has a common interest in protecting, but for which the obligation to protect will vary in accordance with a country's level of development, resources, and institutional capabilities.³⁶ Therefore the term “common” suggests that certain risks affect and are affected by every country.³⁷ These include not only the climate and the ozone shield, but all risk-related global public goods, including peace, public health, and terrorism. In reducing the mutual risks, all countries should therefore “cooperate in a spirit of global partnership.”³⁸

2.3.3 Differentiated Responsibilities and Treatment

As a way of reflecting the common responsibilities discussed above, the UNFCCC provides for differentiated responsibilities. The word “responsibilities” as phrased in the CBDR implies a moral duty and not the legal consequences that flow from an internationally wrongful act.³⁹ The CBDR principle finds expression in the differentiation into three broad categories. First, is the differentiation in commitments between Annex I, or developed country parties (but differentiated within the Annex), and non-Annex I or developing country parties.⁴⁰ Differentiation is between countries, and not just broadly between developed and developing but between various groups of countries.⁴¹ Second, differentiation exists with respect to Annex I parties’ non-binding goal to return their emissions to 1990 levels by 2000; more stringent and frequent reporting obligations of Annex I parties; and third, provisions

³⁶ Mumma A. and Hodas D., Designing a Global Post-Kyoto Climate Change Protocol that Advances Human Development. (2007-2008) 20:4 *Georgetown International Environmental Law Review* 619 at 628.

³⁷ Ibid Stone C., (2004) at 277.

³⁸ Ibid.

³⁹ Murase S. et. al., The legal principles relating to climate change first report, *International Law Association The Hague Conference* (2010) at 11.

⁴⁰ Rajamani L., *Differential Treatment in International Environmental Law*. (2006) at 191. See also Rajamani L., The changing fortunes of differential treatment in the evolution of international environmental law.(2012) 88:3 *International Affairs* 605–623 at 611.

⁴¹ As observed by Rajamani L., The changing fortunes of differential treatment in the evolution of international environmental law. (2012) 88:3 *International Affairs* 605–623 at 617, these are: “developed countries”, “developing countries”, “least-developed countries”, “small island developing States”, “countries with economies in transition”, “developing countries, whose economies are particularly dependent on fossil fuel production”, “low-lying and other small island countries”, “countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification” and “developing countries with fragile mountainous ecosystems”.

concerning the granting of assistance, which may be financial or technological.⁴² It is useful to discern the meaning from each category and therefore these provisions are elaborated on in chapter 3.

2.4 Equity

The issue of particular importance for purposes of this thesis is the question of distribution of costs and benefits at a domestic level. Therefore the concept of equity which is regularly invoked in the climate change context becomes pertinent to provide criteria on “who gets rewarded, why and in what proportions”.⁴³ This is because such concept is deep-rooted in human relations and in that case plays an important role in the “decisions with far-reaching social, economic, and environmental consequences”.⁴⁴ At the international level, Soltau concludes that the differentiated responsibilities and treatment in the climate law and policy give effect to conceptions of equity.⁴⁵ The issues of equity have become prominent in the international environmental instruments for two main reasons: (1) the scarce or threatened shared resources and public goods such as fish stocks have compelled such instruments to put limits on the use of such resources, and subsequently (2) impose burdens and costs as it seeks to reduce environmental degradation.⁴⁶ One aspect of the article 3.1 of the UNFCCC is that parties should protect the climate system on the basis of equity. The subjects of equity according to this provision are the present and future generations. This provision plays an important role in benefit distributions in domestic law since it appears to link equity and sustainable development. Further, Annex I parties are required to take into account the need for “equitable and appropriate contributions” by each of them in their effort to achieve its ultimate objective.⁴⁷ It is notable that the concept of equity in the UNFCCC is connected with other concepts: CBDR and “respective capabilities”. An expansion of the equity criterion is

⁴² Rajamani L., *Differential Treatment in International Environmental Law*. (2006) at 191. See also Rajamani L., The changing fortunes of differential treatment in the evolution of international environmental law. (2012) 88:3 *International Affairs* 605–623 at 611.

⁴³ Badgery-Parker I., *Design benefit-sharing carefully, or risk undermining REDD+, researchers warn*. Thomson Reuters Foundation (2013). Available: <http://www.trust.org/item/20130812025730-y9npk/> [accessed 24 January 2014]. Thuy P.T. et. al., Approaches to benefit sharing: A preliminary comparative analysis of 13 REDD+ countries. Working Paper 108, CIFOR (2013) at 3. Available: http://www.cifor.org/publications/pdf_files/WPapers/WP108Pham.pdf [accessed 3 March 2014].

⁴⁴ Soltau F., *Fairness in International Climate Change Law and Policy* (2009) at 2, 3-5.

⁴⁵ Ibid at 187 and 224. It is observed that in international law, equity is used as a synonym for fairness or justice. See Shelton D., Equity, in Bodansky D. et. al. (eds.), *The Oxford Handbook of International Environmental Law* (2007) 639-662 at 640.

⁴⁶ Shelton D., Equity, in Bodansky D. et. al. (eds.), *The Oxford Handbook of International Environmental Law* (2007) 639-662 at 652.

⁴⁷ Article 4 (2) (a).

provided in the Cancun Agreements as it reflects a growing concern for the differences and inequalities within countries by referring to the interests of vulnerable populations such as women, indigenous peoples, youths and persons with disabilities.⁴⁸ In this sense, the subjects of equity are identified as indigenous peoples and members of local communities.⁴⁹

Equity has many different meanings and the exact nature of this concept is obscure particularly in the climate change context.⁵⁰ Some regard equity as “an ideal, or a set of ideals that shapes our views of what is fair, right or just.”⁵¹ Sands argues that treaties rarely provide a working definition of equity, and therefore countries, international organisations and international courts and tribunals may, ultimately, have to refer back to the general concept as interpreted and applied by the International Court of Justice (ICJ) and other international tribunals.⁵² Franck distinguishes between two main elements of equity as legitimacy (procedural) and distributive justice (substantive) (elaborated on in the next sections).⁵³ With that observation, others have added the third component of equity as contextual equity in the REDD+ debate.⁵⁴ A point of departure in this context is then to ask what kind of inequity is present at the starting point of a REDD+ project.⁵⁵ This is to say that the substantive content of equity depends on the specific circumstance in which it is sought to be applied.⁵⁶

It is also useful to conceptualise equity in parallel with interest.⁵⁷ While interest represents what is best or suitable for an individual, equity represents the common good. Competing versions of what is perceived as equitable are aligned with the interests of individuals who

⁴⁸ Decision 1/CP.16 Part I para 7. Also see Sharma A (ed), *Climate Law In Brief : A brief summary of key legal issues relevant to Durban and beyond*. Foundation for International Environmental Law and Development (FIELD), (undated). See also Murase S. et. al., *The legal principles relating to climate change first report*, International Law Association. The Hague Conference (2010) at 15.

⁴⁹ Decision 1 CP. 16. Appendix 1. Also see Ituarte-Lima C. and McDermott C., *Operationalising equity in national legal frameworks for REDD+: the case of Indonesia*. 23 March 2012, Beyond Carbon Conference, University of Oxford.

⁵⁰ Shelton D., Equity, in Bodansky D. et. al. (eds), *The Oxford Handbook of International Environmental Law* (2007), 639-662 at 640.

⁵¹ Heyward M., *Equity and international climate change negotiations: a matter of perspective*, (2007) 7 *Climate Policy* 518–534 at 519.

⁵² Sands at 152.

⁵³ Franck T., *Fairness in International Law and Institutions* (1995), at 7-9.

⁵⁴ McDermott, M. et.al., *Examining equity: a multidimensional framework for assessing equity in payments for ecosystem services*. (2012) 33 *Environmental Science and Policy* 416-427 at 419.

⁵⁵ *Ibid* at 420.

⁵⁶ Murase S. et. al., *The legal principles relating to climate change first report*, *International Law Association*. The Hague Conference (2010) at 16.

⁵⁷ Ashton, J. and Wang, X., “Equity and climate: in principle and practice”, in: *Beyond Kyoto: Advancing the International Effort against Climate Change*, Pew Center on Global Climate Change, Washington, DC. (2003). Available: http://stephenschneider.stanford.edu/Publications/PDF_Papers/EquityandClimate.pdf [accessed 3 March 2013]. See also Soltau F., *Fairness in International Climate Change Law and Policy* (2009) at 138-140.

support them. This explains why submissions advanced by countries for climate change negotiations based on equity are usually connected with interest.⁵⁸ "Claims about justice by stakeholders are likely tainted by self-interest."⁵⁹ In addition, the "meaning of equity and fairness are not only specific to each society but also change over time."⁶⁰ This is an important issue given evidence that what is "fair" may differ from what is "good" or what people prefer.⁶¹ Therefore, a benefit outcome can be labelled only "just"⁶² because it is "good".⁶³

2.4.1 Legitimacy

The term "legitimacy" is mostly used to refer to the justification of authority.⁶⁴ This conception is understood as the equivalent of having the power to adopt and enforce binding decisions or to prescribe binding rules.⁶⁵ There are several approaches which can induce legitimacy into an authority.⁶⁶ These include, *inter alia*: source; procedure-oriented and result-oriented or a combination of both.⁶⁷ Authority can also be legitimised if the decisions in question are taken in the course of procedures considered to be appropriate, transparent, adequate and fair.⁶⁸ Procedure or obeying to a pre-agreed procedure has a legitimising effect in international law as it has in national law.⁶⁹ Such effect can be created or enhanced depending on who participates in the decision-making process.⁷⁰ It is also helpful to clarify who perceives such decision to be legitimate, because it matters whether members or non-members of an institution or community perceive the rules or authority as legitimate.⁷¹ The

⁵⁸ Heyward M., Equity and international climate change negotiations: a matter of perspective, (2007) 7 *Climate Policy* 518–534 at 519.

⁵⁹ Konow J., Fair and square: the four sides of distributive justice. (2001) 46:2, *Journal of Economic Behaviour and Organization* 137–164 at 162.

⁶⁰ Ibid.

⁶¹ Konow J., Which is the fairest one of all?: a positive analysis of justice theories. (2003) 41, *Journal of Economic Literature* 1188–1239 at 1193.

⁶² In the generic sense.

⁶³ Konow J., Fair and square: the four sides of distributive justice. (2001) 46:2, *Journal of Economic Behaviour and Organization* 137–164 at 156.

⁶⁴ Wolfrum R., Legitimacy of International Law from a Legal Perspective: Some Introductory Considerations, in Rüdiger Wolfrum· Volker Röben (eds.) *Legitimacy in International Law*, (2008) at 6.

⁶⁵ Ibid.

⁶⁶ Ibid.

⁶⁷ Cited by *ibid* Wolfrum R., (2008) at 6.

⁶⁸ *Ibid* Franck T., highlighting the "right process" at 91.

⁶⁹ *Ibid* Wolfrum R. (2008) at 6 citing Luhmann N., *Legitimation durch Verfahren*, 2nd ed., (1989). Also see Habermas J., *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy*. (1996).

⁷⁰ *Ibid.*, Wolfrum R. (2008) at 6.

⁷¹ Cited in Lederer M., From CDM to REDD+: What do we know for setting up effective and legitimate carbon governance? (2011) 70 *Ecological Economics* 1900–1907 at 1901.

legitimacy of the rules or authority relating to REDD+ can therefore be induced by procedure-oriented and result-oriented approaches or a combination of both.

2.4.2 Procedural Equity

Legitimacy is strengthened by procedural equity. To be legitimate, a system must be justifiable, according to given moral principles and social norms.⁷² Procedural justice relates to the transparency of the processes by which decisions are made. Transparency and fair processes are closely associated with the equitable outcomes (distributive justice) in the sense that securing the former can be seen as a way of attaining the latter.⁷³ The goal of procedural justice is therefore to identify the elements of social institutions that lead to a fair distribution of burdens and benefits in a manner that is impartial with regards to any individual's class or role in society.⁷⁴ The emphasis is on the process and rules (rather than on the outcome of the distribution) that decide the allocation.⁷⁵ In the context of REDD+, procedural justice within a country would involve *inter alia* the right of indigenous and local communities to participate in decision making and to Free, Prior and Informed Consent (FPIC) with regard to any REDD+ activities that affect them.⁷⁶ Prior to identifying beneficiaries, it is necessary to develop a tentative understanding of what "legitimacy" means in a given context.⁷⁷ The objective is to provide a framework for consultations and negotiations with the various actors.⁷⁸ For this thesis, the conception of legitimacy is tied to recognising and addressing claims and rights in line with incentives provided. It is argued that an interpretation of the existing legal framework (customary law and non-customary law) can provide legitimacy in identifying legitimate beneficiaries. This would take into account legal pluralism (including in the context of land tenure and resource tenure).

⁷² Luttrell C. et. al., Who Should Benefit from REDD+? Rationales and Realities. (2013) 18:4 *Ecology and Society* 52.

⁷³ Bone R., *Agreeing to Fair Process: The Problem with Contractarian Theories of Procedural Fairness*, (2003) 83 *Boston University Law Review* 485.

⁷⁴ Gaba J.M., Taking "Justice and Fairness" Seriously: Distributive Justice and the Takings Clause, (2006-7) 40 *Creighton Law Review* 569-594 at 14.

⁷⁵ *Ibid.*

⁷⁶ Skutsch M., *Slicing the REDD+ pie: controversies around the distribution of benefits* (2012).

⁷⁷ Bruce J.W. *Identifying and Working with Beneficiaries When Rights Are Unclear: Insights for REDD+ Initiatives*. Washington, DC: Program on Forests (PROFOR) (2012) at 15.

⁷⁸ *Ibid.*

2.4.3 Distributive Justice

The primary objective of the concept of distributive justice is the fair or equitable distribution of burdens and benefits among members of a particular society or group,⁷⁹ individual, or household, along a “value chain”, ecosystem, and intergenerationally.⁸⁰ The benefits and burdens are diverse. The benefits relating to REDD+ span all dimensions of social life such as *inter alia*: financial income, political power, education, shelter, health care, ability to participate in cultural practices, religious activities,⁸¹ strengthening of tenure rights, forest products, ability to participate in decision-making, infrastructure provision, ecosystem benefits such as biodiversity protection, protection of water and soil quality,⁸² and liberty (both negative and positive).⁸³ The burdens related to REDD+ are forest protection costs, opportunity costs, transaction costs⁸⁴ and social costs (elaborated on in section 2.6). The difficult questions relating to this endeavour are: “[w]hat is a just distribution and what are the qualities that entitle an individual [a country, or others] to claim a just share?”⁸⁵ This question raises the issue about the connection between equity and rights (see the equity in relation to rights section below).

A number of principles are found within the dimension of distributive equity. These can be “traced back to different rules-based theories related to distributive justice”.⁸⁶ Sen points out that decision-makers rely on different principles of justice to justify calls for equity and the choice of such principles are likely to lead to different policy solutions.⁸⁷ It is also being stated that the “applications of those principles will have different implications depending on objectives of the project at hand.”⁸⁸ This raises a question of what principles are relevant for distribution of costs and benefits in the REDD+ mechanism. This chapter discusses the

⁷⁹ Franck T., *Fairness in International Law and Institutions* (1995) at 8.

⁸⁰ McDermott M. et al., Examining equity: A multidimensional framework for assessing equity in payments for ecosystem services. (2012) *Environmental Science & Policy* at 7.

⁸¹ Distributive Justice. Available: <http://myweb.lmu.edu/jkonow/distributive%20justice.pdf> [accessed 17 March 2014].

⁸² Luttrell, C., L. et al., *Who should benefit and why: discourses on REDD+ benefit sharing*. In Angelsen A. et. al., *Analysing REDD+: Challenges and choices*. (2012) at 134.

⁸³ For a discussion on liberty see Isaiah B., *Two Concepts of Liberty*. (1959).

⁸⁴ A widely accepted definition refers to the costs of setting up and running a REDD+ governance system. See Karsenty A. et. al., “Carbon rights”, REDD+ and payments for environmental services. (2012) *Environmental Science* at 3.

⁸⁵ Gaba J.M., Taking “Justice and Fairness” Seriously: Distributive Justice and the Takings Clause. (2006-7) 40 *Creighton Law Review* 569-594 at 8.

⁸⁶ Luttrell C. et.al., Who Should Benefit from REDD+? Rationales and Realities. (2013) 18:4 *Ecology and Society* 52.

⁸⁷ Sen A., *The Idea of Justice*. (2009) at 13.

⁸⁸ McDermott, M. et.al., Examining equity: a multidimensional framework for assessing equity in payments for ecosystem services. (2012) 33 *Environmental Science and Policy* 416-427 at 424.

following principles: utilitarianism (maximisation of social utility); egalitarianism (equal shares of the object of distribution to all members of society); the need principle (which justifies different treatment of individuals); the compensation principle; and the accountability principle. All of these principles focus on the fairness of the outcome rather than the process.⁸⁹ Akanle noted that there are many other theories of distributive justice but the utilitarianism, egalitarianism and need principles form the basis of the introduction and development of new ones.⁹⁰

Utilitarianism Principle

The goal of utilitarianism advocates for the (re)distribution of burdens and benefits to secure the maximum overall utility to society as a whole.⁹¹ This outcome (maximum overall utility) is the only just distribution.⁹² Utility is defined as a property in an object whereby it “tends to produce benefit, advantage, pleasure, good or happiness” (all these come to the same thing).⁹³ To achieve the maximum utility, utilitarianism requires laws and social arrangements to harmonise the happiness or interest of every individual with that of the whole, and inform them that their interests are closely associated with the good of the whole.⁹⁴ In this way, it is expected that individuals would be motivated in their actions.⁹⁵

The main criticism of utilitarianism is that the principle ignores the concerns of the distribution of utility within a society.⁹⁶ For instance, it is argued that the utilitarian approach implies that resources be allocated first to those who derive the greater marginal utility.⁹⁷ Accepting this line of argument means that the utilitarianism approach sanctions unequal allocation of costs to some people as long as the overall utility is advanced.⁹⁸ Therefore, it is

⁸⁹ Akanle O., *Distributive justice in International Law CDM geographic distribution*. PhD Thesis University of Dundee (2011) at 78.

⁹⁰ Ibid.

⁹¹ Bentham J., *An Introduction to the Principles of Morals and Legislation*. In Warnock M., (ed.,) *Utilitarianism and On Liberty*, 2nd ed., (2003).

⁹² Harris J.W., *Legal Philosophies* 2nd ed. (1997) at 41.

⁹³ Ibid Bentham J., (2003) at 7.

⁹⁴ Ibid at 194.

⁹⁵ Ibid.

⁹⁶ Frankena W.K., *Ethics* 2nd ed. (1973) Englewood Cliffs, N.J. See also Kelman S., *Cost-Benefit Analysis: An Ethical Critique*, (1981) 5:1 *Regulation* 33-40 at 33.

⁹⁷ Konow, J., Which is the fairest one of all?: a positive analysis of justice theories. (2003) 41 *Journal of Economic Literature*, 1188–1239 at 1200.

⁹⁸ Gaba J.M., Taking “Justice and Fairness” Seriously: Distributive Justice and the Takings Clause. (2006-7) 40 *Creighton Law Review* 569-594 at 10.

a dangerous principle on certain occasions to consult it.⁹⁹ This conclusion therefore means the principle needs to be interpreted and applied with caution.

Egalitarianism Principle

In order to address potential bias arising from the utilitarianism approach, a question may be asked on what concept of equality should be adopted in implementation of REDD+ activities. Responding to this question, egalitarianism seems to be a suitable candidate as it advocates for the allocation of equal shares of the object of distribution (e.g. benefits or resources) to all members of society.¹⁰⁰ The key points to keep in mind are that a distinction is made between approaches to equality of opportunity and equality of result.¹⁰¹ On the equality of opportunity, the issue is limited simply to removing formal obstacles to competition between the participants in the distribution.¹⁰² On the equality of result, the effort focuses on ensuring that a distributive scheme allows participants to receive the equal amount of the entitlement distributed as a final result.¹⁰³ This also means that all people should receive the same benefits at some initial point.¹⁰⁴ Thereafter everyone is free to use their benefits in whatever way they prefer, even if the consequences of the outcome in the future are bound to be unequal.¹⁰⁵ Following from this, advocates of egalitarianism disagree about what should be the object of equal distribution or what form of equality is just.¹⁰⁶

There are merits and demerits to an egalitarian approach. Among the advantages of using the egalitarian approach is the consideration for the poor who are unable to seek relief from courts due to financial constraints. The case of *Government of the Republic of South Africa v Grootboom and Others*,¹⁰⁷ illustrates this point. The applicants, including a number of children, were evicted from the private land that they were unlawfully occupying. Following the eviction, the applicants applied to the Cape High Court for an order demanding the

⁹⁹ Bentham J., *An Introduction to the Principles of Morals and Legislation*. In Warnock M., (ed.) *Utilitarianism and On Liberty*, 2nd ed., (2003) at 20.

¹⁰⁰ Oppenheim F. E., "Egalitarianism as a descriptive concept" in Pojman P.L. and Westmoreland R. (eds.), *Equality: Selected Readings*. (1997) at 56.

¹⁰¹ Keren-Paz T., *Torts, egalitarianism and distributive justice*, (2007) at 9.

¹⁰² Ibid.

¹⁰³ Ibid.

¹⁰⁴ Stanford Encyclopedia of Philosophy. Available: <http://plato.stanford.edu/entries/justice-distributive/#Strict> [accessed 17 September 2015].

¹⁰⁵ Ibid.

¹⁰⁶ Akanle O., *Distributive justice in International Law CDM geographic distribution*. PhD Thesis University of Dundee (2011) at 78.

¹⁰⁷ *Government of the Republic of South Africa v Grootboom & Others* 2000 (11) BCLR 1169 (CC); 2001 (1) SA 46 (CC) (*Grootboom* case).

government to provide them with adequate basic shelter until they obtained permanent accommodation. The Court held that the state was obliged to take positive action to meet the needs of those living in extreme conditions of poverty, homelessness or intolerable housing.¹⁰⁸ The Government of the Republic of South Africa responded by developing an emergency housing policy.¹⁰⁹ The said Cape High Court decision is instructive in the context of REDD+. It shows how such approach can be adopted to cater for people who may be in positions similar to that of the Grootboom community. The egalitarian approach is also demonstrated in *Hoffman v South African Airways*.¹¹⁰ The case was an appeal from the Witwatersrand High Court concerning the constitutionality of South African Airways' (SAA) policy of refusing to hire people living with HIV as cabin attendants. The person in question was Hoffmann who challenged the constitutionality of the policy in the High Court. He argued that he had been unfairly discriminated against on the ground of disability, because of him being HIV positive. The High Court upheld SAA's defence. In the proceedings before the Constitutional Court, the Court indicated that HIV was not a "disability". The Court then held that the policy was unfair as it constituted an infringement of dignity, as it was discrimination based on a person's medical health.¹¹¹ Though the remedy appeared to be directed at the individual victim, the Constitutional Court was convinced that the approach would assist people who are confronted with a similar challenge.¹¹² Both cases may be helpful to local people who may be at risk of evictions due to government decisions or other agencies in implementations of REDD+ activities. Critics of egalitarianism argue that if benefits are "perfectly equal and everyone is guaranteed the same income level, then what is the incentive to work? Too much equality may reduce work effort (and investment) and thereby the total product of society."¹¹³

¹⁰⁸ The UWC's Community Law Centre: Available: <http://communitylawcentre.org.za/projects/socio-economic-rights/Cases/South%20African%20Cases/Constitutional%20Court%20Cases/summary-of-cases> [accessed 12 September 2014]. Also see Budlender G., "Justiciability of socio-economic rights: Some South African experiences" in Y Ghai and J Cottrell (eds) *Economic, Social and Cultural Rights* (2004) 41.

¹⁰⁹ National Department of Housing Part 3: National Housing Programme: Housing Assistance in Emergency Circumstances April 2. As cited by Mbazira C., *Litigating socio-economic rights in South Africa: A choice between corrective and distributive justice*. (2009) at 141.

¹¹⁰ *Hoffman v South African Airways* 2000 (11) BCLR 1211 (CC) (*Hoffman* case).

¹¹¹ *Hoffmann v South African Airways* (CCT17/00) [2000] ZACC 17; 2001 (1) SA 1; 2000 (11) BCLR 1235; 2000 (12) BLLR 1365 (CC) (28 September 2000). Available: <http://www.saflii.org/za/cases/ZACC/2000/17.html> [accessed 17 July 2015].

¹¹² Ibid. Mbazira C., (2009) at 141 fn 107 above.

¹¹³ Ramirez S.A., Bearing the Costs of Racial Inequality: Brown and the Myth of the Equality/Efficiency Trade-Off, (2004) 44 *Washburn Law Journal* 84.

The Need Principle (Justifiable Inequality)

A departure from the egalitarian approach is justified by the introduction of “needs”. The purpose is to justify different treatment of individuals.¹¹⁴ Rawls proposes the principle of need to determine how rights and duties in society are to be assigned, and how benefits and burdens of social cooperation should be distributed.¹¹⁵ The author stresses that to decide about the distribution of benefits, the principle of need along with fair equality of opportunity should be chosen.¹¹⁶ The argument here is that social and economic inequalities are only just if they are to the greatest benefit of the least advantaged.¹¹⁷ The goal of the principle of need is not to define the elements of equality. Rather the goal is to define the elements that justify unequal treatment among individuals.¹¹⁸ Put differently, the principle of need requires equal treatment of all individuals unless there is a “material principle” that justifies unequal and differential treatment.¹¹⁹ Therefore, a redistribution of benefits from “haves” to “have nots” is regarded as just.¹²⁰

The problem arising from the above exposition relates to the devising provisions specifying the just distribution of benefits and burdens in a manner that everyone receives their due.¹²¹ A starting point is usually that everyone should be treated equally, except reasons for inequality exist.¹²² A difficult step that follows includes the identification of reasons that justify the departure from “all”-equality, the role of the government in rectifying inequality, and the link between a distributive system and the maximisation of well-being.¹²³ Regarding the reasons that justify the departure from “all”-equality, Rawls proposes that one choose a particular social position (such as that of the unskilled worker) and all those with the average income of this position or less. Also, he advocates “classify[ing] persons according to their relative

¹¹⁴ Pascual U. et. al., Exploring the links between equity and efficiency in payments for environmental services: A conceptual approach. (2010) 69 *Ecological Economics* 1237–1244 at 1239. See also Konow, J., Fair and square: the four sides of distributive justice. (2001) 46:2 *Journal of Economic Behaviour and Organization*, 137–164 at 141.

¹¹⁵ Rawls J., *A Theory of Justice*, at 4, 11 and 54.

¹¹⁶ *Ibid* at 61.

¹¹⁷ *Ibid* at 75.

¹¹⁸ *Ibid*.

¹¹⁹ Gaba J.M., Taking “Justice and Fairness” Seriously: Distributive Justice and the Takings Clause, (2006-7) 40 *Creighton Law Review* 569-594 at 13.

¹²⁰ *Ibid*.

¹²¹ *Ibid*.

¹²² *Ibid*.

¹²³ Blackburn S., *The Oxford Dictionary of Philosophy* (1996) at 248.

income and wealth, and so for example, all those with less than half of the medium income and wealth can be regarded as the worst off in society”.¹²⁴

Compensation Principle

The compensation principle deals with the compensation of benefits to those who are made worse off due to the allocation of costs and benefits of a particular activity.¹²⁵ To illustrate this point, the egalitarian approach would allow the policy and legal framework to decide the “thing” to be distributed. Second, utilitarianism as argued by Louka represents effectiveness if legislation secures: (a) win-win (or Pareto optimal) situations¹²⁶ or (b) situations in which losers would be compensated whereas winners would still remain better off (Kaldor-Hicks optimal situations).¹²⁷ Viewed another way, a pursuit of a global wealth maximizing decision has in it distributive elements, at least, in terms of compensation of those who are to lose the most from the welfare maximising outcome.¹²⁸ If the members are not compensated for concessions they make, it is expected that they will sabotage solutions that would disadvantage them.¹²⁹

Accountability Principle

This principle provides that rewards (and/or “punishments”) should be distributed in accordance with a recipient's inputs or contributions (e.g. level of production) and that merit or desert determines equity.¹³⁰ Put differently, individuals through their effort or other morally creditable behaviour are entitled to a greater share of benefits.¹³¹ The application of this principle in the REDD+ mechanism has some challenges. This is because payment by performance to individual communities or forest owners is technically almost impossible for reduction in deforestation and degradation because these activities can only be measured

¹²⁴ Rawls J., *A Theory of Justice*, (1999) at 98.

¹²⁵ Konow, J., Fair and square: the four sides of distributive justice. (2001) 46:2 *Journal of Economic Behaviour and Organization*, 137–164 at 148.

¹²⁶ Posner, *supra* note 39, at 13. “A Pareto-superior transaction is one that makes at least one person in the world better off and no one worse off.” As cited by Louka E., at 72.

¹²⁷ According to the Kaldor-Hicks principle of optimality, a change is identified as wealth maximising if those who gain from the change could, in principle, compensate the losers and still be better off. But “criterion does not provide a clear guidance about the level of compensation that is considered satisfactory to the losers, because this would vary according to individual circumstances and situations, but it does provide a more organized framework.” As cited by Louka E., at 72, 74-75.

¹²⁸ *Ibid*, Louka E., (2006) at 72.

¹²⁹ *Ibid*.

¹³⁰ Konow, J., Which is the fairest one of all?: a positive analysis of justice theories. (2003) 41 *Journal of Economic Literature* 1188–1239. Also see Konow, J., Fair and square: the four sides of distributive justice. (2001) 46:2 *Journal of Economic Behaviour and Organization* 137–164 at 138.

¹³¹ Gaba J.M., Taking “Justice and Fairness” Seriously: Distributive Justice and the Takings Clause, (2006-7) 40 *Creighton Law Review* 569-594 at 14.

against a forecasted baseline.¹³² Usually such a baseline would be constructed at regional level, reflecting the probability that any one forest parcel will become deforested in a given period.¹³³ Therefore, within independent project activities, benefits are not usually distributed on the basis of achievements of the individual members but use a flat rate system.¹³⁴ So the rewards are based on inputs (improved forest management or continued use of sustainable practices) instead of outputs (emission reductions).¹³⁵ The challenge for rewarding the benefits is in regard to the identifying of criteria for opportunity costs as discussed in section 2.6.

2.4.4 Contextual Equity

The principle of contextual equity focuses on establishment of a context specific meaning of equity.¹³⁶ This requirement is informed by the realisation that the distributional and procedural elements of a policy fall within the scope and control (at least initially) of its proponents.¹³⁷ However, the ability to attain distributional and procedural equity is conditioned by context.¹³⁸ It is argued that “what is perceived as equitable is not universal but rather depends on the specific context in which decisions about the distribution of resources are made.”¹³⁹ For example, contextual factors such as capacity, power, cultural values, social capital, and the level of dependence on forests have important effects on the equity of distribution. In this sense, some “indirect benefits” such as tenure reform, capacity building, or improved governance could also be categorised as “contextual” features, in that

¹³² Torres B. A. and Skutsch M., Splitting the difference: a proposal for benefit sharing in reducing emissions from deforestation and forest degradation (REDD+). (2012) 3:1 *Forests*, 137-154. Skutsch M. and Torres A.B., Challenges for pro-poor benefit sharing schemes in the implementation of REDD+ in Mexico. *Scoping paper prepared for The Forest Dialogue (TFD) on REDD+ Benefit Sharing Chetumal, Mexico* 2-5 June 2014 at 12.

¹³³ Skutsch M., Slicing the REDD+ pie: controversies around the distribution of benefits 2012. Also see Skutsch M. and Torres A.B., Splitting the Difference: A Proposal for Benefit Sharing in Reduced Emissions from Deforestation and Forest Degradation (REDD+). (2012) 3:1 *Forests* 137-154 at 144.

¹³⁴ Skutsch M., Slicing the REDD+ pie: controversies around the distribution of benefits 2012.

¹³⁵ Ibid.

¹³⁶ McDermott, M. et al., Examining equity: A multidimensional framework for assessing equity in payments for ecosystem services, (2012) *Environmental Science & Policy* at 421.

¹³⁷ Ibid.

¹³⁸ Ibid. Also see Suiseeya K.R.M., A Retreat from Justice in Global Forest Governance: REDD+ and the “Do No Harm” Principle. A paper presented at the 3rd Annual UCSB Environmental Politics Conference UC Santa Barbara June 5, (2015) at 9. Available:

[http://fiesta.bren.ucsb.edu/~sanderson/Suiseeya%20\(UCSB2015\)%20REDD%20Status%20Quo_052215.pdf](http://fiesta.bren.ucsb.edu/~sanderson/Suiseeya%20(UCSB2015)%20REDD%20Status%20Quo_052215.pdf) [accessed 10 September 2015].

¹³⁹ Ibid fn 134.

they constitute the necessary pre-conditions for benefiting from the implementation of REDD+.¹⁴⁰

2.4.5 Equity in relation to Rights

The focus of this section is on the theoretical background for discussions on the question of why and how carbon rights issues arise (discussed in chapter 5). Essentially, the assertion of carbon rights has its foundations in the concept of the libertarian principle. This principle provides that property rights should be the basis for distribution of benefits.¹⁴¹ For example, right-libertarians are advocating for private rights and argue that natural resources should be appropriated by those who claim them, discover them, or provide labour inputs.¹⁴² On the other hand, left-libertarians advocate for common ownership and that those who claim rights should pay others for the value of those rights.¹⁴³ The discussion of carbon rights is set aside until later in chapter 5. For now, the focus is to explore the connection between equity and “rights”.¹⁴⁴ This connection is informed by the general view that rights are closely associated with equity, in the sense that securing the former can be seen as a means of attaining the latter.¹⁴⁵

There exists a classification of human rights as follows: “First-generation” rights stress the civil and political rights such as rights to life, privacy and liberty. Usually these are given priority in implementation.¹⁴⁶ “Second-generation” rights lay emphasis on economic, social

¹⁴⁰ Cited in Luttrell C. et.al., Who Should Benefit from REDD+? Rationales and Realities. 18:4 *Ecology and Society* (2013) 52.

¹⁴¹ Boaz D., *Libetarianism a primer* (1997) at 17.

¹⁴² Luttrell C. et. al., Who Should Benefit from REDD+? Rationales and Realities. (2013) 18:4 *Ecology and Society* 52. Available: <http://www.ecologyandsociety.org/vol18/iss4/art52/#Theoretical> [accessed 20 September 2015].

¹⁴³ Ibid. Also see Boaz D., *Libetarianism a primer* (1997) at 16.

¹⁴⁴ “Rights” is a slippery term as there are different conceptions of “rights”. Takacs discusses “first generation” rights, “second generation rights” and “third generation rights”. See Takacs D., The public trust doctrine, environmental human rights, and the future of private property. (2008) 16 *New York University Environmental Law Journal* 711 at 7. “Rights” are legal privileges that may be temporary or fungible. For example rights to water is a limited “right” in the sense that it can easily (at least when compared with rights or rights) be revoked or made conditional. These rights correspond to what Sax refers to as usufructary, a “right” that incorporates the interests of others and thus a “right” that one does not own “in the same way he owns his watch or his shoes”. Takas citing Sax J., Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention, (1970) 68 *Michigan Law Review* 471, 476. This distinction has implications for the “carbon rights” discussed in chapter 5. “A further distinction is between “positive” and “negative” rights. The former are associated with claims of a holder to a certain performance (act or acquiescence) of another subject, while the latter imply that one's rights are respected and not infringed or violated.” Schrijver N., *Sovereignty over natural resources: Balancing rights and duties*. (1997) at 259-260.

¹⁴⁵ McDermott M. et al., Examining equity: A multidimensional framework for assessing equity in payments for ecosystem services, (2012) *Environmental Science & Policy* at 423.

¹⁴⁶ Takacs D., The public trust doctrine, environmental human rights, and the future of private property, (2008) 16 *New York University Environmental Law Journal* 711 at 7.

and cultural rights such as rights to education, work and health. Demands are put on the state's positive duties to realise these rights progressively as resources allow. "Third-generation" rights focus on the generic heading of collective rights where people are taken as a whole. Examples include the right to development, the right to peace, the right to environment, the right to the ownership of the common heritage of humankind.¹⁴⁷ It is noted that controversies exist as to whether third-generation rights are rights in the sense that they pose legal obligations. It is also noted that some scholars argue that all rights should be given equal weight because as human rights they all are "universal, indivisible and interdependent and interrelated".¹⁴⁸ Following from this, Takacs discerns three types of rights, namely: (1) "rights", (2) rights and (3) *rights*. This thesis adopts this approach because of its practical relevance as elaborated below.

"Rights" are legal privileges that may be temporary or fungible. With reference to the California Constitution Takacs indicates that "rights to water" is a limited "right" in the sense that it can easily (at least when compared with (2) rights or (3) *rights*) be revoked or made conditional.¹⁴⁹ He further points out that these rights correspond to what Sax refers to as a usufructuary, a "right" that incorporates the interests of others and thus a "right" that one does not own "in the same way he owns his watch or his shoes".¹⁵⁰

With regards to (2) rights, the author argues that these are fundamental guarantees in a sense that they are enshrined in constitutions. These include environmental rights such as those contained in section 24 of South African Constitution and Article 21 of the Indian Constitution.¹⁵¹ These are not absolute, and in some cases limitations may be imposed on the subjects in a reasonable and justifiable manner.¹⁵² Despite this possibility, these rights confer considerable power on the rights holders. Once codified, they are usually enforced through legislation, judicial and quasi-judicial bodies and through mobilising venues to shame those who violate them.¹⁵³ An example of enforcement through judicial and quasi-judicial bodies

¹⁴⁷ Tseng C.Y., On People's Human Rights: From a Taiwanese Perspective. *Yu Da College of Business* (2003) 165-196 at 169-170. Available: <http://ir.ydu.edu.tw/handle/310997200/281> [accessed 6 August 2015].

¹⁴⁸ Takacs D., The public trust doctrine, environmental human rights, and the future of private property, (2008) 16 *New York University Environmental Law Journal* 711 at 7.

¹⁴⁹ *Ibid* at 7.

¹⁵⁰ *Ibid* citing Sax J., Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention, (1970) 68 *Michigan Law Review* 471 at 476.

¹⁵¹ Takacs D., The public trust doctrine, environmental human rights, and the future of private property, (2008) 16 *New York University Environmental Law Journal* 711 at 9.

¹⁵² *Ibid* citing Razzque J., Public Interest Environmental Litigation in India, Pakistan and Bangladesh 85 (2004).

¹⁵³ Takacs D., The public trust doctrine, environmental human rights, and the future of private property, (2008) 16 *New York University Environmental Law Journal* 711 at 9.

includes a court order requiring the party at fault to execute, or refrain from, a particular course of action, usually when they had a duty to do, or to refrain from doing something.¹⁵⁴ With regards to the issue of fairness, a set of questions arises as follows: “[w]hat set of fundamental rights is adequate to ensure justice in REDD+ implementation? Who holds these rights, and who bears the duty to enforce them?”¹⁵⁵ Advocates have contended that “there should be “gender equality” to imply equal rights, responsibilities and opportunities of women and men and girls and boys. Equality does not mean that women and men will become the same but that women’s and men’s rights, responsibilities and opportunities will not depend on whether they are born male or female.”¹⁵⁶ In addition, some advocates have contended that warranting clear property rights will complement implementation of REDD+ which is fair.¹⁵⁷ But defining costs and equitable distributions on the grounds of property rights raises problems in specifying the target group of concern (who), and the content of the right (such as forest, timber or carbon; non/commercial use; and non/consumptive use).¹⁵⁸ With reference to Sikor and Stahl, McDermott, et al., ask by what authority, or grounds, were such rights conferred?¹⁵⁹ The fact that carbon rights are not yet legally defined in most countries¹⁶⁰ places this latter issue at the forefront.¹⁶¹

The (3) *rights* are procedurally and substantively inviolable. These are supreme to any national laws. This means they provide absolute privileges to the subjects and violations thereof may be prohibited in all circumstances.¹⁶² These are widely known as *jus cogens*

¹⁵⁴ Zalta E. (ed.), *Stanford Encyclopedia of Philosophy* (2010). Available: <http://plato.stanford.edu/entries/african-ethics/> [accessed 15 July 2014].

¹⁵⁵ McDermott, M. et al., Examining equity: A multi-dimensional framework for assessing equity in payments for ecosystem services, (2012) *Environmental Science & Policy* at 423.

¹⁵⁶ UNREDD, 2013 cited in Skutsch M. and Torres A.B., Challenges for pro-poor benefit sharing schemes in the implementation of REDD+ in Mexico. Scoping paper prepared for The Forest Dialogue (TFD) on REDD+ Benefit Sharing Chetumal, Mexico 2-5 June 2014 at 18.

¹⁵⁷ McDermott M. et al., Examining equity: A multi-dimensional framework for assessing equity in payments for ecosystem services, (2012) *Environmental Science & Policy* at 423 citing Larson A.M., Forest tenure reform in the age of climate change: Lessons for REDD+. (2011) 21:2 *Global Environmental Change* 540-549.

¹⁵⁸ Sikor T. and Stahl J. (eds.), *Forests and People: Property, Governance and Human Rights*. Earthscan, London (2011).

¹⁵⁹ Sikor T., and Lund C., Access and property: A question of power and authority. (2009) 40:1, *Development and Change* 1–22 at 10.

¹⁶⁰ Mahanty S. et. al., The social Life of forest carbon: property and politics in the production of a new commodity. (2012) 40:5 *Human Ecology*, 661-664.

¹⁶¹ McDermott M. et al., Examining equity: A multi-dimensional framework for assessing equity in payments for ecosystem services, (2012) *Environmental Science and Policy* at 423.

¹⁶² Takacs D., The public trust doctrine, environmental human rights, and the future of private property. (2008) 16 *New York University Environmental Law Journal* 711 at 9.

rights.¹⁶³ This distinction of rights is helpful when one is discussing the question of why anyone can claim carbon rights but such explanation is not discussed here. To this end, it is then sufficient to point out that the legal basis for a benefit claim for REDD+ can be derived from the existing legal frameworks such as the constitution, a statute or contract.¹⁶⁴

2.5 Environmental-Effectiveness

The UNFCCC obliges countries to enact effective legislation and to formulate, implement, publish and update national and regional programs to achieve its objectives.¹⁶⁵ It should also be noted that Principle 11 of the Rio Declaration requires all countries to enact “effective environmental legislation”, and recommends that the standards, objectives and priorities “reflect the environmental and developmental context to which they apply”.¹⁶⁶ The term “effective” as applied in the context of climate legislation and policy is subject to multiple interpretations. Before embarking on the conception of effectiveness, it is helpful to give a brief discussion to illustrate how such concept relates to law.

The goal of rules of law is to serve justice and establish (minimum) order. Such rules are invented to address issues as they transpire from technological, social, and other changes.¹⁶⁷ It is also argued that a legal system is unable to initiate and monitor social change on its own. To have the said effects, it must devise some clear parameters for the direction and extent of social change. Such parameters must also be reflective of what society feels strongly about and in that way such law will be effective. On the contrary, if they are unclear or ignore the social realities, they will have little or no impact.¹⁶⁸ It should be noted that law is a “product of struggle, negotiation, compromise and power dynamics, and may represent the dominant views or social compromise”.¹⁶⁹ Therefore, it is clear that legislation may not be reflective of

¹⁶³ This principle is codified in Article 53 of the Vienna Convention on the Law of Treaties, May 23, 1969, 1155 U.N.T.S. 331, 344. See also Takacs D., The public trust doctrine, environmental human rights, and the future of private property. (2008) 16 *New York University Environmental Law Journal* 711 at 9.

¹⁶⁴ Ituarte-Lima C. et. al., Assessing equity in national legal frameworks for REDD+: The case of Indonesia. (2014) xxx *Environmental Science and Policy* 1-10 at 292. Chapman S. and Wilder M., Defining the legal elements of benefit sharing in the context of REDD+. REDD+ Law Project - Working Paper (2014) at 16.

¹⁶⁵ The preamble read together with Article 4.1 (b).

¹⁶⁶ Principle 11. Also see Sands P., (2003) at 56.

¹⁶⁷ Louka E., *International Environmental Law: Fairness, Effectiveness, and World Order*. (2006) at 71. McGrath C. J., How to evaluate the effectiveness of an environmental legal system. *PhD Thesis, Queensland University of Technology* (2007) at 50.

¹⁶⁸ Bosselmann K., *The Principle of Sustainability: Transforming Law and Governance*, (2008) at 43.

¹⁶⁹ Redclift (1992) cited in Katerere J. M., “Participatory natural resources management in the communal lands of Zimbabwe: What role for customary law?” (2001) *African Studies Quarterly* 5.

a society at large. If this is the outcome, then securing rights with the view to attaining fairness cannot be expected.

This brings us to the issue of effectiveness. A general test of the effectiveness of a law or a particular provision of a legal system is to see how far it realises its objectives, i.e. fulfills its purposes.¹⁷⁰ Because climate law and environmental law have been adopted to deal with environmental problems, it is not surprising that when such law is appraised from the perspective of effectiveness, it is judged based on whether it has resolved the environmental problem in question with some measure of success.¹⁷¹ This is the popular conception of effectiveness. It follows that the conception of effectiveness of climate law requires more investigations since the quantity of carbon reduction in REDD+ occurs over time.¹⁷² In this case, its effectiveness is determined by the extent to which REDD+ actions reduce and control emissions from avoiding deforestation and degradation and/or increase carbon sequestration as a result of sustainable forest management¹⁷³ within a defined period of time. Some have concluded that the effectiveness of REDD+ will vary depending on the particular objectives it holds for diverse actors, across countries and localities.¹⁷⁴ The impact thereof will depend “on a whole host of interacting political and economic dynamics within and outside the control of any particular group of actors.”¹⁷⁵ With that understanding together with the conception of equity in mind, it is therefore, plausible to argue that the effectiveness of climate change mitigation responds to the question whether the legislation or policy leads to a reduction in and control of emissions compared to a reference level within a defined timeframe in a fair manner. The effectiveness of climate change mitigation should address three concerns: (i) additionality: the emission reductions must be additional to what would have occurred without mitigation interventions; (ii) permanence: the emission reductions

¹⁷⁰ IPCC, Working Group III Chapter 3: Social, Economic, and Ethical Concepts and Methods. Final Draft as distributed to governments on 17 December (2013) at 43 also emphasises that “ambition levels, enforcement and compliance” are important in determining the effectiveness of a policy or law. Also see Allott A., *The effectiveness of laws*. (2011) 15:2 *Valparaiso University Law Review*, 229-242 at 233.

¹⁷¹ Louka E., *International Environmental Law: Fairness, Effectiveness, and World Order*. (2006) at 72. See also Skutsch M. and Torres A.B., Challenges for pro-poor benefit sharing schemes in the implementation of REDD+ in Mexico. Scoping paper prepared for The Forest Dialogue (TFD) on REDD+ Benefit Sharing Chetumal, Mexico 2-5 June 2014 at 17.

¹⁷² Emissions reduction below the baseline is expected only at the third phase implementation of REDD+ activities. Therefore, the further along the results chain one wishes to measure performance, the more time needs to pass. In order to measure whether the desired impact has been achieved one has to wait until some years (estimated from 10-15) have passed. Angelsen A. et. al., *Analysing REDD+: Challenges and choices* (2012) at 235.

¹⁷³ Skutsch M., Slicing the REDD+ pie: controversies around the distribution of benefits. Review (Undated).

¹⁷⁴ Angelsen A. et. al., *Analysing REDD+: Challenges and choices*. (2012) at 235.

¹⁷⁵ McDermott C.L., REDDuced: From sustainability to legality to units of carbon-The search for common interests in international forest governance. *Environmental Science and Policy* (2012) at 7.

must be permanent and (iii) leakage: mitigation interventions in one area must not lead to a shift of emissions elsewhere.¹⁷⁶ It can be concluded therefore that the effectiveness of climate change mitigation should be assessed against technologies, what aspects of REDD+ are included (i.e. reduced deforestation, reduced degradation/disturbances, forest enhancement/increased sequestration, conservation),¹⁷⁷ materials, intent and impacts (environmental impacts, cost-effectiveness, cultural, equity, potential human rights violations, all of which are relevant elements of such mitigation intervention).¹⁷⁸ This understanding is in line with the requirement for establishing reference levels or a baseline as the basis for payments or punishment.¹⁷⁹

Apart from the above understanding, there is another way of defining effectiveness. This arises from the understanding that some environmental regimes are effective in the sense that they make a difference (sometimes sizable) not only in terms of outputs and outcomes but also in terms of inducing their subjects to comply with systems of rules and regulations.¹⁸⁰ However, it should be noted that success on this approach does not guarantee progress in solving the relevant problems.¹⁸¹ In contrast, compliance effectiveness is the extent to which an agreement has an adequate and effective institutional framework such as monitoring procedures and implementation review, which in turn is largely considered as a precondition of reaching desired environmental outcomes.¹⁸² In addition, the effectiveness of environmental regimes might be strengthened or reduced when such regime interacts with other regimes operating in other areas like trade and finance.¹⁸³ Louka contends that for

¹⁷⁶ Resosudarmo I.A.P.et. al., Does Tenure Security Lead to REDD+ Project Effectiveness? Reflections from Five Emerging Sites in Indonesia. *World Development* (2013) at 3-4. Also see Angelsen A. and Wertz-Kanounnikoff S., Chapter 2: What are the key design issues for REDD and the criteria for assessing options? in Angelsen, A. (ed.), *Moving Ahead with REDD*. (2008) at 19.

¹⁷⁷ Louka E., *International Environmental Law: Fairness, Effectiveness, and World Order* (2006) at 72. See also Skutsch M. and Torres A.B., Challenges for pro-poor benefit sharing schemes in the implementation of REDD+ in Mexico. Scoping paper prepared for The Forest Dialogue (TFD) on REDD+ Benefit Sharing Chetumal, Mexico 2-5 June 2014 at 17.

¹⁷⁸ This line of thinking is drawn from the Regulatory Framework of Climate-related Geo-engineering Relevant to the Convention on Biological Diversity Study carried out in line with CBD Decision X/33 Second Draft 23 January 2012. Available: <http://sustainabledevelopment.un.org/content/documents/1741cbd.pdf> [accessed 15 July 2015].

¹⁷⁹ For a discussion of REDD+ payments and reference levels see Chapter 6 in Angelsen A. et.al., *Analysing REDD+: Challenges and choices*. (2012) at 53-63.

¹⁸⁰ Young O.R., Effectiveness of international environmental regimes: Existing knowledge, cutting-edge themes, and research strategies. (2011) 108:50 *PNAS*, 19853-19860 at 19855.

¹⁸¹ *Ibid* at 19854.

¹⁸² Bäckstrand, K., Democratizing global environmental governance? Stakeholder democracy after the world summit on sustainable development. (2006) 12 *European Journal of International Relations* 467-498 at 479.

¹⁸³ Young O.R., Effectiveness of international environmental regimes: Existing knowledge, cutting-edge themes, and research strategies. (2011) 108:50 *PNAS*, 19853-19860 at 19855.

environmental legislation to be called effective, it must address successfully the distributional justice issues among others.¹⁸⁴ Only after it addresses and balances minimum order, distributive justice and *interspecies equity* with some success, then it could be claimed that the legislation has begun to mitigate the environmental problem effectively¹⁸⁵ (emphasis added). The exposition therefore implies that costs and benefits can be distributed based on inputs and outputs.¹⁸⁶

Measurement, Reporting and Verification (MRV)

What can and should be measured? an agreed definition of “measurement” does not exist in international law.¹⁸⁷ But some researchers have attempted to define the concept of measurement in terms of its function. They indicate that the “function of measurement is to describe a phenomenon in reasonably precise, objective terms—that is, in terms of an established standard or “unit of measurement.”¹⁸⁸ The authors draw on international environmental law to show that “measurement” is not only connected with quantifiable attributes (such as volume or area), but that, in principle, almost any phenomenon can be measured. They added that the more precise and certain the description, the better the measurement.¹⁸⁹ But “measurement” is often used interchangeably with the term “monitoring”. However, the two do not mean the same thing and are not equally feasible in all contexts. To distinguish the two one has to understand that all that can be measured can also be monitored; but not all monitored elements can be necessarily measured quantitatively.¹⁹⁰ Generally, monitoring is defined as the “repeated measurement” of three separate, but related factors as follows:¹⁹¹

- (1) “the quality of the... environment and each of its compartments...,”
- (2) activities or natural and anthropogenic inputs which may affect the quality of the ...environment, and

¹⁸⁴ Ibid Louka E., (2006) at 72.

¹⁸⁵ Ibid. See also Young O.R., Effectiveness of international environmental regimes: Existing knowledge, cutting-edge themes, and research strategies. (2011) 108:50 *PNAS* at 19855.

¹⁸⁶ Skutsch M. and Torres A.B., Challenges for pro-poor benefit sharing schemes in the implementation of REDD+ in Mexico. Scoping paper prepared for The Forest Dialogue (TFD) on REDD+ Benefit Sharing Chetumal, Mexico 2-5 June 2014 at 14.

¹⁸⁷ Clare B. and Bodansky D., “Measurement, reporting and verification in a post-2012 climate agreement”. Pew Center on Global Climate Change (2009) at 3.

¹⁸⁸ Ibid.

¹⁸⁹ Ibid. Also see Saunders J. and Reeve R., (2010) at 19.

¹⁹⁰ Hinostroza M (ed)., *Measuring Reporting Verifying: A Primer on MRV for Nationally Appropriate Mitigation Actions*. UNEP Risø Centre (2012) at 7. Available: http://orbit.dtu.dk/fedora/objects/orbit:112215/datastreams/file_8167750/content [accessed 13 July 2015].

¹⁹¹ 1992 OSPAR Convention, Annex IV, Art. 1. Also see Ibid Sands (2003) at 848.

(3) the effects of such activities”.

Reporting is broadly described as a part of a broader system designed to ensure compliance with international obligations. It can be distinguished from reporting within countries for domestic use in developing policies and measures. In the context of international environmental instruments the UNEP Guidelines define reporting as the provision by parties of: “Regular, timely reports on compliance, using an appropriate common format.”¹⁹² In the context of the REDD+ mechanism this definition may be somewhat restrictive. This is because when one considers reporting on performance-based mitigation actions to international institutions, the focus does not only concern compliance with agreed benchmarks but also the extent to which payments deliver results.¹⁹³ Unlike other instruments, the UNFCCC and Kyoto Protocol provide that the responsibility for reporting be undertaken by parties only.¹⁹⁴

Verification refers to the process of independently checking the accuracy and reliability of reported information or the procedures used to generate reported information.¹⁹⁵ In the context of international environmental instruments, it is broadly defined as a process of testing the accuracy of data or information.¹⁹⁶ Such a process (*usually* undertaken by a third party) may involve verification of data and technical information in order to assist in ascertaining whether a party is in compliance.¹⁹⁷ Verification is not the same as review although sometimes the two overlap. The former generally means a technical and non-judgmental process and is carried out by a wide variety of actors both at international and national levels. The latter means an evaluation of performance or an assessment of the adequacy of commitments. An example cited is the expert review under the UNFCCC and Kyoto Protocol.¹⁹⁸ Given the difference between the two, it should be added that verification also is distinct from the issue of compliance. It involves an assessment of the factual accuracy of information rather than a legal judgment as to whether a country is in compliance with its obligations. However, verification is usually closely related to compliance and sometimes the

¹⁹² UNEP Governing Council Decision SS.VII/4, *Compliance with and enforcement of multilateral environmental agreements*”, UNEP(DEPI)/MEAs/WG.1/3, annex II (Feb 2002). As highlighted by Saunders J. and Reeve R., (2010) at 19.

¹⁹³ Ibid Saunders J. and Reeve R., (2010) at 19.

¹⁹⁴ Ibid at 20, citing Brack D, personal communication in Reeve, 2002.

¹⁹⁵ Reeve R., *Policing International Trade in Endangered Species: the CITES Treaty and Compliance*, (2002). As highlighted by Saunders J. and Reeve R., (2010) at 20.

¹⁹⁶ *Compliance Mechanisms under Selected Multilateral Environmental Agreements*, UNEP, Nairobi, 2007. As highlighted by Saunders J. and Reeve R., (2010) at 20.

¹⁹⁷ Ibid.

¹⁹⁸ Ibid at 21.

two blend together. It follows that in regard to agreements with compliance procedures, verification usually has a preliminary role for providing the accurate ground for later legal determinations.¹⁹⁹

A common understanding of the purpose and functions of the MRV regime remains to be clearly articulated.²⁰⁰ At the moment there is limited guidance on “reporting” on developing country mitigation actions and no precedent on “verification” under the UNFCCC or Kyoto Protocol.²⁰¹ A plausible explanation as to why this is the case is offered by Dutschke. The author argues that the verification debate recalls the issue of aid conditionality and in so doing it raises old sensitivities in recipient countries. Aid conditionality has been used to link aid to the acquisition of goods and services from the donor country.²⁰²

This chapter argues that the subject of MRV should be the 3Es and related benefits such as financial rewards. However this is a broad assertion in response to a very complex issue. For example, when addressing MRV for equity the immediate question which arises is “at what social and temporal scale should equity be assessed?”²⁰³ Is it practically possible to address this at *inter alia* individual, household, community, ecosystems, and intergenerational levels as discussed by some scholars?²⁰⁴

2.6 Cost-Effectiveness

The UNFCCC provides that legal and policy measures to address climate change “should be cost-effective so as to ensure global benefits at the lowest possible cost.”²⁰⁵ The term “cost-effective” is not unique in the climate change regime but also in other environmental legislation.²⁰⁶ It should be noted that the UNFCCC does not mention efficiency. With this

¹⁹⁹ Clare B. and Bodansky D., Measurement, reporting and verification in a post-2012 climate agreement. Pew Center on Global Climate Change (2009) at 7.

²⁰⁰ Ibid. Saunders J. and Reeve R., (2010) at 19.

²⁰¹ Ibid.

²⁰² Dutschke M., Key issues in REDD+ verification. Occasional Paper 88. *Center for International Forestry Research (CIFOR)* (2013). Available: http://www.cifor.org/publications/pdf_files/OccPapers/OP-88.pdf [accessed 5 July 2014].

²⁰³ McDermott, M. et. al., Examining equity: a multidimensional framework for assessing equity in payments for ecosystem services. (2012) 33 *Environmental Science and Policy* 416-427 at 422.

²⁰⁴ Ibid.

²⁰⁵ Article 3.3 of UNFCCC.

²⁰⁶ Interwies E. et. al., Evaluating the cost-Effectiveness of Environmental Policies: Theoretical Aspirations and Lessons from European Practice for Global Conference. Paper presented at the 2007 Amsterdam Conference on the Human Dimensions of Global Environmental Change (24-26 May 2007): “Earth System Governance: Theories and Strategies for Sustainability”. Theme 2: Architectures of Earth System Governance, Panel 3: Regional Governance Architectures. Available:

observation in mind, Soltau contends that cost-effectiveness should be distinguished from efficiency.²⁰⁷ It follows that, once the distinction is obtained, one can understand the reasons for the choice of the principle in question. However, the principle of cost-effectiveness in the UNFCCC is not defined. Thus efforts have been undertaken (although not exhaustive as far as this thesis is concerned) to show how the principle is aimed as guiding decision-making with the view to giving effect to sustainable development while mitigating climate change.²⁰⁸

To understand the meaning of cost-effectiveness in climate change regime, it is helpful to understand its origin and what it aims to serve. In terms of the origin, the available literature suggests that the concept is connected to or originates from the cost-effectiveness analysis (CEA) which was introduced for the first time by the United States of America (USA) Department of Defense in 1950s. The department sought a device to assist them in judging among the demands of the various branches of the armed services for increasingly costly weapons systems with different levels of performance and overlapping missions. Since the 1960s, CEA has been widely used as a means to analyse the efficiency of alternative government programs outside of the military.²⁰⁹ Until recently, CEA is dealt with to a greater extent in the military, health and education sectors than in environmental sector.²¹⁰ In all these sectors, the objective of CEA has been to compare alternatives for the irrelative costs and results. In its most basic form CEA asks: “which program or intervention provides the most effectiveness (on a single criterion measure) at the lowest cost?”²¹¹ Thus, it is possible to judge the most cost-effective options for achieving a particular objective.²¹² However,

http://www.2007amsterdamconference.org/Downloads/AC2007_InterwiesGoerlachNewcombe.pdf [accessed 5 July 2014].

²⁰⁷ Soltau F., *Fairness in International Climate Change Law and Policy* (2009) at 3 and 234.

²⁰⁸ Appropriate economic instruments may offer the potential for achieving environmental improvements in a cost-effective manner. The adoption of any form of economic or regulatory measures would require careful and substantive analysis. Cited in Sands P., *Principles of International Environmental Law*, 2nd ed., (2003) at 8 and 154.

²⁰⁹ Levin H.M., Cost-effectiveness Analysis, in *International Encyclopedia of Economics of Education*, 2ed, (1995) 381-386 at 381.

²¹⁰ Interwies E. et. al., Evaluating the cost-Effectiveness of Environmental Policies: Theoretical Aspirations and Lessons from European Practice for Global Conference. Paper presented at the 2007 Amsterdam Conference on the Human Dimensions of Global Environmental Change (24-26 May 2007): “Earth System Governance: Theories and Strategies for Sustainability”. Theme 2: Architectures of Earth System Governance, Panel 3: Regional Governance Architectures. Available: http://www.2007amsterdamconference.org/Downloads/AC2007_InterwiesGoerlachNewcombe.pdf [accessed 16 July 2014].

²¹¹ White J.L. et. al., Cost Analysis in Educational Decision Making: Approaches, Procedures, and Case Examples. Working Paper No. 2005-1. *Wisconsin Center for Education Research (NJ3)* at 5.

²¹² Levin H.M., Waiting for Godot: Cost-Effectiveness Analysis in Education. *New Directions for Evaluation*, 90, *John Wiley & Sons, Inc* (2001) at 56. Macintosh A. et. al., Limp, Leap or Learn? Developing legal frameworks for climate change adaptation planning in Australia. National Climate Change Adaptation Research Facility. Gold Coast, Final Project Report (2013) 277 at 27.

sometimes the most cost-effective strategy is not the cheapest.²¹³ Taking these issues together, cost-effectiveness is defined as the “extent to which the programme has achieved or is expected to achieve its results at a lower cost compared with alternatives.”²¹⁴ CEA only requires the costs to be calculated in monetary terms.²¹⁵ On the other end, benefits are quantified as incremental effects expressed in any unit other than monetary terms.²¹⁶ CEA differs from its close relation, cost-benefit analysis (CBA), which requires monetary measures of impact relative to costs.²¹⁷ A discussion on CBA is different in focus from the present task and will not be discussed further.²¹⁸

CEA consists of three components: (a) the costs of alternatives must be carefully measured, (b) the outcomes or effectiveness of the alternatives must be measured, and finally (c) costs and effectiveness measures are combined to calculate a cost-effectiveness ratio, for instance by dividing the effectiveness of each alternative by its cost to show the unit cost of achieving a particular objective. Such a ratio is known as “the achievement gain per dollar spent.”²¹⁹ It is at this point where the most cost-effective alternative can be established.²²⁰ It should also be noted that the distinction between outputs and outcomes is sometimes blurred (for instance by referring to both as “results”) in determining the cost-effectiveness of a programme. CEA links the level of outcomes to the costs involved. Technically, services may be delivered efficiently in terms of number of services provided per dollar spent (output), but the impact of the service may be negligible when measured against the stated objectives (outcome), making it very cost-ineffective. Decision-makers are in a

²¹³ Bray M., *Double-shift schooling design and operation for cost-effectiveness. Fundamentals of Educational Planning*, 3rd ed. (2008) at 34.

²¹⁴ “Value-for-money is a related concept. This assesses the extent to which the program has obtained the maximum benefit from the outputs and out-comes it has produced within the resources available to it.” http://siteresources.worldbank.org/EXTGLOREGPARPROG/Resources/grpp_sourcebook_chap11.pdf [accessed 5 July 2014]. See also Markandya A., *Dictionary of Environmental Economics* (2003) at 50.

²¹⁵ Bray M., *Double-shift schooling design and operation for cost-effectiveness. Fundamentals of Educational Planning*, 3rd ed. (2008) at 31. McEwan P.J., Cost-effectiveness analysis of education and health interventions in developing countries. (2012) 4:2 *Journal of Development Effectiveness*. 189–213 at 190.

²¹⁶ Bray M., *Double-shift schooling design and operation for cost-effectiveness. Fundamentals of Educational Planning*, 3rd ed. (2008) at 31.

²¹⁷ Levin H. M., *Waiting for Godot: Cost-Effectiveness Analysis in Education. New Directions for Evaluation*, 90, John Wiley & Sons, Inc (2001) at 56.

²¹⁸ “Grabosky has pointed out that efficiency and effectiveness are not inextricably linked. A policing action may be inefficient but effective, or it may be efficient but ineffective, or it may be neither, or both.” Cited in Ayling J. et. al., *Lengthening the Arm of the Law: Enhancing Police Resources in the Twenty-First Century*. (2008) at 45. For a critique of Cost-Benefit Analysis see Kysar D.A., Climate change, cultural transformation, and comprehensive rationality. (2004) 31 *Boston College Environmental Affairs Law Review* 555 in Wold C. et. al., *Climate Change and the Law*, (2009) 87-93.

²¹⁹ Harbison R.W. and Hanushek E.A., *Educational performance of the poor: lessons from rural northeast Brazil*. (1992) at 140.

²²⁰ Woodhall M., *Cost-benefit analysis in educational planning*. 4th ed (2004) at 26.

better position to make informed decisions when they have information relating to the level and worth of outcomes relative to their costs as well as the programme's technical efficiency and effectiveness.²²¹

CEA can be applied both as an ex-ante appraisal and ex-post evaluation tool.²²² In ex-ante application, CEA helps to determine the most cost-effective way of achieving a given target thereby assisting decision-makers to allocate resources efficiently to realise policy objective.²²³ If applied ex-post, CEA assists in determining whether the aforementioned policy has been effective in addressing the problem it was designed for and at what cost. In some cases such application may require an ex-ante/ex-post comparison to assess whether expected effects were realised in a projected cost. Therefore, carrying out an ex-ante assessment presents an opportunity to formulate at an early stage the questions that should later be addressed in the post-ante CEA.²²⁴ This analysis can inform the MRV requirements accordingly. As indicated earlier, the objective of CEA is usually to inform choices about the allocation of society's scarce resources for the betterment of society's outcomes. The question that follows is "whose costs and outcomes"? Arguably, costs and, if possible, effects should be measured from multiple standpoints: host governments, including agencies directly and indirectly involved in implementing the intervention, communities and investors who nonetheless receive benefits or effects.²²⁵

With regard to the application of CEA in the climate change context with reference to the question of cost of REDD+ implementation, two types of costs are discussed in the literature.²²⁶ The first one requires the financing of upfront capacity-building as countries are required to fulfil minimum readiness requirements. These include establishing infrastructure for monitoring emissions reduction, addressing land tenure and strengthening institutional

²²¹ Common wealth of Australia, *Introduction to Cost-Benefit Analysis and Alternative Evaluation Methodologies*, January (2006) at 30.

²²² Interwies E. et. al., *Evaluating the Cost-Effectiveness of Environmental Policies: Theoretical Aspirations and Lessons from European Practice for Global Conference*. Paper presented at the 2007 Amsterdam Conference on the Human Dimensions of Global Environmental Change (24-26 May 2007): "Earth System Governance: Theories and Strategies for Sustainability". Theme 2: Architectures of Earth System Governance, Panel 3: Regional Governance Architectures. Available: http://www.2007amsterdamconference.org/Downloads/AC2007_InterwiesGoerlachNewcombe.pdf [accessed 5 June 2014].

²²³ Ibid.

²²⁴ Ibid.

²²⁵ McEwan P.J. Cost-effectiveness analysis of education and health interventions in developing countries.(2012) 4:2 *Journal of Development Effectiveness*, 189–213 at 194-95.

²²⁶ Dutschke M. et. al., *How do we match country needs with financing sources?* In Angelsen, A. (ed.), *Moving Ahead with REDD*. (2008), at 42. See also Luttrell C. et. al., *Who should benefit from REDD+? Rationales and realities*. (2013) 18:4 *Ecology and Society* 52.

capacities for law enforcement. The second cost requires the financing of ongoing emission reduction. In the current context, this is broken down into two aspects: (1) sustainable forest management costs and (2) opportunity costs. The costs (interms of finances) for forest protection both inside and outside the forest sector which have implications for carbon reduction. Examples cited include “forest monitoring, reforming tenure, law enforcement, taxation of forestland, restrictions on road building and agricultural zoning.”²²⁷ Other costs could relate to the setting and operating of the MRV. Opportunity costs occur due to foregone profits from deforestation and agricultural commodity sales or the costs of implementing sustainable forest use.²²⁸ “Opportunity costs are higher where markets are accessible and where expanding forest protection (e.g. REDD+) intensifies agriculture.”²²⁹ REDD+ activities can be implemented at a low cost when opportunity costs are lower but this is unlikely in cases where there are the greatest challenges in administration and monitoring REDD+ legislation and policy.²³⁰ In addition to the opportunity costs, there is a transaction cost for participating in a REDD+ scheme which must be addressed.²³¹ As it has been seen, the REDD+ mechanism has some upfront costs, but the cost may be subject to change depending on different circumstances such as natural disasters or fire which are beyond the control of the forest manager. It is also conceivable that the cost of the REDD+ mechanism will also change in the future due to different factors. Therefore, the overall cost and overall effectiveness of any given alternative strategy are not often apparent on first glance. This is perhaps the reason why cost effective analysis has to be taken together with a precautionary approach.

To integrate cost in cost-effective analysis, one could ascertain the lower cost by assessing the cost of: introducing incentives for community-based monitoring against that of command and control; direct payments in achieving conservation objectives compared to indirect strategies such as the promotion of commercial enterprises with the view to generating local incentives for conservation.²³² Another way of looking at cost-effectiveness is through the lens of activities to be implemented. It can also mean that “the choice that a country makes

²²⁷ Ibid. Dutschke M. et. al., (2008) at 42.

²²⁸ Ibid.

²²⁹ Ibid.

²³⁰ Ibid citing Eliasch (2008).

²³¹ Angelsen A. and Wertz-Kanounnikoff. S., What are the key design issues for REDD and the criteria for assessing options? In: Angelsen, A. (ed.), *Moving Ahead with REDD*, (2008) at 19.

²³² Wünscher T. et.al., The Cost-Effectiveness of Combining Reforestation Auctions with Performance Based Payments – A Field Trial in Rural Kenya (Undated). Available: <http://www.isee2012.org/anais/pdf/592.pdf> [accessed 5 July 2015].

between different domestic instruments to implement REDD+ (such as payments for ecosystem services, participatory forest management and forest concession revenue sharing) may lead to differences” in cost-effectiveness. In this case, the one which is least costly would be preferred.

With regards to the issue of effectiveness, the first word of caution is that a cost-effectiveness provision is not self-standing, but read together with reference to a precautionary approach.²³³ Some of the key issues to consider in the context of climate change relates to the issues of uncertainty and irreversibility. Regarding the former, Beder contends that it is impossible to identify all the consequences of a particular project or policy option. To do so would require one to predict the future and deal with the uncertain interactions between human activities and the ecosystems in which they take place.²³⁴ “The first challenge in assessing ‘effectiveness’ is that uncertainty prevails in climate change’s impact on humans and ecosystems at the regional and local level.”²³⁵ Concerning the latter, there is provision in the cost-benefit analysis for the significance of keeping options open for the future in case of irreversibility due to harmful practices.²³⁶ The fact that a REDD+ project takes at least 15 years for the emission reductions to be measured,²³⁷ brings this issue to the fore. Another issue is that a decision to plant trees may have irreversible ecosystem damage.

Why cost-effectiveness? It is observed that efficiency analysis may have the result of displacing fairness issues in the process of defining the goal. The distinction between cost-effectiveness and efficiency is relevant to fairness, policy analysis, and legal grounds.²³⁸ Having analysed such a distinction, it seems to the writer that cost-effectiveness overlaps with procedural equity in the sense that the cost-effectiveness approach accommodates the requirement for public participation to allow other related issues (e.g. culture) to be considered.

2.7 Are the 3Es Synergetic or Contradicting?

The need to establish whether there is a contradiction among the principles in this chapter is borne out of the assertion by scholars such as Sen who point out that decision makers rely

²³³ Soltau at 235.

²³⁴ Beder S., *Environmental Principles and Policies: An Interdisciplinary Approach*. (2006) at 152.

²³⁵ Ibid.

²³⁶ Ibid.

²³⁷ Angelsen A. et.al., *Analysing REDD+: Challenges and choices*, (2012) at 235.

²³⁸ Soltau at 235.

on different principles of justice to justify calls for equity.²³⁹ The author adds that the choice of “principles”²⁴⁰ are likely to lead to different policy solutions.²⁴¹ Accordingly, it is concluded that there is “no rational way to prefer, a priori, one fairness criterion over another because all of them are equally justifiable both in ethical and operative terms.”²⁴²

2.7.1 Environmental-Effectiveness, Cost-Effectiveness and Equity?

The inclusion of equity usually arises after the cost-effectiveness calculations have been finalised.²⁴³ One of the reasons for advocating the use of cost-effectiveness is its appeal to justice.²⁴⁴ This arises since it minimises total costs so that, in principle, everyone can be made better off (although this is usually not the case).²⁴⁵ In healthcare systems, the terms “effectiveness”, “efficiency”, and “equity” are often complementary.²⁴⁶ This is because improving health care effectiveness while holding resources constant increases efficiency.²⁴⁷ Increases in efficiency create opportunities for improved effectiveness and equity.²⁴⁸ Thus, applying this line of thinking in the climate change context, the following must be correct. Since climate change will erode nations’ capacities to achieve the “sustainable development goals”²⁴⁹ and “Millennium Development Goals” particularly in Africa,²⁵⁰ it follows that mitigating climate change (environmental-effectiveness) at least cost would enhance efficiency. Similarly, increases in efficiency create opportunities for improved effectiveness and equity. However, the objectives may also be in conflict. In healthcare system, “maximizing effectiveness by allocating additional resources to improve health may conflict

²³⁹ Sen A., *The idea of justice*. (2009) at 13. See also Pascual U. et. al., Exploring the links between equity and efficiency in payments for environmental services: A conceptual approach. (2010) 69 *Ecological Economics* 1237–1244 at 1239.

²⁴⁰ Such as discussed in section 2.4.

²⁴¹ Ibid.

²⁴² Pascual U. et. al., Exploring the links between equity and efficiency in payments for environmental services: A conceptual approach. (2010) 69 *Ecological Economics* 1237–1244 at 1239.

²⁴³ IPCC, Working Group III: Mitigation. Available:

<http://www.ipcc.ch/ipccreports/tar/wg3/index.php?idp=51#fig12> [accessed 19 July 2013].

²⁴⁴ Tol R.S.J., Equitable cost-benefit analysis of climate change policies. (2001) 36 *Ecological Economics* 71–85 at 72.

²⁴⁵ Ibid.

²⁴⁶ Aday L. A. et. al., *Evaluating the Healthcare System: Effectiveness, Efficiency, and Equity* 3rd ed. (2004) at 3.

²⁴⁷ Ibid.

²⁴⁸ Ibid.

²⁴⁹ These are successors to the Millennium Development Goals. UN GA/RES/66/288: The future we want. Available: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/66/288&Lang=E [accessed 15 July 2013].

²⁵⁰ Climate Change 2007. *Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M. L. Parry, O. F. Canziani, J. P. Palutikof, P. J. Van der Linden, and C. E. Hanson (eds.). 717-43 at 75. In addition, climate change “invokes additional inequities, as its impacts are unevenly distributed and disproportionately affect the poor.” Tol R.S.J., Equitable cost-benefit analysis of climate change policies. (2001) 36 *Ecological Economics* 71–85 at 78.

with efficiency if the cost of the resources is high relative to their effectiveness.”²⁵¹ Maximising effectiveness and efficiency by distributing resources to persons who would gain the most may be deemed unfair in terms of procedural equity if the policy leads to a very uneven distribution of these resources.”²⁵² This is also true for the climate change mitigation.

2.7.2 Cost-Effective but Inequitable?

An example of the cost-effective approach which seems to be inequitable is illustrated by the following reference applicable to the REDD+ mechanism:²⁵³

...payments need to be applied strategically so that additionality can be demonstrated clearly. Only in this manner can users’ willingness to pay overtime be enhanced. Yet this also means people already living in approximate harmony with nature without any credible internal or external threat to service provision will generally not qualify as Payment for Environmental Services (PES) recipients.

Such a recommendation is challengeable from the equity stance. Many researchers seem to agree that those who conserve their forests, and therefore deliver an environmental service, should be rewarded regardless of their opportunity cost for REDD+ activities.²⁵⁴ Elsewhere, Wunder argues that:²⁵⁵

To reward, in the name of fairness, anybody who delivers an environmental service seems a dangerous avenue. ... Across-the-board entitlements to PES could endorse blackmail by anybody owning an unthreatened environmental asset, from Scandinavian forest owners menacing to cut down their trees for receiving carbon credits, to upland settlers threatening to deliberately pollute a river to receive watershed payments. It seems crucial not to take the PES- underlying victim pays principle to such absurd extremes.

In responding to the above extracts, Karsenty is of the view that it is probably too ambitious, and somehow dangerous, to anticipate economic instruments designed to address environmental problems to also be levers for social justice and poverty alleviation, especially

²⁵¹ Aday L. A. et.al., *Evaluating the Healthcare System: Effectiveness, Efficiency, and Equity*. 3rd ed. (2004) at 3.

²⁵² Ibid.

²⁵³ Wunder, S., The efficiency of payments for environmental services in tropical conservation. (2007) 21:1 *Conservation Biology* 48–58. In addition, “[t]he effectiveness–equity dilemma is that in many of these low-emission situations, additionality cannot be proven because there are no emissions to reduce in the first place.” See Angelsen A. et. al., *Analysing REDD+: Challenges and choices*. (2012) CIFOR, Indonesia at 146.

²⁵⁴ Karsenty A. at. al., “Carbon rights”, REDD+ and payments for environmental services. (2012) xxx *Environmental Science and Policy* xxx-xxx at 6.

²⁵⁵ Wunder, S., The efficiency of payments for environmental services in tropical conservation. 21:1 *Conservation Biology* (2007) at 56.

when those instruments are market-based.²⁵⁶ In this context, the choice between cost-effectiveness and cost-efficiency becomes crucial as discussed in section 2.6 above.

2.7.3 Cost-Ineffective but Equitable?

Equity and cost-effectiveness are not always compatible.²⁵⁷ An example cited to illustrate a potential outcome of cost-ineffectiveness in REDD+ activities is the use of the egalitarianism approach in Costa Rica's, Ecuador's and Mexico's PES. The approach used uniform payment rates per hectare.²⁵⁸ This move was motivated by administrative ease and equity grounds.²⁵⁹ The problem is that this approach resulted in cost-ineffectiveness.²⁶⁰ Evidence shows that cost-effectiveness depends on targeting spatial heterogeneities in “(i) environmental service provision (benefits), (ii) risk of environmental service loss (e.g. through deforestation), and (iii) landowner's participation cost (sum of opportunity, transaction, and protection costs, which jointly determine the minimum payment required for the landowner to participate).”²⁶¹

2.8 Conclusion

The above discussion has surveyed not only the meaning of various principles and concepts applicable to international climate and domestic law and policy, but also their objectives which each have a direct bearing on climate law and policy. In attempting to assess the synergies or contradictions among equity, environmental effectiveness and cost-effectiveness, the chapter concludes that conceptions of equity are not always compatible with environmental-effectiveness and/or cost-effectiveness depending on the choice of theory of distributive justice deployed. Therefore, underlying such links lies the notion of trade-offs.²⁶²

These principles and concepts should form part of the criteria for identifying legitimate REDD+ beneficiaries and distribution of costs and benefits. However, the discussion above has indicated that decision-makers rely on different principles of justice to justify calls for equity and the choice of such principles is likely to lead to different policy solutions. Thus, it is expected that actors such as investors, governments and local communities will be

²⁵⁶ Karsenty A. et al., “Carbon rights”, REDD+ and payments for environmental services. (2012) xxx *Environmental Science and Policy* xxx-xxx at 6-7.

²⁵⁷ Börner, J., S. et al., Direct Conservation Payments in the Brazilian Amazon: Scope and Equity Implications. (2010) 69 *Ecological Economics* 1272-82 at 1280.

²⁵⁸ Wunder S. et. al., Taking stock: A comparative analysis of payments for environmental services programs in developed and developing countries. (2008) 65 *Ecological Economics* 834–852 at 841.

²⁵⁹ Ibid at 841.

²⁶⁰ Ibid at 831.

²⁶¹ Ibid at 822.

²⁶² Ibid Pascual U. et. al., (2010) at 1240.

confronted by the following questions: to what extent should one goal or principle be sacrificed to achieve the others? What are the trades-offs? How does one reconcile different views that may arise? These and other questions are useful in deciding the choice of regulatory framework for REDD+. Having analysed the conceptual framework for the legal and policy design the next chapter turns to examining the evolution of REDD+ and presenting its legal relevance. This discussion is particularly pertinent to the legal nature of the domestic law for REDD+.

Chapter Three:

Placing REDD+ in the Context of International Climate Law Negotiations

3.1 Introduction

It is well known that deforestation and climate change have been among the central concerns in international environmental negotiations for decades. However, until recently they have been treated largely as separate and distinct, with only limited attention to deforestation's role in climate change.¹ Prior to the REDD+ negotiations, the preceding international efforts to reduce deforestation focused on biodiversity conservation, and unsustainable consumption practices, with minimal outcomes in reducing deforestation on any significant scale.² Taking this historical account into perspective, this chapter investigates why that has been the case and discusses the legal relevance of REDD+ in developing countries. The chapter achieves this objective by discussing the place of REDD+ within the framework of the international climate change regime. The argument advanced here is that the place of the REDD+ mechanism must be considered within the said framework which allows a host country to define its own mitigation activities and obliges that country to report on such activities as well as technology and capacity building support needed and received.³ This is the outcome of the 21st Conference of the Parties (COP) (hereinafter the Paris Agreement) where countries agreed that the breach of reducing emissions pledges does not give rise to international legal responsibility.⁴ This focus is instructive in deciding the legal nature of the domestic regulatory framework for REDD+.

¹ Boyd W., Ways of seeing in environmental law: how deforestation became an object of climate governance. (2010) 37 *Ecology Law Quarterly* 843-916 at 844.

² Ibid.

³ These two aspects are also known as a “bottom up approach” and a “top down approach”.

⁴ UNFCCC/CP/2015/L.9/Rev.1.

3.2 Negotiations of the Climate Change Regime: The Rio Earth Summit

The momentum to negotiate a top-down climate change regime began to build with the release of the first report of the Intergovernmental Panel on Climate Change (IPCC) in 1990. The IPCC was created in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP). The purpose of the IPCC is to inform the governments of the world with a clear scientific view of what is happening to the world's climate.⁵ Thus the IPCC seeks to provide on a “comprehensive, objective, open and transparent basis the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts and options for adaptation and mitigation.”⁶

In 1990, the General Assembly passed a resolution to initiate negotiations for the United Nations Framework Convention on Climate Change (UNFCCC) and other related instruments containing appropriate commitments for action to combat climate change and its adverse effects to be ready for signature at the 1992 United Nations Conference on Environment and Development (UNCED) also known as the Rio Earth Summit.⁷ The objective of the Earth Summit can be categorised in two aspects. First, it focused on negotiations of environmental instruments with a view to addressing longer-term, irreversible, global threats, such as greenhouse warming, loss of biological diversity, and drought and desertification. Second, it focused on the more general economic and social policies needed to achieve sustainable development.⁸ Subsequently, the outcome of the Earth Summit was hailed as representing a “paradigm shift” from international environmental law to a new (but yet to be defined) international law of sustainable development.⁹ The Earth Summit led to the adoption of the UNFCCC, the CBD, Agenda 21 (a blueprint on how to make development socially, economically and environmentally sustainable), the Rio

⁵ IPCC. Available: http://www.ipcc.ch/organization/organization_history.shtml#UTuboFvsaCc [accessed 15 July 2014].

⁶ Principles Governing IPCC Work. Available: http://www.ipcc.ch/organization/organization_history.shtml#UTuboFvsaCc [accessed 15 July 2014].

⁷ United Nations, “Protection of global climate for present and future generations of mankind”, General Assembly Resolution 45/212, 71st plenary meeting 21 December (1990) paras 1 and 7.

⁸ Bodansky D., “History of the Global Climate Change Regime” in Luterbacher U. and Sprinz D.F. (eds.), *International Relations and Global Climate Change*. (2001) at 23.

⁹ Peter H. S., “Kaleidoscope: International environmental law after Rio”, (1993) *European Journal of International Law* 377-389. Available: <http://ejil.org/pdfs/4/1/1209.pdf> [accessed 15 July 2014].

Declaration on Environment and Development (Rio Declaration)¹⁰ (containing 27 fundamental principles for sustainable development) and the Statement of Principles for a Global Consensus on the Management, Conservation, and Sustainable Development of All Types of Forests (Forest Principle).¹¹ The UNFCCC and CBD “were negotiated separately from but parallel to preparations for the Earth Summit.”¹² Agenda 21 was instrumental in highlighting the issue of drought and desertification and proposed a Convention to Combat Desertification.¹³ Subsequently, the United Nations General Assembly established an “Intergovernmental Negotiating Committee for the elaboration of an international convention to combat desertification in those countries experiencing serious drought and/or desertification, particularly in Africa” (UNCCD).¹⁴ It is during the negotiations and subsequent developments of these instruments where one can trace the origin of REDD+.

3.2.1 Mitigation of Desertification as a Priority for Developing Countries

From an African perspective, (at least from the 1970s to the 1990s) the main environmental problem was desertification.¹⁵ Although the problem in question was not limited to Africa, it was the drought in Africa that became the focus for concern and inspired the United Nations to initiate early international action.¹⁶ After failed international attempts to address desertification, the issue was finally placed on the agenda of the Earth Summit.¹⁷ During the preparations for the Earth Summit, the African Group felt that the interests of other regions of the world were being met either by the biodiversity or climate convention and in this context Africa needed a convention to combat desertification in exchange.¹⁸ This meant that African countries needed to address some of the immediate adverse impacts of climate change (desertification) by undertaking what is now known as adaptation. African demands became politically linked to the issue of deforestation and industrialised countries were pressing for a

¹⁰ The Declaration failed to obtain its intended title (Earth Charter) due to resistance of developing countries. It “bears little resemblance to the Universal Declaration of Human Rights”. Sands P., (2003) at 54.

¹¹ International Institute for Sustainable Development (IISD). Available: <http://www.iisd.org/rio+5/agenda/riodocs.htm> [accessed 15 March 2015].

¹² Ibid.

¹³ UNGA Res. 47/188 (1992). Available: <http://habitat.igc.org/open-gates/a47r188.htm>. [accessed 1 June 2015]. Also see Sands P., (2003) at 556-557.

¹⁴ The UNCCD was signed in 1994 entered into force on 26 December 1996. Available: <http://www.doe-bd.org/UNCCD.pdf> [accessed 14 June 2015].

¹⁵ Corell E., Dryland degradation-Africa’s main environmental challenge: International activities from 1970s to the 1990s and the futures of the United Nations Convention to Combat Desertification, at 1. In Chaytor B. and Gray K.R. (Eds.), *International environmental law and policy in Africa*, (2003).

¹⁶ Ibid Corell E., at 6.

¹⁷ Ibid.

¹⁸ Ibid at 9.

convention on forests instead.¹⁹ Later on, it became clear (section 3.2.2 below) that developed countries wanted to compel developing countries to allow their forest resources as a climate change mitigation measure. The objection to a convention on desertification by most developed countries may be attributed to the early definition of desertification which placed all the responsibility on human activities.²⁰ This definition was used by industrialised countries to demand that the remedies for mitigation of desertification to a large extent lay in how human organised their lives rather than which technology was used.²¹ A solution to the dilemma was proposed in a package deal: developing countries would agree to a forests convention while industrialised countries would support the UNCCD. However, it was not possible to agree on a forest convention (see sections 3.2.3 and 3.2.4 below).

3.2.2 Climate Change Mitigation as a Priority for Developed Countries

Later during the preparations for the Earth Summit, a number of proposals for a legally binding instrument on forests were submitted.²² Taken together, these proposals represent the intent of the developed countries to use a forest convention for climate change mitigation. Most governments in favour of such proposals argued that a legally binding instrument is the most appropriate mechanism to ensure sustainable forest management. Humphreys doubts whether this was their sole motive.²³ The following sections describe such proposals.

3.2.2.1 Forest Protocol Proposals

The first forest protocol proposal emerged from a declaration which was agreed upon at the IPCC workshop on Agriculture, Forestry and Other Human Activities (AFOS) in São Paulo in 1990. The workshop recommended that the IPCC should support the development of a forestry protocol in the context of a climate convention process and should also address energy supply and use. The workshop concluded that the specific elements of such a protocol were a matter of international negotiations. These elements could comprise: fundamental

¹⁹ Ibid Corell E., at 10.

²⁰ Corell observed that the scientists who were involved in developing the early 1990s definition of desertification indicated that the issues in question resulted from “mainly adverse human impact”, which in their view also led to climatic factors as causes of desertification. However, the legally binding CCD definition included both the human and climatic factors. The author argues that, this was aimed at softening the political ramifications by not placing all the responsibility on human activities and underlying socio-economic causes. Ibid Corell E., at 4 and 16.

²¹ Cited in ibid Corell E., at 10.

²² Humphreys D., *The Elusive Quest for a Global Forests Convention*. (2005) 14:1 *Review of European Community and International Environmental Law* at 4.

²³ Ibid.

research, tropical forest planning, measures to use, protect, and reforest, international trade, financial assistance, and the advantages and disadvantages of national and international targets.²⁴ The declaration provides that: “Although forests can assist in mitigating the effects of atmospheric carbon build-up, the problem is essentially a fossil fuel one and must be addressed as such.”²⁵ The declaration further noted that:

Forests cannot be considered in isolation, and solutions must be based on an integrated approach which links forestry to other policies, such as those concerned with poverty and landlessness. The forest crisis is rooted in the agricultural sector and in people's needs for employment and income. Deforestation will be stopped only when the natural forest is economically more valuable than alternative uses for the same land.²⁶

The above debate is relevant to the genesis of REDD+. The origin of REDD+ can be traced back to the forest protocol proposal because the forest proposal was advocating an approach to forest and carbon sink conservation that fits into the logic of environmental economics: “deforestation takes place because the public goods that forests provide are undervalued in markets.”²⁷ Apart from that, another forest protocol proposal was advocated by Declaration by the European Council on the Environmental Imperative in 1990.²⁸ The European Council (EC):

[U]rged all countries to introduce extensive energy efficiency and conservation measures and to adopt as soon as possible targets and strategies for limiting emissions of greenhouse gases. [The EC] called on the [European] Commission to expedite its proposals for concrete action and, in particular, measures relating to carbon dioxide emissions, with a view to establishing a strong [...] position in preparation for the Second World Climate Conference. [The Declaration aimed to] take all possible steps to promote the early adoption of a Climate Convention and associated protocols, including one on tropical forest protection.

The above proposal was influenced by the continuing and rapid destruction of the tropical forests, soil erosion, desertification and other environmental problems of the developing

²⁴ Intergovernmental Panel on Climate Change (IPCC). 1991. *Climate change: The IPCC response strategies*, 77-84. Available: <http://www.ciesin.columbia.edu/docs/002-166/002-166.html> [accessed 18 September 2015].

²⁵ Ibid.

²⁶ Ibid.

²⁷ Humphreys D., *The politics of “Avoided Deforestation”: Historical context and contemporary issues*, (2008) at 435.

²⁸ Declaration by the European Council on the Environmental Imperative, (1990) 6 *Bull. Eur. Comm.*, at 17. Available: <http://www1.umn.edu/humanrts/environmentaldeclaration.html> [accessed 4 September 2015].

countries. The Declaration asserted that these concerns can be fully addressed only in the context of North-South relationships generally.²⁹ Lastly, the last proposal on forests was adopted by the 18th IUCN General Assembly at Perth, Australia in 1990. A resolution 18.30 called the parties of the International Union for Conservation of Nature (IUCN) to “negotiate [...] protocols to a Framework Convention on Climate Change, on the subjects of forest protection and the reduction of those greenhouse gases not controlled by the Montreal Protocol.”³⁰

3.2.2.2 Forest Convention Proposals

The first proposal to recommend a Forest Convention originated during the Independent Review of Tropical Forestry Action Plan (TFAP) in May 1990.³¹ The Review (led by the Swedish Ambassador Ola Ullstein) analysed among others the causes and the global implications of the deforestation and degradation since 1980.³² The review noted that although the international conventions on biodiversity and climate change were under consideration, neither of them would directly address the issue of conservation and sustainable use of forest resources for the benefit of mankind. Therefore, the review proposed a comprehensive global Forest Convention which covered all forests with a view to addressing all aspects of forest management, conservation and management (which included biodiversity and climate change).³³ The second proposal emerged from the review of the same TFAP by the World Resources Institute (WRI) in May 1990. In particular the WRI recommended a similar establishment of a global Forest Convention but not under TFAP auspices.³⁴

The last proposal was put forward on 11 July 1990 at the 16 Houston Summit, in Texas, USA. At this summit, the Heads of state and government declared *inter alia* that they “are

²⁹ The Seven Major Industrial Countries (G7), Declaration by the European Council on the Environmental Imperative, (1990) 6 *Bull. Eur. Comm.*, at 17. Available: <http://www1.umn.edu/humanrts/environmentaldeclaration.html> [accessed 4 September 2015].

³⁰ 18th Session of the General Assembly of IUCN - The World Conservation Union Perth, Australia 28 November-5 December 1990 at 79. Available; <http://data.iucn.org/dbtw-wpd/edocs/GA-18th-014.pdf> [accessed 10 September 2015]. Also see, Kristin R.G., “The Forest Issue in Post-UNCED Negotiations: Conflicting Interests and Fora for Reconciliation”, (1995) 4 *Biodiversity and Conservation*, 91–107 at 93.

³¹ *Ibid.*

³² Tropical Forestry Action Plan, Report of the Independent Review, Kuala Lumpur, Malaysia, May 1990 at 5-12. Available: http://homepage2.nifty.com/fujiwara_studyroom/kokusai/kosai3/independent_review_tfap.pdf [accessed 4 September 2015].

³³ *Ibid.*

³⁴ Kristin R.G., “The Forest Issue in Post-UNCED Negotiations: Conflicting Interests and Fora for Reconciliation”, (1995) 4 *Biodiversity and Conservation*, 91–107 at 92.

ready to begin negotiations, [...] on a global forest convention or agreement, which is needed to curb deforestation, protect biodiversity, stimulate positive forestry actions, and address threats to the world's forests". It was argued that a convention or agreement would be completed as soon as possible, but no later than 1992.³⁵

3.2.2.3 Forest Instrument Proposal

The proposal for a Forest Instrument emerged from the Second World Climate Conference (SWCC) in Geneva, 1990. The SWCC was organised by a consortium of UN agencies (UNEP, WMO, Scientific and Cultural Organization (UNESCO), and the Food and Agriculture Organization (FAO)), together with the International Council of Scientific Unions. The conference attracted several world leaders including the United Kingdom (UK) and France.³⁶ It was noted that the conference statement supported the development of an international forest instrument linked with the Climate Change and Biodiversity Conventions.³⁷

3.2.3 Objections to Legal Regulatory Framework for Forests

The proposals exposed above were met with strong resentment among developing countries especially those with rich forest resources.³⁸ Developing countries contended that "since the industrialized countries are the ones responsible for the emissions of industrial waste into the atmosphere, the poor countries should have nothing to do with the solution of the problem."³⁹ This argument echoed the statement of Malaysia's prime minister (Mahathir bin Mohamad) shortly before the Earth Summit: "if it is in the interests of the rich that we do not cut down our trees then they must compensate us for the loss of income."⁴⁰ Therefore they pushed for financial commitment from developed countries, and for some developing countries, finance

³⁵ Economic Declaration July 11, 1990, Article 67 of the Economic Declaration. Available: http://www.mofa.go.jp/policy/economy/summit/2000/past_summit/16/e16_a.html [accessed 25 September 2015].

³⁶ Kenneth Hare, F. Review of Jager, J. and Ferguson, H.L., "Climate Change: Science, Impacts and Policy" (1992) *Environmental Conservation*, 19, 189-189. Available: http://journals.cambridge.org/action/displayAbstract?jsessionid=A7A57FBC7FA74FE2B10C76FE4AA76569_journals?fromPage=online&aid=5957284 [accessed 22 September 2015].

³⁷ Kristin R.G., "The Forest Issue in Post-UNCED Negotiations: Conflicting Interests and Fora for Reconciliation", (1995) 4 *Biodiversity and Conservation*, 91-107.

³⁸ Ibid at 92.

³⁹ Ibid at 96.

⁴⁰ Humphreys D., *The politics of "Avoided Deforestation": Historical context and contemporary issues*, (2008) at 436 citing Mahathir, B.M., (1992).

was the only theme where they really wanted the instrument to have added value.⁴¹ Contrary to this demand, developing countries contended that the proposed forest instruments would only diminish their potential for economic development.⁴²

Developing countries therefore asserted that all issues should be settled in a comprehensive package as a prerequisite for agreeing to the proposed forest instrument.⁴³ This approach should be done by devising a global forest fund and providing technology transfers on concessional terms and external debt relief to help developing countries achieve sustainable forest management.⁴⁴ Developing countries also invoked two concepts. The first is the concept of “compensation for opportunity cost foregone”⁴⁵ and the second is the concept of “common but differentiated responsibilities”.⁴⁶ The latter concept argued that the onus of tropical forest conservation should not lie exclusively with the South, but also with the North which has historical responsibility for much tropical deforestation through its unsustainable consumption of tropical forest products.⁴⁷ In addition, they felt that the negotiations had focused entirely on tropical forests.⁴⁸ The key point to be noted here is that developed countries should commit to similar standards in forest conservation which they extend to the tropical countries.

However, most developed countries were not prepared to agree on any strong financial mechanism which would be new and additional.⁴⁹ They also disagreed on technology transfer, as well as on the principle of common but differentiated responsibility.⁵⁰ This aspect has led to some scholarly discussion on the possible explanations of this disagreement. Accordingly, the prevailing argument seems to be that developing countries were so single-

⁴¹ Ibid., Kunzmann K., (2008) at 986.

⁴² Will countries create a binding international accord on forests? United Nations Panel on Forests to Hold Final Session from 11-21 February, Special Session of the General Assembly to Review and Appraise the Implementation of Agenda 21, New York, 23-27 (1997). Available: <http://www.un.org/ecosocdev/geninfo/sustdev/forests.htm> [accessed 3 September 2015].

⁴³ Humphreys D., Forest negotiations at the United Nations: explaining cooperation and discord, (2001) 3 *Forest Policy and Economics* 125-135, at 436.

⁴⁴ Ibid.

⁴⁵ Humphreys D., Forest negotiations at the United Nations: explaining cooperation and discord, (2001) 3 *Forest Policy and Economics* 125-135, at 436.

⁴⁶ Ibid.

⁴⁷ Ibid.

⁴⁸ Will countries create a binding international accord on forests? United Nations Panel on Forests to Hold Final Session from 11-21 February, Special Session of the General Assembly to Review and Appraise the Implementation of Agenda 21, New York, 23-27 (1997). Available: <http://www.un.org/ecosocdev/geninfo/sustdev/forests.htm> [accessed 3 September 2015].

⁴⁹ Ibid., Kunzmann K., (2008) at 986.

⁵⁰ Ibid.

mindful about maintaining sovereign rights over their natural resources and this precluded agreement on any legal instrument.⁵¹ However, other factors seem to play a significant contribution to the said prevailing argument. Dimitrov et al point to the absence of reliable information on key aspects of deforestation and degradation,⁵² while Lipschutz concludes that in large part this could be attributed to the fact that forests are different from other natural resources whose role is directly related to international trade. This means that forests can be addressed through instruments that regulate trade.⁵³ Beyond such explanations, Davenport contends that the benefits of such instrument did not outweigh the potential economic costs to the USA at the domestic level.⁵⁴ That being said, critics argue that deforestation in developing countries will not be curbed unless poverty is also addressed, something which is not proposed for the proposed forest instruments.⁵⁵ To address poverty in developing countries will require a bold commitment similar to that proposed by Secretary of State General George Marshall (1947) to help rebuild Europe after World War II (in which the USA pledged 2-3% of its Gross Domestic Product (GDP) in economic aid over 5 years).⁵⁶

3.2.4 The Outcomes and Implications for Climate Change Mitigation

Since the demands of developing countries were not fulfilled,⁵⁷ they declared: (i) that they would continue to oppose a forest convention (ii) that developed countries should take a leading role in the formulation of forest principles and (iii) developed countries should ensure the transfer of financial resources and technology for implementing such forest principles in

⁵¹ Humphreys D., *The Elusive Quest for a Global Forests Convention*. (2005) 14:1 *Review of European Community and International Environmental Law* at 1. Humphreys D., *The Politics of Avoided Deforestation Historical Context and Contemporary Issues*, (2008) 10:3 *International Forestry Review*, 433-442 at 439. Humphreys D., *Forest negotiations at the United Nations: explaining cooperation and discord*, (2001) 3 *Forest Policy and Economics* 125-135 at 127. Also see Gareth, P. and Brown J.W., *Global Environmental Politics*, 2nd ed. (1996) Boulder, CO: Westview Press. Holmgren P. and Marklund, L.G., 2007. *National Forest Monitoring Systems - purposes, options and status*. In: *Forestry & Climate Change* edited in Lynch J.M. et al., 163-173. CAB International. Available: <http://www.fao.org/docrep/010/k1276e/K1276E04.htm> [accessed 2 October 2015].

⁵² Dimitrov R.S. et. al., *International Non-regimes: A research agenda*. (2007) 9 *International Studies Review* 230-258 at 244.

⁵³ Lipschutz R.D., *Why Is There No International Forestry Law?: An Examination of International Forestry Regulation, Both Public and Private*. (2000/2001), 19 *UCLA Journal of Environmental Law & Policy* 153-180.

⁵⁴ Davenport D.S., *An alternative explanation for the failure of the UNCED forest negotiations*. (2005) 5:1 *Global Environmental Politics*, 105-130.

⁵⁵ Vanclay J.K. et. al., *What would a Global Forest Convention mean for tropical forests and for timber consumers?* (2005) 103:3 *Journal of Forestry*, 120-125.

⁵⁶ Ibid.

⁵⁷ Humphreys D., *The politics of "Avoided Deforestation": Historical context and contemporary issues*, (2008) at 437.

developing countries.⁵⁸ Therefore, negotiations on forest instruments at the Earth Summit in 1992 resulted in the adoption of two instruments. The first⁵⁹ was the Forest Principles Instrument⁶⁰ and the second was Chapter 11 of Agenda 21: “Combating Deforestation”.⁶¹ The former suggests the indecisiveness of the international community on forest issues. This suggestion is drawn from the title “(non-legally binding but authoritative; a statement, not principles, but: a statement of principles)”.⁶² The latter became a new international forum (the United Nations Forum on Forests (UNFF)) which gave international policy new momentum by adopting the Non-Legally Binding Instrument on all Types of Forests (NLBI) in 2007.⁶³

The Forest Principles require the sustainable management of forest resources and forest lands so as to ensure carbon sinks and reservoirs for sustainable development.⁶⁴ Among the key principles reflected in the Forest Principles Instrument as highlighted by Humphrey include “the importance of redressing external indebtedness, particularly where aggravated by the net transfer of resources to developed countries” (para. 9(a)), “new and additional financial resources” (para. 10), the “transfer of environmentally sound technologies” (para. 11), and the “agreed full incremental cost of achieving benefits associated with forest conservation [...] should be equitably shared by the international community” (para. 1(b)).⁶⁵ The omitted key principles are “compensation for opportunity cost foregone” and “common but differentiated responsibilities”.⁶⁶

⁵⁸ Kristin R.G., “The Forest Issue in Post-UNCED Negotiations: Conflicting Interests and Fora for Reconciliation”, (1995) 4 *Biodiversity and Conservation*, 91–107 at 103.

⁵⁹ Humphreys D., *The politics of “Avoided Deforestation”: Historical context and contemporary issues*, (2008) at 436.

⁵⁹ Kristin R.G., “The Forest Issue in Post-UNCED Negotiations: Conflicting Interests and Fora for Reconciliation”, (1995) 4 *Biodiversity and Conservation*, 91–107 at 92.

⁶⁰ United Nations General Assembly (1992) A/CONF.151/26 (Vol. III), [hereafter Forest Principles]. Available: <http://www.un.org/documents/ga/conf151/aconf15126-3annex3.htm> [accessed 10 October 2015]. The main objective of the principles is to “contribute to the management, conservation and sustainable development of forests and to provide for their multiple and complementary functions and uses, preamble (b).

⁶¹ About UNFF, History and Milestones of International Forest Policy see <http://www.un.org/esa/forests/about-history.html>. Also see Kunzmann K., *The Non-legally Binding Instrument on Sustainable Management of All Types of Forests - Towards a Legal Regime for Sustainable Forest Management?* (2008) 09:08 *German Law Journal* 981.

⁶² Max-Planck-Institut: Available: http://www.mpil.de/shared/data/pdf/pdfmpunyb/henne_fakir_3.pdf [accessed 21 February 2015].

⁶³ United Nations General Assembly (2007) A/C.2/62/L.5 “Non-legally binding instrument on all types of forests”. Available: http://www.forda.com/www/news/2007/UN_Instrument%20on%20all%20types%20of%20forests.pdf [accessed 12 October 2015].

⁶⁴ Para 2 (b) of Forest Principles.

⁶⁵ Humphreys D., *The politics of “Avoided Deforestation”: Historical context and contemporary issues*, (2008) at 437.

⁶⁶ *Ibid.*

Like the Forest Principles, the NLBI excludes the concept of “compensation for opportunity cost foregone” but included the “common but differentiated responsibilities” principle. The purpose of NLBI includes *inter alia* to “strengthen political commitment and action at all levels to implement effectively sustainable management of all types of forests and to achieve the shared global objectives on forests.”⁶⁷ One of the objectives is to “[r]everse the decline in official development assistance for sustainable forest management and mobilize significantly increased, new and additional financial resources from all sources for the implementation of sustainable forest management.”⁶⁸ Regarding the NLBI the European Union and some other countries “wanted to have some more and stronger commitments on the protection of forests and regarding the sustainability of forest management.”⁶⁹ In their proposal they wanted:

- (a) a full definition of sustainable forest management to be included in a universally accepted and applicable document for the first time;
- (b) the commitment of states to identify quantifiable and time-bound targets in their national forest programmes, which would make it possible to assess progress and setbacks in the implementation of this [i]nstrument; and
- (c) the clear commitment towards good governance and legality in the forest sector.⁷⁰

The above proposal was rejected mainly by Brazil, the USA and some developing countries. At the same time other countries, especially countries with economies in transition, tried to make commitments towards sustainable forest management as minimal as possible and the nature of the instrument as vague and non-binding as possible. In doing so they blocked anything which could evolve into a new rule of customary international law, such as promoting good governance or legality in the forest sector and thereby affect national sovereignty.⁷¹ Subsequently, the failure to devise a legally binding forest instrument meant that the aims and objectives of the UNFCCC had to be weakened.⁷²

⁶⁷ Para 1 (b) of the Non-legally Binding Instrument on all Types of Forests.

⁶⁸ Para 5 of the Non-legally binding instrument on all types of forests.

⁶⁹ Kunzmann K., The Non-legally Binding Instrument on Sustainable Management of All Types of Forests - Towards a Legal Regime for Sustainable Forest Management? (2008) 09:08 *German Law Journal* 981 at 987.

⁷⁰ Ibid Kunzmann K., (2008) at 986.

⁷¹ Ibid at 986.

⁷² Humphreys D., The Elusive Quest for a Global Forests Convention. (2005) 14:1 *Review of European Community and International Environmental Law* at 2.

In 1993, several NGOs and a collection of timber buyers and retailers launched voluntary certification schemes such as the Forest Stewardship Council (FSC).⁷³ This is a market-driven instrument designed to incentivise sustainable forest production through the green labelling of timber products.⁷⁴

3.3 The United Nations Framework Convention on Climate Change

The ultimate objective of the UNFCCC⁷⁵ is to stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system 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.⁷⁶ The precise legal status of this objective is not entirely clear.⁷⁷ Soltau argues that while the objective is not phrased as an obligation, it is similar to a collective commitment, as it encapsulates the rationale of the UNFCCC as a whole.⁷⁸ Thus it is argued that the wording “stabilization” of atmospheric concentration of greenhouse gases (GHGs) is not the same as stabilisation of the climate.⁷⁹ The former means that GHGs have nil effect because are balanced by removal processes while the latter means the removal of GHGs could take much longer to achieve due to the long lifetimes of such gases and the inertia of the climate system particularly the ocean.⁸⁰ Thus “stabilization” is linked to the prevention of dangerous interference with the climate system which suggests that the actual objective of the UNFCCC is the stabilisation of the climate itself at safe levels.⁸¹

The origins and development of Article 2 and evolution of the concept of “dangerous anthropogenic interference” appear to take place without the active participation of

⁷³ FSC. Available: <https://ic.fsc.org/> [accessed 21 October 2015].

⁷⁴ McDermott C.L. et. al., Chapter 5 Governance for REDD+, forest management and biodiversity: Existing approaches and future options in, Parrotta, J. et.al. (eds.) *Understanding relationships between biodiversity, carbon, forests and people*. IUFRO, Vienna. Commissioned by Global Forest Expert Panel, The Collaborative Partnership on Forests. (2012) at 118. Buizer M. et.al., *Climate change and deforestation: The evolution of an intersecting policy domain*. (2014) 35 *Environmental Science and Policy*, 1–11 at 5. Humphreys D., *Logjam: Deforestation and the Crisis of Global Governance*(2006) at xviii.

⁷⁵ United Nations Framework Convention on Climate Change, adopted May 9, (1992).

⁷⁶ Article 2.

⁷⁷ Soltau F., *Fairness in international climate change law and policy*, (2009) citing Bodansky at 55.

⁷⁸ *Ibid.*

⁷⁹ Verheyen R., *Climate change damage and international law: Prevention duties and state responsibility*. (2005) at 55.

⁸⁰ *Ibid.*

⁸¹ *Ibid.*

developing countries.⁸² This evolution might be attributed to the lack of interest of developing countries since “until 1990, the governments interested in climate change were primarily those of Western industrialized countries.”⁸³ Even so, more concerns were raised because such initiatives paid attention to physical and biological vulnerability as sources of danger and less attention has been paid to economic, ethical and cultural considerations.⁸⁴ A number of questions which are also vital to the development of policy for implementation of REDD+ mechanism were raised. Such questions include: what generic risks, and what specific impacts, should guide long-term policy? What geographic scope is important? Populations of what size should be of concern? In what way should the distribution of impacts geographically, or among socioeconomic or cultural groups, be taken into account, as opposed to total human welfare? And should costs and benefits be weighed quantitatively to define “dangerous” or should environmental criteria supplemented by bounds on implementation costs be employed, as in the tolerable window approach?⁸⁵

Unlike in the Forest Principles,⁸⁶ the UNFCCC provides for “common but differentiated responsibilities”.⁸⁷ This principle requires developed countries to take the lead in combating climate change and the adverse effects thereof since they are responsible for most of the carbon emissions.⁸⁸ The principle finds expression in the differentiation in commitments between developed country and developing country parties. Differentiation can be observed in developed country parties’ non-binding goal to return their emissions to 1990 levels by 2000; in the more stringent and frequent reporting obligations of Annex I parties; as well as in provisions concerning the granting of assistance.⁸⁹ In the context of forest protocol and convention negotiations, developing forest countries invoked the principle of “common but

⁸² Oppenheimer M. and Petsonk A., Article 2 of the UNFCCC: Historical Origins, Recent Interpretations, Climatic Change (2004) at 38. Available: <http://www.princeton.edu/step/people/faculty/michael-oppenheimer/recent-publications/Article-2-of-the-UN-Framework-Convention-on-Climate-Change.pdf> [accessed 10 October 2015].

⁸³ Bodansky D., “History of the Global Climate Change Regime” in Luterbacher U. and Sprinz D.F. (eds), *International Relations and Global Climate Change*. (2001) at 23.

⁸⁴ Oppenheimer M. and Petsonk A., Article 2 of the UNFCCC: Historical Origins, Recent Interpretations, Climatic Change (2004) at 38. Available: <http://www.princeton.edu/step/people/faculty/michael-oppenheimer/recent-publications/Article-2-of-the-UN-Framework-Convention-on-Climate-Change.pdf> [accessed 10 October 2015].

⁸⁵ Ibid., Oppenheimer M. and Petsonk A., (2004) at 38.

⁸⁶ Humphreys D., *The politics of “Avoided Deforestation”: Historical context and contemporary issues*, (2008) at 437.

⁸⁷ Articles 3.1 and 4.1.

⁸⁸ Article 3.1.

⁸⁹ Soltau F., *Fairness in international climate change law and policy*, (2009) at 56.

differentiated responsibilities” to require that the burden of tropical forest conservation should not lie exclusively with the South, but also with the North which has historical responsibility for much tropical deforestation through its unsustainable consumption of tropical forest products.

Specific Commitments for Developed Countries are provided in article 4 (2) which reflect a top-down model.⁹⁰ In particular each developed state party and other parties included in Annex I are required to adopt national policies and take corresponding measures on the mitigation of climate change, by limiting their anthropogenic emissions of greenhouse gases and protecting and enhancing their greenhouse gas sinks and reservoirs.⁹¹ “These Parties may implement such policies and measures jointly with other Parties and may assist other Parties in contributing to the achievement of the objective of the Convention.”⁹² This commitment is followed by a top-down model, setting forth a non-binding aim for developed countries to return their emissions to 1990 levels by the year 2000.⁹³ However, when Article 4(2) (a) and Article 4(2) (b) are read together, they do not reflect a clear commitment for developed countries and the European Commission (EC) to stabilise carbon dioxide and other greenhouse gases by the year 2000 at 1990 levels as advocated by some parties during negotiations.⁹⁴ This is because Article 4(2) (a) requires only each developed country to limit its emissions instead of stabilisation at a particular level or reduction.⁹⁵ These are thus soft targets obligations.⁹⁶

The UNFCCC also provides that the COP shall review the adequacy of Article 4 (2) (a) and Article 4 (2) (b) at its first session.⁹⁷ This review shall be carried out in the light of the best available scientific information and assessment on climate change and its impacts, as well as relevant technical, social and economic information. Based on this review, the COP is mandated to take appropriate action, which may include the adoption of amendments to the

⁹⁰ Bodanski D., “A tale of two architectures the once and future U.N. climate change regime” (2011) *Arizona State University Sandra Day O'Connor College of Law* at 6.

⁹¹ Article 4 (2).

⁹² Article 4 (2) (a).

⁹³ Article 4 (2) (b). Also see Bodanski D., “A tale of two architectures the once and future U.N. climate change regime” (2011) *Arizona State University Sandra Day O'Connor College of Law* at 6.

⁹⁴ Sands P., (2003) at 365.

⁹⁵ *Ibid.*

⁹⁶ *Ibid.*

⁹⁷ Article 4 (2) (b) of the UNFCCC.

commitments in aforementioned articles.⁹⁸ The COP, at its first session, shall also take decisions regarding criteria.⁹⁹ However, this requirement remains subject to competing views as to whether the review extends to the commitments of developing states or is limited to those of Annex I parties.¹⁰⁰

General commitments applicable to all countries are also provided. The UNFCCC established the principle of “common but differentiated responsibilities and respective capabilities” (CBDR),¹⁰¹ but did not draw an absolute separation between developed and developing states.¹⁰² However, it is observed that the UNFCCC contemplated that this division of the world into developed and developing countries could evolve over time.¹⁰³ Under the “common but differentiated responsibilities” and “specific national and regional development priorities, objectives and circumstances”, developing countries are obliged by the UNFCCC to *inter alia* “promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases [...] including biomass and forests [...]”¹⁰⁴ But there are no specific greenhouse gas emission reduction targets related to such obligation. The UNFCCC does not mandate any binding action as to how to achieve its ultimate objective.¹⁰⁵

3.4 Negotiations of the 1st Commitment Period: Kyoto Protocol (2008-2012)

In 1995, at the UNFCCC COP 1, countries began a new round of negotiations, aimed at defining quantitative emission limitation and reduction objectives (emission targets) for

⁹⁸ Article 4(2) (d) of the UNFCCC.

⁹⁹ *Ibid.*

¹⁰⁰ Sands P., (2003) at 365.

¹⁰¹ Article 3.1 of the UNFCCC.

¹⁰² Bodanski D., “A tale of two architectures the once and future U.N. climate change regime” (2011) *Arizona State University Sandra Day O'Connor College of Law* at 2.

¹⁰³ The authors substantiate their argument by citing Article 4.2(f) of the UNFCCC which provides that the parties shall review the lists of parties in Annexes I and II with a view to making amendments. They also cite Article 4.2(g) which further allows non-Annex I countries to opt in to the hortatory target and timetable established by Article 4.2(a) and (b). See Bodansky D. and Diring E., *The Evolution of International Regimes: Implications for Climate Change*, *Pew Center on Global Climate Change Report*, (2010) at 14. Available: SSRN:<http://ssrn.com/abstract=1773828> or <http://dx.doi.org/10.2139/ssrn.1773828>

¹⁰⁴ Article 4(1) (d) of the UNFCCC.

¹⁰⁵ Streck C. and Scholz S.M., *The role of forests in global climate change: whence we come and where we go*. *International Affairs* Volume 82, Issue 5, Article first published online: 4 OCT 2006. <http://dspace.cigilibrary.org/jspui/bitstream/123456789/19664/1/The%20role%20of%20forests%20in%20global%20climate%20change%20whence%20we%20come%20and%20where%20we%20go.pdf?1> [accessed 10 October 2014].

developed countries.¹⁰⁶ The Protocol to the UNFCCC was adopted at the COP 3 in December 1997 in Kyoto, Japan and entered into force in 2005.¹⁰⁷ The Kyoto Protocol (KP) has two objectives which are provided in Article 12(2). The first is to “assist Parties not included in Annex I in achieving sustainable development” and to assist Annex I parties in achieving their emission limitation and reduction commitments. Article 3(1) of the KP establishes basic obligations for the Annex I parties. In particular the parties are required to “individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts [...] with a view to reducing their overall emissions of such gases by at least 5 per cent below 1990 levels in the commitment period 2008 to 2012.”¹⁰⁸ Thus article 3.1 obliges developed countries to reduce their net greenhouse gas emissions by at least 5% below 1990 levels from 2008 to 2012. No comparable commitment is provided for developing countries.¹⁰⁹ The Kyoto Protocol provides different emission reduction targets for different states¹¹⁰ and regional economic organisations.¹¹¹ Furthermore, the Protocol applies to six greenhouse gases which are: carbon dioxide, hydro fluorocarbons (HFCs), methane (CH₄), nitrous oxide (N₂O), sulphur hexafluoride (SF₆) and perfluorocarbons (PFCs).¹¹²

In sharp contrast to the UNFCCC, the meaning attributed to the obligation expression changed dramatically compared to the Kyoto Protocol. The change was from a concept that started with a duty on all countries to protect common resources to the concept which imposes no responsibility on developing countries.¹¹³ However, the nature and extent of each country's obligations was proposed to be equitably allocated.¹¹⁴ Mumma and Hodas argue that this elimination of duty or responsibility undermines the foundation principles of sustainable development articulated in the Rio Declaration and Agenda 21 and renders the

¹⁰⁶ Berlin Mandate: Review of the Adequacy of Article 4(2) (a) and (b) of the UNFCCC, Dec. 1/CP.1, in COP-1 Report, U.N. Doc FCCC/CP/1995/7/Add.1, at 4. Also see Bodanski D., “A tale of two architectures the once and futre U.N. climate change regime” (2011) *Arizona State University Sandra Day O'Connor College of Law* at 7.

¹⁰⁷ UNFCCC. Available: http://unfccc.int/essential_background/kyoto_protocol/items/6034.php [accessed 10 October 2014].

¹⁰⁸ Article 3 (1) of the Kyoto Protocol.

¹⁰⁹ Dernbach J.C. and Kakade, S., *Climate Change Law: An Introduction*, (2008) 29 *Energy L. J.* 1 at 10.

¹¹⁰ *Ibid.*

¹¹¹ See annex B of the Kyoto Protocol.

¹¹² Annex A of the Kyoto Protocol. Also see Dernbach J.C. and Kakade, S., *Climate Change Law: An Introduction*, (2008) 29 *Energy L. J.* 1 at 10.

¹¹³ Mumma A. and Hodas D., *Designing a Global Post-Kyoto Climate Change Protocol that Advances Human Development*. (2007-2008) 20:4 *Georgetown International Environmental Law Review*, 619 at 628.

¹¹⁴ *Ibid.*

Kyoto Protocol fatally flawed. To substantiate this argument, the scholars point out that in the Kyoto Protocol CBDR was based on a “business-as-usual” mindset served to justify continued reliance by the developing countries on the old fossil fuel intensive development paradigm. In this case they contended that CBDR lost its original meaning as articulated in the UNFCCC.

The CBDR as initially envisaged in the UNFCCC which subsequently dominated the views of most negotiators from 1992 to 2002, with the exception of the USA negotiators, accepted as a matter of course that CBDR meant that only industrialised countries would assume reduction obligations under the UNFCCC and subsequent protocols. On the other hand, the “developing country view would appear to be that CBDR implies that developing countries must not assume emission reductions commitments under even a post Kyoto climate change regime.”¹¹⁵ The US view of the CBDR is that every country make a commitment, but the “level and timing of each country's commitments must be commensurate with its national abilities and level of development. Balance and fairness must be maintained.”¹¹⁶ Developing countries have submitted their views of the concept of CBDR in the context of REDD+. For example, Colombia submitted that CBDR means that REDD+ “be included as an eligible [CDM] activity and that Annex I commitments in the second and subsequent commitment periods should be strong enough to accommodate the new supply of emission reductions arising from this and other new options.”¹¹⁷ Brazil’s conception of CBDR advocates that developing countries should not “have quantified commitments to reduce or limit their anthropogenic emissions of greenhouse gases.”¹¹⁸ In addition, Brazil submits that there “are many programs being implemented on a national basis by developing countries that result in a considerable reduction of their greenhouse gas emissions.”¹¹⁹ Meanwhile, in the context of the Cancun agreements and Durban platform, the least developed countries and small-island developing countries demanded stronger binding commitments from both developed and

¹¹⁵ Ibid at 8.

¹¹⁶ Ibid at 10.

¹¹⁷ Submission by Colombia on reducing emissions from deforestation in developing countries. (Undated) at 2. Available: http://unfccc.int/files/land_use_and_climate_change/lulucf/application/pdf/colombia.pdf [accessed 10 October 2014].

¹¹⁸ Submission from Brazil. United Nations Framework Convention on Climate Change: Dialogue on long-term cooperative action to address climate change by enhancing implementation of the Convention Second workshop Nairobi, 15–16 November 2006. Dialogue working paper 21 (2006) at 3. Available: https://unfccc.int/files/meetings/dialogue/application/pdf/wp_21_braz.pdf [accessed 10 October 2014].

¹¹⁹ Ibid.

emerging economies. This suggests that their understanding of the CBDR implies “differentiation” in terms of stronger mitigation targets for both developed and emerging economies. But it is unclear to this writer whether they implicitly imply that they should be exempted from committing to any binding commitments, or they should undertake weak binding targets.

The tensions reflected in the above exposition have seen a new meaning or forms of CBDR evolving in the second post-Kyoto negotiations. Developed countries agreed in their insistence that any reference to CBDR must be qualified with a provision that the CBDR principle must be interpreted in the light of “contemporary economic realities”. They also insisted that the future regime must be “applicable to all” countries. Rajamani concluded that any international instrument that emerges from these negotiations is likely to have a fundamentally different character from that of the Kyoto Protocol. In particular, the instrument will likely “reflect a regulatory approach based on self-selection of mitigation commitments and actions (rather than prescription), enhanced parity between the obligations placed on developed and developing countries (rather than differentiation), and enhanced information flow relating to commitments/actions (rather than a compliance system).”¹²⁰ This type of instrument will have a direct bearing on the legal aspect of reflexive law discussed in chapters 8 and 9.

In addition, all references to differentiation – except one in the Cancun decisions – were expressed under the wording of Common But Differentiated Responsibility and Respective Capabilities (CBDRRC) which combines CBDR and respective capabilities (RC) as used in the UNFCCC. In this case it remains uncertain how this abbreviation should be understood. The abbreviation CBDRRC with reference to formulations such as “taking into account”, “recognizing” or “guided by” tends to confirm the status of the CBDR as a philosophical basis for other differentiated obligations rather than signifying a change in its nature or scope. In their submission, Mumma and Hodas argue that CBDR can mean that developing countries have a cap (i.e. emissions avoidance obligations different from that of developed countries i.e. emissions reduction obligations), one that is adequate for their sustainable

¹²⁰ Rajamani L., Differentiation in the Emerging Climate Regime. (2013) 14:1 *Theoretical Inquiries in Law* 151- 171 at 168.

development.¹²¹ In this case, they stress that all developing countries must commit to moving to a new, low-carbon and energy future that bypasses the old low-cost fossil fuel paradigm.¹²² However, other scholars have doubts about whether such an approach is practical, and it is becoming increasingly likely that other approaches will be used—for example, a cap-and-trade system in the developed countries combined with technical and financial assistance and general targets for developing countries. This approach provides a broad meaning of fairness with respect to the central objective of the post-Kyoto Protocol climate change agreements. This differentiation then means that CBDR gives effect to conceptions of fairness in emission limitation and reduction commitments which should have been reflected under the Kyoto Protocol and post-Kyoto.¹²³ This will also depend on the issue of implementation and assistance as deconstructed in the next sections below.

The application of CBDR in the UNFCCC takes different forms as reflected in provisions which differentiate between developed and developing countries with regards to their implementation. These provisions include different compliance schedules, permission to adopt subsequent base years, delayed reporting schedules, and softer approaches to non-compliance.¹²⁴ However, since the Cancun Agreements, the international community has moved towards a uniformity in the context of information demands—measurement, reporting and verification (MRV) in the developed and developing countries. This means the “differentiation” formerly understood in the context of CBDR has disappeared and uniformity emerged. In this case some demands were observed such as an increase in the frequency, rigour and review of national communications for developing countries.¹²⁵

The CBDR can be viewed from two different perspectives with respect to assistance. For developing countries sustainable development through CBDR has made the duty to cooperate conditional upon the receipt of financial and technological assistance. For developed countries, it has broadened the duty to cooperate to include the commitment to transfer financial and technological assistance. In securing the provision of a global public good, countries that are most able, in terms of technological, financial, and human capacities, are

¹²¹ Mumma A. and Hodas D., *Designing a Global Post-Kyoto Climate Change Protocol that Advances Human Development*. (2007-2008) 20:4 *Georgetown International Environmental Law Review*, 619 at 14.

¹²² *Ibid.*

¹²³ Soltau F., *Fairness in International Climate Change Law and Policy*. (2009) at 187.

¹²⁴ Rajamani L., *The changing fortunes of differential treatment in the evolution of international environmental law*. (2012) 88:3 *International Affairs* 605–623 at 611.

¹²⁵ *Ibid.*

expected to contribute more than countries that are less able. A combination of need and capability provides the ethically relevant grounds on which to justify differential treatment. A commonly cited standard for assistance is income per capita, or gross domestic product (GDP). In addition to that standard, there are attempts to widen the scope to include “health and education, enjoyment of economic and social security, and the freedom to engage in economic interchange and social decision making”.¹²⁶ Overall, developed countries recently submitted that the CBDR principle should mean mitigation actions applicable to all and thereby eliminated the no differentiation as it was previously formulated under the UNFCCC. However, this does not mean that is a symmetrical application.¹²⁷ On the other hand, developing countries maintain that the CBDR principle is resting on the argument that developing countries’ economic and technological capacity are insufficient to combat climate change and achieve sustainable development goals.¹²⁸

3.5 Implementing the 1st Commitment Period: Flexible Mechanisms

The Kyoto Protocol established Joint Implementation (JI),¹²⁹ the Clean Development Mechanism (CDM)¹³⁰ and Emission Trading (ET).¹³¹

3.5.1 Emission Trading (ET)

Article 17 of the Kyoto Protocol provides for Emission Trading (ET). The ET allows countries with commitments under the Protocol (Annex B Parties) to purchase and sell parts of each country’s carbon credits known as Assigned Amount Units (AAUs). Those countries with spare AAUs permitted but not used, can sell their excess capacity to countries that are over their targets.¹³²

3.5.2 Joint Implementation (JI)

Joint Implementation (JI) is the mechanism that entails full or partial financial support from an investor country, which subsequently receives carbon credits known as Emission

¹²⁶ Cited in Soltau F., *Fairness in International Climate Change Law and Policy*. (2009) at 161.

¹²⁷ Rajamani L., “The changing fortunes of differential treatment in the evolution of international environmental law”, (2012) 88:3 *International Affairs* 605–623 at 618.

¹²⁸ Nasir S., *Climate Change Negotiations and Third World Countries: (Past, Present and Future)*. *Master of Laws, The University of Waikato*, (2014) at 142.

¹²⁹ Article 6 of the Kyoto Protocol.

¹³⁰ *Ibid* Article 12.

¹³¹ *Ibid* Article 17.

¹³² International Institute for Sustainable Development (IISD). Available: http://www.iisd.org/pdf/2009/international_carbon_market_mechanisms.pdf [accessed 20 October 2013].

Reduction Units (ERUs) for the carbon emissions reduced by projects it undertakes in a recipient country. The credits are to meet part of their emission reduction commitment under the Kyoto Protocol.¹³³ JI has been promoted as potentially serving three related purposes as follows: “(1) a first step toward establishing an international tradable permit system; (2) a cost-effective option for industrialized countries to finance emission reductions in [other industrialized countries or in] the developing countries; and (3) an activity to identify when it is cost effective to bring new emissions sources or sinks into an existing international greenhouse management scheme.”¹³⁴

Under the Kyoto Protocol, the JI is mainly open to Annex I Parties.¹³⁵ JI has its roots in Article 4(2) (a) and (d) of UNFCCC.¹³⁶ Under the UNFCCC the COP established a pilot phase for activities implemented jointly (AIJ) where developed countries (Annex I) could implement projects reducing emissions of GHGs or enhancing their removal through sinks in other countries, both developed and developing.¹³⁷ The purpose of the AIJ was to enable countries to gain experience with a project-based mechanism, such as an approximation of emissions reduction potential, costs, and likely barriers¹³⁸ from the 1995 to 1999 period.¹³⁹

3.5.3 Clean Development Mechanism (CDM)

The CDM has its roots in a proposal for a Clean Development Fund (CDF) advanced by Brazil, to be financed from fines levied on Annex I parties for non-compliance.¹⁴⁰ The key element of the fund was the introduction of a “compulsory contribution” or a financial penalty for non-compliance, to be assessed against each developed country that had exceeded its effective emissions ceiling at the end of its budget period. The penalty was to be used for

¹³³ Article 6, Kyoto Protocol. Also see UNFCCC: Available: <http://ji.unfccc.int/index.html> [accessed 17 October 2013] and Sathaye J.A et al., Concerns About Climate Change Mitigation Projects: Summary of Findings from Case Studies in Brazil, India, Mexico, and South Africa, (1998) *Ernest Orlando Lawrence Berkeley National Laboratory*. Available: <http://ies.lbl.gov/iespubs/41403.pdf> [accessed 20 October 2013].

¹³⁴ Stavins R.N., Policy Instruments for Climate Change: How Can National Governments Address a Global Problem? (1997) *The University of Chicago Law School* at 16. Available: <http://www.hks.harvard.edu/fs/rstavins/Papers/Policy%20Instruments%20for%20Climate%20Change.pdf> [accessed 20 October 2013].

¹³⁵ Available: <http://ji.unfccc.int/index.html> [accessed 20 October 2013].

¹³⁶ Soltau F., *Fairness in international climate change law and policy*, (2009), at 75.

¹³⁷ Decision 5/CP.1, in Report of the Conference of the Parties on its First Session, Addendum, Part II: Action Taken by the Parties, FCCC/1995/7/Add.1 (1995). Also see *ibid.*, Soltau F., (2009) at 75.

¹³⁸ Cited by *ibid.*, Soltau F., (2009) at 75.

¹³⁹ Working Group on Trade & Environment The First Meeting of the Second Phase CCICED The First Meeting of the Second Phase of The China Council for International Cooperation On Environment and Development: China's Strategies for Implementation of Activities Implemented Jointly: Analysis on Advantages and Disadvantages, (1997). Available: <http://www.iisd.org/pdf/aij.pdf> [accessed 17 October 2013].

¹⁴⁰ *Ibid.* Soltau F., (2009) at 79.

funding climate change projects in developing countries under the Clean Development Fund.¹⁴¹ The funds would be provided in developing countries in response to “voluntary” projects subject to the approved regulation by the COP.¹⁴² However, negotiations were later dominated by developed countries and it became apparent that it would not be possible to agree on specific binding consequences which would flow from a determination of non-compliance. Therefore the direct link between compliance and the fund was dissolved.¹⁴³ Therefore, the basic principles and design features for the Clean Development Mechanism (CDM) were agreed¹⁴⁴ and finally provided in Article 12 of the Kyoto Protocol.

The CDM is a project-based mechanism which allows a project or program of activities to mitigate climate change in a developing country. The project can generate carbon credits known as Certified Emission Reductions (CERs) which can be used by an Annex I Party to help meet its carbon emissions reduction commitment.¹⁴⁵ In addition, the CDM is currently the only mechanism that provides for emission reduction projects which generate CERs in developing countries under the Kyoto Protocol. The CDM has two objectives: the first is to assist developed countries with their quantified emission limitation and reduction commitments; the second is to assist developing countries in achieving sustainable development.¹⁴⁶ CDM GHG emission reduction projects earn CERs.¹⁴⁷

There were several factors which lead to the establishment of the CDM. The first factor relates to the General Assembly’s recognition of the need for international cooperation and for addressing climate change within a global framework, taking account of the needs and development priorities of developing countries.¹⁴⁸ The second factor was an attempt to reduce developing countries’ carbon emissions. This is because the aforementioned emissions are

¹⁴¹Cameron J. and Werksman J., *The Clean Development Mechanism: The “Kyoto Surprise”* (1998) at 9. Available:

<http://www.ucdenver.edu/academics/colleges/SPA/BuechnerInstitute/Centers/WirthChair/Publications/Documents/The%20Clean%20Development%20Mechanism.pdf> [accessed 17 June 2014].

¹⁴² Ibid., Cameron J. and Werksman J., (1998).

¹⁴³ Werksman J., *The Clean Development Mechanism: Unwrapping the “Kyoto Surprise”* (1998) 7:2 *Review of European Community and International Environmental Law* at 152.

¹⁴⁴ Ibid.

¹⁴⁵ Murphy D. et.al., *International Carbon Market Mechanisms in a Post-2012 Climate Change Agreement*, *International Institute for Sustainable Development (IISD)* (2009) at 6.

¹⁴⁶ Article 12 (2) of the Kyoto Protocol.

¹⁴⁷ Ibid Murphy D. et.al., (2009).

¹⁴⁸ UNGA Resolution 44/207, Preamble, paragraph 9 and Paragraph 12, and UNGA Resolution 45/212, Preamble, paragraph 1 and Paragraph 8 as cited by Akanle O., *Distributive justice in international law: can the CDM regime support an equitable geographic distribution of projects?* PHD thesis, University of Dundee (2011) at 5.

expected to grow as a result of growing energy needs.¹⁴⁹ The need for developing countries' energy increase and subsequent carbon emissions increase has also been recognised in the preamble of the UNFCCC. In addition the UNFCCC acknowledges that the achievement of sustained economic growth and the eradication of poverty are priority needs of developing countries.¹⁵⁰ Consequently there was a need for a mechanism that would serve the interest of developing countries (i.e. sustainable development) and interest of developed countries (i.e. acquire CERs and use them to meet part of their emission reduction target at a reduced cost).¹⁵¹

3.5.4 COP-7 (Marrakesh Accords): Operational Details for CDM

Although Article 12 of the Kyoto Protocol provided guiding principles for the CDM, the operational details of the CDM were agreed upon only in 2001, as part of the Marrakesh Accords.¹⁵² The process was complete in 2003 with the agreement over the rules governing forestry-related CDM projects. These rules were titled Land Use, Land-Use Change and Forestry (LULUCF) projects.¹⁵³ LULUCF activities are provided under Articles 3(3) and (4), 6 and 12 of the Kyoto Protocol and include afforestation, reforestation, deforestation, forest degradation and additional activities such as soil carbon management in agriculture, restoration of wetlands, cropland management and grazing land management.¹⁵⁴ It should be noted that LULUCF excludes parts of GHG emissions from the agricultural sector.¹⁵⁵ However, in 2006, the IPCC introduced the concept of "Agriculture, Forestry and other Land Uses" (AFOLU) which combines direct GHG emissions of all land-based activities.¹⁵⁶

¹⁴⁹ International Energy Agency, in the absence of new government action (that is, following a business as usual pattern), global primary energy demand is set to increase at an annual rate of 1.6% between now and 2030, with over 70% of this increase coming from developing countries. Fossil fuels (one of the main sources of GHG emissions) will remain the dominant source of energy up to 2030, accounting for 83% of this increased demand, cited by Akanle O., (2011) at 5.

¹⁵⁰ UNFCCC preamble.

¹⁵¹ Article 12 (2)-(3) of the Kyoto Protocol.

¹⁵² Lecocq F. and Ambrosi P., *The Clean Development Mechanism: History, Status, and Prospects*, (2007) 1:1 *Review of Environmental Economics and Policy*, 134–151. It should also be noted that the Marrakech Accords provided modalities and guidelines for each of flexibility mechanisms. See Sands P., (2003) at 379.

¹⁵³ Ibid.

¹⁵⁴ Ibid Murphy D. et.al., (2009).

¹⁵⁵ Gardi O., *Climate Change: Agriculture, Forestry, and Other Land-Use (AFOLU) for Addressing Climate Change Mitigation and Adaptation in the Latin American and Caribbean Region*, Inter-American Development Bank (2010) at 6.

¹⁵⁶ IPCC Guidelines for National Greenhouse Gas (GHG) Inventories (IPCC 2006).

Therefore a reference to LULUCF in the first commitment period of the Kyoto Protocol might be expanded and become the AFOLU in a post-2012 agreement.¹⁵⁷

The emerged rules of the LULUCF were strict in a sense that eligible activities under the CDM in the Marrakesh Accords were only afforestation and reforestation.¹⁵⁸ The largest source of emissions in the developing countries (emissions from deforestation)¹⁵⁹ was excluded¹⁶⁰ for the first commitment period from 2008 to 2012.¹⁶¹ Instead, these activities were regarded as priority projects to be funded under the adaptation fund with a view to addressing drought, desertification and watershed protection, forest conservation, restoration of native forest ecosystems, restoration of salinised soils.¹⁶² In addition, LULUCF rules limited the total amount of LULUCF CERs that could be obtained in developing countries.¹⁶³ In particular, such credits could be used to meet only 1 per cent of a developed country's emission reduction obligations under the Kyoto Protocol.¹⁶⁴

Finally, countries adopted the technical rules for afforestation and reforestation projects under the CDM, and thereby completed the last item on the Buenos Aires Plan of Action in the Milan meeting.¹⁶⁵ The agreement gave developing countries, in particular African nations,

¹⁵⁷ Gardi O., *Climate Change: Agriculture, Forestry, and Other Land-Use (AFOLU) for Addressing Climate Change Mitigation and Adaptation in the Latin American and Caribbean Region*, Inter-American Development Bank (2010) at 35.

¹⁵⁸ UNFCCC Decision 17/CP.7: Modalities and procedures for a clean development mechanism as defined in Article 12 of the Kyoto Protocol, at paragraph 7(a), reprinted in report of the Conference Of the Parties on its seventh session, held at Marrakesh From 29 October To 10 November 2001, FCCC/CP/2001/13/Add.2, 21 January 2002, at 22 para 7 (a). Available: <http://unfccc.int/resource/docs/cop7/13a02.pdf>. [accessed 22 June 2014]. Also see Petsonk A., "Compensated reduction: rewarding the role of forests in climate protection", *Climate Change Law and Policy*.

¹⁵⁹ Ibid., Petsonk A.

¹⁶⁰ Instead, deforestation and land degradation activities were regarded as priority projects to be funded under the adaptation fund with a view to addressing drought, desertification and watershed protection, forest conservation, restoration of native forest ecosystems, restoration of salinised soils. See Decision 1/CP.6 (2000), Implementation of the Buenos Aires Plan of Action. Available: <http://unfccc.int/resource/docs/cop6/dec1-cp6.pdf> [accessed 1 June 2014].

¹⁶¹ Lecocq F. and Ambrosi P., *The Clean Development Mechanism: History, Status, and Prospects*, (2007) 1:1 *Review of Environmental Economics and Policy*, 134–151 at 145.

¹⁶² Decision 1/CP.6 (2000), Implementation of the Buenos Aires Plan of Action. Available: <http://unfccc.int/resource/docs/cop6/dec1-cp6.pdf> [accessed 1 June 2014].

¹⁶³ Ibid Lecocq F. and Ambrosi P., (2007), at 146.

¹⁶⁴ Decision 17/CP.7 on "Modalities and procedures for a clean development mechanism", FCCC/CP/2001/13/Add.2, paras 7(a) and (b).

¹⁶⁵ Decision 19/CP.9, in Report of the Conference of the Parties on its Ninth Session, Addendum, Part II: Action Taken by the Conference of the Parties, Vol. II, 13, FCCC/CP/2003/6/Add.2 (2004). Available: <http://unfccc.int/resource/docs/cop9/06a02.pdf> [accessed 10 June 2014]. The decision addresses complex issues relating to the permanence of sinks by providing for two types of CERs for an afforestation or reforestation project activity under the CDM: a temporary CER (tCER), which expires five years after its issue, and a long-

hope that they could profit from significant forestry opportunities under the CDM. In particular, they had been assured that the complicated rules would address the concerns relating to monitoring and permanence, and that these rules would allow market access for CDM forestry projects.¹⁶⁶ Sadly, the LULUCF activities were *de facto* barred from the market because of their exclusion from the European Union Emissions Trading System (EU ETS).¹⁶⁷ This reduced their demand from European firms as well as from non-European buyers who feared that LULUCF credits have a lower resale value on the secondary market.¹⁶⁸

3.5.5 Exclusion of Avoiding Deforestation and Degradation¹⁶⁹

The first reason commonly cited is the high risk of leakage.¹⁷⁰ Many environmental groups, mainly in Europe, opposed the idea by arguing that that wealthy nations like the USA might attempt to “buy their way out” of part of their international obligations to control the growing of *inter alia* industrial, fossil fuel and automobile emissions, instead of making substantial and permanent emission reductions.¹⁷¹ At the same time, some opponents contended that forest conservation was a risky strategy for battling greenhouse gases. This is because emission reductions as a result of forest conservation such as a national park could lead to a shift of deforestation agents elsewhere and thereby cause leakage.¹⁷² The second reason related to leakage relates to the difficulties associated with monitoring and measurement of carbon emissions from forests with associated baselines establishment,

term CER (ICER), which expires at the end of the crediting period of the project activity. Also see *ibid.*, Soltau F., (2009) at 104.

¹⁶⁶ Streck et al., “The role of forests in global climate change: whence we come and where we go” (2006) 82:5 *International Affairs* at 871.

¹⁶⁷ *Ibid.*

¹⁶⁸ *Ibid* Lecocq F. and Ambrosi P., (2007), at 146.

¹⁶⁹ It should be known upfront that developed countries are obliged to curb deforestation that occurs within their territories under the Kyoto Protocol. In particular Article 3.3 of the Kyoto Protocol obliges developed countries to include deforestation activities when accounting for emissions and removals from land use, land use change and forestry (LULUCF). Also see Stockwell C. et. al., *Design a REDD mechanism: the TDERM triptych*, 151-177 at 173 in Benjamin J. et.al., (eds) *Climate law and developing countries: Legal and policy challenges for the world economy*. (2009).

¹⁷⁰ The concept of leakage has been discussed in chapter 2.

¹⁷¹ Laurance W.F., A New Initiative to Use Carbon Trading for Tropical Forest Conservation, (2007) 39:1 *Biotropica*, 20–24 at 20-21. Also see Streck et al., “The role of forests in global climate change: whence we come and where we go” (2006) 82:5 *International Affairs* at 866. Also see Peterson A., Compensated Reduction: Rewarding the role of forests in climate protection, Legal Working Paper Series on Climate Change Law and Policy, *Centre for International Sustainable Development Law*. Available: <http://cisdl.org/public/docs/legal/Peterson%20-%20Compensated%20Reduction.pdf> [accessed 1 June 2014].

¹⁷² Laurance W.F., A New Initiative to Use Carbon Trading for Tropical Forest Conservation, (2007) 39:1 *Biotropica*, 20–24 at 21.

additionality and non-permanence.¹⁷³ The final reason cited by Laurance relates to the issue of sovereignty. While the USA, Japan, and Canada supported a decision on Article 3.3 (afforestation, reforestation, deforestation) and 3.4 (agricultural soils and the land-use change and forestry categories) as a package critical to the success of the Kyoto Protocol,¹⁷⁴ Brazil which contains 40 percent of the world's remaining tropical rain forest, adamantly opposed carbon trading to reduce deforestation, and lobbied other developing countries to do the same. This opposition as argued indicated that accepting reduced deforestation funds from industrial countries could potentially limit their future development options.¹⁷⁵ The idea of reducing deforestation was proposed at the Rio Earth Summit in 1992 where some developed countries delegates claimed that “forests are, in some respects, a global common; all peoples and states have a stake in them.”¹⁷⁶ This claim according to Humphreys has no standing in international law.¹⁷⁷ In contrast, the principle of sovereignty as invoked by developing countries that forests are a sovereign national resource is the strongest claim in international law and this was “affirmed in the 1992 Forest Principles, para 1(a)” and 2007 “Non-legally binding instrument on all types of forests”.¹⁷⁸

3.6 Genesis and Development of REDD+ in the Negotiations of the 2nd Commitment Period: Post-Kyoto Protocol

3.6.1 Conference of the Parties (COPs) on Climate Change

COP-11 in Montreal, 2005: REDD+ Proposal

The discussions on how to structure the climate regime after 2012 commenced at COP 11.¹⁷⁹ Subsequently, two separate negotiation processes were therefore established: an Ad Hoc

¹⁷³ The 2006 IPCC Guidelines for National Greenhouse Gas Inventories – Agriculture, Forestry and Other Land Use, available at <http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol4.htm> (viewed 30 January 2008) and GOFG-GOLD REDD Sourcebook which uses remote sensing to monitor and measure greenhouse gas emissions from forests, available at <http://www.gofc-gold.uni-jena.de/redd/>, cited by Lyster R., *The New Frontier of Climate Law: Reducing Emissions from Deforestation and Degradation*, (2009) 26:6 *Environmental and Planning Law Journal*, 417-456, at 423. For a discussion on non-permanence, baselines and additionality see chapter 2.

¹⁷⁴ International Institute for Sustainable Development (IISD). Available: <http://www.iisd.ca/vol12/enb12163e.html> [accessed 1 June 2014].

¹⁷⁵ Laurance W.F., *A New Initiative to Use Carbon Trading for Tropical Forest Conservation*, (2007) 39:1 *Biotropica*, 20–24 at 21.

¹⁷⁶ Humphreys D., *The politics of “Avoided Deforestation”: Historical context and contemporary issues*, (2008) at 339.

¹⁷⁷ Ibid.

¹⁷⁸ Ibid.

¹⁷⁹ Bodansky D. and Rajamani L., *The Evolution and Governance Architecture of the Climate Change Regime*. In Sprinz D. and Luterbacher U. (eds.), *International Relations and Global Climate Change: New Perspectives*. 2nd ed, (2016) Forthcoming at 15.

open-ended Working Group to consider further commitments for the developed countries beyond 2012 under the Kyoto Protocol and a “Dialogue on long-term cooperative action” under the FCCC.¹⁸⁰ Extensive negotiation, however, began at COP 13 as discussed in the next section.¹⁸¹ That said, the point of departure for the REDD+ mechanism was presented at COP 9.¹⁸² At this time the concept only referred to reducing deforestation (RED), however, the scope of the concept was broadened to REDD at COP 13 and REDD+ at COP 15.¹⁸³ That said, the objective of COP 13 was to highlight lessons learned during the intense discussions that took place before and during COP 6. It concluded by rejecting project-based conservation schemes to climate change mitigation and introduced the concept of “compensated reductions”, explicitly referred to a national crediting scheme, with the view to reducing the problem of leakage.¹⁸⁴ The idea began to gain momentum at COP 11 where Papua New Guinea, and the Coalition for Rainforest countries proposed to take part in post-2012 agreement by undertaking voluntary carbon emission reduction targets to avoid deforestation.¹⁸⁵ The influence to include REDD+ mechanism in the post-Kyoto agreement grew as a growing number of scientists and experts warned that “the time window for meeting the objective of the UNFCCC [...] was narrowing, and that [deep] emissions cuts were urgently needed.”¹⁸⁶ This changed the position of some environmental NGOs who had opposed project-based crediting. They realised that if the world is to avert dangerous climate change, it would be necessary to figure out a way to address deforestation rather than to

¹⁸⁰ Ibid.

¹⁸¹ Ibid.

¹⁸² At this point the focus was to reduce deforestation only. See Santilli M.P. et al., Tropical deforestation and the Kyoto protocol. An editorial essay. *Climatic Change* 71, (2005) 267. Santilli M.P. et al., Tropical Deforestation and the Kyoto Protocol: A New Proposal. Paper Presented at COP 9, UNFCCC, December 2003, Milan, Italy.

¹⁸³ For an extensive discussion on the development of REDD+ see Pistorius T., From RED to REDD+: the evolution of a forest-based mitigation approach for developing countries. (2012) 4:6 *Current Opinion in Environmental Sustainability*, 638.

¹⁸⁴ Karsenty A. et al., “Carbon rights”, REDD+ and payments for environmental services. (2012) *Environmental Science & Policy* at 2.

¹⁸⁵ Holloway A. and Giandomenico E., Carbon Planet White Paper: The History of REDD Policy, Carbon Planet (2009). Available: http://unfccc.int/files/methods_science/redd/application/pdf/the_history_of_redd_carbon_planet.pdf [accessed 5 July 2014]. Also see CD REDD Capacity Development for Reducing Emissions from Deforestation and Forest Degradation. Available: http://unfccc.int/files/methods_science/redd/technical_assistance/training_activities/application/pdf/cd_redd_concept_note.pdf [accessed 5 July 2014].

¹⁸⁶ Oppenheimer M and. Petsonk A., “Article 2 of the UNFCCC: Historical origins, recent interpretations,” (2005) 73 *Climatic Change* 195-226, cited by Petsonk A., “Compensated reduction: rewarding the role of forests in climate protection”, (2005) *Climate Change Law and Policy*.

continue wrangling over denying credits to small-scale forest conservation projects.¹⁸⁷ This was complemented by a Brazilian pledge to cut the deforestation rate in the Amazon by more than half within a decade.¹⁸⁸ Subsequently, this development was welcomed by a number of countries, including representatives from the USA legislative branch who were observing the talks.¹⁸⁹ An observation made here is that Brazil embarked on a new position as it was objecting to deforestation during CDM negotiations.

The change of position by Brazil was largely influenced by Marina Silva who was the Brazil's Environment Minister from 2003 to 2008. She was instrumental in reducing deforestation in the Amazon to historically low levels – by 60% from 2004 to 2007. Subsequently, the earth avoided emissions of 520 million tons of CO₂, or ten times Norway's annual emissions.¹⁹⁰ This was mainly due to (1) creation of a new protected area which is equal to the size of Australia and (2) addressing the concerns of indigenous peoples (this was an achievement which was not addressed over thirty (30) years). Subsequently, indigenous people's rights were enshrined within the constitution and empowered indigenous peoples to exercise their rights over about 20 percent of Amazon.¹⁹¹ This initiative gave an idea to the Brazilian government that it was possible to combat deforestation and continue to develop. For reasons explained, Brazil became in favour of including avoiding deforestation towards the post-2012 climate change regime.¹⁹² Subsequently, the rainforest countries met with a member of the USA senate, who informed them that a bipartisan majority of the senate had resolved that Congress should enact a program of mandatory, market-based limits and incentives to slow, stop and reverse the growth of America's carbon emissions, and to do so in a way that would encourage "comparable action" by developing nations.¹⁹³ Following this stage, the proposal was forwarded to the Subsidiary Body of Scientific and Technological Advice (SBSTA) of the UNFCCC for further exploration to see how deforestation in

¹⁸⁷ Petsonk A., "Compensated reduction: rewarding the role of forests in climate protection", *Climate Change Law and Policy*. (2005). Available: <http://cisdl.org/public/docs/legal/Petsonk%20-%20Compensated%20Reduction.pdf> [accessed 16 July 2014].

¹⁸⁸ Partlow J., *Brazil's Decision on Deforestation Draws Praise*, Washington Post, December 6, (2008), at A09, cited by *ibid.*, Soltau F., (2009) at 124.

¹⁸⁹ *Ibid* Petsonk A., (2005).

¹⁹⁰ The Sophie prize 2009. Available: http://www.sofieprisen.no/Prize_Winners/2009/index.html [accessed 25 July 2014].

¹⁹¹ Nepstad D., presentation New America Foundation (2009).

¹⁹² *Ibid.*

¹⁹³ Petsonk A., "Compensated reduction: rewarding the role of forests in climate protection", *Climate Change Law and Policy* at 8. Available: <http://cisdl.org/public/docs/legal/Petsonk%20-%20Compensated%20Reduction.pdf> [accessed 12 July 2014].

developing countries could be incorporated into the climate change negotiations.¹⁹⁴ Following consideration by the SBSTA and several workshops to address issues in greater depth, the idea of reducing emissions from deforestation in developing countries: approaches to stimulate action, was adopted as part of the Bali Action Plan¹⁹⁵ at the UNFCCC Conference (COP-13/MOP-3) in Bali, Indonesia.¹⁹⁶

COP-13 in Bali 2007 and COP-14 in Poznan, 2008: Negotiations for a Post-2012 Agreement

The Bali Action Plan launched a parallel track under the UNFCCC to address the post-2012 period, encompassing all aspects of the climate change issue: mitigation, adaptation, finance and technology¹⁹⁷ and involved the other big emitters such as the United States, India and China. It is well known that these countries do not have emission reduction commitments under the Kyoto Protocol. However, unlike the previous Kyoto Protocol negotiations, which targeted only carbon emission reductions from developed countries, the Bali Action Plan focuses on emission reductions from both developed and developing countries.¹⁹⁸ This marked the first time developing countries were fully engaged in the climate mitigation debate.¹⁹⁹ The Bali Action Plan committed both developed and developing countries to begin a negotiation process immediately to allow them to adopt a decision at COP 15 on a shared vision for long-term cooperative action on climate change.²⁰⁰ It committed developed countries to negotiate a post-Kyoto agreement with “[m]easurable, reportable and verifiable nationally appropriate mitigation commitments or actions including quantified emission limitation and reduction objectives,”²⁰¹ and developing countries to negotiate the Nationally Appropriate Mitigation Actions (NAMAs).²⁰² Finally, the Bali Action Plan committed both

¹⁹⁴ Ibid., Holloway A. and Giandomenico E., (2009).

¹⁹⁵ Decision 1/CP.13, Bali Action Plan in Report of the Conference of the Parties on its thirteenth session, held in Bali from 3 to 15 December (2007), Addendum, Part Two: Action taken by the Conference of the Parties at its thirteenth session, FCCC/CP/2007/6/Add.1 Mar. 14, (2008).

¹⁹⁶ Ibid., Holloway A. and Giandomenico E., (2009).

¹⁹⁷ Bali Action Plan, Dec.1/CP.13, Dec.14-15, 2007, in COP-13 Report, U.N. Doc. FCCC/CP/2007/6/Add.1, at 3.

¹⁹⁸ Some estimates indicate that developing country carbon emissions will grow so rapidly over the next 20 years that, even if developed countries were to phase out their greenhouse gas emissions completely, global emissions would still be higher in 2030 than today. Project Catalyst, “Limiting Atmospheric CO₂e to 450 ppm - The Mitigation Challenge,” at 13 (2009) as cited by Bodanski D., W[i]ther the Kyoto Protocol Durban and Beyond (2011) at 3.

¹⁹⁹ Willem den Besten J. et. al., The evolution of REDD+: An analysis of discursive institutional dynamics. (2014) 35 *Environmental Science and Policy* 40–48 at 46.

²⁰⁰ Para 1. Also see Lyster R., The New Frontier of Climate Law: Reducing Emissions from Deforestation and Degradation. (2009) 26:6 *Environmental and Planning Law Journal*, 417-456 at 4.

²⁰¹ Para 1(b) (i).

²⁰² Para 1(b) (ii).

developed and developing countries to negotiate the “[p]olicy 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”.²⁰³

NAMAs and REDD+ developments are heralded as a radical shift of developing countries’ position as they moved from qualitative commitments under Article 4 (1) of the UNFCCC to *potentially* quantifiable “nationally appropriate mitigation actions” that are “measurable, reportable and verifiable”, or MRV.²⁰⁴ In addition, the Bali Action Plan encourages developing countries to undertake a range of actions including REDD+ demonstration activities relevant to their national circumstances. At the same time it requested the Subsidiary Body for Scientific and Technological Advice (SBSTA) to undertake a programme of works on methodological issues related to REDD+. The survey of some of the key provisions of the Bali Action Plan show how a basis for subsequent negotiations for REDD+ and other post-Kyoto commitments was established.

Parties at the Poznań negotiations endorsed an intensified negotiating schedule for COP 15 and agreed that the first draft of a negotiating text for a post-2012 agreement would be available at a UNFCCC gathering in Bonn in 2009.²⁰⁵ One of the hallmarks of these negotiations in Bali and Poznań was the addition of degradation, conservation of forest carbon stocks, sustainable management of forests, and enhancement of carbon stocks (collectively referred to as “+”) as a climate change mitigation focus. This expansion of activities was initiated by Vanuatu and the Coalition for Rainforest Nations. Their argument was that such inclusion would allow a more comprehensive coverage of emission reductions from the forest sector since degradation is more significant than deforestation in some countries.²⁰⁶ However, at the negotiations, it was the Congo Basin countries which were vocal and fought successfully for the inclusion of the degradation.²⁰⁷ India pushed for the

²⁰³ Para 1(b) (iii).

²⁰⁴ *Ibid.*, Winkler H., (2008) at 535. Emphasis is mine.

²⁰⁵ UNFCCC. Available: https://unfccc.int/meetings/poznan_dec_2008/meeting/6314.php, <http://www.iisd.ca/vol12/enb12395e.html> [accessed 5 July 2014].

²⁰⁶ Freestone D. and Streck C., *Legal Aspects of Carbon Trading: Kyoto, Copenhagen, and Beyond*. (2009) at 588-9.

²⁰⁷ *Ibid.*

negotiation of the conservation, sustainable development of forests, and the enhancement of carbon stocks in the Bali negotiations.²⁰⁸

COP-15 in Copenhagen, 2009: A Non-Binding Agreement Outcome

The COP 15 held in December 2009 in Copenhagen, was initially intended as the end point of the said parallel negotiating tracks. Thus many scholarly publications indicated the possibility of a new legal agreement (or agreements) at this stage to address the post-2012 period.²⁰⁹

A point of departure for the negotiations in order to reach an agreed outcome and adopt a decision at COP 15 began with the negotiation text which was released by the UNFCCC secretariat on 19 May 2009.²¹⁰ The text proposed a post-2012 agreement legal form to consider various options such as a set of COP decisions that would be legally binding emanating from the obligations and commitments of the parties under the UNFCCC, a new legal instrument or instruments within the framework of the UNFCCC, and a new protocol to the UNFCCC for adoption at COP 15.²¹¹ Despite these options parties failed to reach a new legal agreement at COP 15 and instead agreed on a political agreement named the Copenhagen Accord as provided by decision 2/CP.15.²¹²

One of the striking aspects of the Copenhagen Accord is the bottom-up approach to the negotiation of climate change which is fundamentally different architecture than the Kyoto Protocol as observed by Bodansky. The author observes that rather than defining emissions targets from the top down through international negotiations, the Copenhagen Accord establishes a process that allows each party to define its own commitments and actions unilaterally.²¹³ This allowed a number of countries to define eligible activities for REDD+. Thus, this stage marked the beginning of a flexible and bottom-up approach which was followed up in the subsequent COPs.

²⁰⁸ Ibid at 589.

²⁰⁹ Bodanski D., “A tale of two architectures the once and future U.N. climate change regime” (2011) *Arizona State University Sandra Day O'Connor College of Law* at 10.

²¹⁰ FCCC/AWGLCA/2009/8 19 May 2009. Available: <http://unfccc.int/resource/docs/2009/awglca6/eng/08.pdf> [accessed 10 July 2014].

²¹¹ Para 14-20. Also see Ibid Lyster R., (2009) at 6.

²¹² Copenhagen Accord, Dec. 18, 2009, in COP-15 Report, U.N. Doc. FCCC/CP/2009/11/Add.1.

²¹³ Bodanski D., “A tale of two architectures the once and future U.N. climate change regime” (2011) *Arizona State University Sandra Day O'Connor College of Law* at 10. Bodansky D. and Diring E., *Alternative Models for the 2015 Climate Change Agreement*. FNI Climate Policy Perspectives 13. October 2014 at 3.

Regarding the issues of distribution of benefits and costs, debates which took place at COP-15 focused on the issue of Reference Emissions Levels/Reference Levels (REL/RL). Scholars such as Angelsen have pointed out that the choice of REL/RL has profound implications for both the incentives to participate and distribution of benefits and costs at the international level.²¹⁴ As countries increased the scope of mitigation of climate change to include conservation, sustainable management of forests, and enhancement of carbon stocks, the issue of reference continued to be debated. The question was whether to use reference levels, reference emission levels or both. The final decision that emerged from COP 15 at Copenhagen decided to include both phrases.²¹⁵ Regarding the starting date or period for reference emissions, a group of developed countries stressed the role of historical emissions from deforestation while many parties stressed the importance of flexibility.²¹⁶ A strong argument advocating flexibility came from Suriname. In its submission to the UNFCCC on technical and institutional capacity-building needs it explained that:²¹⁷

“Simple historical base-lines are not adequate, because they characterize a different economic and social dynamic that led to low rates of deforestation; Suriname is now embarking on a more dynamic development trajectory and a deliberate strategy to increase the exploitation of its natural resources including expansion of agriculture. Therefore, Suriname’s reference scenario must be based on a modeled future economy and the projected emissions that would occur under a business as usual assumption that would normally accompany changes in land-use allocations, infrastructure investments, demographic and socio-economic trends, policy and enforcement, and any other causal or correlative factors that can be used to infer forest cover change with known levels of certainty.”²¹⁸

With respect to the above issues, a report prepared by the Subsidiary Body for Scientific and Technological Advice indicated that REL/RL will entail historical data and if necessary adjustments for expected future emission trends in square brackets, indicating that this matter

²¹⁴ Angelsen A., REDD models and baselines. (2008) 10:3 *International Forestry Review* 465 at 471. Available: http://www.cifor.org/publications/pdf_files/articles/AAngelsen0801.pdf [accessed 2 July 2013].

²¹⁵ Cited by Wiersema A., *Climate Change, Forests, and International Law: REDD’s Descent into Irrelevance*. (2014) 47:1 *Vanderbilt Journal Transnational Law* 1 at 50.

²¹⁶ *Ibid* at 56.

²¹⁷ United Nations Framework Convention on Climate Change, Subsidiary Body for Scientific and Technological Advice, Information on Experiences and Views on Needs for Technical and Institutional Capacity-Building and Cooperation, Submissions from Parties, FCCC/SBSTA/2009/MISC.2, at 44 (Mar. 10, 2009). Cited in Wiersema A., *Climate Change, Forests, and International Law: REDD’s Descent into Irrelevance*. (2014) 47:1 *Vanderbilt Journal Transnational Law* 1 at 46.

²¹⁸ UNFCCC: Available: <http://unfccc.int/resource/docs/2009/sbsta/eng/misc02.pdf> [accessed 2 July 2013].

was still subject to disagreement among the parties.²¹⁹ This leaves interpretation of REL/RL to be “based on national circumstances and include historical data, socio-economic factors, drivers of deforestation and the national policy context.”²²⁰ The term “national circumstances” is not defined and countries are only just beginning to explore what “national circumstances” means for their specific contexts (such as high forest, low deforestation and drivers of deforestation).²²¹ All of the subsequent subsections discussing how MRV should function and what they should provide have some kind of modifier that maintains a lot of flexibility for the developing countries, “although one of these leaves open the possibility of more or less oversight by the COP, depending on what the parties agree on in subsequent decisions.”²²²

COP-16: Cancun, 2010: Flexible Bottom-Up Approach and Establishment of MRV System

At COP 16 in Cancun, parties agreed to incorporate the core elements contained in the Copenhagen Accord into the official UNFCCC process.²²³ The Cancun Agreements²²⁴ neither prescribed the type, nature nor stringency of commitments or contributions to be taken by parties nor imposed any informational requirements in relation to these commitments and contributions.²²⁵ In this case, Cancun reinforced the paradigm shift (flexible bottom-up

²¹⁹ Report of the Subsidiary Body for Scientific and Technological Advice on its thirtieth session, held in Bonn from 1 to 10 June 2009. FCCC/SBSTA/2009/3. Available: <http://unfccc.int/resource/docs/2009/sbsta/eng/03.pdf> [accessed 2 July 2013].

²²⁰ Van Laake P. E., Review of methodologies for the establishment of Reference Emission Levels and Reference Levels for REDD in Viet Nam (2010). Available: http://www.unredd.net/index.php?option=com_docman&task=doc_view&gid=7654&tmpl=component&format=raw&Itemid=53 [accessed 2 July 2014].

²²¹ <http://www.forestcarbonpartnership.org/sites/forestcarbonpartnership.org/files/Documents/PDF/Nov2011/Refer%20Level%20overview%20for%20FCPF-Winrock%20workshop%20Andrasko%20%2011%209%202011.pdf> [accessed 2 July 2014].

²²² United Nations Framework Convention on Climate Change, Subsidiary Body for Scientific and Technological Advice, *Report of the SBSTA on Its Thirtieth Session, Held in Bonn from 1 to 10 June 2009*, Draft Decision, FCCC/SBSTA/2009/3, at 23 (2009). Cited by Wiersema A., *Climate Change, Forests, and International Law: REDD's Descent into Irrelevance*. (2014) 47:1 *Vanderbilt Journal Transnational Law* 1 at 46.

²²³ UNFCCC: Available: <http://cancun.unfccc.int/> [accessed 2 July 2014]. Bodansky D. and Rajamani L., *The Evolution and Governance Architecture of the Climate Change Regime*. In Sprinz D. and Luterbacher U. (eds.), *International Relations and Global Climate Change: New Perspectives*. 2nd ed, (2016) Forthcoming at 17. Bodanski D., “A tale of two architectures the once and future U.N. climate change regime.” (2011) *Arizona State University Sandra Day O'Connor College of Law* at 3.

²²⁴ The Cancun Agreements comprise of Decision 1/CP.16 2011 and, Decision 1/CMP.6 2011. Available: <http://unfccc.int/documentation/decisions/items/3597.php?such=j&volltext=/CP.16> , [accessed 2 July 2014]., and <http://unfccc.int/documentation/decisions/items/3597.php?id=3597#beg> [accessed 2 July 2014].

²²⁵ Bodansky D. and Rajamani L., *The Evolution and Governance Architecture of the Climate Change Regime*. In Sprinz D. and Luterbacher U. (eds.), *International Relations and Global Climate Change: New Perspectives*. 2nd ed, (2016) Forthcoming at 21.

approach) which began at COP 15. The challenge for the negotiators is to establish the “pillars from which a diversity of bottom-up initiatives can join together and converge towards an ever more efficient, fair and self-reinforcing climate regime.”²²⁶

In the context of REDD+, Decision 1/CP.16 incorporated REDD+ activities²²⁷ which were provided in the draft text on REDD.²²⁸ The vital progress made at Cancun relates to the substance of and complements the Bali Action Plan. According to the Earth Negotiations Bulletin,²²⁹ positive outcomes include the establishment of the Green Climate Fund,²³⁰ the Technology Mechanism²³¹ and the Cancun Adaptation Framework.²³² The COP 16 also agreed upon a phased approach, starting with the development of national strategies.²³³ The REDD+ activities are required to be “[r]esults-based demonstration activities, and evolving into results-based actions that should be full measured, reported and verified” in phase 3.²³⁴

However, a number of open questions related to REDD+ were left to be resolved, one of them being the respect for the rights of indigenous peoples and local communities.²³⁵ Other unresolved issues include methodological modalities related to the MRV of carbon stocks, the monitoring of forests, and the identification of the drivers of deforestation, much of which have been tasked to the SBSTA.²³⁶ The legal and institutional arrangement for the establishment and operationalisation of the Green Climate Fund has in the meantime been finalised and was recommended for approval at COP 17.²³⁷

²²⁶ Hourcade J. et al., *Climate policy architecture for the Cancun paradigm shift: building on the lessons from history*. 15:4 *International Environmental Agreements: Politics, Law and Economics* (2015) 353–367 at 358.

²²⁷ Article 70.

²²⁸ Article 3 of FCCC/AWGLCA/2009/L.7/Add.6.

²²⁹ International Institute for Sustainable Development (IISD). Available: <http://www.iisd.ca/vol12/enb12498e.html> [accessed 2 July 2014].

²³⁰ Para 109.

²³¹ Para 117.

²³² Para 13.

²³³ Outcome of the work of the Ad Hoc Working Group on Long-Term Cooperative Action under the Convention, Decision 1/CP.16, FCCC/CP/2010/7/Add.1, 11 Dec. 2010, Sec. III.C. Available: <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf> [accessed 2 July 2014].

²³⁴ Decision 1/CP.16 para 73.

²³⁵ Ludwig G., *Property Rights and Participation in REDD1: The Case of Mozambique*, *Transnational Environmental Law*, (2012).

²³⁶ International Institute for Sustainable Development (IISD). Available: <http://www.iisd.ca/vol12/enb12498e.html> [accessed 2 July 2014].

²³⁷ See Decision 1/CP.16 Appendix III (1). The Green Climate Fund report. Available: http://unfccc.int/files/cancun_agreements/green_climate_fund/application/pdf/tc4-3.pdf [accessed 2 July 2014].

COP-17 in Durban, 2011: Negotiations for a Post-2020 Agreement

The Durban Platform, "...decide[d] to launch a process to develop a protocol, another legal instrument or an agreed outcome with legal force under the UNFCCC applicable to all Parties...".²³⁸ This outcome "represents a finely balanced compromise among the principal negotiating groups in the UN climate change process."²³⁹ The European Union (EU), supported by least-developed countries and small-island developing countries, demanded a fast-start mandate to negotiate a legally-binding instrument engaging all parties, as a condition for its agreement to a second commitment period under the Kyoto Protocol.²⁴⁰ The USA insisted that it would accept a mandate to negotiate such instrument only if the mandate was "symmetrical" in its application to all parties.²⁴¹ Similarly, China and India also made their demands. China said that it would not accept legal commitments before 2020 while India resisted the EU's demands for a new legally-binding instrument.²⁴²

Accordingly, the Durban Platform made no reference to developed, developing, Annex I, or non-Annex I parties. Instead, it established a uniform single negotiation category which addresses developed and developing parties together, rather than dividing the negotiations into two categories, as established by the Bali Action Plan.²⁴³ The implication of the Durban Platform for the REDD+ mechanism is the departure from the conception of REDD+ as "policy approaches and positive incentives ..." as stressed by the Bali Action Plan.²⁴⁴ The wording "positive incentives" has been interpreted by many parties to imply a full compensation to developing countries.²⁴⁵ Thus REDD+ is no longer perceived predominantly as a system of payments from developed to developing countries for reduced forest emissions. Instead it is perceived as a shared responsibility to some extent.²⁴⁶ At least two factors define the change: the pledges made by many middle income countries and their national low-carbon strategies (which also incorporate REDD+) are currently being developed for reducing emissions as compared to a business as usual scenario, and the

²³⁸ Decision 9/CP.19.

²³⁹ Bodansky D. and Diringer E., *Alternative Models for the 2015 Climate Change Agreement*. FNI Climate Policy Perspectives 13. October 2014 at 3.

²⁴⁰ *Ibid* at 3.

²⁴¹ *Ibid*.

²⁴² *Ibid* at 4.

²⁴³ *Ibid*.

²⁴⁴ Angelsen A. et.al., *Analysing REDD+: Challenges and choices*, (2012) at 47.

²⁴⁵ *Ibid*.

²⁴⁶ *Ibid*.

concern that international mechanisms are unlikely to be able to fully compensate developing countries for REDD+ costs.²⁴⁷

COP-18 in Doha, 2012, COP-19 in Warsaw 2013, and COP-20 in Lima, 2014: Flexible Bottom-Up Approach and Top-Down Approach

Parties chose not to address the legal aspect of the 2015 agreement at subsequent COPs in Doha, Warsaw and Lima.²⁴⁸ However, preparations to achieve such objective began at COP 19 where parties created the building blocks of the post-2020 agreement.²⁴⁹ Indeed, the Warsaw decision includes a strong bottom-up element, inviting parties to communicate their “Intended Nationally Determined Contributions” (NDCs) before the COP 21 in Paris.²⁵⁰ The term “contributions” in this call has been a subject of intense debate both at a scholarly level and at UN negotiations. Some scholars argue that “since the term ‘contributions’ is not qualified by ‘mitigation,’ contributions could take the form of adaptation, finance, technology transfer or capacity building contributions.”²⁵¹ At the UN negotiations, the authors note that the COP 19 decision does not resolve this issue and by default leaves the scope of contributions to be a subject of national determination.²⁵² The only attempt made by the COP 19 decision to resolve this issue is the encouragement of parties to consider including an adaptation component in their contributions and a call to specify the information about their contributions to ensure “clarity, transparency, and understanding.”²⁵³ The authors consider this call to be the beginning of a top-down component to balance the bottom-up element.²⁵⁴

²⁴⁷ Ibid at 48 citing UNEP: Available:<http://www.unep.org/climatepledges/>. [accessed 2 July 2014].

²⁴⁸ Decision 1/CP.19, “Further Advancing the Durban Platform”, FCCC/CP/2013/10/Add.1 (31 January 2014) (hereinafter “Warsaw ADP Decision”), paras 2(b) and 2(c). Rajamani L., *Negotiating the 2015 Climate Agreement: Issues relating to Legal Form and Nature*. Research Paper (2015) at 21.

²⁴⁹ Bodansky D. and Rajamani L., *The Evolution and Governance Architecture of the Climate Change Regime*. In Sprinz D. and Luterbacher U. (eds.), *International Relations and Global Climate Change: New Perspectives*. 2nd ed, (2016) Forthcoming at 20.

²⁵⁰ Warsaw ADP Decision, paras 2(b) and 2(c). Rajamani L., *Negotiating the 2015 Climate Agreement: Issues relating to Legal Form and Nature*. Research Paper (2015) at 21. Bodansky D. and Diringer E., *Alternative Models for the 2015 Climate Change Agreement*. FNI Climate Policy Perspectives 13. October 2014 at 7.

²⁵¹ Bodansky D. and Rajamani L., *The Evolution and Governance Architecture of the Climate Change Regime*. In Sprinz D. and Luterbacher U. (eds.), *International Relations and Global Climate Change: New Perspectives*. 2nd ed, (2016) Forthcoming at 20.

²⁵² Ibid.

²⁵³ Ibid. Also see Bodansky D. and Diringer E., *Alternative Models for the 2015 Climate Change Agreement*. FNI Climate Policy Perspectives 13. October 2014 at 7.

²⁵⁴ Bodansky D. and Diringer E., *Alternative Models for the 2015 Climate Change Agreement*. FNI Climate Policy Perspectives 13. October 2014 at 7.

In the context of REDD+, COP 19 produced a series of decisions on REDD+ collectively known as the Warsaw Framework for REDD+. These decisions provided the basic blueprint for the progress of REDD+ in seven areas namely: finance, coordination of financial arrangements, forest reference emission levels, national forest monitoring systems, verification, transparency and safeguards, and drivers of deforestation and forest degradation. However, significant progress is still needed in all of these areas specifically a clear articulation of sources of funding for REDD+.²⁵⁵ At COP 20, debate in the context of NDCs did not resolve the question on whether and how forestry and land use will be part of the post-2020 climate regime.²⁵⁶ This is perhaps because the COP 20 was intended to prepare a draft text to be used as a basis for negotiations leading up to the COP 21 in Paris.²⁵⁷

COP-21 in Paris, 2015: The Paris Agreement with a Hybrid Governance Approach

Pursuant to the Durban Platform, the parties to the UNFCCC reached an agreement (hereinwith the Paris Agreement) with legal force under the UNFCCC and applicable to all parties.²⁵⁸ The Paris Agreement obliges parties to prepare, communicate and maintain successive Nationally Determined Contributions (NDCs) with the aim of achieving the objectives of the UNFCCC.²⁵⁹ The contents of NDCs are expressed in various articles as follows: mitigation actions, the global goal on adaptation, financial resources for both mitigation and adaptation, technology development and transfer, capacity-building activities and an enhanced transparency framework for action and support.²⁶⁰

The mitigation actions and financial resources provisions are further elaborated here as they have direct bearing on REDD+. Thus in the context of mitigation actions, the Paris Agreement calls for developed countries' NDCs to be "economy-wide absolute emission reduction targets."²⁶¹ At the same time, it encourages developing countries' NDCs to "move over time towards economy-wide emission reduction or limitation targets in the light of

²⁵⁵ Neto E.R., REDD+ as a Tool of Global Forest Governance. *The International Spectator*: (2015) 50:1 *Italian Journal of International Affairs* at 69.

²⁵⁶ Chris Lang C., What came out of Lima COP20 on REDD? Part 1: "REDDlock" 9 December (2014). Available: <http://www.redd-monitor.org/2014/12/09/what-came-out-of-lima-cop20-on-redd-part-1-reddlock/> [accessed 15 February 2014].

²⁵⁷ Morgan J. et. al., COP20 Lays the Groundwork for Paris Climate Pact: 7 Key Developments. December 14 (2014). Available: <http://www.wri.org/blog/2014/12/cop20-lays-groundwork-paris-climate-pact-7-key-developments> [accessed 8 February 2014].

²⁵⁸ UNFCCC/CP/2015/L.9/Rev.1 (hereinafter the Paris Agreement) para 1.

²⁵⁹ Article 4 (2) of the Paris Agreement.

²⁶⁰ Article 3 of the Paris Agreement read together with articles 4, 7, 9, 11, and 13.

²⁶¹ Article 4 (4) of the Paris Agreement.

different national circumstances.”²⁶² The REDD+ mechanism which is already agreed in the COP decisions discussed above is repeated in the Paris Agreement.²⁶³ This repetition means REDD+ activities can be accounted for in the NDCs. The Paris Agreement also obliges developed country parties to provide financial and other assistance to developing countries.²⁶⁴ Such resources can arise from a wide variety of sources, instruments and channels.²⁶⁵ Likewise, other parties are encouraged to provide such support on a voluntary basis.²⁶⁶ These provisions can be seen as a platform for financing REDD+ mechanism.

In addition, the Paris Agreement provides advancement of the already legal requirement to report by specifying the details on what has to be reported after “every five years”.²⁶⁷ With regards to “mitigation actions” expressed above, parties are obliged to provide the following information:²⁶⁸

- (a) A national inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases, prepared using good practice methodologies accepted by the Intergovernmental Panel on Climate Change and agreed upon by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement;
- (b) Information necessary to track progress made in implementing and achieving its nationally determined contribution under Article 4.²⁶⁹

Likewise, the obligation to provide information on the NDCs is inscribed. In particular, developed country parties are obliged to provide quantitative and qualitative information on financial, technology transfer and capacity-building support provided to developing countries,²⁷⁰ while other parties that provide support are encouraged to provide such information.²⁷¹ Such information must be in accordance with the modalities, procedures and guidelines to be adopted by the COP.²⁷² In the same breath, developing country parties are

²⁶² Article 4 (4) of the Paris Agreement.

²⁶³ Article 5 (2) of the Paris Agreement.

²⁶⁴ Article 9 (1) of the Paris Agreement.

²⁶⁵ Article 9 (3) of the Paris Agreement.

²⁶⁶ Article 9 (2) of the Paris Agreement.

²⁶⁷ Article 4 (9) of the Paris Agreement.

²⁶⁸ Article 13 (7) of the Paris Agreement.

²⁶⁹ Article 13 (7) (a)-(b) of the Paris Agreement.

²⁷⁰ Article 13 (9) of the Paris Agreement.

²⁷¹ Article 13 (9) of the Paris Agreement.

²⁷² Article 9 (5) read together with article 9 (1) and (7) of the Paris Agreement.

required to provide information on financial, technology transfer and capacity-building support needed and received.²⁷³

The Agreement also establishes an enhanced transparency framework for action and support with built-in flexibility which takes into account parties' different capacities.²⁷⁴ The purpose of such framework is to provide a clear understanding of climate change action in the light of the objective of the UNFCCC, including clarity and tracking of progress towards achieving parties' individual NDCs.²⁷⁵ The framework will be "implemented in a facilitative, non-intrusive, non-punitive manner, respectful of national sovereignty, and avoid placing undue burden on [p]arties."²⁷⁶ To this end, the Paris Agreement can be seen to establish both the bottom-up governance approach to determine the NDCs and a "top-down MRV governance".²⁷⁷

3.6.2 Conference of the Parties (COPs) on Biodiversity

The Conference of the Parties (COP) to the Convention on Biological Diversity (CBD) hereinafter (CBD COP) like the UNFCCC COP/MOP is empowered to "[c]ontact, through the Secretariat, the executive bodies of conventions dealing with matters covered by [the CBD] with a view to establishing appropriate forms of cooperation with them."²⁷⁸ Pursuant to this mandate, the CBD COP adopted a number of decisions on biodiversity conservation and sustainable use and climate change and adaptation and mitigation.²⁷⁹ These decisions have been instrumental in highlighting biodiversity concerns in UNFCCC COP decisions,²⁸⁰ but have not yet led to strong references to biodiversity in the climate regime's decisions on forests.²⁸¹ Nevertheless, it is worthwhile to survey some of the attempts to include forests in climate change mitigation.

In 2008, the CBD COP officially sanctioned climate change as a cross-cutting issue within the convention and subsequently requested that climate change considerations be integrated

²⁷³ Article 13 (10) of the Paris Agreement.

²⁷⁴ Article 13 (1) of the Paris Agreement.

²⁷⁵ Article 13 (5) of the Paris Agreement.

²⁷⁶ Article 13 (3) of the Paris Agreement.

²⁷⁷ That is international oversight or MRV approach to assess obligations based on the modalities and guidance adopted by the COP. For the conceptual discussion of MRV see chapter 2 section 2.5.

²⁷⁸ Articles 23(4)(h) and 24(1)(d) of the CBD, as highlighted by Harro van Asselt (2010) at 36.

²⁷⁹ Harro van Asselt (2010) at 37.

²⁸⁰ Ibid citing Yamin F. and Depledge J., *The international climate change regime: A guide to rules, institutions and procedures*, (2004) 122-29 at 523-24.

²⁸¹ Harro van Asselt (2010) at 37.

into each CBD program of work, where relevant and appropriate.²⁸² And the CBD COP 9 encouraged the continuation of “activities that were already ongoing or had been called for by parties in the framework of the Rio Conventions”, and provided an “indicative list of activities by parties to promote synergies among the Rio Conventions”.²⁸³ A particularly divisive issue in the context of CBD COP 10’s decision on biodiversity and climate change was the call for an increased and more programmatic institutional interaction among the Rio Conventions, and mainly between the CBD and the UNFCCC, given that the CBD already has a joint work programme with the UNCCD.²⁸⁴

Certain CBD parties, however, objected to the proposed joint work programme and in particular the proposal to establish a clear substantive mandate for the CBD on biodiversity-related climate change issues.²⁸⁵ In their view, this approach would compromise the delicate bargaining for a post-2012 international climate change regime by exporting issues which are still under negotiation at the UNFCCC to a setting where other substantive elements of the climate change negotiations are not addressed at all.²⁸⁶ Subsequently, CBD state parties decided to abandon substantive discussions on a proposed joint work programme among the Rio Conventions, and instead focus on the procedural steps towards ensuring that the governing bodies of each of the three conventions agreed to such an approach.²⁸⁷

Eventually, the CBD COP requested the CBD Secretariat to develop a “proposal to develop *joint activities* between the Rio Conventions to their Secretariats.”²⁸⁸ At this point COP 10 began to develop procedural steps towards the further discussion of possible joint

²⁸² Decision IX/16 A *Biodiversity and climate change*, para. 1, CBD (2008) as discussed by Morgera E., CBD SBSTTA 14 and WGRI 3: Integration and Implementation in Focus, (2010) 40 *Environmental Policy and Law* 154 at 9.

²⁸³ Decision IX/16 B, CBD COP including Annexes I and II, as discussed by Morgera E., (2010) at 18.

²⁸⁴ *Joint work programme on the biological diversity of dry and sub-humid lands between the Convention on Biological Diversity and the United Nations Convention to Combat Desertification*, UNEP/CBD/COP/7/INF/28, CBD (2004); welcomed by Decision VII/2 *The biological diversity of dry and sub-humid lands*, CBD (2004) as highlighted by Morgera E., Faraway, *So Close: A Legal Analysis of the Increasing Interactions between the Convention on Biological Diversity and Climate Change Law*, University of Edinburgh School of Law Working Paper 2011/05 (2010) at 17.

²⁸⁵ Morgera E., CBD SBSTTA 14 and WGRI 3: Integration and Implementation in Focus, (2010) 40 *Environmental Policy and Law* 154 at 18.

²⁸⁶ Stefan Jungcurt S. et al., *Summary of the tenth Conference of the Parties to the Convention on Biological Diversity*, 9:544 *Earth Negotiations Bulletin*, (2010) at 19-21.

²⁸⁷ Morgera E., CBD SBSTTA 14 and WGRI 3: Integration and Implementation in Focus, (2010) 40 *Environmental Policy and Law* 154 at 155.

²⁸⁸ CBD COP decision X/33, para 13 as discussed by Morgera E., CBD SBSTTA 14 and WGRI 3: Integration and Implementation in Focus, (2010) 40 *Environmental Policy and Law* 154 at 19.

activities.²⁸⁹ It called upon the COPs of the UNFCCC and UNCCD to collaborate with the CBD Secretariat, through the Joint Liaison Group, by considering the proposed elements on joint activities on climate change, biodiversity, land degradation, and ecosystem-based approaches to climate change mitigation and adaptation.²⁹⁰ The collaboration was also intended to explore the possibility of convening a joint preparatory meeting among the Rio Conventions on possible joint activities.²⁹¹ The decision also points towards the discussion of the joint activities in the context of the preparatory process leading to the Rio+20 Summit.²⁹²

3.7 The place of REDD+ in the International Climate Change Regime

The provision to repeat REDD+ in the Paris Agreement (see the COP 21 discussion above) resolves the question of the place of the REDD+ mechanism in the post-2020 climate change regime.²⁹³ This is so because REDD+ can be incorporated in the NDCs activities.²⁹⁴ Before expounding on the importance and implications of this interpretation, the reader is directed to Lyster's observation. She noted that most countries have been waiting to see how the REDD+ mechanism is incorporated in the overall climate change agreement before deciding whether to incorporate REDD offsets in their emissions trading schemes.²⁹⁵ The unavoidable question has been when to classify REDD+ as either an offset or non-offset mechanism and the conditions attached to either classification. The Paris Agreement provides part of the answer to this question with regards to implementation of NDCs. In particular, it provides that parties can choose to pursue voluntary cooperation in the implementation of their NDCs.²⁹⁶ To do so, the agreement establishes a mechanism which is to be supervised by a body designated by the COP. Such mechanism aims:²⁹⁷

- a) To promote the mitigation of greenhouse gas emissions while fostering sustainable development;
- b) To incentivise and facilitate participation in the mitigation of greenhouse gas emissions by public and private entities authorised by a Party;

²⁸⁹ This uncertainty has been a subject of discussion elsewhere. See for example Morgera E., CBD SBSTTA 14 and WGRI 3: Integration and Implementation in Focus, (2010) 40 *Environmental Policy and Law* 154 at 19.

²⁹⁰ Ibid.

²⁹¹ Ibid.

²⁹² Ibid.

²⁹³ This uncertainty has been a subject of discussion elsewhere. See for example Morgera E., CBD SBSTTA 14 and WGRI 3: Integration and Implementation in Focus, (2010) 40 *Environmental Policy and Law* 154 at 19.

²⁹⁴ Article 4 (2) read together with article 5 (1)-(2) of the Paris Agreement.

²⁹⁵ Lyster R., The New Frontier of Climate Law: Reducing Emissions from Deforestation and Degradation, (2009) 26:6 *Environmental and Planning Law Journal*, 417-456, at 423.

²⁹⁶ Article 6 (1) of the Paris Agreement.

²⁹⁷ Article 6 (4) of the Paris Agreement.

- c) To contribute to the reduction of emission levels in the host Party, which will benefit from mitigation activities resulting in emission reductions that can also be used by another Party to fulfil its nationally determined contribution; and
- d) To deliver an overall mitigation in global emissions.

Article 6 (5) of the Paris Agreement further provides that emission reductions resulting from the above aims can “not be used to demonstrate achievement of the host party’s [NDC] if used by another party to demonstrate achievement of its [NDC].”²⁹⁸ It follows that, in the event that a REDD+ mechanism is implemented under these conditions, it means that REDD+ is an offset mechanism similar to the CDM mechanism (CDM is discussed in section 3.5.3 above). The extent to which REDD+ can be used by another party to demonstrate achievement of its NDC is yet to be determined. This aspect is likely to be determined by the upcoming COP sessions, parties concerned or the body which will oversee the voluntary cooperation with the view to generating emission reductions for the offset purpose. Another interpretation implicitly suggested by article 6 (5) of the Paris Agreement is that if REDD+ is implemented outside these conditions, it means that REDD+ is a non-offset mechanism.

Given the above context, the legal nature of the Paris Agreement both for developed and developing countries draws from the UNFCCC rather than from the Kyoto Protocol. Under the UNFCCC, all countries have a general obligation to mitigate climate change. In the context of the CDM the UNFCCC provides a legal obligation for Annex I parties to provide “information necessary to demonstrate compliance with its commitments...” under the guidance of COP.²⁹⁹ In the context of developing countries, the UNFCCC’s core obligation is to provide information on a general description of the national circumstances and institutional arrangements; emissions and removals of GHGs through the national inventory; steps taken or envisaged by the non-Annex I party to mitigate climate change and any other additional information relevant to the achievement of the objective of the Convention.³⁰⁰ As alluded to above, the Paris Agreement does not establish a new legal obligation to report. However, the legal point made here is that the Paris Agreement goes beyond the UNFCCC by providing more specific aspects to be reported by its signatories. These elements relate to

²⁹⁸ Article 6 (5) of the Paris Agreement.

²⁹⁹ Article 7.

³⁰⁰ United Nations Climate Change Secretariat, Handbook on Measurement, Reporting and Verification for Developing Country Parties (2014).

mitigation and adaptation actions, and their respective financial aspects, capacity-building activities and technology development and transfer.

3.8 Conclusion

The materials covered in this chapter reflect three concerns that also inform the chapters that follow. First, the Earth Summit marked the early attempt of mostly developed countries and other stakeholders to broaden the scope of binding commitments to developing countries through either forest protocol or convention. In turn, developing forest countries rejected such proposals since they were not accompanied by substantial financial transfer and capacity building to help address poverty as the main cause of deforestation. Second, the chapter has described the implementation of the first commitment period of the Kyoto Protocol through its three flexible mechanisms. Among the flexible mechanisms, CDM has been the main focus as it is the only mechanism available for the developing countries' mitigation activities. It has also been found that the emission reductions targets imposed by the Kyoto Protocol have not been ambitious enough to meet the overall objective of the UNFCCC. Furthermore even though the Kyoto Protocol provides for avoided deforestation as part of mitigation measures, the detailed implementation rules of CDM have precluded the avoided deforestation and degradation from receiving carbon credits. Reasons cited include: the lack of permanence and high risk of leakage since the CDM activities are implemented at a project level. The negotiations of the Kyoto Protocol's second commitment period began by facing the pressures to have deep emissions. This situation saw the beginning of a negotiation of the REDD+ mechanism which is now repeated in the Paris Agreement to be implemented from 2020. Third, the above discussion has discussed the place and legal nature of the REDD+ mechanism. The chapter has argued that the place of the REDD+ mechanism must be considered within the broader framework of the international climate change regime. The international climate change regime has a hybrid governance (or pledge-and-review)³⁰¹ approach. This is to say that on the one hand, countries are responsible for pledging how to prepare and implement the elements of the NDC and on the other hand, these elements are subjected to top-down review processes. Thus developing countries implementing the REDD+ mechanism face different sets of compliance questions. These are *inter alia* reporting on forest carbon stock changes and to provide information on financial, technology

³⁰¹ Neto E.R., Beyond 2015: Exploring the Future of Global Climate Governance. Conference Paper - Amsterdam, November 20, (2014) at 11-12.

transfer and capacity-building support needed and received. In order to comply with these procedural requirements in line with positive incentive requirements, a wide set of legal and institutional approaches may have to be undertaken by developing countries. These are *inter alia* conventional matters of improving forest conservation protection and assessment and new ways of looking at property ownership, land use, forest management and forest inventories and social and environmental impact. To this end, the legal nature of REDD+ is likely to be only procedural in nature.³⁰² Apart from the main international climate change regime, other initiatives have been attempting to raise other aspects in the climate change mitigation. A reference to be made here is the initiatives which were advocated by the COP to the Convention on Biological Diversity as indicated above as well as other voluntary initiatives discussed in chapter 4. Given the hybrid governance approach of the international climate change regime, the question that arises relates to the emerging system which determines the scope and activities to be undertaken and regulated at a domestic level. This is the subject of discussion of the next chapter.

³⁰² Robles F.F., *Forest Carbon Tenure in Asia-Pacific: A comparative analysis of legal trends to define carbon rights in Asia-Pacific*. *FAO Legal Papers Online* No. 89 (2012) at 7.

Chapter Four:

REDD+ as Self-Regulatory System

4.1 Introduction

The critical question in this chapter is to explore what is meant by REDD+. Admittedly, a number of studies have already discussed this aspect. REDD+ is linked with different concepts such as Green Economy¹ and can be undertaken as part of Nationally Appropriate Mitigation Action (NAMA).² Scholars have also considered REDD+ to be a performance-based aid,³ as an investable asset,⁴ as a form of governance,⁵ REDD+ as a new form of power

¹ Watson C. et. al., Integrating REDD+ into a green economy transition: Opportunities and challenges. Overseas Development Institute (ODI), (2013) at 10.

² “The UNFCCC negotiations have defined different approaches to NAMA MRV depending on the type of NAMA planned. Unilateral NAMAs are subject to domestic MRV, in accordance with general international guidelines; while supported NAMAs are subject to national and international MRV. Credited NAMAs are not officially defined by the UNFCCC but will likely be subject to the most stringent MRV since the validity of any credits will need to be verified.” Also it should be stressed that “countries in favor of keeping REDD+ emission reductions domestically to be counted towards national efforts rather than offsets to be sold internationally would prefer REDD+ to be included as a NAMA. Contenders of this view include large developing countries such as Indonesia, South Africa and Brazil, but also smaller countries such as Costa Rica, Dominican Republic, Guatemala, Honduras and Tuvalu.” See Costenbader J. et. al, NAMAs and REDD+: Relationship and main issues for consideration -with a focus on Southeast Asia. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), (2013) at 10 and 16. The choice here implies a different approach on the allocation of carbon rights ownership as seen in chapter 5.

³ Angelsen A., REDD+ as performance-based aid: General lessons and bilateral agreements of Norway. *WIDER Working Paper No. 2013/135* (2013).

⁴ Laing T. et. al., *Understanding the demand for REDD+ credits*. The Centre for Climate Change Economics and Policy and Grantham Research Institute on Climate Change and the Environment, (2015) at 2. Available: <http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2015/05/Working-Paper-193-Laing-et-al.pdf> [accessed 15 June 2014].

Also see, Sukhdev P. et. al., *REDD+ and a Green Economy: Opportunities for a mutually supportive relationship*. UN-REDD Programme Policy Brief #01. (Undated) at 2.

⁵ This is due to the presence of multiple actors and interests involved. As such this represents an example of the notion of “governance beyond government” in managing natural resources, including the forest sector. See Somorin O.A. et.al., REDD+ policy strategy in Cameroon: Actors, institutions and governance. *Environmental Science and Policy* 35 (2014) 87-97 at 89. These authors also add that this means that we should acknowledge there are multiple interests and actors with stakes in forests; multiple forest ecosystem services or outcomes (carbon, livelihoods and biodiversity); differentiated management systems; intricately complex drivers of deforestation and forest degradation; and unresolved methodological issues (additionality, leakage, and permanence) *ibid* at 90. Also see Buizer M. et.al., Climate change and deforestation: The evolution of an intersecting policy domain. (2014), *Environmental Science and Policy*, 35, 1–11 at 5 who argue that REDD+ is a dynamic and emerging form of governance where more rules are almost certain to emerge through negotiations between existing and possible new actors within the donor community, environmental NGOs and indigenous peoples. These rules will vary from country to country. Therefore the question that follows is what policy-makers should consider to be an ideal legal and policy framework for REDD+ which will also take into

and knowledge constituted by a complex interplay of actors and practices across scales rather than a top-down process involving hierarchically nested governance arrangements,⁶ neoliberal environmental governance,⁷ processes of “inclusive” neoliberal conservation,⁸ polycentric programmes,⁹ (global) environmental governance,¹⁰ regimes¹¹ and a multi-level Payment of Ecosystem Services (PES) scheme.¹² But each of these framings has its own validity in terms of mobilising efforts to govern the implementation of REDD+ activities. At the same time, each framing can lead to a distinctive emphasis and choice of policy instruments. The chapter argues that REDD+ should be seen as a “self-regulation system”. This view of REDD+ as a self-regulatory system allows one to perceive REDD+ beyond solely as a mechanism to offset emissions and the incentives that come with it. Viewed as such can help us to design tools (consciously rather than accidentally) to regulate self-

account the seemingly vast and rapid growing body of rules for implementing REDD+. This thesis has argued that a reflexive REDD+ legal framework holds that potential (discussed in detail in chapters 8 and 9).

⁶ McGregor A. et al., Beyond carbon, more than forest? REDD+ governmentality in Indonesia. (2015) 47 *Environment and Planning*, 138–155 at 139-40.

⁷ Scheba A., Reducing Emissions from Deforestation and Forest Degradation (REDD+): The costs and benefits of neoliberal forest-carbon conservation. Institute for Development Policy & Management, University of Manchester, UK at 4.

⁸ Scheba A., Commodifying forest carbon: How local power, politics and livelihood practices shape REDD+ in Lindi Region, Tanzania. *PhD Thesis, University of Manchester* (2014) at 189. Available: <https://www.escholar.manchester.ac.uk/api/datastream?publicationPid=uk-ac-man-scw:234415&datastreamId=FULL-TEXT.PDF> [accessed 15 June 2014].

⁹ Long A., REDD+, Adaptation, and Sustainable Forest Management: Toward Effective Polycentric Global Forest Governance. (2012) *Tropical Conservation Science, Forthcoming* at 32. Boyd W., Climate Change, Fragmentation, and the Challenges of Global Environmental Law: Elements of a Post-Copenhagen Assemblage. (2014), 32:2 *Journal of International Law*, 457 at 512–13. The author describes REDD+ as part of a post-Copenhagen legal assemblage which is a form of polycentric governance. Others argue that “Polycentric approaches to track forest change hold great scope for the effective implementation of programs such as REDD+.” And that Polycentric forest governance may also “alleviate concerns about the distribution of financial incentives through programs such as REDD and REDD+”. Nagendra H. and Ostrom E., Polycentric Governance of Multifunctional Forested Landscapes. (2012) 6:2 *International Journal of the Commons* 104–133 at 123.

¹⁰ Thompson M. C. et. al., Seeing REDD+ as a project of environmental governance. (2011) 14 *Environmental Science & Policy* 100–110 at 102-105. See also Angelsen A. (ed.), Realising REDD+ National strategy and policy options. CIFOR, Bogor, Indonesia, (2009). Mustalahti I and Rakotonarivo S., REDD+ benefit sharing mechanisms: Does it make a difference in equity? In Toppinen A. et. al. (eds.), Proceedings of the Biennial Meeting of the Scandinavian Society of Forest Economics. Hyytiälä, Finland, (2012) at 115.

¹¹ Young M.A., REDD+ and Interacting Legal Regimes. Human Rights, Environmental Sustainability, Post-2015 Development, and the Future Climate Regime. Prepared for the 3rd UNITAR-Yale Conference on Environmental Governance and Democracy, 5-7 September (2014), New Haven, USA at 2. By categorising REDD+ in this way, the author means REDD+ is a “sets of norms, decision-making procedures and organizations coalescing around functional issue-areas and dominated by particular modes of behaviour, assumptions and biases.”

¹² Corbera E., Problematizing REDD+ as an Experiment in Payments for Ecosystem Services. (2012) 4 *Environmental Sustainability*, 612–619 at 612. Bond I. et.al, Incentives to sustain forest ecosystem services: A review and lessons for REDD. International Institute for Environment and Development (IIED) (2009) at 15-16. Available: <http://pubs.iied.org/pdfs/13555IIED.pdf> [accessed 5 June 2014]. Also see Loft L. et. al., Taking Stock of Carbon Rights in REDD+ Candidate Countries: Concept Meets Reality. (2015) 6, *Forests*, 1031-1060 at 1032. Available: <http://www.mdpi.com/1999-4907/6/4/1031> [accessed 12 June 2014].

regulation so as to implement REDD+ activities as discussed in chapter 8. As pointed out in chapter 1, the main focus of this thesis is on identification of the ideal model legislative framework sufficient to implement REDD+. Therefore, in discussing the meaning of REDD+, the analysis is limited to its regulatory aspect and implications thereof. To regulate well, regulators must ask (1) what is the subject of regulation, (2) who is the object of regulation and (3) what is a feasible regulatory architecture. Thus the chapter proceeds by exploring the concept of REDD+ by discussing the technical and regulatory-related aspects of preparing, consulting and standard setting, and communicating these contributions. The argument that REDD+ should be seen as a “self-regulation system” arises out of the core idea that REDD+ is based on incentives. The manner in which such incentives are entrenched and regulated reveals characteristics similar to “self-regulation” discussed by Julia Black (elaborated on in the next section). The chapter extends the analysis of self-regulation from different disciplines to the study of REDD+. It examines how multiple actors are engaging to implement REDD+. In their approaches, such actors develop *inter alia* a number of principles and strategies. The realisation of these strategies and principles relies on various categories of self-regulation as discussed in section 4.2.2. The chapter concludes by recognising some of the challenges of self-regulatory governance in terms of achieving the 3Es.

4.2 Self-Regulation

4.2.1 Introduction

Self-regulation is exhibited in different places. Ants, for example, work in a completely self-organised and mainly in a decentralised fashion without a hierarchical structure of command and control. The same applies to social animals such as flocks of birds, termites, and schools of fish. The ecological and immune systems also function in a decentralised and highly efficient way, due to the evolutionary principles of mutation and selection.¹³ Other examples are discerned from insurance, professions (such as medical), sports, the press, advertising and financial services, and illegal and harmful Internet content which are regulated to a large extent by self-regulatory bodies. In regulating such services, these bodies may become significant sources of law and policies.¹⁴ But self-regulation is a fuzzy concept due to many

¹³ Helbing D., *Economics 2.0: The Natural Step towards a Self-Regulating, Participatory Market Society*. (2013) 10:1 *Evolutionary and Institutional Economic Review* 3–41 at 5.

¹⁴ Black, J., *Constitutionalising Self-Regulation*. (1996) *The Modern Law Review* 24-55 at 26. See also Baldwin R. et. al., *Understanding Regulation: Theory, Strategy, and Practice*. 2nd ed (2012) at 137. Self-regulation approaches have also being used in environmental law. See self-regulatory initiatives in relation to addressing

possible forms of self-regulation.¹⁵ Often, self-regulation is used interchangeably with other concepts.¹⁶ In some cases, the term has been used uniformly but the meanings which are attributed to the term “self-regulation” vary greatly.¹⁷ For the purpose of this thesis, I suggest it is important to ask what is meant by “self-regulation” in the context of “decentring regulation” or “regulation in many rooms” as discussed by Black.¹⁸ This is because these concepts to some extent reflect the picture of REDD+ as this chapter attempts to demonstrate.

4.2.2 Understanding Self-Regulation

Before further discussion on self-regulation, it is important to briefly discuss what is meant by decentring. According to Black (one of the leading analysts of this scholarly development), decentring is a term used to describe changes occurring with government and administration with the view to express the removal of the government from the conceptual hierarchy of government-society, and move to a hierarchical relationship in which the role of governors and governed are both shifting and ill-defined.¹⁹ This process is similar to the New Governance paradigm which departs from “the traditional top-down model of regulation, in which the power to create rules belongs exclusively to the [government] (also known as monocentric model), [and] is being replaced by a more flexible “governance” model (also known as polycentric model),²⁰ in which power to set and enforce the rules is increasingly diffused among a variety of societal actors working alongside the governments.”²¹ As

Internet child pornography. Akdeniz Y., *Internet Child Pornography and the Law: National and International Responses* (2008) at 247. Brousseau É., Internet Regulation: Does Self-Regulation Require an Institutional Framework? Paper to be presented at the DRUID Summer Conference on "Industrial Dynamics of the New and Old Economy - who is embracing whom?" Copenhagen/Elsinore 6-8 June (2002).

¹⁵ Gunningham N. and Rees J., Industry self-regulation: An institutional perspective. (1997) 19:4 *Law & Policy* 364 at 366.

¹⁶ These include *inter alia*: “self-governance”, “co-regulation”, “voluntarism”, “private regulation”, “soft law”, “quasi-regulation”, “communitarian regulation”, “polycentric governance”, “noddle governance”, and “adaptive governance”. Sovacool B.K., An international comparison of four polycentric approaches to climate and energy governance. (2011) 39 *Energy Policy* 3832–3844 at 3833. See also Omarova S.T., Wall Street as community of fate: Toward financial industry self-regulation. (2011) 159 *University of Pennsylvania Law Review* 411 at 424.

¹⁷ Black, J., Constitutionalising Self-Regulation. *The Modern Law Review* (1996) 24-55 at 26. Black, J., “Decentring Regulation: Understanding the Role of Regulation and Self-Regulation in a ‘Post-Regulatory’ World” (2001) 54:1 *Current Legal Problems*, 103-146 at 121. See also Harlow C. and Rawlings R., *Law and Administration*. 3rd ed (2010) at 324-325.

¹⁸ Black J., Proceduralisation and Polycentric Regulation. (2005) 1 *Especial* 99-130 at 103.

¹⁹ Black, J., “Decentring Regulation: Understanding the Role of Regulation and Self-Regulation in a ‘Post-Regulatory’ World” (2001) 54:1 *Current Legal Problems*, 103-146 at 104.

²⁰ These two models are discussed in chapter 8.

²¹ For a discussion of the emerging New Governance model, see Lobel O., The Renew Deal: The Fall of Regulation and the Rise of Governance in Contemporary Legal Thought, (2004) 89 *Minnesota Law Review* 342. For a recent analysis of the multidisciplinary scholarship on New Governance, see Burris S. et. al., Changes in Governance: A Cross-Disciplinary Review of Current Scholarship, (2008) 41 *Akron Law Review* 1. See Black, J., “Decentring Regulation: Understanding the Role of Regulation and Self-Regulation in a ‘Post-Regulatory’ World” (2001) 54:1 *Current Legal Problems*, 103-146.

discussed in section 4.5.1 below, the concept of REDD+ displays both the attributes of self-regulation and decentring regulation. It is argued that the former is seen as a means to ensure the latter. In answering what role is assigned to self-regulation in ensuring decentring regulation, Black indicates that the role assigned to self-regulation in the process of decentring can be viewed twofold: first, self-regulation is seen as the solution to the limits of “centred” regulation, and secondly, self-regulation is the challenge that has to be addressed. That is to say that regulation of self-regulation is the new challenge that has to be addressed.²² Examples of self-regulating systems include microfinance, internet content, and technology diffusion.²³ Thus, we can now discuss what is meant by self-regulation.

What makes regulation “self-regulation” is not easy to recognise.²⁴ One set of definitions assumes that self-regulation is a process of collective government. It “describes the situation of a group of persons or bodies, acting together, performing a regulatory function in respect of themselves and others who accept their authority.”²⁵ For many, it is that regulation is voluntarily initiated, whether on a unilateral, bilateral or collective basis, and that the jurisdiction of any enforcer is voluntarily submitted to, which is the hallmark of “pure” self-regulation.²⁶ Others associate self-regulation with soft law or bilateral agreements entered into between government and a particular firm or firms with voluntary efforts to reduce carbon.²⁷ A distinction is also made where self-regulation is labeled in a variety of arrangements in which associations or individuals may retain authority to make rules and to monitor and enforce them, but which involve different relationships with government. Therefore, they have broadly identified four types of possible relationships: “mandated self-

²² Black, J., “Decentring Regulation: Understanding the Role of Regulation and Self-Regulation in a ‘Post-Regulatory’ World” (2001) 54:1 *Current Legal Problems*, 103-146 at 104. For challenges and prospects of self-regulation see Harlow C. and Rawlings R., *Law and Administration*. 3rd ed (2010) at 324-325. With regards to the prospects, a number of cost-effective measures are outlined. Among the challenges, the authors points out that there is a danger of self-interest being put ahead of the public interest, the organisations involved in enforcement may not be open and transparent about their processes and outcomes. Akdeniz Y., *Internet Child Pornography and the Law: National and International Responses* (2008) at 248. Ashgate Publishing Limited. Self-regulation may have certain disadvantages in the sense that self-regulatory practices or schemes may not apply to those who are not members of a particular initiative. This could potentially lead to partial coverage and a lack of wider standards for the sector concerned, and to a distortion of the market with non-members not following the self-regulatory rules and codes of practice. It is also possible that standards in practice may vary amongst those participating.

²³ Ghose J.R., What does it mean to regulate? A review of epistemological frameworks and their application within the Indian context. See also Lessig L., *Code: Version 2.0*. (2006).

²⁴ Black, J., “Decentring Regulation: Understanding the Role of Regulation and Self-Regulation in a ‘Post-Regulatory’ World” (2001) 54:1 *Current Legal Problems*, 103-146 at 116.

²⁵ Black, J., Constitutionalising Self-Regulation. (1996) *The Modern Law Review* 24-55 at 27.

²⁶ Black, J., “Decentring Regulation: Understanding the Role of Regulation and Self-Regulation in a ‘Post-Regulatory’ World” (2001) 54:1 *Current Legal Problems*, 103-146 at 116.

²⁷ *Ibid* at 116-17.

regulation, in which a collective group, an industry or profession for example, is required or designated by the government to formulate and enforce norms within a framework defined by the government, usually in broad terms; sanctioned self-regulation, in which the collective group itself formulates the regulation, which is then subjected to government approval; coerced self-regulation, in which the industry itself formulates and imposes regulation but in response to threats by the government that if it does not the government will impose statutory regulation; and voluntary self-regulation, where there is no active state involvement, direct or indirect, in promoting or mandating self-regulation.”²⁸ The question that follows is: under what category can REDD+ be conceptualised? The answer to this question in section 4.5.1 indicates that REDD+ does not neatly fit neatly into distinctions of self-regulatory systems discussed here. Rather it displays both aspects of voluntary²⁹ and coerced self-regulatory measure. Other variables could be built into the above explanation. These include collective self-regulation that could take the form of consumer or community representatives such as rulemaking with communities. Also self-regulation “could be 'verified' self-regulation, in which third parties are responsible for monitoring compliance (auditors, NGOs, others); or 'accredited' self-regulation, in which rules and compliance are accredited by another non-governmental body (e.g. technical committee).”³⁰

Self-regulation is triggered by incentives.³¹ But what is understood by incentives must be clarified. In discussing incentives, it is important to point out positive and negative incentives that can trigger self-regulation. The positive incentives “consist of rewards for superior

²⁸ Black, J., Constitutionalising Self-Regulation. (1996) *The Modern Law Review* 24-55 at 27. See also Gunningham N. and Rees J., Industry self-regulation: An institutional perspective. (1997) 19:4 *Law & Policy* 364 at 365. Black, J., “Decentring Regulation: Understanding the Role of Regulation and Self-Regulation in a ‘Post-Regulatory’ World” (2001) 54 *Current Legal Problems*, 103-146 at 118. Senn M., *Non-state regulatory regimes: understanding institutional transformation*. (2010) at 110, 148.

²⁹ Arthurs has pointed out that the use of the term “voluntary” to describe codes requires some explanation. “They are typically adopted without compulsion of law; thus in a juridical sense they are indeed voluntary. But in a practical sense, they are generally less so. They are often adopted only after a corporation has been accused of exploiting or abusing its workers, either at home or abroad. Adverse publicity ensues, and the corporation is confronted by threats of moral, economic or political sanctions such as consumer boycotts, sympathetic industrial action, denial of government loans and procurement contracts, or (infrequently) legislation barring its goods from market. If these threats are deemed credible, the corporation must respond. One response is to adopt a ‘code’ which declares its commitment to respect fundamental labour rights such as freedom of association, a safe work environment and the absence of coercion and discrimination.” See Arthurs H., *Corporate Self-Regulation: Political Economy, State Regulation and Reflexive Labour Law*, in Estlund C. and Bercusson B. (eds.), *Regulating Labour in the Wake of Globalisation. New Challenges, New Institutions*. (2008) at 21.

³⁰ Black, J., “Decentring Regulation: Understanding the Role of Regulation and Self-Regulation in a ‘Post-Regulatory’ World” (2001) 54:1 *Current Legal Problems*, 103-146 at 119.

³¹ Omarova S.T., Wall Street as community of fate: Toward financial industry self-regulation. (2011) 159 *University of Pennsylvania Law Review* 411 at 455. The author discusses the incentives for the emergence of a system of embedded self-regulation in the financial services sector. The author contends that the financial services industry currently lacks meaningful incentives to develop self-regulation which is more publicly minded and socially responsible.

performance.”³² With reference to Smith’s line of thinking, one could say that the objective of positive incentives is to reinforce or increase something which the target entities find pleasant.³³ Such incentives are usually cash payments or other direct money transfer.³⁴ Non-monetary positive incentives generally entail recognition of exemplary behavior and may result in economic benefits.³⁵ These include, for example, awarding the provider a competitive advantage in attracting new investors.³⁶ Positive incentive systems are referred to in the COP decisions.³⁷ It should be noted that climate change negotiators, policy-makers and stakeholders from developed and developing countries have “investigated whether positive incentives are more than just a slogan, whether they can be designed in such a way as to advance international climate change negotiations and if so, determining the optimum conditions to achieve them.”³⁸ The negative incentives consist of punitive measures. They are usually embedded in command and control.³⁹ That approach is intended to force individuals or countries to obey the demands issued by more powerful or influential actors. The next sections discuss REDD+ as self-regulatory governance. The discussion begins by analysing REDD+ within the UNFCCC followed by a discussion of REDD+ outside the UNFCCC process.

4.3 REDD+ within the UNFCCC Process

The REDD+ within the UNFCCC focuses on a mechanism negotiated by states at international level under the banner of the UNFCCC.

4.3.1 What is being Regulated?

The main object of regulation in REDD+ within the UNFCCC process is on reducing and control of carbon by avoiding deforestation and degradation, conservation of forest carbon stocks, sustainable management of forest and enhancement of forest carbon stocks. This is

³² Geron S.M., Regulating the Behavior of Nursing Homes Through Positive Incentives: An Analysis of Illinois' Quality Incentive Program (QUIP). (1991) 31:3 *The Gerontologist* 292-301 at 292.

³³ Smith K.W. and Stalans L.J., Encouraging tax compliance with positive incentives: A conceptual framework and research directions. (1991) 13 *Law & Pol'y* 35 at 37.

³⁴ Geron S.M., Regulating the Behavior of Nursing Homes Through Positive Incentives: An Analysis of Illinois' Quality Incentive Program (QUIP). (1991) 31:3 *The Gerontologist* 292-301 at 292.

³⁵ Ibid.

³⁶ Ibid.

³⁷ Such as FCCC/CP/2010/7/Add.1 Cancun Decision which refers to “positive incentives on issues relating to [REDD+]”.

³⁸ <http://aei.pitt.edu/9414/2/9414.pdf>.

³⁹ At a domestic level, command and control means “regulation by the state through the use of legal rules backed by (often criminal) sanctions.” Black J., Proceduralisation and Polycentric Regulation. (2005) 1 *Especial* 99-130 at 102. Available: http://direitosp.fgv.br/sites/direitosp.fgv.br/files/rdgv_esp01_p099_130.pdf [accessed 12 June 2014].

the initial idea and it is the point of greatest agreement.⁴⁰ Skutsch and Torres have pointed out the object of regulation according to three types. Type 1 relates to the activities to be developed within the forests. Type 2 relates to activities to be developed outside forests⁴¹ while type 3 involves general policies.⁴² Skutsch and Torres discuss how all of these types of activities increase the costs and the scope of beneficiaries more than previous thought. They also point out that implementers of REDD+ within type 1 can be able to estimate their costs and therefore be able to claim the appropriate benefits. By the same token, implementers in types 2 and 3 are faced with difficulties in estimating their costs and that affects the appropriate amount of the benefits they can claim.⁴³ The other objects of regulation (referred to as “co-benefits” or “non-carbon benefits”) have been added. These include protecting biodiversity and strengthening local communities’ rights.⁴⁴

The above objects of regulation find their theoretical justification in conceptions of compensation of opportunity costs forgone and CBDR discussed in chapters 2 and 3. However, there is no consensus on the additional objects. Differences exist within countries in negotiations of REDD+ and also within academic debates. A major concern is that the additional objects in the REDD+ negotiation will overload the negotiations of climate mitigation and some prefer that attempt to be left out at this stage. Some share this concern but argue that “the key to the ultimate success of REDD+ lies in combining the conservation and development objectives of sustainable development. Both in the national policy arena and in local implementation, REDD+ must deliver on both fronts to be successful.”⁴⁵ This

⁴⁰ Decision 1/CP.16 2011 para 70. See also McDermott C.L., REDDuced: From sustainability to legality to units of carbon-The search for common interests in international forest governance. (2014) 35 *Environmental Science & Policy* 12-19 at 17. This is with exception of some parties such as Bolivia. Accordingly, Bolivia’s chief negotiator, Rene Orellana argues that “as people who live in the forest, we are not carbon stocks. We disagree with REDD because we oppose the commodification of the forests.” Bolivia worried about proposals to use private sector markets to fund forest conservation, as this did not take account of the multiple functions forests provide. Newmarch J., “COP-17: Bolivia’s forest proposal gets little attention” *Business Day* 2 December 2011.

⁴¹ These include stall feeding of cattle instead of forest grazing and improved stoves and charcoal kilns.

⁴² These might involve sectorial and macro-economic policies and planning laws have a direct bearing on deforestation and degradation in a broad way. An example cited is that the Ministry of Agriculture might change its policies on subsidising clearance for agriculture which in turn might reverse the deforestation and degradation.

⁴³ Skutsch M. and Torres A.B., Challenges for pro-poor benefit sharing schemes in the implementation of REDD+ in Mexico. Scoping paper prepared for The Forest Dialogue (TFD) on REDD+ Benefit Sharing Chetumal, Mexico 2-5 June 2014 at 11-12.

⁴⁴ Angelsen A., REDD+ as performance-based aid: General lessons and bilateral agreements of Norway. World Institute for Development Economics Research (WIDER), Working Paper No. 2013/135 (2013) at 3. Brown D. et. al., *How do we achieve REDD co-benefits and avoid doing harm?* In Angelsen A., *Moving Ahead with REDD issues, Options and Implications*. (2008) 108-118, at 109. Angelsen A. et al. (eds), *Analysing REDD+: Challenges and choices*. (2012) at 42.

⁴⁵ Angelsen A. et al. (eds), *Analysing REDD+: Challenges and choices*. (2012) at 42. The impact of REDD on poverty and equity depends on the way its key design variables are implemented, including reference scenarios

means that trade-offs must be undertaken. Others argue that the expansion of the scope was motivated by the realisation that a narrower focus may create perverse incentives for carbon leakage and biodiversity loss.⁴⁶ For instance, countries with high forest cover and low deforestation rates may be prompted to increase deforestation in order to benefit from REDD+ payments.⁴⁷

REDD+ is also increasingly linked to the agriculture climate agenda.⁴⁸ Notwithstanding the scope of REDD+ above, many (both developing and developed) countries along with civil society observers and technical agencies, have recently called for further expansion of such scope to go beyond REDD+ and also include carbon and other GHGs on agricultural and other non-forest lands commonly known as AFOLU (Agriculture, Forestry, and Other Land Use).⁴⁹ It is further observed that many parties are of the view that agriculture can only be brought into the accounting scope once appropriate measurement and monitoring methodologies are developed.⁵⁰ However, some other parties, particularly African countries, have been pushing for agriculture to be included in the post-2012 agreement as this may provide their best opportunity for participation in land-based mitigation.⁵¹

At COP 21, parties advocated for the development of the “assessment of risk and vulnerability of agricultural systems, taking into consideration the particular vulnerability of agriculture to climate change impacts and the central role of the agriculture sector in ensuring food security in different climatic conditions.”⁵² Thus, agriculture in the Paris Agreement is

or levels, the scope of the accounting system, its position within the international framework, the way it is financed, liability issues, and the spatial scale. There are also concerns regarding effects on food and commodity prices, knowledge and interpretation of opportunity costs benefit sharing mechanism, information availability and understanding, the role of carbon rights, verification and compliance systems, corruption, accountability and transparency and REDD policies and measures. Peskett L, et.al., *Making REDD Work for the Poor*. (2008) at 44. See also Cendra de Larragán J.D., *Distributional Choices in EU Climate Change Law and Policy: Towards a Principled Approach?* (2011) at 239.

⁴⁶ Lawlor K. et.al., *Expanding the Scope of International Terrestrial Carbon Options Implications of REDD+ and Beyond*, (2010) *Nicholas Institute for Environmental Policy Solutions* at 5.

⁴⁷ Savaresi A., *Reducing Emissions from Deforestation in Developing Countries under the UNFCCC: Caveats and Opportunities for Biodiversity*, Forthcoming, (2011) 21 *Yearbook of International Environmental Law* at 11.

⁴⁸ Angelsen A., *REDD+ as performance-based aid: General lessons and bilateral agreements of Norway*. World Institute for Development Economics Research (WIDER), Working Paper No. 2013/135 (2013) at 3. Brown D. et. al., *How do we achieve REDD co-benefits and avoid doing harm?* In Angelsen A., *Moving Ahead with REDD issues, Options and Implications*. (2008) 108-118, at 109. Angelsen A. et.al., *Analysing REDD+: Challenges and choices*. (2012) at 42.

⁴⁹ As discussed by Lawlor K. et.al., *Expanding the Scope of International Terrestrial Carbon Options Implications of REDD+ and Beyond*, (2010) *Nicholas Institute for Environmental Policy Solutions* at 6.

⁵⁰ *Ibid.*

⁵¹ *Ibid.*

⁵² FCCC/SBSTA/2015/INF.7: Report on the workshop on the assessment of risk and vulnerability of agricultural systems to different climate change scenarios at regional, national and local levels, including but not

said to be addressed in the preamble which refers to the “priority of safeguarding food security and ending hunger, and the particular vulnerabilities of food production systems to the adverse impacts of climate change”.⁵³ With regards to mitigation, analysts argue that since the “Paris Agreement aims to limit global temperatures ‘well below’ two degrees C, and pursue a 1.5 degree target,” the debate between a 1.5 or two degree C target means that “much greater emission reduction efforts will be required than what have already been put forward.”⁵⁴ Therefore, “a 1.5 degree C target demands urgent mitigation in agriculture sector.”⁵⁵

The question of how much emissions should be reduced under the REDD+ mechanism is not well clarified. The negotiation text before the Copenhagen Accord indicated that the aim is to reduce the forest cover loss in developing states by 2030 at the latest and reduce gross deforestation in developing countries by at least 50% by 2020 compared with the current levels.⁵⁶ The subsequent COP decisions have watered down such targets. Since the COP decisions are silent on the emission target for REDD+, academic debates indicate that a basic principle of REDD+, as introduced in the UNFCCC negotiations, was voluntary participation to receive positive incentives for activities which are reasonably attributable to human activities.⁵⁷ This might be interpreted as a “no-lose” principle; i.e. REDD+ countries should have a non-negative net benefit (total international REDD+ transfers, less the real costs of REDD+) from any REDD+ agreement it enters. They have also explained the implication of this approach for setting reference levels. The point to be emphasised from this implication is that a country will reduce emissions up to the point where the marginal cost equals the price (realised REDD+).⁵⁸

A detailed discussion on the eligible activities under these objectives raises confusion. For example, the definition of REDD+ as reflected from COP13 decisions includes

limited to pests and diseases. Subsidiary Body for Scientific and Technological Advice Forty-third session, Paris 2015.

⁵³ Meadu V. et. al, The Paris Climate Agreement: what it means for food and farming. Climate Change, Agriculture and Food Security (CCAFS) (2015).

⁵⁴ Ibid.

⁵⁵ Ibid.

⁵⁶ FCCC/AWGLCA/2009/8, UNITED NATIONS Negotiating Text, para x. 3 Available: http://unfccc.int/files/meetings/ad_hoc_working_groups/lca/application/pdf/redd140809web2.pdf [accessed 7 June 2014].

⁵⁷ Angelsen A., REDD+ as performance-based aid: General lessons and bilateral agreements of Norway. World Institute for Development Economics Research (WIDER), Working Paper No. 2013/135 (2013) at 10. See also Karsenty A. et. al., “Carbon rights”, REDD+ and payments for environmental services. (2012) *Environmental Science* at 3.

⁵⁸ Angelsen A., REDD+ as performance-based aid: General lessons and bilateral agreements of Norway. World Institute for Development Economics Research (WIDER), Working Paper No. 2013/135 (2013) at 10.

“enhancement of forest carbon stocks.” This aspect has been interpreted differently. Some parties have argued that this includes forests plantations while others have not.⁵⁹ Some of the representatives in charge of facilitating REDD+ have indicated the confusion related to the REDD+ concept. In Brazil, it is stated that there are many misunderstandings of the REDD+ concept. This confusion is brought by some actors who look “at emissions reduction at any cost” from multiple examples around the world. This has brought fear to people.⁶⁰ In Tanzania, it is stated that there, are now misconceptions and misunderstandings about REDD+. Raja Jarrah who is a Technical Advisor for the CARE-HIMA REDD+ project in Tanzania said, we “ourselves don’t have enough information to explain REDD+ in detail [...]. We lack specifics because we ourselves have not done the math.”⁶¹ These sentiments appear to suggest why some scholars define REDD+ as an “objective rather than a clearly delimited set of actions or activities.”⁶² Therefore, the emerging confusion is not necessarily a bad thing. Angelsen suggested that part of the reason for REDD+ success is because of the broadness or vagueness of the concept.⁶³ Support for REDD+ remained high and as long as REDD+ was still vague, different viewpoints and interests have been accommodated.⁶⁴ For example, developed countries have attempted to reach agreement on what REDD+ should do, but failed because the process of reaching such an agreement is flawed. At the same time, developing countries which are being paid to reduce their emissions may prefer to not agree to a common understanding because that common understanding might take away the degrees of power to determine how REDD+ is put into practice according to their domestic circumstances.⁶⁵

Given the lack of clarity on what REDD+ entails, a key question is how will REDD+ be implemented and how will costs and benefits be allocated? It is contended that while REDD+ has managed to create a global objective of exceptional clarity, this clarity creates confusion

⁵⁹ Angelsen A. and McNeill D., *The evolution of REDD+* in Angelsen A. et al., (eds). *Analysing REDD+: Challenges and choices*. (2012) at 33.

⁶⁰ Monica de los Rios from Acre’s Department of Climate Change (Brazil) cited in Portaccio A. et. al., *Endorsing REDD+ in the institutional mechanisms: how could tropical forests and voluntary initiatives be affected?* (2013). Available: <http://intra.tesaf.unipd.it/pettenella/index.html>

⁶¹ Raja Jarrah of the HIMA project in Tanzania. Cited in Angelsen A. et al., (eds). *Analysing REDD+: Challenges and choices*. (2012) at 189.

⁶² Angelsen, A. (ed.), *Moving Ahead with REDD*. (2008) at 11.

⁶³ Angelsen A. and McNeill D., *The evolution of REDD+* in Angelsen A. et.al., *Analysing REDD+: Challenges and choices*, (2012) at 33.

⁶⁴ Ibid at 35.

⁶⁵ Ibid at 49.

about how REDD+ activities will be implemented.⁶⁶ In the context of distribution of costs and benefits, it is difficult to decide precisely who is allocated costs and benefits and the basis for such decision. Boyd has argued that the discussion of how tropical deforestation has become an object of climate governance has been largely contributed by the scientific and technical innovations.⁶⁷ In particular, Boyd points to the role played by such innovations in objectifying and framing particular problems, thereby shaping the possibilities for particular legal and policy responses.⁶⁸ Therefore the role of scientific and technical ways of seeing will have implications for the distribution of costs and benefits. For example, Skutsch has argued that payment by performance to individual communities or forest owners is technically almost impossible for reduction in deforestation and degradation because these activities can only be measured against a forecasted baseline.⁶⁹ However, it is well known that scientific and technical innovation is constantly improving and the question that follows is how to devise laws and policy which are progressive (i.e. within the limits of the available scientific and technical aspects). This chapter argues that viewing REDD+ as self-regulatory governance might be a point of departure. Building on this understanding chapter 8 considers reflexive law as a potential solution to the distribution of costs and benefits.

4.3.2 Regulating REDD+ Objectives

Whatever the amount of emissions to be reduced by REDD+, it is necessary to address the issues of leakage, permanence, additionality, reference levels and MRV (see chapter 2 for conceptual clarification of these elements). The practical aspect of these requirements present some challenges for host countries. Submissions by countries to the UNFCCC proposed that these elements may best be addressed if participation in REDD+ is voluntary, and the level and means of participation are flexible.⁷⁰ It was emphasised that, a voluntary, flexible, step-wise approach that is well-designed would offer real potential for consensus and broad participation among parties. For REDD+ to have maximum impact, it was added that there should be a suite of options that would allow for increasing levels of participation, climate benefits, scale of reduced deforestation and associated sustainable development benefits, and

⁶⁶ McDermott C.L., REDDuced: From sustainability to legality to units of carbon-The search for common interests in international forest governance. (2014) 35 *Environmental science & policy* 12-19 at 17.

⁶⁷ Boyd W: Ways of seeing in environmental law: how deforestation became an object of climate governance. (2010) 37 *Ecology Law Quarterly* 843-916 at 898.

⁶⁸ Ibid.

⁶⁹ See chapter 2.

⁷⁰ Joanneum Research et al., Reducing Emissions from Deforestation in Developing Countries: potential policy approaches and positive incentives. Submission to the UNFCCC/SBSTA UNFCCC/SBSTA/2006/L.25

stringency of regulation.⁷¹ Lastly, it was proposed that developing countries should be allowed to select the option that best represents their national circumstances and their capacity to participate.⁷²

The above exposition provides reasons as to why it was decided that REDD+ activities be implemented in phases by “beginning with the development of national strategies or action plans, policies and measures, and capacity building (phase 1),⁷³ followed by the implementation of national policies and measures and national strategies or action plans that could involve further capacity building, technology development and transfer and results-based demonstration activities (phase 2),⁷⁴ and evolving into results-based actions that should be fully measured, reported and verified (phase 3).”⁷⁵⁷⁶ The choice of a starting phase could depend on the specific national circumstances, capacities and capabilities of each developing state.⁷⁷ The third phase entails three main uncertainties and consequent risks for the parties. First, the future values of drivers of deforestation and degradation such as the prices of soybeans, and the relationship between such drivers and the agricultural land expansion into forests are not known. Subsequently developing a reliable reference level becomes problematic.⁷⁸ Second, the agricultural incomes that could have been obtained from cleared land are uncertain and thus the costs of avoided deforestation and degradation are also uncertain.⁷⁹ Third, it is unclear how actors such as farmers will respond to particular incentives, aimed to constrain forest clearing. For this reason, the effectiveness of the REDD+ policies implemented is uncertain.⁸⁰

⁷¹ Ibid.

⁷² Ibid.

⁷³ UNFCCC: http://unfccc.int/files/meetings/ad_hoc_working_groups/lca/application/pdf/redd140809web1.pdf [accessed 12 June 2014].

⁷⁴ Ibid.

⁷⁵ Ibid.

⁷⁶ Decision 1CP.16, FCCC/CP/2010/7/Add.1 para 73.

⁷⁷ Ibid, FCCC/CP/2010/7/Add.1 para 74. 3 Phases, 3 Approaches, 3 Tiers, 3 Steps at 290, Options for performance indicators across REDD+ phases at 242 in Angelsen A. et.al., *Analysing REDD+: Challenges and choices*. (2012). See also MRV objectives for different phases of REDD+ participation at 92, Elements of a phased approach toward REDD+ at 15 in Angelsen A. (ed.), *Realising REDD+ National strategy and policy options*. (2009). How can we monitor, report, and verify (MRV) carbon emissions from forests? at 87 in Angelsen, A. (ed.), *Moving Ahead with REDD*, (2008).

⁷⁸ Angelsen A., REDD+ as performance-based aid: General lessons and bilateral agreements of Norway. World Institute for Development Economics Research (WIDER), Working Paper No. 2013/135 (2013) at 11. For challenges related to leakage and distribution of costs and benefits see Skutsch M. et. al., Rights to carbon and payments for services rendered under REDD+: Options for the case of Mexico. (2013) 23 *Global Environmental Change* 813-825 at 823.

⁷⁹ Ibid.

⁸⁰ Ibid.

Given the practical difficulties in implementing REDD+ activities such as discussed above, it is argued that “REDD+ will be pursued as a broader set of national forest conservation policies including command-and-control (e.g. establish and better enforce protected areas) and addressing drivers (e.g. removing agricultural subsidies).”⁸¹ These are known as emission reductions programmes. This means that rewards are based on Emission Reductions (ERs) as opposed to Certified Emission Reductions (CERs) which are generated in the CDM due to project-based transactions. This is to say that, at the third phase of REDD+ implementation, ERs are in some cases not going to be traceable to a particular project on the ground but result from national policies accounted for at the national level.⁸² With this in mind, it can be imagined how difficult it would be for governments to enforce the rules pertaining to REDD+ in a command and control fashion. This is because it is well known that developing countries lack capacity to police forest areas. Given this situation, it is argued that for REDD+ to succeed, the REDD+ mechanism must exhibit self-regulatory governance attributes.

The safeguards provided in the REDD+ mechanism under the UNFCCC focus on the (1) indigenous peoples and members of local communities, and (2) biodiversity and ecosystems and sustainable development. Regarding the former, developing countries are requested when developing and implementing their national strategies or action plans in relation to REDD+, to address, *inter alia*, the drivers of deforestation and forest degradation, land tenure issues, forest governance knowledge and rights of indigenous peoples and members of local communities.⁸³ It is provided that this approach should take into account relevant international obligations, national circumstances and laws.⁸⁴ In addition, developing states are required to develop a system for providing information on how the safeguards referred to in appendix I are being addressed and respected throughout the implementation of the REDD+ activities while respecting sovereignty.⁸⁵ Regarding the latter, the COP decisions require REDD+ to contribute to the achievement of the objective set out in Article 2 of the Convention,⁸⁶ be consistent with parties’ national sustainable development needs and goals and be implemented in the context of sustainable development and reducing poverty, while

⁸¹ Angelsen A., REDD+ as performance-based aid: General lessons and bilateral agreements of Norway. World Institute for Development Economics Research (WIDER), Working Paper No. 2013/135 (2013) at 3.

⁸² Forest Carbon Partnership Facility (FCPF). Available: http://www.forestcarbonpartnership.org/sites/fcp/files/Documents/tagged/FCPF_CF_Valuation_Note_10-08-08.pdf [accessed 2 June 2014].

⁸³ Ibid, FCCC/CP/2010/7/Add.1 para 74.

⁸⁴ Ibid.

⁸⁵ Decision 1/CP.16 para 71 (d).

⁸⁶ FCCC/CP/2010/7/Add.1 Appendix I 1(a).

responding to climate change.⁸⁷ In addition, there is also the requirement for REDD+ to be consistent with the conservation of natural forests and biological diversity, protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits.⁸⁸ The REDD+ mechanism shall ensure that state parties take precautionary measures and establish safeguards to protect biological diversity in host states, including safeguards against the conversion of natural forests to forest plantations.⁸⁹ Thus, REDD+ activities should be consistent with, *inter alia*, the relevant provisions of the Convention on Biological Diversity, the United Nations Forum on Forests, and United Nations Convention to Combat Desertification with the view to achieving sustainable forest management.⁹⁰

4.3.3 Incentives to Self-Regulate

Following the call to participate voluntarily, there is a notable provision of positive incentives within a range of COP decisions.⁹¹ So the chapter asks what is meant by “positive incentives” as reflected in the COP decisions? What reference levels (as the basis for a starting point of compensation and not the crediting line) should be used (i.e. historic reference levels and/or projected or forward-looking reference levels)? Does REDD+ offer compensation for the costs incurred only or revenues beyond mere financial compensation? The need to clarify this provision has been a subject of scrutiny in the past where climate change negotiators, policy-makers and stakeholders from developed and developing countries “investigated whether positive incentives are more than just a slogan, whether they can be designed in such a way as to advance international climate change negotiations and if so, what would be the optimum conditions to achieve this?”⁹² More related questions are: what is expected in exchange of positive incentives? And which principles and concepts apply and to whom (investors, host governments or communities)?

⁸⁷ FCCC/CP/2010/7/Add.1 Appendix I 1(f) and (g).

⁸⁸ FCCC/CP/2010/7/Add.1 Appendix I 2(e).

⁸⁹ Para 108.1 at 6 UNFCCC. Available: http://unfccc.int/files/meetings/ad_hoc_working_groups/lca/application/pdf/redd140809web3.pdf [accessed 12 June 2014].

⁹⁰ Para 109.1 at 7 UNFCCC. Available: http://unfccc.int/files/meetings/ad_hoc_working_groups/lca/application/pdf/redd140809web3.pdf [accessed 12 June 2014].

⁹¹ Decision 1CP.16, FCCC/CP/2010/7/Add.1 para 73. See also Decision -/CP.13 articles 1(b) (iii), 1(e) (ii).

⁹² Egenhofer C. et. al., *Positive Incentives for Climate Change Action: Some Reflections*. European Climate Platform (ECP) (2008). Available: <http://aei.pitt.edu/9414/2/9414.pdf> [accessed 12 July 2014].

The issue related to the choice of reference levels is answered in chapter 3 where reference levels are to be based on historic reference levels and not projected or forward-looking reference levels. This decision is lauded by some as a credible way towards a delivery of emissions reductions.⁹³ Others argue that one of the consequences of the selection of historical reference levels means insufficient incentives for the Congo Basin countries because of a historically low rate of deforestation.⁹⁴ The conclusion is that such “countries would bear all or part of the costs to control deforestation while at the same time facing even more pressure on their forests due to international leakage.”⁹⁵ Ultimately, reference levels will be needed to assess countries’ performance and reward with “positive incentives” or even possibly punish them. To answer the question of what is meant by “positive incentives” the Bali Action Plan provides that such incentives are constituted by financial and other incentives that are new and additional.⁹⁶ This is in line with developing countries’ demands. For example, Brazil proposed that “incentives should encompass the provision of new and additional financial resources and transfer of technology, as well as means for capacity-building and enhancement of endogenous capacities.”⁹⁷ For these reasons, the following sections discuss the issues of finance, technology transfer, capacity building, and other incentives and implications for REDD+.

Climate Finance

Climate finance is divided into two parts as provided by the Cancún Agreements. The first type of climate finance is entitled Fast-Start Finance (FSF).⁹⁸ This commits developed countries to providing new and additional USD 30 billion for the period 2010-2012.⁹⁹ A study on this aspect reveals that on 18 November 2011 the financing pledges had reached USD 28.22 billion whilst the amount requested and/or budgeted stood at USD 16.23 billion.

⁹³ Greenpeace., REDD: Reference Levels. (2011). Available: <http://www.greenpeace.org/international/Global/international/publications/REDD%20-%20Reference%20Levels.pdf> [accessed 5 July 2014].

⁹⁴ The World Bank., REDD Reference Levels and Drivers of Deforestation in Congo Basin Countries. (2009). <http://www.comifac.org/Members/tvtchuante/technical-note-on-redd-reference-levels-and-drivers-of-deforestation-in-congo-basin-countries> [accessed 8 July 2014].

⁹⁵ Ibid.

⁹⁶ Article 1(d) (i) read together with Article 1 (e) (i).

⁹⁷ Brazil’s Submission on Positive incentives for voluntary action in developing countries to address climate change: Brazilian perspective on reducing emissions from deforestation. The 12th Conference of Parties to the UNFCCC, Nairobi, Kenya (2006) at 4. Available: https://unfccc.int/files/meetings/dialogue/application/pdf/wp_21_braz.pdf [accessed 12 July 2014].

⁹⁸ Decision 1CP.16, FCCC/CP/2010/7/Add.1 para 95 and para 97.

⁹⁹ Ibid.

However, it was unclear about the actual payment of these sums.¹⁰⁰ A recent study reveals that developed countries mobilised USD 35 billion, exceeding agreed commitments during the FSF period. Likewise, “much of the finance mobilised would not meet many proposed definitions for additionality.”¹⁰¹ Regarding the distribution of FSF, the study indicates that nearly half (43%) of FSF has been directed to Asia, 18% was directed to sub-Saharan Africa, and 16% to Latin America.¹⁰² The connection of this source and amount of finance confirms what is expected in exchange for the positive incentives. Angelsen points out that in exchange for FSF, the host government was supposed to undertake “deep policy reforms”.¹⁰³ It is clear that both objects (i.e. raising USD 30 billion that is new and additional, and performance and results) have failed to be realised.¹⁰⁴ That said, questions can be asked about what role was expected for the host government and the meaning of policy reform. Regarding the former, the role of government in REDD+ activities is said to be on the designation of existing or creation of new systems and institutions to implement REDD+ activities (e.g., monitoring, benefit distribution, revenue management and conflict resolution).¹⁰⁵ Others see the role of government to be that of leading coordination REDD+ activities “with sub-national activities being developed in cooperation with government agencies, promoted by local private or public actors, or by a combination of both REDD+ incentives resulting from successful implementation would be issued exclusively to governments by the UNFCCC.”¹⁰⁶ An exception is made in terms of when and where emission reductions are traded through sub-national activities which may be asked to make their accountability transparent to national governments so as to avoid double counting.¹⁰⁷ The latter focused on ensuring that these institutions and systems are well-governed – particularly in terms of their accountability

¹⁰⁰ Stasio K. et. al., Summary of Developed Country Fast-Start Climate Finance Pledges. November (2011). World Resources Institute. Available: http://pdf.wri.org/climate_finance_pledges_2011-11-18.pdf

¹⁰¹ Nakhooda S. et. al., Mobilising International Climate Finance: Lessons from the Fast-Start Finance Period. Overseas Development Institute (ODI), World Resources Institute (WRI), Global Environmental Strategies (IGES), and Open Climate Network (OCN), November (2013) at 39.

¹⁰² Ibid at 30.

¹⁰³ Angelsen A., REDD+ as performance-based aid: General lessons and bilateral agreements of Norway. World Institute for Development Economics Research (WIDER), Working Paper No. 2013/135 (2013) at 1. See also Ibid Nakhooda S. et. al., at 39. The author indicates that for “many developing countries there is a need to strengthen the underlying policies, regulations and governance that will facilitate investment in low-carbon and climate-resilient approaches”.

¹⁰⁴ Angelsen concludes that “...aid cannot buy policy reforms, yet this remains a major idea in current REDD+ discourses”. Angelsen A., REDD+ as performance-based aid: General lessons and bilateral agreements of Norway. World Institute for Development Economics Research (WIDER), Working Paper No. 2013/135 (2013).

¹⁰⁵ Williams L.G., Putting the pieces together for good governance of REDD+: an analysis of 32 REDD+ country readiness proposals. Working Paper, (2013) at 4.

¹⁰⁶ Corbera E. and Schroeder H., Governing and implementing REDD+. (2010) *Environmental Science and Policy* at 2.

¹⁰⁷ Ibid.

and transparency, to stakeholders, as well as being inclusive in terms of their decision-making.¹⁰⁸

The UN-REDD Programme has provided good governance principles for “effective and inclusive national governance systems” for REDD+. These principles relate to integrity, transparency and accountability and stakeholder engagement.¹⁰⁹ To be realised, the UN-REDD Programme supports the conduct of nationally owned, multi-stakeholder, inclusive and participatory governance assessments. The emphasis is placed “on the process of developing these indicators rather than the indicators themselves, based on what stakeholders’ value, and on the process of establishing an information management system that reinforces domestic accountability over time”.¹¹⁰ These elements can be seen as an example of a step towards decentring regulation. However, there is no indication as to what strategy is essential in removing the state from the conceptual hierarchy of state-society. This is the role of self-regulation.

The second type of climate finance is generally referred to as “long-term finance”. Regarding this aspect, developed countries pledged that in the context of “meaningful mitigation actions and transparency on implementation” by developing countries, they would raise US \$100 billion per year by 2020 to address both adaptation and mitigation actions in the developing countries.¹¹¹ Most of the fund would be dispersed through the Green Climate Fund.¹¹² Zahar et. al., point out that despite many meetings the sources of finance mentioned above are still only vague and uncertain ideas, which await systematic exploration at the COP level.¹¹³ Efforts to raise finance for REDD+ began in 2012 under the banner of the UNFCCC. However, currently, there is still no clarity on how adequate and predictable long-term finance for REDD+ will be mobilised.¹¹⁴ What is commonly understood is that the COP 19 decision in Warsaw in 2013 clarified what was largely pointed out in the literature about the source of this long-term finance. The decision established that results-based finance for REDD+, may come from multiple sources such as public and private (such as through trading

¹⁰⁸ Ibid Williams L.G., (2013) at 4.

¹⁰⁹ UNDP, Supporting Inclusive and Effective National Governance Systems for REDD+. UN-REDD Programme (2010).

¹¹⁰ Ibid.

¹¹¹ UNFCCC, Decision 1/CP.16 (2010), para 98.

¹¹² Ibid, para 100.

¹¹³ Zahar A. et. al., *Australian Climate Law in Global Context*. (2013) at 275.

¹¹⁴ Watson C. et. al., Integrating REDD+ into a green economy transition: Opportunities and challenges. Overseas Development Institute (ODI) Report (2013). Available: http://www.unep.org/pdf/REDD_green_economy_digital_master.pdf [accessed 9 June 2014].

carbon credits within compliance carbon markets), bilateral and multilateral, including alternative sources.¹¹⁵ In return the host countries are required to provide information on how all safeguards have been addressed and respected before they can receive results-based payments. The decision on results-based finance also establishes an information hub on the web platform on the UNFCCC website as a means to publish information on the results of REDD+ activities and corresponding results-based payments. However, the decision does not indicate that this information disclosure statement is compulsory in order to receive finance.¹¹⁶

Technology Transfer

The question raised here is whether REDD+ is considered to be a mechanism that is expected to facilitate technology transfer.¹¹⁷ This is because, pursuant to article 4.9 of the UNFCCC, Nepal on behalf of the least developed countries group submitted that such provision must be reflected in all decisions related to REDD+.¹¹⁸ What should the provisions on technology transfer reflect? Some have advocated that the REDD+ mechanism is a cost-effective way to reduce global greenhouse gas emissions, precisely because “no new technologies are required except maybe for the monitoring of forest-carbon changes except perhaps for important monitoring purposes.”¹¹⁹ This begs the question as to how REDD+ will be implemented successfully in the absence of technology particularly for the renewable energy sector. Without this undertaking, it seems that the success of REDD+ in the long term would be impossible. This is because the pressure that is exerted on forests resources can only be avoided once there are alternative sources of energy, environmentally friendly organic fertilisers and pesticides and efficient machinery among others.¹²⁰ It should be recalled from

¹¹⁵ Ibid. Also see Dutschke M. et al., How Do We Match Country Needs with Financing Sources?, in Angelsen A. (ed.), *Moving ahead with REDD: Issues, options and implications*, (2008) at 47-48.

¹¹⁶ Ibid.

¹¹⁷ Under CDM, African countries “hoped that technology can be sent to developing countries to assist in the pursuit of sustainable energy projects. In turn, African countries can generate markets for CDM projects.” See Gupta J. and Cray K., in Chaytor B. and Gray K.R., *International Environmental Law and Policy in Africa*. (2003) at 72.

¹¹⁸ http://unfccc.int/files/documentation/submissions_from_parties/application/pdf/nepal_redd.pdf.

¹¹⁹ Stern N. Stern review: the economics of climate change. Cambridge: HM Treasury UK Government (2006). Corbera, E. et al., Reducing greenhouse gas emissions from deforestation and forest degradation in developing countries: revisiting the assumptions. *Climatic Change*, 100, (2010) 355-388. The Stern Review Report at 538; Available: http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm [accessed 9 June 2013]. See also, Lyster R., The New Frontier of Climate Law: Reducing Emissions from Deforestation and Degradation. (2009) 26:6 *Environmental and Planning Law Journal*, 417-456 at 3.

¹²⁰ Wibisana points out that emission reductions would be realised by utilising these factors in the agricultural sector. See Wibisana A., A critical view on Indonesia’s legal responses to climate change, in Faure M. and

chapter 3 that the resistance to commit forests for climate change mitigation was based on the finance and technology transfer. But the issue of technology transfer is rarely brought into the REDD+ debate. This could be in part because the issue of technology transfer is being negotiated within the overall climate change agreement. Others see that how REDD+ implementation takes place can become a catalyst to facilitate technology transfer.¹²¹ From the connection between REDD+ and the green economy it is clear that this connection “entails pursuing the possibility to enhance technology transfer along all three channels” namely: “trade, licensing and foreign direct investment.”¹²² This is despite the fact that these are generally quite segregated policy arenas with separate constituencies.¹²³

4.4 REDD+ outside the UNFCCC Process

The emerging of REDD+ outside the UNFCCC Process is motivated by a range of issues. We have seen above that the provision of REDD+ under the UNFCCC process requires that REDD+ mechanism to be implemented in phases. To facilitate this process numerous organisations have become involved in REDD+ readiness activities. These include a number of multilateral organisations, regional and bi-lateral REDD+ funding initiatives. In addition to these governmental activities, NGOs and the private sector are involved in designing and investing in individual REDD+ projects, developing certification schemes to verify carbon and non-carbon performance, as well as working with governments on voluntary standards for REDD+.¹²⁴ This approach is similar to what Bodansky refers to as the evolutionary process which allows for trial and error.¹²⁵ The author contends that countries use this process “to see whether a particular policy approach works before deciding what to do next.”¹²⁶ An example cited is that countries can set voluntary standards before deciding whether to convert the voluntary regime into a binding one.¹²⁷

Wibisana A. (eds.), *Regulating disasters, climate change and environmental harm: Lessons from the Indonesian experience* (2013) at 105.

¹²¹ REDD+ Benefit Sharing. CIFOR, (2013). Available:

http://www.cifor.org/publications/pdf_files/factsheet/4258-factsheet.pdf [accessed 26 June 2013].

¹²² Eaton D., Technology and Innovation for a Green Economy. (2013) 22:1 *Review of European Community and International Environmental Law* at 67.

¹²³ Ibid.

¹²⁴ McDermott C.L., REDDuced: From sustainability to legality to units of carbon—The search for common interests in international forest governance. (2014) 35 *Environmental science & policy* 12-19 at 18.

¹²⁵ Bodansky D. and Diringer E., The Evolution of International Regimes: Implications for Climate Change, Pew Center on Global Climate Change Report, (2010) at 3.

¹²⁶ Ibid.

¹²⁷ Ibid.

The motivation of the private sector and NGOs to get involved in voluntary markets such as REDD+ outside the UNFCCC process can also be explained by the desire to acquire “carbon offsets generated in order to offset their greenhouse gas emissions and/or those of their customers in order to reduce their carbon footprint or those of their customers.”¹²⁸ Private actors include *inter alia* private manufacturing and service companies, private foundations, credit brokers, carbon project developers, legal assistance providers and companies established by NGOs.¹²⁹ These actors are referred to in this thesis as self-regulatory bodies.

4.4.1 What is being Regulated?

The result of numerous self-regulatory bodies is an enormous level of complexity, fragmented decision-making and uncertainty in the sense that they attempt to establish objectives for REDD+ in a way which advances their own interests and priorities for REDD+ without the need for global consensus.¹³⁰ For example, besides reducing emissions, the objects of regulation in REDD+ outside the UNFCCC include “(i) creating private protected areas on private land; (ii) conducting research, for example into carbon stocks or alternative energy generation that can help generate carbon credits for the market; (iii) conserving existing public protected areas and buffer zones; (iv) safeguarding sovereign frontiers; and (v) developing alternative income generation opportunities for local communities that are compatible with nature conservation.”¹³¹ These objects can be seen in more than 100 private sectors involved in REDD+ projects in Africa, Asia and Latin America recorded at the end of 2013.¹³²

4.4.2 Regulating REDD+ Objectives: Standards and Principles

There are a number of standards and principles which reflect a wide range of interests in legitimising certain aspects of voluntary offsets.¹³³ The question that arises is: what standards and principles are reflected in regulating REDD+ objectives? To answer that question, it is important to explain what is meant by standards and principles. The use of standards is not exclusive to command and control regimes and standard-setting issues may arise when

¹²⁸ Deatherage S.D., *Carbon Trading Law and Practice*. (2011) at 64.

¹²⁹ Nhantumbo I., Carbon rights legislation: not yet ready for private sector REDD+. The International Institute for Environment and Development (2013).

¹³⁰ Ibid McDermott C.L., (2014) at 18.

¹³¹ Ibid Nhantumbo I., (2013).

¹³² Ibid.

¹³³ Bumpus A.G. et. al., The rise of voluntary carbon offset standards: self-regulation, legitimacy and multi-scalar governance. (2010) at 7. Available at SSRN: <http://ssrn.com/abstract=1680054> or <http://dx.doi.org/10.2139/ssrn.1680054> [both accessed 30 November 2013].

incentives, rather than sanctions, underpin regulation.¹³⁴ Standards can thus be divided into three categories in correspondence with these three stages of intervention.¹³⁵ The first is that specification “standards focus on prevention by controlling the processes that give rise to dangerous situations—by demanding, for example, that industrial activities conform to specification on plant construction, equipment to be used, or modes of operation.”¹³⁶ Second, performance standards demand a given level of delivery at the act stage but do not specify how that delivery is to be achieved.¹³⁷ Third, target standards seek to overcome the problems of linking standards to regulatory goals by stating those goals or outcomes directly.¹³⁸ These standards prescribe no particular type of process or level of risk creation, but call for the avoidance of certain harmful consequences (e.g. removing the water’s capacity to support fish life). The advantage of such standards is that firms are left free to decide how best (and most cheaply) to achieve the set targets.¹³⁹ Principles: regulatory “authorities can demand that regulatees comply with precise rules but, in the alternative, they can call on them to act to further certain principles. In principles-based regulation, principles are used to outline regulatory objectives and values, and regulatees are left free to devise their own systems for serving such principles”.¹⁴⁰ The next section discusses the standards and principles advocated by the regulatory bodies.

UN-REDD and FCPF

In order to implement the REDD+ mechanism in the sub-national and national programmes, two main multilateral readiness programmes were established. These are the UN-REDD Programme and the Forest Carbon Partnership Facility (FCPF).¹⁴¹ The UN-REDD programme was established by collaboration of three UN agencies, UNEP, UNDP and FAO. It is a multi-donor trust that provides funding with a view to implementing the REDD+ mechanism.¹⁴² The FCPF is a World Bank program. It was established to “build partnerships among developed and developing countries, public and private sector entities, international

¹³⁴ Baldwin R. et. al., *Understanding Regulation: Theory, Strategy, and Practice*. (2012) at 296.

¹³⁵ Ibid.

¹³⁶ Ibid at 297.

¹³⁷ Ibid.

¹³⁸ Ibid at 298.

¹³⁹ Ibid.

¹⁴⁰ Ibid at 302.

¹⁴¹ Danon S. and Bettiati D., *Reducing Emissions from Deforestation and Forest Degradation (REDD+) – What is Behind the Idea and What is the Role of UN-REDD and Forest Carbon Partnership Facility (FCPF)?* (2012) 2:2 *SEEFOR (South-East European Forestry)*. Available: http://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=120739 [accessed 26 November 2013].

¹⁴² Ibid Danon S. and Bettiati D., (2012) at 96.

organizations, non-governmental organizations, forest-dependent indigenous peoples and forest dwellers to prepare for possible future systems of positive incentives for REDD, including innovative approaches to sustainable use of forest resources and biodiversity conservation.”¹⁴³ Another objective is to assist host countries to build their capacity and develop a methodological and policy framework that provides incentives for the implementation of REDD programs.¹⁴⁴ This objective is explored further in the capacity building section below.

To explain the standards employed by the above bodies in the implementation of REDD+ activities, the UN-REDD Programme developed principles and criteria and associated tools and guidance are still under development, with a working title of the UN-REDD Programme “Social and Environmental Principles Framework”. The Framework is made up of two components: First, a minimum standard risk assessment and mitigation framework: UN-REDD Programme funded programs/projects/actors will have to comply with a set of minimum environmental and social standards also referred to as “safeguard” or “do no harm” principles.¹⁴⁵ These are reflecting the specification standards explained above. Second, an assessment of impact magnitude is intended to account for and provide guidance for designing, implementing, and operating REDD programs in a way that minimises social and environmental risks and maximises multiple benefits for climate, sustainable development, and conservation.¹⁴⁶

FCPF has developed the Strategic Environmental and Social Assessment (SESA). The purpose of SESA is to incorporate “environmental and social concerns into national REDD+ strategy process and ensures that the FCPF readiness activities comply with World Bank Policies during the strategic planning phase, considering that these strategic activities could have potentially far reaching impacts.”¹⁴⁷ A specific output of the SESA is the Environmental and Social Management Framework (ESMF). The ESMF is a framework to avoid and/or mitigate and manage potential risks of the REDD+ strategy options related to the adoption of future REDD+ projects, activities, and policies. For the ESMF to ensure compliance with the

¹⁴³ International Bank for Reconstruction and Development Charter Establishing The Forest Carbon Partnership Facility (2010). Available: http://www.forestcarbonpartnership.org/sites/forestcarbonpartnership.org/files/Documents/PDF/Sep2010/FCPF_Charter-August_2010_clean.pdf [accessed 15 November 2013].

¹⁴⁴ Ibid.

¹⁴⁵ Moss N. and Nussbaum R., A Review of Three REDD+ Safeguard Initiatives. The Forest Carbon Partnership Facility (FCPF) and the UN-REDD Programme (2011) at 10.

¹⁴⁶ Ibid.

¹⁴⁷ Ibid at 7.

Bank's safeguard policies, it has to be consistent with the applicable World Bank safeguard policies, including the policy on Environmental Assessment, and it is expected to contain sections addressing the requirements of other applicable policies.¹⁴⁸

Voluntary Carbon Standard (VCS)

The Voluntary Carbon Standard Association (VCSA) is an organisation which administers the Verified Carbon Standard (VCS) and was formed by the International Emissions Trading Association, the Climate Group and the World Economic Forum in 2005.¹⁴⁹ The Verified CS is a greenhouse gas accounting program with the aim to verify and issue carbon credits in voluntary markets.¹⁵⁰ The focus of the VCS is on GHG reduction attributes only and does not require projects to have additional environmental or social benefits.¹⁵¹ After the VCS was introduced, it was planned that the VCS would be updated yearly for the first two years and every two years after that.¹⁵² The VCS has been applied widely in Kasigau Corridor REDD+ projects in Kenya.¹⁵³

The VCS works by accepting methodologies that serve as the protocols for developing carbon credit projects. Some of these methodologies are created through the VCSA which relies on expert committees from organisations such as the CDM Meth Panel, the World Bank and leading non-profit and private sector organisations.¹⁵⁴ In addition, VCSA accepts methodologies adopted by the Executive Board of the CDM.¹⁵⁵ In order to obtain approval of a carbon project and the issuance of Verified Carbon Units (VCUs), a third-party validator/verifier must validate the project design document submitted by the project developer, and verify the amount of greenhouse gas emissions actually reduced and, therefore, how many VCUs should be issued. The VCSA relies on third-party registries to

¹⁴⁸ Ibid at 7.

¹⁴⁹ The Verified Carbon Standard program. Available: <http://www.v-c-s.org/who-we-are> [accessed 27 November 2013].

¹⁵⁰ For additional discussion about the history regarding the standard see <http://v-c-s.org/who-we-are> [accessed 27 November 2013].

¹⁵¹ Kollmuss A. Zink H.C., Polycarp *Making Sense of the Voluntary Carbon Market: A Comparison of Carbon Offset Standards* (WWF: March 2008) at 58.

¹⁵² Ibid.

¹⁵³ Carbon Neutral. Available: <http://www.carbonneutral.com/carbon-offsets/kasigau-corridor-redd-forestry/> [accessed 6 January 2014].

¹⁵⁴ Verified Carbon Standard. Available: <http://www.v-c-s.org/how-it-works/expert-committees> [accessed 6 January 2014].

¹⁵⁵ Ibid.

actually issue the credits and maintain them on their registries. The VCSA does not play a direct role in the issuance of carbon credits for individual projects.¹⁵⁶

Verified Emission Reductions (VER+)

TÜV SÜD is a technical service organisation founded in 1866 in Germany. It provides validation and verification services for CDM and JI projects according to the Kyoto Protocol among other things.¹⁵⁷ Based on that experience, the company also offers validation and verification services for projects that do not intend to get registered under the Kyoto scheme or any other governmental system.¹⁵⁸ This certification organisation has already validated REDD+ projects in Brazil and it is likely to expand its services to other countries.¹⁵⁹

In order to demonstrate additionality, the VER+ standard requires the VER+ project to apply the most recent version of the CDM Additionality Tool.¹⁶⁰ In dealing with permanence, the VER+ standard requires that emission reductions should not be reversible. However, in case of land use related projects which cannot ensure permanence, the VER+ requires applications of adequate safeguards in order to balance potential reversibility (e.g. buffer of not-issued credits).¹⁶¹ Thus the VER+ provides a general statement that any VER+ Project Design Document (PDD) has to undergo a validation process before registration. But verification is undertaken according to the monitoring reports prepared by the project participants. In case of retroactive projects it is possible to perform both activities in one joint effort. The first verification is carried out at least one year after registration of the starting date of the crediting period. But in the case of land use and forestry activities a first verification shall not occur later than 5 years after validation.¹⁶² The monitoring of the project specific

¹⁵⁶ Deatherage S.D., *Carbon Trading Law and Practice*. (2011) at 67.

¹⁵⁷ Verified emission reductions (VER) Standards. Available: http://www.tuev-sued.de/uploads/images/1179142340972697520616/Standard_VER_e.pdf [accessed 21 January 2014].

¹⁵⁸ Ibid.

¹⁵⁹ World Rainforest Movement. Available: <http://wrm.org.uy/oldsite/bulletin/155/Brazil.html> [accessed 6 January 2014].

¹⁶⁰ VER+ A robust Standard for Verified Emission Reductions (Criteria Catalogue), TÜV SÜD, Available: http://www.tuev-sued.de/uploads/images/1179142340972697520616/Standard_VER_e.pdf [accessed 6 January 2014], also see A. Kollmuss, H. Zink, C. Polycarp *Making Sense of the Voluntary Carbon Market: A Comparison of Carbon Offset Standards* (WWF: March 2008). Available: http://assets.panda.org/downloads/vcm_report_final.pdf at 64 [accessed 21 January 2014].

¹⁶¹ VER+ A robust Standard for Verified Emission Reductions (Criteria Catalogue), TÜV SÜD, Available: http://www.tuev-sued.de/uploads/images/1179142340972697520616/Standard_VER_e.pdf [accessed 6 January 2014].

¹⁶² VER+ A robust Standard for Verified Emission Reductions (Criteria Catalogue), TÜV SÜD, Available: http://www.tuev-sued.de/uploads/images/1179142340972697520616/Standard_VER_e.pdf [accessed 6 January 2014].

methodology approach is based on the guidance from criteria for baseline setting and monitoring as established for JI project activities.¹⁶³

Application for registration under the VER+ is based on the submission of an application for registration as a VER+ activity to TÜV SÜD and an independent assessment of compliance with the aforementioned criteria. Upon a positive validation opinion the project will be registered by TÜV SÜD's certification body "climate and energy" and an account will be opened at TÜV SÜD's Blue Registry.¹⁶⁴ The registry allows project participants and traders to administer their VER+ credits and thus avoid any potential double selling.¹⁶⁵ In order to ensure that offsets are sold only once, the VER+ requires that "emission reductions that are caused or are included indirectly to other existing schemes have to be factored out from the amount of VER+."¹⁶⁶ In an event that there is a further claim of emission reductions by the same activity in the same time frame in a different regime (i.e. CDM/JI emission trading schemes or other voluntary VER schemes), the VER+ considers this claim to be a misuse of a TÜV SÜD certificate.¹⁶⁷ The same conclusion is reached in the case of multiple use of VER+ credits either by selling/transferring the same charge of VER+ credits to several buyers or by using it in several cancellation transactions.¹⁶⁸ In this case such misuse leads to a fine of €300,000.¹⁶⁹

Regarding the environmental and social impacts, VER+ only provides a general statement which requires project activity to avoid causing substantial negative impacts on the environment and social aspects. Any potentially negative impact shall be mitigated. Therefore, if the project activity requires an Environmental Impact Assessment (EIA) according to national legislation, VER+ provides that the latter should have been submitted for approval by the end of validation.¹⁷⁰

¹⁶³ Ibid.

¹⁶⁴ Ibid.

¹⁶⁴ Ibid.

¹⁶⁵ Ibid.

¹⁶⁵ Ibid.

¹⁶⁶ Ibid.

¹⁶⁶ Ibid.

¹⁶⁷ Ibid.

¹⁶⁷ Ibid.

¹⁶⁸ Ibid.

¹⁶⁹ Ibid.

¹⁷⁰ Ibid.

Chicago Climate Exchange (CCX)

The Chicago Climate Exchange (CCX) is a voluntary GHG emissions cap-and-trade scheme based in North America. Although participation is voluntary, compliance with emission reduction objectives is legally binding once a member joins.¹⁷¹ The CCX standards have been applied in REDD+ in regional carbon trading programs in America and Australia.¹⁷²

Plan Vivo System

The Plan Vivo System is a set of tools, processes, guidelines and standards which enable communities in developing countries to access payments for ecosystem services.¹⁷³ The Plan Vivo Foundation certifies and issues only ex-ante credits, known as Plan Vivo Certificates.¹⁷⁴ The Plan Vivo System was first conceived and developed in 1994, as part of a UK Department for International Development (DFID) funded research project in Mexico. The system was devised by the Edinburgh Centre for Carbon Management (ECCM) at the University of Edinburgh, in partnership with other organisations.¹⁷⁵ The Plan Vivo Standard has been designed to cater to the needs of smallholder and community based projects.¹⁷⁶ In recent years the Plan Vivo Standard has been used in the REDD+ pilot projects in Tanzania.¹⁷⁷

The Plan Vivo Foundation selects and commissions expert reviewers to conduct an initial validation of each new project. Then third-party verifiers assess projects against the Plan Vivo Standards based on terms of reference agreed between project coordinators and verifiers.¹⁷⁸ The Plan Vivo Foundation also approves verifiers that are accredited by an international certification authority such as the CDM, International Standards Organisation

¹⁷¹ Kollmuss A. et. al., *Making Sense of the Voluntary Carbon Market: A Comparison of Carbon Offset Standards* (WWF: March 2008) at 66. Available: http://assets.panda.org/downloads/vcm_report_final.pdf [accessed 9 January 2014].

¹⁷² The REDD Desk. Available: <http://theredddesk.org/markets-standards/analysis/forest-trends> [accessed 6 January 2014].

¹⁷³ The Plan Vivo Standards (2008) at 20. Available: http://www.responsiblepurchasing.org/purchasing_guides/carbon_offsets/standards/plan_vivo_system.pdf [accessed 6 January 2014].

¹⁷⁴ Ibid Kollmuss A. et. al., (2008) at 79.

¹⁷⁵ The Plan Vivo Standards (2008) at 9.

¹⁷⁶ The REDD Desk. Available: <http://theredddesk.org/markets-standards/analysis/forest-trends> [accessed 6 January 2014].

¹⁷⁷ Plan Vivo. Available: <http://www.planvivo.org/project-network/redd-in-yaeda-valley-tanzania/> [accessed 6 December 2013].

¹⁷⁸ The Plan Vivo Standards (2008) at 20. Available: http://www.responsiblepurchasing.org/purchasing_guides/carbon_offsets/standards/plan_vivo_system.pdf [accessed 6 December 2013].

(ISO).¹⁷⁹ Plan Vivo producers are land-holders that have written and registered Plan Vivos, and signed sale agreements with the project coordinator agreeing to carry out specified monitoring and management activities in return for staged payments.¹⁸⁰ Purchasers wishing to resell Plan Vivo Certificates must therefore register as a Plan Vivo Reseller with the Plan Vivo Foundation and agree to comply with a Code of Good Practice which seeks to recognise and reinforce the importance of professional reselling, prohibits double-selling, and promotes the transparent flow of quality information.¹⁸¹

Climate, Community and Biodiversity Alliance

The Climate, Community and Biodiversity Alliance (CCBA), is a partnership of international NGOs including CARE, Rainforest Alliance, Conservation International, Nature Conservancy, and the Wildlife Conservation Society. The CCBA oversees the Climate, Community and Biodiversity Standards (CCBS).¹⁸² Development of such standards was due to increasing concerns that standards such as the Chicago Climate Exchange (CCX), Voluntary Carbon Standard (VCS) and American Carbon Registry (ACR) only focus on emission reductions and that meant that the local communities and biodiversity were not addressed.¹⁸³ Therefore, CCBS focuses on identification of high quality land-based carbon projects that adopt best practices to generate significant benefits for local communities and biodiversity.¹⁸⁴ However, it should be noted that the CCBA does not issue quantified emission reductions certificates (nor does it provide a registry).¹⁸⁵ Instead, the standards require project developers to apply other carbon standards such as CCX or VCS in combination with CCBS in order to obtain quantified carbon credits.¹⁸⁶ The CCBA can be used for projects funded with either private or public investment, and the standards apply to

¹⁷⁹ The Plan Vivo Standards (2008) at 24.

¹⁸⁰ Ibid at 18.

¹⁸¹ Ibid at 20.

¹⁸² The Climate, Community & Biodiversity Alliance (CCBA). Available: http://www.climate-standards.org/standards/pdf/ccb_standards_second_edition_december_2008.pdf [accessed 6 December 2013]. McGregor A. et.al., Beyond carbon, more than forest? REDD+ governmentality in Indonesia. (2015) 47 *Environment and Planning*, 138–155 at 143.

¹⁸³ Deatherage S.D., *Carbon Trading Law and Practice*. (2011) at 69.

¹⁸⁴ The Climate, Community & Biodiversity Alliance (CCBA). Available: <http://www.climate-standards.org/2013/03/22/comments-invited-on-draft-third-edition-of-ccb-standards/> [accessed 6 December 2013]. See also The Climate, Community & Biodiversity Alliance (CCBA) http://www.climate-standards.org/standards/pdf/ccb_standards_second_edition_december_2008.pdf [accessed 6 December 2013].

¹⁸⁵ Climate, Community & Biodiversity Standards (Second Edition – December 2008) at 8. Available: http://www.climate-standards.org/standards/pdf/ccb_standards_second_edition_december_2008.pdf [accessed 6 December 2013].

¹⁸⁶ Ibid.

projects that generate carbon credits for either voluntary or compliance markets.¹⁸⁷ Examples of REDD+ projects that use CCBA are cited in the literature.¹⁸⁸

4.4.3 Incentives to Self-Regulate

Climate Finance

Apart from the financing options existing under the UNFCCC process, there is an emerging voluntary market for REDD+ credits. For example a “variety of multilateral banks and carbon funds provide financing for carbon credit projects. The World Bank has established the Carbon Finance Unit. Within this unit the World Bank operates several carbon funds that are financed with sovereign funds and private funds, depending on the project. There are a number of funds which are managed by the bank. Those with a direct bearing on REDD+ are the FCPF and BioCarbon Fund,¹⁸⁹ and Forest Investment Programme (FIP).¹⁹⁰

It has been asked how it is possible that non-state actors would invest in reducing emissions without any government mandate because this might not be possible under a traditional view of economics or corporate behaviour.¹⁹¹ The answer has to do with public interests. It was pointed out that as the public has become more informed about causes and impacts of climate change, demand for action by consumer product and service companies to reduce carbon emissions or to offset them has developed dramatically.¹⁹² So some buyers are purchasing carbon credits for “green” corporate policies or marketing programs.¹⁹³ Another plausible scenario is that some buyers are taking early initiatives to purchase credits so as to use them once the compliance regime has been finalised. These buyers are usually referred to as “pre-compliance” buyers.¹⁹⁴ These buyers may be buying for marketing or public relations reasons

¹⁸⁷ The Climate, Community & Biodiversity Alliance (CCBA). Available: http://www.climate-standards.org/standards/pdf/ccb_standards_second_edition_december_2008.pdf [accessed 6 December 2013].

¹⁸⁸ Lyster R., The New Frontier of Climate Law: Reducing Emissions from Deforestation and Degradation, (2009) 26:6 *Environmental and Planning Law Journal*, 417-456, at 22. Available: <http://www.carbonneutral.com/carbon-offsets/kasigau-corridor-redd-forestry/> [accessed 6 December 2013].

¹⁸⁹ Deatherage S.D., *Carbon Trading Law and Practice*. (2011) at 214. The World Bank. The World Bank Carbon Funds and Facilities (2013). Available: <http://www.worldbank.org/en/topic/climatechange/brief/world-bank-carbon-funds-facilities> [accessed 6 December 2013].

¹⁹⁰ Climate Funds Update. Available: <http://www.climatefundupdate.org/listing/forest-investment-program> [accessed 29 December 2013].

¹⁹¹ Deatherage S.D., *Carbon Trading Law and Practice*. (2011) at 65.

¹⁹² Ibid.

¹⁹³ Ibid.

¹⁹⁴ Ibid.

but may also or solely be acquiring voluntary credits in order to accumulate a certain volume of credits before a mandatory program is instituted.¹⁹⁵

Capacity Building

Different service providers have been involved in offering capacity building programmes. These included development of national REDD+ baselines, calculating the costs versus benefits of REDD+, training for REDD+ fund management and benefit sharing, leveraging the mainstream media to raise public awareness about REDD+, to raise awareness services in local and tribal languages especially in the context of REDD+ pilot projects and in countries with a high diversity of ethnicities and in formulating policies and strategies.¹⁹⁶ An example of capacity building can be explained by UNREDD and FCPF. Under the UN-REDD programme, the focus of the Food and Agriculture Organization of the United Nations (FAO) is on technical issues related to forestry, natural resources and supporting in particular the development of REDD+ monitoring, including MRV systems.¹⁹⁷ The focus of the UNDP is on good governance, socio-economic implications of REDD+ and the engagement of Indigenous Peoples and civil society. Lastly UNEP is focusing on convening expertise and decision-makers in the REDD+ agenda, increasing knowledge and capacity on multiple benefits of REDD+ and facilitating the enabling conditions to migrate towards a low-carbon economy by transforming the forest sector through analysis, scenario development and assessment of options for investments.¹⁹⁸ On the other hand, the FCPF complements the UNFCCC negotiations on REDD+ by demonstrating how REDD+ can be implemented at the national and sub-national level and by learning lessons from this early implementation phase.¹⁹⁹ This program has two main objectives: like UN-REDD it has the objective of capacity building for REDD+ readiness, and the second aim is to test a program regarding

¹⁹⁵ Ibid.

¹⁹⁶ REDD+ in Asia-Pacific: Are capacity building services meeting countries' needs? RECOFTC – The Center for People and Forests (2011). Available: http://www.recoftc.org/site/uploads/content/pdf/UN-REDD%20capacity%20building%20providers%20study_182.pdf [accessed 29 December 2013]. See also UNDP Capacity Assessment: Practice Note (2008) Available: <http://www.undp.org/content/dam/aplaws/publication/en/publications/capacity-development/capacity-assessment-practice-note/Capacity%20Assessment%20Practice%20Note.pdf> [accessed 21 December 2013]. Forest Carbon Partnership Facility (FCPF) Capacity Building Program for Forest-Dependent People on REDD plus February 22, 2010. Available: http://www.forestcarbonpartnership.org/sites/fcp/files/Documents/tagged/FCPF_FMT_Note_2010-8_IP_Capacity_Building_02-22-10%5B1%5D.pdf [accessed 21 December 2013].

¹⁹⁷ Ibid, the UN-REDD Programme Strategy 2011-2015.

¹⁹⁸ Ibid.

¹⁹⁹ The Forest Carbon Partnership Facility. Available: <http://www.forestcarbonpartnership.org/fcp/node/12> [accessed 21 December 2013].

incentive payments in some pilot countries.²⁰⁰ Thus it can be seen that both the UN-REDD and the FCPF have taken on unique but integrated roles in the process of supporting national governments in their preparations for implementing REDD+ activities.²⁰¹ The point of emphasis here is that UN-REDD has been the leader in the design of effective MRV strategies, while the FCPF has been the leader in the development of successful economic incentives and tools for REDD+ programs.²⁰² Thus the need for capacity building in REDD+ fits well with what is referred to as the information asymmetry between regulators and the regulated. In this case, the emphasis is that “no single actor has all the knowledge required to solve complex, diverse, and dynamic problems, and no single actor has the overview necessary to employ all the instruments needed to make regulation effective.”²⁰³

Other Incentives

Not all potential incentives from REDD+ can be quantified in financial terms, technology transfer and capacity building. Other incentives relate to how “national governments are expected to benefit from increased investment (such as spending of income in local markets or creation of jobs elsewhere in the economy), development of physical infrastructure, reduced spending in certain sectors (such as on flood management due to improved forest environmental services), and promotion of national environmental objectives”.²⁰⁴ In addition, indirect incentives include how REDD+ implementation can clarify land tenure, support forest management and governance, and improve ecosystem services such as water provision.²⁰⁵

So far, we have discussed positive incentives which seem to encourage developing countries to participate in the REDD+ mechanism. But it is argued here that a positive incentive is not the only motive. In a context of climate change mitigation, a threat of a carbon border tax can be seen as an example of negative incentives. It should be mentioned that this approach has not been used within the UNFCCC process but rather developed countries have been

²⁰⁰ Danon S. and Bettiati D., Reducing Emissions from Deforestation and Forest Degradation (REDD+) – What is Behind the Idea and What is the Role of UN-REDD and Forest Carbon Partnership Facility (FCPF)? 2:2 (2012) *SEEFOR (South-East European Forestry)*.

²⁰¹ Thompson M.C. et al., Seeing REDD+ as a project of environmental governance. (2011) 14 *Environmental Science & Policy* 100–110 at 101.

²⁰² Ibid.

²⁰³ Black, J., “Decentering Regulation: Understanding the Role of Regulation and Self-Regulation in a ‘Post-Regulatory’ World” (2001) 54:1 *Current Legal Problems*, 103-146 at 107.

²⁰⁴ Cited in Mathur V.N. et al, Experiences of host communities with carbon market projects: towards multi-level climate justice. (2014) 14:1 *Climate Policy*, 42-62 at 46.

²⁰⁵ REDD+ Benefit Sharing. CIFOR, (2013). Available: http://www.cifor.org/publications/pdf_files/factsheet/4258-factsheet.pdf.

threatening to use carbon border taxes outside the UNFCCC process. This threat is being given serious consideration and it seems to be one of the factors influencing the decision to undertake climate change mitigation in South Africa.²⁰⁶ In the context of REDD+ this line of thinking can be advanced based on the earlier discussion.²⁰⁷ It was discussed that some corporations were pushing for high standards. This explains why Canada advocated for a forest convention with the view to establishing international rules on tariffs and trade barriers against timber exports.²⁰⁸ Higher global standards would make Canadian timber more competitive internationally since its high domestic forest management standards place Canadian timber at a comparative disadvantage relative to tropical timber. Many Canadian businesses have signed up to the International Organization of Standards (ISO), and the Canadian Pulp and Paper Association has argued that ISO standards should be made applicable worldwide.²⁰⁹ Given this understanding, it is possible that the call to impose carbon border tax adjustments to those who do not undertake the REDD+ mechanism could have a significant negative effect for the export affected products. In essence, carbon border tax adjustments would benefit importers of those products as they have already implemented higher standards for forest resources as explained.

4.5 The Aspect of Self-Regulation

4.5.1 Introduction

Before discussing the self-regulation aspect, it is useful to discuss the decentring aspect of REDD+. It is argued that REDD+ at international negotiations contains both the decentring regulation and self-regulation aspects. The decentring regulation aspect is divided into the international and domestic dimensions. As seen in chapter 3, historical international negotiation changed from the top-down to the developing countries' initiatives to participate in climate change mitigation. Negotiation of REDD+ is in the form of a bottom-up approach whereby in principle each country is required to determine its own level of ambition. However, in reality this ambition is defined by multiple actors with formal and informal

²⁰⁶ It is noted that some “developed countries are considering the introduction of Border Carbon Adjustments (BCAs) where higher import duties are levied on carbon-intensive goods and services originating from countries without an effective GHG mitigation strategy and/or carbon price”. National Treasury Department, Republic of South Africa. Policy Paper for Public Comment. Carbon tax policy paper: Reducing greenhouse gas emissions and facilitating the transition to a green economy, (2013) at 16. Available: <http://www.treasury.gov.za/public%20comments/Carbon%20Tax%20Policy%20Paper%202013.pdf> [accessed 20 December 2013].

²⁰⁷ Chapter 3 section 3.2.2.

²⁰⁸ Humphreys D., *Logjam: Deforestation and the Crisis of Global Governance*, (2006) at 43.

²⁰⁹ Humphreys D., *The Elusive Quest for a Global Forests Convention*. (2005) 14:1 *Review of European Community and International Environmental Law* at 4.

power and authority.²¹⁰ In this sense, REDD+ falls under the decentring paradigm. This change of top-down to bottom-up in the second climate change commitment period is well explored elsewhere.²¹¹ Self-regulation as discussed in section 4.2 above is seen as a strategy to enable decentring regulation to be realised. With this in mind, we can now discuss the self-regulation aspect of REDD+. The discussion focuses on voluntary and coerced self-regulation, verified self-regulation, rule making with actors, markets for intervention rights, and accredited self-regulation.

4.5.2 Voluntary and Coerced Self-Regulation

In discussing what makes REDD+ self-regulation within the international dimension, I first look at the concepts of “opportunity costs” and “voluntary” which is a useful framework to understand how REDD+ can be viewed as a concept of self-regulation. This is because this concept encourages internal self-reflection concerning not only costs of compliance but also the net gain which encourages a change of behaviour. The behaviour in this case is the change of government policy in terms of management of forests and in this case is the forest management for the purpose of climate change mitigation. The issue of “positive incentives” is a key concept in the Bali Action Plan and was interpreted by many to mean compensation provided by Annex I to non-Annex I countries for achieving measurable reductions in forestry emissions. In this case, REDD+ seems to fit well with the division established in the Kyoto Protocol: Annex I countries would take on commitments for emission reductions, while non-Annex I countries would do so on a voluntary basis (more recently expressed as NAMAs).²¹²

South Africa can be cited as an example of an African country undertaking mitigation action on a voluntary basis. It has pledged to undertake mitigation action to enable a 34% deviation

²¹⁰ As concluded in section 4.6 below.

²¹¹ Qi X., The rise of BASIC in UN climate change negotiations. (2011) 18:3 *South African Journal of International Affairs*. 295-318. Bodansky D., “History of the Global Climate Change Regime” in Luterbacher U. and Sprinz D.F. (eds.), *International Relations and Global Climate Change*. (2001) at 23-39. Bodansky D. and Diringer E., The Evolution of International Regimes: Implications for Climate Change. *Pew Center on Global Climate Change Report*, (2010). Bodansky D., A tale of two architectures: The once and future U.N. climate change regime (2011) 43, *Arizona State Law Journal*, 697–712. In this latest publication, Bodansky indicates that the “Copenhagen Accord embraces a fundamentally different architecture than the Kyoto Protocol. Rather than defining emissions targets from the top down through international negotiations, the Copenhagen Accord establishes a bottom-up process that allows each party to define its own commitments and actions unilaterally.”

²¹² Angelsen A. et.al., *Analysing REDD+: Challenges and choices*. (2012) at 34-35.

below business as usual growth trajectory by 2020 and a 42% deviation by 2025.²¹³ REDD+ is part of the REDD+ considered as a component of NAMA.²¹⁴ South Africa emphasises that the extent to which this action will be implemented depends on the provision of financial resources, the transfer of technology and capacity-building support by developed countries.²¹⁵ Viewing mitigation measures in this sense it seems that REDD+ has a self-regulatory aspect where countries take the initiative themselves to undertake climate change mitigation.

Developed countries such as Norway, Australia, the USA and European Union have also expressed support for REDD+ as a NAMA, generally viewing NAMAs as broad economy-wide low emission development strategies that include unilateral actions, with REDD+ functioning as a component of that strategy. Conversely, developing countries such as Papua New Guinea, Paraguay, Guyana and Colombia who do not support the inclusion of REDD+ in NAMAs. They see it as an approach to impose a binding commitment to least developing countries and they argue that referring to REDD+ as part of NAMAs will dilute the focus on REDD+.²¹⁶ It can be understood that the support for REDD+ as part of NAMA means that the supporters do so because they are welcoming the emission reductions targets of developing countries.

The above dichotomy forces us to view REDD+ as a coerced self-regulatory measure. This follows a discussion pointed out in chapter 3 where the reference to "...legal instrument or [...] applicable to all Parties" indicates a departure from the Bali Action Plan, which stressed that REDD+ is concerned with "policy approaches and positive incentives ...", with positive incentives interpreted by many to imply full compensation to developing countries.²¹⁷ This radical shift could end up being a watershed in climate negotiations, including for REDD+. This is mainly because of the shifting from REDD+ being predominantly a system of payments from developed to developing countries for reduced forest emissions, to one that is perceived as a shared responsibility.²¹⁸ At a domestic level, the concepts of "opportunity

²¹³ Department of Environmental Affairs, Republic of South Africa 29 January 2010. Available: http://unfccc.int/files/meetings/cop_15/copenhagen_accord/application/pdf/southafricaphaccord_app2.pdf [accessed 21 December 2013].

²¹⁴ Rahlao S. et.al., South Africa's national REDD+ initiative: assessing the potential of the forestry sector on climate change mitigation. (2012) 17 *Environmental Science & Policy* 24-32.

²¹⁵ Ibid Department of Environmental Affairs, Republic of South Africa.

²¹⁶ Climate Focus. Developing Effective National REDD Programmes: REDD and NAMAs. (2009) at 16-20 and 40-47. Available: http://www.climatefocus.com/documents/files/developing_effective_national_redd_programmes_redd_and_namas [accessed 21 December 2013].

²¹⁷ Angelsen A. et.al., *Analysing REDD+: Challenges and choices*. (2012) at 47.

²¹⁸ Ibid.

costs” and “voluntary” point to voluntary self-regulation. Taken together, these concepts seem to encourage internal self-reflection concerning not only costs of compliance but also the net gain which encourage a change of behaviour. The nature of “voluntary” suggests that parties will apply their own logic of opportunity costs in order to decide whether to get involved in REDD+ activities. In this sense REDD+ has a self-regulatory aspect. An example of self-regulation is the use of voluntary agreements deployed by Plan Vivo Systems.

4.5.3 Verified Self-Regulation

As seen above, verified self-regulation is established as a form of self-regulation when third parties are responsible for monitoring compliance. To observe this aspect in REDD+, this section needs to draw from the earlier discussion of MRV in chapter 2. What transpired in the conclusion is that at the moment there is no precedent on “verification” under the UNFCCC or Kyoto Protocol.²¹⁹ So we are left with a discussion of verification outside the UNFCCC process. However, an example of the verification discussed in chapter 2 is exemplified by FCPF. The FCPF requires host countries to fulfil different aspects in order to enter in agreements to begin and develop what is known as a Readiness Preparedness Proposal (RPP). With reference to the FCPF charter, Thompson et al note that a country needs to devise a Readiness Plan Idea Note (R-PIN) which is “the initial proposal submitted to the Facility Management Team. . . outlining the basic elements of that Country’s proposal for a Readiness Preparation Proposal.”²²⁰ Host countries are furnished with a template of R-PIN which content includes a number of questions to be answered. These include questions related to forest law enforcement and forest sector governance e.g., concession policies and enforcement, land tenure, forest policies, capacity to enforce laws.²²¹ Once the R-PIN is approved by the Trustee of the Readiness Fund then such countries may enter into agreements to fund a RPP. The authors note that such proposal is reviewed by the FCPF Facilities Management Team and upon a successful review, the proposal is approved by the Participants Committee that is comprised of 14 REDD country participants and 14 donor country and Carbon Fund participants.²²² It is argued that such process establishes governance by verifying and validating any country’s framework for REDD+

²¹⁹ Ibid. Saunders J. and Reeve R., (2010) at 19.

²²⁰ Thompson M.C. et al, Seeing REDD+ as a project of environmental governance. (2011) 14 *Environmental Science & Policy* 100–110 at 104.

²²¹ The Forest Carbon Partnership Facility (FCPF) Readiness Plan Idea Note (R-PIN) Template. March 8, (2008).

²²² Thompson M.C. et al, Seeing REDD+ as a project of environmental governance. (2011) 14 *Environmental Science & Policy* 100–110 at 104.

implementation.²²³ This is because it shapes what is to be measured and how that measurement is to take place.²²⁴ For this reason, it makes sense to think of REDD+ as verified self-regulation.²²⁵

4.5.4 Rule Making with Actors

As we have seen in the introduction in self-regulation, government shares with regulated entities and regulatory beneficiaries the power either to set the contents of regulations or to enforce regulations or both at once.²²⁶ In REDD+ both within and outside the UNFCCC, this explanation can be located within the principle of Free, Prior and Informed Consent (FPIC) and it is argued that this is an aspect of power sharing. However, while FPIC by local communities is required in many cases the basic question of “consent for what?” is not answered.²²⁷ Given the lack of clarity, there “has been considerable confusion about how this right is most effectively exercised by indigenous peoples and best respected by outsiders.”²²⁸

This chapter argues that we can draw from Ostrom’s analysis of self-regulation to make FPIC work. Ostrom indicates that "common pool resources" (i.e. natural resources used by many individuals in common) have long been subject to over exploitation and misuse by individuals acting in their own best interests. Ostrom observed that attempts to regulate the common have traditionally relied on two main approaches: centralised governmental regulation or privatisation of the resource. Ostrom argues that individuals in the community can design durable cooperative institutions that are organised and governed by the resource users themselves. And this is the third approach that should be used for long-term success. The work of Ostrom aimed to answer “how a group of principals who are in an interdependent situation can organize and govern themselves to obtain continuing joint benefits when all face temptations to free-ride, shirk, or otherwise act opportunistically.”²²⁹

²²³ Ibid.

²²⁴ Ibid.

²²⁵ This also takes note of the Cancun Agreements requiring developing countries’ mitigation actions to be reported in biennial update reports comprising a national inventory report, information on mitigation actions, needs and mitigation support received. These reports will be subject to “international consultation and analysis.” Here the object is to increase the transparency. Costenbader J. et.al, NAMAs and REDD+: Relationship and main issues for consideration -with a focus on Southeast Asia. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). (2013) at 9

²²⁶ Bregman E. and Jacobson A., Environmental performance review: Self-regulation in environmental law. (1994-1995) 16 *Cardozo Law Review* 465 at 467-468.

²²⁷ Angelsen A. et.al., *Analysing REDD+: Challenges and choices*, (2012) at 41.

²²⁸ Colchester M. and Ferrari M., “Making FPIC Work: Challenges and Prospects for Indigenous Peoples”, FPIC Working Papers, Forest Peoples Program, June (2007) at 3.

²²⁹ Ostrom E., *Governing the Commons: The Evolution of Institutions for Collective Action*. (1990).

With this in mind, one can argue that the principle of FPIC should be consenting to self-regulation which includes *inter alia* the operational principles defined by the author.²³⁰

It has been noted that the “idea or principle of national sovereignty has become a major issue in debates surrounding the establishment of a set of international REDD+ safeguards. National governments want to retain their autonomy in social and environmental policy, which makes it challenging to implement internationally mandated safeguards.”²³¹ Furthermore, it is widely accepted that the function of the government includes attending to the needs of its people but in reality, because of their particular social and political situations, many developing countries are incapable of guaranteeing those rights. Subsequently, people feel compelled to develop self-regulation mechanisms to remedy the deficiencies of the country’s legal system. In this case, self-regulation provides the only possibility for their communities to enjoy such rights as security or justice.²³² Whereas the claim to self-regulation can be justified on the basis of internal cohesion of the group, the practices which it entails are related to the fundamental demands of justice, morality and values which the group considers worthy of respect.²³³ The claim to self-regulation is therefore clearly related to the most vigorously asserted rights: those to land and to self-determination.²³⁴ Many native groups seek to enjoy the free possession and control of the territories where they live, or to recover those which they have lost. Control means in this case not only the free disposition of their natural resources or the power to exclude outsiders from their territories.²³⁵ Self-regulation does not mean that one can choose the rules as one likes.²³⁶ Instead, it only works when the rules must be able to achieve a balance between the interests of everyone who is affected by the externalities of a particular decision.²³⁷

²³⁰ These principles are: (1) clearly defined boundaries and membership; (2) congruence between members’ resource appropriation and provisions; (3) member participation in defining operational rules; (4) monitoring; (5) graduated sanctions; (6) conflict-resolution mechanisms; (7) members’ right to devise their own institutions unchallenged by government; and (8) in the case of larger systems, activities are organised in multiple layers of nested enterprises.

²³¹ Angelsen A. et.al., *Analysing REDD+: Challenges and choices*, (2012) at 304.

²³² Ardito W., The right to self-regulation legal pluralism and human rights in Peru. (1997) 39 *Journal of Legal Pluralism* at 22.

²³³ *Ibid* at 17-18.

²³⁴ *Ibid* at 18.

²³⁵ *Ibid*.

²³⁶ Helbing D., Economics 2.0: The Natural Step towards a Self-Regulating, Participatory Market Society. (2013) 10:1 *Evolutionary and Institutional Economic Review* 3–41 at 32.

²³⁷ *Ibid*.

4.5.5 Markets for Intervention Right

Markets for rights to engage in undesirable environmental interventions allow regulated entities to determine for themselves the content of regulation. The instrument of self-regulation is the creation of property rights to engage in harmful interventions and the trade of these rights in an organised market.²³⁸ The call for carbon rights and the linkage to the market is discussed in chapter 5 under the title “from carbon sequestration to carbon sequestration right”. With this in mind, it is possible to see how such approach fits with a model of self-regulatory governance.

4.5.6 Accredited Self-Regulation

Accredited self-regulation in which rules and compliance are accredited by another non-governmental body (e.g. technical committee) was discussed above.²³⁹ An example of this is reflected in REDD+ outside the UNFCCC where CCBS does not verify emission reductions. The offsets must be verified through another standard (e.g. VCS or CDM). When the carbon credits are verified, they are tracked by the registry associated with the carbon accounting standard used.

4.5.7 Under which Category of Self-Regulation does REDD+ fit?

Having examined the different types of self-regulatory systems, this begs the question: under what category can REDD+ be conceptualised? The answer to this question is that REDD+ does not fit neatly into distinctions of self-regulatory systems discussed above. Rather it displays both aspects of voluntary and coerced self-regulatory measures. This is because of the fundamental principle of international law (state sovereignty) that states cannot be forced (theoretically speaking) to enter into an agreement. This is also in line with Lobel’s contention that the new governance paradigm defies the dichotomy of self-regulation. Instead it requires ongoing roles for government and law.²⁴⁰

²³⁸ Bregman E. and Jacobson A., Environmental performance review: Self-regulation in environmental law. (1994-1995) 16 *Cardozo Law Review* 465 at 478.

²³⁹ Black, J., “Decentring Regulation: Understanding the Role of Regulation and Self-Regulation in a ‘Post-Regulatory’ World” (2001) 54:1 *Current Legal Problems*, 103-146 at 119.

²⁴⁰ Lobel O., New Governance as Regulatory Governance. In David Levi-Four (ed), *The Oxford Handbook of Governance* (2012). Lobel O., The renew deal: The fall of regulation and the rise of governance in contemporary legal thought, 89 *Minnesota Law Review* 342 (2004). Lobel O., Setting the Agenda for New Governance Research. (2004-5) 89 *Minnesota Law Review* 498. “[I]t can be postulated, that pure forms of self-regulation hardly exist in reality. Most are hybrid forms, which can appear under various constellations.” Senn M., *Non-state regulatory regimes: understanding institutional transformation*. (2010) at 111.

For the purpose of this chapter, it is useful to keep in mind that self-regulation occurs at the domestic level and international level. It is noted that the literature on self-regulation has largely emphasised that self-regulation happens within a particular national jurisdiction. Put differently, the relationship between actors in self-regulator and regulatory beneficiaries occurs within a particular country. In this chapter, this concept is extended to international actors (regulatory bodies such as the World Bank, UNEP, FAO, UNDP etc.), and countries which are negotiating either in the new climate change agreements, or countries negotiating in the implementation of REDD+ activities within a host country.

4.5.8 Potential Prospects for the 3Es Outcomes

Cost-Effectiveness

To many scholars self-regulation has many benefits as opposed to other regulatory approaches such as command and control. The most cited benefit is cost-effectiveness from the government's point of view.²⁴¹ This is because most enforcement duties and costs would be internalised by the regulated (the regulatees) which would be required to establish its own independent inspectorial group. Once that is achieved, the primary role of governmental inspectors would be to warrant the independence of this group and to assess its efficiency among other things.²⁴² In chapter 2, it was noted that cost-effectiveness refers to the extent to which the programme has achieved or is expected to achieve its results at a lower cost compared with alternatives. It is submitted that self-regulation seems to offer that possibility. This implies that in order to achieve cost-effectiveness, it is crucial to see REDD+ as self-regulatory governance.

Equity

Chapter 2 identified principles of justice for designing a regulatory framework for REDD+. It is argued that the application of those principles will have different implications depending on the objectives of the project at hand. As shown in this chapter, the objectives of REDD+ depend on the actor which anchors development of REDD+. McDermott et al conclude that

²⁴¹ Sinclair D., Self-regulation versus command and control? Beyond false dichotomies. (1997) 19:4 *Law and Policy* at 530. Braithwaite J., Enforced Self-Regulation: A New Strategy for Corporate Crime Control. (1982) 80 *Michigan Law Review* 1466-1507 at 1470-71. Wolfgang S. and Schmitter P.C., Community, Market, State and Association? The Prospective Contribution of Interest Governance to Social Order, in Wolfgang S. and Schmitter P.C., (eds.), *Private Interest Government: Beyond Market and State*, (1998) at 22-25. Gunningham N. and Rees J., Industry self-regulation: An institutional perspective. (1997) 19:4 *Law & Policy* 364 at 366.

²⁴² Braithwaite J., Enforced Self-Regulation: A New Strategy for Corporate Crime Control. (1982) 80 *Michigan Law Review* 1466-1507 at 1470-71.

“it matters whether the goal of an initiative is to maximise gains in social equity, or merely to ‘safeguard’ it.”²⁴³ A more recent paper argues that the UN-REDD and FCPF place demands on the principle of *do no harm* to the REDD+ countries.²⁴⁴ And this has been the dominant principle in REDD+ implementation.²⁴⁵ In the analysis of the mentioned principle, the author rightly contends that:

The principle of do no harm is problematic for justice in REDD+ primarily because it is a negative principle. A negative principle of justice means that no action is necessary unless a new action or activity takes place. This is problematic for two primary reasons: first, as a negative principle, do no harm suggests that justice is the baseline in the absence of a new REDD+ intervention. It assumes that the status quo is fair and just. It presumes that project proponents have no prior relationships with the rights-holders and ignores the long and often unjust relationships that forest peoples have had with forest conservation interventions for decades-experiences that sparked the outcry following the promotion of REDD+ as a major carbon emissions mitigation and forest conservation mechanism. Second, the principle of do no harm and its operationalization through a standard (“generic”) set of justice practices further reifies norms and principles of justice that do not reflect the conceptualizations of justice articulated and pursued by forest peoples.²⁴⁶

The exposition above raises further concerns. Suisseea argues that the use of the do no harm principle above raises questions of clarity.²⁴⁷ For example, it is not easy to establish what constitutes harm, who decides when harm has taken place, over what time period protection from harm is required, as well as who is responsible for remediating occurrences of harm.²⁴⁸ Thus in the absence of a common conceptualisation of what harm entails, it is hard to assess the extent to which the said principle can assist justice along any of the three dimensions of equity (distributive, procedural, and contextual) as discussed earlier. In this sense the role of such principle is to retreat “from more positive justice principles that have historically permeated global forest governance.”²⁴⁹

Another aspect of equity relates to the allocation of positive incentives to the host countries. REDD+ incentives within the UNFCCC seem to be allocated to the national governments

²⁴³ McDermott, M. et. al., Examining equity: a multidimensional framework for assessing equity in payments for ecosystem services. (2012) 33 *Environmental Science and Policy* 416-427 at 424.

²⁴⁴ Suisseea K.R.M., A Retreat from Justice in Global Forest Governance: REDD+ and the “Do No Harm” Principle. A paper presented at the 3rd Annual UCSB Environmental Politics Conference UC Santa Barbara June 5, (2015) at 21.

²⁴⁵ Ibid at 5.

²⁴⁶ Ibid at 21.

²⁴⁷ Ibid.

²⁴⁸ Ibid.

²⁴⁹ Ibid.

based on what is considered to be sustainable development by the host governments. For instance, positive incentives to attract host governments include increased investment (such as spending of income in local markets or creation of jobs elsewhere in the economy), development of physical infrastructure, reduced spending in certain sectors (such as on flood management due to improved forest environmental services), and promotion of national environmental objectives.²⁵⁰ Critics argue that such an approach might be sustainable development according to host governments but not according to the local community. The implication is that the host community would stand to lose. Therefore, it is then important from a justice perspective to examine how local impacts are balanced with national-level benefits.²⁵¹ More importantly, there is a need to apply and balance the rest of the principles discussed in chapter 2.

Environmental Effectiveness

Traditional regulatory approaches such as command and control and/or privatisation of the resource have proven ineffective for solving many environmental issues.²⁵² Subsequently, there have been efforts to search for viable alternatives.²⁵³ Self-regulation is an approach capable of resolving the problem of the overexploitation of the common resource. Ostrom through a number of case studies proposes a set of design principles common to each of the cases for the success of environmental effectiveness.²⁵⁴ Ostrom dispels the three dominant models (the tragedy of the commons, the prisoners' dilemma, and the logic of collective action) because they are all inadequate for they are based on the free-rider problem where individual, rational, resource users act against the best interest of the users collectively.²⁵⁵ It is revealed that Ostrom argues that these models are not necessarily wrong, but rather the conditions under which they hold are very particular. This is because they apply only when the many, independently acting individuals involved have high discount rates and little mutual trust, no capacity to communicate or to enter into binding agreements, and when they do not arrange for monitoring and enforcing mechanisms to avoid overinvestment and

²⁵⁰ Mathur V.N. et al, Experiences of host communities with carbon market projects: towards multi-level climate justice. (2014) 14:1 *Climate Policy*, 42-62 at 46.

²⁵¹ Ibid. For a discussion of the limits of Self-Regulation see Graham D. and Woods N., Making Corporate Self-Regulation Effective in Developing Countries. (2006) 34:5 *World Development* 868–883.

²⁵² Lobel O., The Renew Deal: The Fall of Regulation and the Rise of Governance in Contemporary Legal Thought, 89 *Minnesota Law Review* (2004) 342 at 343. Ostrom E., *Governing the Commons: The Evolution of Institutions for Collective Action*. (1990).

²⁵³ Ibid.

²⁵⁴ Ostrom E., *Governing the Commons: The Evolution of Institutions for Collective Action*. (1990) at 181.

²⁵⁵ <http://www.scotlondon.com/reviews/ostrom.html>.

overuse.²⁵⁶ Ostrom concludes that the challenge is to foster contingent self-commitment among the members.²⁵⁷ Another study by Cameron Holley on self-regulation in the context of environmental sustainability sought to address the conditions for new environmental governance to be achieved. The study concluded that the key pillars to achieve such governance include, *inter alia*: capacity building and training, skillfully designed incentives, mobilising environmental interests, linking action at different scales, and improving the flow of information.²⁵⁸

4.6 Conclusion

This study extends the analysis of self-regulation from different disciplines to the study of REDD+. It has examined how multiple actors are engaging for the implementation of REDD+. In their approaches, such actors develop *inter alia* a number of principles and strategies. The realisation of these strategies and principles relies on various categories of self-regulation as discussed in section 4.2.2. Thus the potential self-regulatory practices that are beginning to emerge out of these principles and strategies can be translated to mean different things in different contexts. At times they seemingly undermine the objects they purport to support as pointed out in the discussion of the principle of do no harm above. Thus, potential challenges of REDD+ as a self-regulatory tool relate to what the critics refer to as self-regulation is self-serving, self-interested and lacking in sanctions. These attributes have potential to derail efforts to secure the 3Es. As indicated above, self-regulation bodies define the objectives of REDD+ in a way which advances their interests. As they do that, they compete to define appropriate solutions.²⁵⁹ This is seen as self-serving and self-interested. “In particular, the privileging of market-based solutions reflects the interests of certain organizations and countries, with their neo-liberal emphasis on using the market and allocating property rights to create incentives to reduce emissions wherever it is cheapest to do so.”²⁶⁰ The increase of actors and locations for governance also raises substantial challenges in terms of policy coordination and consistency.²⁶¹ Such exposition is evident in a brief comparison of UN-REDD and FCPF programmes. It has also been pointed out that the UN-REDD programme seems to maintain a more socially oriented approach while the

²⁵⁶ Ibid.

²⁵⁷ Ostrom E., *Governing the Commons: The Evolution of Institutions for Collective Action*. (1990) at 181.

²⁵⁸ Holley C., *New Environmental Governance*. PhD Thesis, Australian National University (2008) at 366 and 373.

²⁵⁹ Bulkeley H. and Newell P., *Governing Climate Change*, (2010) at 51.

²⁶⁰ Ibid.

²⁶¹ Ibid.

presence of a carbon fund suggests a natural financial approach by the World Bank.²⁶² The challenges that emerge from the two approaches such as envisaged by these actors are discussed in detail in the next chapter.

The emphasis revealed by this chapter is that self-regulation is not a simple, single-equilibrium undertaking about the private actors regulating their own actions. Instead, it is an effort regarding the relationship between the public and private actors. In particular, a self-regulatory system is about the ability of the former to induce collective action within the latter and vice versa depending on the objective at hand and the ability of actors to influence the direction of the other actor.²⁶³ By arguing that REDD+ should be viewed as a self-regulatory system, we begin to gain a new and clear understanding of the conditions of possibility of a form of governance that can be harnessed to provide an optimal and feasible aspect of a regulatory framework. Therefore, the questions that emerge are: how can a self-regulatory system be regulated? And what should be the role of the government thereof? The thesis returns to these questions in chapter 8. However before we address this aspect, the focus is directed to the understanding of the factors that create perils and promises in self-regulation. This approach is deemed as a necessary preliminary in order to ascertain how to regulate a self-regulatory system.

²⁶² Danon S. and Bettiati D., Reducing Emissions from Deforestation and Forest Degradation (REDD+) – What is Behind the Idea and What is the Role of UN-REDD and Forest Carbon Partnership Facility (FCPF)? (2012) 2:2 *SEEFOR (South-East European Forestry)*.

²⁶³ Newman A.L. and Bach D., Self-Regulatory Trajectories in the Shadow of Public Power: Resolving Digital Dilemmas in Europe and the U.S. (2004) 17:3 *Governance: An International Journal of Policy, Administration, and Institutions*, 387–413 at 388.

Chapter Five:

Carbon Rights: Developing a Property Law Framework and a Self-Regulatory Governance Regime

5.1 Introduction

Chapter 3 concluded that the international climate change regime has a hybrid governance (or pledge-and-review) approach. Thus developing countries face different sets of compliance questions, many arising out of REDD+ projects undertaken in the context of reporting on forest carbon stock changes in national communications.¹ In order to comply with these procedural requirements in line with positive incentives requirements, a wide set of legal and institutional approaches may have to be undertaken by developing countries. These are *inter alia* conventional matters of improving forest conservation protection and assessment and new ways of looking at property ownership, land use, forest management and forest inventories and social and environmental impact.² However, so far, a limited number of countries have legislated rights specific to carbon sequestration (carbon rights). These include *inter alia* New Zealand, six states in Australia, and the province of Alberta, Canada.³ At the time of writing, some developing countries (such as Mexico and Costa Rica) have devised climate legislation to prepare the ground for REDD+ implementation but have not explicitly expressed rights to carbon in their laws.⁴

¹ Robles F.F., Forest Carbon Tenure in Asia-Pacific: A comparative analysis of legal trends to define carbon rights in Asia-Pacific. (2012) 89 *FAO Legal Papers Online* at 7.

² *Ibid.*

³ Knox A. et. al., The Interface of Land And Natural Resource Tenure and Climate Change Mitigation Strategies: Challenges and Options. Background paper prepared for the Expert Meeting on Land Tenure Issues for Implementing Climate Change Mitigation Policies in the AFOLU sectors by the Rural Development Institute (Seattle, USA) November 2010. Food and Agriculture Organization of the United Nations (FAO) Rome, 15-17 November (2010) at 17.

⁴ *Ibid* Knox A. et. al., (2010). Also see Townshend T. et. al., The GLOBE Climate Legislation Study: A Review of Climate Change Legislation in 66 Countries. 4th ed London: GLOBE International and the Grantham Research Institute, London School of Economics. (2014). Available: <http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2014/03/Globe2014.pdf> [accessed 21 March 2014].

What carbon rights mean⁵ and who should be subject to such rights have been discussed widely.⁶ The underlying premise of carbon rights is to establish the first step in a process of distributing the benefits flowing from carbon finance amongst different stakeholders.⁷ Thus this chapter explores the property nature of carbon rights and does so with a view to suggesting a self-regulatory system for the governance of a REDD+ mechanism. It continues from chapter 4 which argued that the REDD+ mechanism represents a self-regulatory system. The conclusion was that the system holds promises (the solution to the limits of “centred” regulation and therefore highly efficient) as well as perils (that it could be self-serving, self-interested and lacking in sanctions). Thus the main task of this chapter is to investigate the underlying concepts of “carbon rights” and the notion of “property” in the context of developing a cohesive governance system to source finance for REDD+. This is helpful in determining the conceptualisation of carbon rights. This undertaking is important because answers to it will add to a better understanding of how the definition and understanding of the concept of carbon rights can impact the regulatory functions of REDD+. This is by revealing essential characteristics which show how the ability of the host state can be facilitated or constrained in exercising the regulatory oversight in the self-regulatory system. Additionally, because the central question of this thesis is to identify the ideal model legislative framework sufficient to implement REDD+, answering this question contributes to knowledge of how

⁵ Can the carbon be categorised as a proprietary interest? If that is the case, then what is the most appropriate legal model to give effect to that right? How does the carbon right intersect with human rights and ecological dimensions? These types of questions were raised in Zahar A. et. al., *Australian Climate Law in Global Context*. (2013) at 348. Hepburn S., Carbon Rights as New Property: The benefits of statutory verification. (2009) 31 *Sydney Law Review* 239.

⁶ Streck, C., asks “*who has the right to be compensated*”? Streck, C., Rights and REDD+: legal and regulatory considerations. In: Angelsen, A., et al. (ed.), *Realising REDD+: National Strategy and Policy Options*. (2009) at 160. Other scholars ask *who should benefit from REDD+ and why*? Luttrell C. et. al., Who should benefit and why? Discourses on REDD+ benefit sharing in Chapter 8 in Angelsen A. et.al., *Analysing REDD+: Challenges and choices*. (2012) at 155-157. See also Luttrell C. et. al., Who should benefit from REDD+? Rationales and realities. (2013)18:4 *Ecology and Society* 52. Takacs D., Forest Carbon: Law and Property Rights. Conservation International, (2009) at 18. O’Brien S., asks: *who owns the carbon in the forests (and soils)*? O’Brien S., REDD+ and Forest Carbon Rights in Papua New Guinea. Background Legal Analysis. International Climate Initiative Regional project Climate Protection through Forest Conservation in Pacific Island Countries. SPC/GIZ Regional REDD+ Project (2012) at 14. Lyster R., asks: *who really owns the carbon in tropical rainforest countries: “land tenure” or “resource tenure”*? Lyster R., The New Frontier of Climate Law: Reducing Emissions from Deforestation and Degradation. (2009) 26:6 *Environmental and Planning Law Journal*, 417-456 at 35. Barnes and Quail point out that the question of “who owns the Carbon?” is relevant to REDD initiatives as it identifies the major stakeholders and potential “beneficiaries” of REDD payments. But, in addition, the answer to this question “determines the required effort, resources and time to clarify and document carbon property rights” Barnes G. and Quail S., Property rights to carbon in the context of climate change. University of Florida *Proceedings WB Land and Poverty Conference* (2009) at 7.

⁷ Martijin W. et. al., Creating an enabling legal framework for REDD+ investments in Kenya. Ministry of the Environment, Sweden (2014) at 20.

different sources of climate finance at the global level shape regulatory outcomes at the local level.

The next section briefly discusses the conceptualisation of carbon rights. This is followed by a discussion on ownership of carbon rights and “allocation of benefits” by focusing on private and public sector finances to discern some potential perils and promises for the REDD+ mechanism. In addition, the chapter discusses how these sources of financing REDD+ impact the conceptualisation of carbon rights and implications for a self-regulatory system. The chapter concludes with the implications of the framework for REDD+ regulation at a domestic level.

5.2 Conceptualising Carbon Rights

Arguably, in exploring the concept of carbon rights, we must examine what the term intends as well as the actors or forces behind that intention. But an understanding of the key concepts on which carbon rights are based is a necessary preliminary to such an inquiry. These are “carbon sink”,⁸ “reservoir”,⁹ “carbon sequestration”, and “enhancement of carbon sequestration”. Thereafter the next step is to allocate “rights” (either ownership rights or the economic right to benefit, or both) associated with the aforementioned concepts.¹⁰

5.2.1 Carbon “Stock”, “Sink”, “Reservoir” and “Sequestration”

Neither the UNFCCC nor the Kyoto Protocol defines carbon sequestration (also known as a sink).^{11,12} However, the UNFCCC defines the terms “reservoir” and “sink” as indicated in next paragraph. Elsewhere, there are some examples that are helpful in the definition of these concepts. The US Environmental Protection Agency (EPA) defines carbon sequestration as “[t]he uptake and storage of carbon.”¹³ The Parliament of Australia defines carbon sequestration as a process of capturing and storage of carbon over a long period of time. The

⁸ The term “sink” appears in the definitions of the UNFCCC as discussed in section 5.2.1.

⁹ The term “reservoir” appears in the definitions of the UNFCCC as discussed in section 5.2.1.

¹⁰ Gupta H.S., *Policy and Legal Aspects of Forestry Carbon Projects*. In Gupta H.S. et. al., *Science and Business of Forestry Carbon Projects*. (2014) at 143.

¹¹ IPCC Good Practice Guidance for LULUCF. Annex A: Glossary at G18. Available: http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf_files/Glossary_Acronyms_BasicInfo/Glossary.pdf [accessed 12 March 2014].

¹² Carbon Sequestration Options Under the Clean Development Mechanism to Address Land Degradation. World Soil Resources Reports, Food and Agriculture Organization of the United Nations Rome, 2000 at 9. Available: <http://www.fao.org/forestry/15528-0534f06d08a9c3cbcd73deefd8d06c674.pdf> [accessed 1 March 2014].

¹³ Ibid.

capturing can occur at the point of emission (e.g. from power plants) or through natural processes (such as photosynthesis), which remove carbon from the earth's atmosphere.¹⁴ This definition is different to the New South Wales Conveyancing Act.¹⁵ The Act provides that "carbon sequestration" by a tree or forest means the process by which the tree or forest absorbs carbon from the atmosphere.¹⁶

The UNFCCC defines "reservoir" to mean a "component or components of the climate system where a greenhouse gas or a precursor of a greenhouse gas is stored." It also defines the term "sink" to mean any process, activity or mechanism which removes carbon or a precursor of a greenhouse gas from the atmosphere.¹⁷ The opposite of the term "sink" is "source" which is defined as a process or activity which releases carbon into the atmosphere.¹⁸ Removal of carbon by sinks is provided in the Kyoto Protocol under Article 3.3 as discussed in chapter 3. The requirement is that Annex Parties can rely on carbon sequestration to help meet their obligations. Specifically the article provides that:

The net changes in greenhouse gas emissions by sources and removals by sinks resulting from direct human-induced land-use change and forestry activities, [...] measured as verifiable changes in carbon stocks in each commitment period shall be used to meet the commitments [...].

The term "carbon stock" is not defined, but its scope has been suggested. A carbon stock refers to the amount of carbon stored in a carbon pool (also known as a reservoir).¹⁹ Within the land-use category the relevant classification of "carbon pool" relevant for the REDD+ mechanism is provided by the IPCC 2006 guidelines as follows:

- Biomass (above and below ground): Above ground contains all biomass of living vegetation, both woody and herbaceous, above the soil including stems, stumps,

¹⁴ Parliament of Australia, Carbon sequestration, 22 October, 2010. Available: http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/Browse_by_Topic/ClimateChange/responses/mitigation/Carbon_sequestration [accessed 27 March 2014].

¹⁵ Section 87A of the New South Wales Conveyancing Act 1919 No 6.

¹⁶ Ibid.

¹⁷ Article 1 (8).

¹⁸ IPCC Good Practice Guidance for LULUCF. Annex A: Glossary at G19. Available: http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf_files/Glossary_Acronyms_BasicInfo/Glossary.pdf.

¹⁹ Cited in Carbon Sequestration Options Under The Clean Development Mechanism To Address Land Degradation. World Soil Resources Reports, Food and Agriculture Organization of the United Nations Rome, 2000 at 16. Available: <http://www.fao.org/forestry/15528-0534f06d08a9c3cbcd73deefd8d06c674.pdf> [accessed 28 March 2014]. The term "pool" means "a component of the climate system, other than the atmosphere, which has the capacity to store, accumulate, or release a substance of concern (e.g., carbon, a greenhouse gas, or a precursor). Oceans, soils, and forests are examples of reservoirs of carbon." See Glossary of Terms used in the IPCC Third Assessment Report at 383. Available: <http://www.ipcc.ch/pdf/glossary/tar-ipcc-terms-en.pdf> [accessed 20 March 2014].

branches, bark, seeds, and foliage. Below ground contains all biomass of live roots except fine roots of less than (suggested) 2mm diameter

- Dead organic matter; all dead wood, and litter
- Soil (including peat and organic carbon in mineral soils which includes live and dead roots of less than 2mm diameter)²⁰

Given the above exposition, there are various appropriate management practices which are used to enhance carbon sequestration. These include *inter alia*:

- Enhancing the storage of carbon in forests and other vegetation (plant sequestration)
- Enhancing the storage of carbon in soil (soil sequestration)
- Storing carbon in underground geological formations (geo-sequestration)
- Storing carbon in the ocean (ocean sequestration) and
- Subjecting the carbon to chemical reactions to form inorganic carbonates (mineral carbonation)²¹

5.2.2 Approaches to Creating New Property Rights

Concerns over, *inter alia*, the nature of carbon sequestration as discussed above, the management practices thereof, the need to translate the sequestered carbon into commercial benefits have given rise to the need to create carbon rights as new property rights. In turn there has been a scholarly discussion about carbon rights as new property rights.²² This raises

²⁰ The UNFCCC has requested the state parties that implement REDD+ activities to use the most recent IPCC guidelines, as adopted or encouraged by the COP, as a basis for estimating anthropogenic forest-related greenhouse gas emissions by sources and removals by sinks (Dec. 4/CP. 15, para. 1(c)). The most recent guideline is IPCC 2006 which provides the said categories of carbon pools above. See IPCC 2006 Guidelines for National Greenhouse Gas Inventories, Vol. 4 on AFOLU, Ch. 1, Table 1.1 (<http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol4.html>). [accessed 10 March 2014].

²¹ Glazewski J. et. al., Carbon Capture and Storage (CCS): Towards a Regulatory and Legal Regime in South Africa' Institute of Marine and Environmental Law (IMEL) and African Climate and Development Initiative (ACDI), University of Cape Town, Cape Town (2012). Available: http://www.imel.uct.ac.za/usr/law/imel/downloads/CCS_Report.pdf [accessed 16 March 2014]. Parliament of Australia, Carbon sequestration, 22 October, 2010. Available: http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/Browse_by_Topic/ClimateChange/responses/mitigation/Carbon_sequestration [accessed 16 March 2014].

²² Using \$500 as compensation to Jose for not cutting down a tree, Barnes argues that a prudent project proponent needs to answer five fundamental questions: (1) What rights did Jose have to the tree given that the state owned the land? (2) How could the transaction be legally formalised? (3) What would prevent Jose from selling the development rights to a number of other unsuspecting gringos? (4) How could the proponent's rights be enforced if Jose turned around and logged the tree for its timber value? (5) Is \$500 a fair market price for the tree given its ecological function as a carbon sink? The authors believe that all of these questions point to the fundamental property rights. Barnes G. and Quail S., Property rights to carbon in the context of climate change. University of Florida *Proceedings WB Land and Poverty Conference* (2009) at 1. This line of thinking could be supported by Hepburn's observation that new forms of proprietary interests have emerged as society recognises new types of objects which may be owned and new forms of relationships which are proprietary in nature. Hepburn S., *Principles of Property Law*, (2001), at 25. The introduction of legislation for the creation of rights in

a question of what are essential elements to take into account so as to classify carbon rights as new property rights.

In deciding whether to assign a proprietary status to a particular resource, Gray argues that three criteria must be satisfied. A resource cannot be propertised if, on any of these grounds, it lacks the quality of excludability.²³ These are:

- (1) physical excludability
- (2) legal excludability and
- (3) moral criteria of excludability²⁴

The first criterion of physical *non-excludability* arises where it is not possible or reasonably practicable to exclude strangers from access to the benefits of a particular resource in its existing form. The lighthouse example as discussed by Gray provides quite a good illustration.²⁵ Gray stresses that it “is important to observe that the test of physical excludability requires careful application. A physically non-excludable resource presents itself only where it is not reasonably practicable to exclude strangers from access to the benefits of that resource in its existing form.”²⁶ Therefore no one can claim "property" in a resource in relation to which it is physically unrealistic to exclude strangers from access and

sequestered carbon in some jurisdictions has been motivated by the need to attract investment by overseas investors, who demanded a legislative mechanism to recognise carbon rights. Such rights would afford “the owner” the legal and commercial benefits due to carbon sequestration and risks and liabilities in the event of carbon release occurring with respect to the carbon right which is registered. Thus, in determining the elements of carbon rights, those charged with devising regulatory instruments must ensure that carbon rights are aligned with the rules of the carbon offsets trading regime in which they are to be traded (i.e. either in a compliance market or voluntary market). O’Conner P. et. al., *From Rights to Responsibilities: Reconceptualising Carbon Sequestration Rights in Australia*. (2013) 30:5 *Environmental and Planning Law Journal*, at 3-4. The Western Australian Carbon Rights Act 2003, S 8:1. And Boydell S. et. al., *Carbon Rights in Context*. (2009) 11:2 *Environmental Practice* at 112. Explicit definitions of carbon rights are probably needed for trade mechanisms, but a “more precise definition of rights to benefits from land and carbon sinks may instead be required under other conditions” such as the need to prevent potential violations of human rights and biodiversity degradation. Boydell S. et. al., *Carbon Rights in Context*. 11:2 *Environmental Practice* (2009) at 108. Expert meeting on land tenure issues and requirements for implementing climate change mitigation policies in the forestry and agriculture sectors. 15-17 November, Headquarters, Rome, Italy (2010). Available: <http://www.fao.org/climatechange/65623/en/>. Hepburn S., *Carbon Rights as New Property: The benefits of statutory verification*. (2009) 31 *Sydney Law Review* 239. Martijin W. et. al., *Creating an enabling legal framework for REDD+ investments in Kenya*. Ministry of the Environment, Sweden (2014). Boydell explains that in “the face of rising green litigation in Australia, the finance and business sectors, as well as the legal profession, have been calling for a clearer understanding of carbon property rights.” Boydell S. et. al., *Carbon Rights in Context*. (2009) 11:2 *Environmental Practice* at 105 and 110.

²³ Gray K., *Property in Thin Air*, (1991) 50 *Cambridge Law Journal* 252-307 at 17.

²⁴ *Ibid* at 17 and 44.

²⁵ *Ibid* at 17 and 18. Once the lighthouse is in operation, “the light cannot be artificially confined to a subset of the seafarers within its broad sweep.” In this case the beam of light is non-excludable, and resources of such nature are retained in the commons. Gray then argues that a person can have “property rights” in the lighthouse but not in the light.

²⁶ *Ibid* at 20.

use it consistently over prolonged periods.²⁷ The limiting factors that have to be taken into account include *inter alia* cost-effectiveness of providing protection.²⁸ As discussed in the above section, carbon sequestration exists in an intangible nature. However, to ensure its existence, there must be some degree of physical excludability or control over an area of forest. This means that REDD+ activities will not be immune from various conflicts over land and resource access. Ostrom has argued that the ability to exclude unwanted beneficiaries depends both on the technology of physical exclusion devices.²⁹ These may include barbed wire fences and the existence and enforcement of various bundles of property rights such as the use of customary law to enforce locally devised rules as to who was allowed to access and utilise the resource in question.³⁰

The second criterion is frequently invoked to ensure that a resource is protectable against strangers by legal means. If, however, the plaintiff fails to use such means, where available, to regulate the access of strangers to the benefits of a resource, then Gray contends that the resource must be considered to be non-excludable.³¹ Subsequently, the resource should be available for use and exploitation by all who actually succeed in gaining access. Just as in the instance of physically non-excludable resources, the burden and risk of legal non-excludability rests with the claimant who seeks to propertise a particular resource.³²

A third and final ground on which a resource may be left outside the threshold of property arises in cases of *moral non-excludability*.³³ The notion of moral non-excludability derives from the fact that there are certain resources which are simply perceived to be so central or intrinsic to constructive human coexistence that it would be severely anti-social that these resources should be removed from the commons.³⁴ To propertise resources of such social

²⁷ Ibid at 19.

²⁸ Gray K., Property in Thin Air, (1991) 50 *Cambridge LawJournal* 252-307 at 20. A similar reasoning is also being discussed by Bell. The author argues that: "It must be borne in mind that the cost of property protection depends on the available technology. In this case the advancement of technology may make it possible and cost-effective to create new property rights in as yet unprotected resources." Bell A. and Parchomousky G., A theory of property. (2005) *Cornell Law Review*, 90, *University of Pennsylvania Institute for Law and Economics, Research Paper* 04-0 531 at 533 and 564.

²⁹ Ostrom E., How types of goods and property rights jointly affect collective action. 15:3 *Journal of Theoretical Politics* (2003) 239-270 at 241.

³⁰ Ibid at 241.

³¹ Gray K., Property in Thin Air, (1991) 50 *Cambridge Law Journal* 252-307 at 21 and 23.

³² Ibid.

³³ Ibid.

³⁴ Ibid.

vitality is *contra bonos mores*.³⁵ This means that the resources in question are non-excludable because it is widely recognised that undesirable or intolerable consequences would flow from allowing any one person or group of people to control access to the benefits which they confer.³⁶

One can add the fourth criterion by making reference to the *Lord Wilberforce in National Provincial Bank Ltd v. Ainsworth* case.³⁷ This case concerned two aspects: the quality of a person's interest in a home when people reside together, and licences in land. Thus, before the House of Lords the “legal problem involve[d] an effort to balance matrimonial relations and real property rights.”³⁸ In making the distinction between an equitable interest and a “mere” equity, Lord Wilberforce stated:

Before a right or an interest can be admitted into the category of property, or of a right affecting property, it must be definable, identifiable by third parties, capable in its nature of assumption by third parties, and have some degree of permanence or stability. The wife's right has none of these qualities, it is characterised by the reverse of them.³⁹

With reference to this case, Hepburn points out that a “right to the intangible benefit flowing from carbon storage does not, however, have any identifiable physical boundaries making the nature and scope of associated rights obscure in the absence of express articulation.”⁴⁰

According to Lyster, it:

is not a simple undertaking to identify what amounts to “property” in forest carbon.⁴¹ This is so for a number of reasons not the least of which that in trying to craft a definite legal answer to this issue, one realises that REDD+ schemes are multi-jurisdictional where either common law or civil law predominate, and where the constitutions of former colonies may now include the protection of fundamental legal

³⁵ Ibid.

³⁶ Gray K., Property in Thin Air, (1991) 50 *Cambridge Law Journal* 252-307 at 21 and 23.

³⁷ Temelini P.D., National Provincial Bank vs. Ainsworth, [1965] 2 All E.R. 472, (1966) 4:1 *Osgoode Hall Law Journal* 133-141 at 134.

³⁸ Ibid.

³⁹ National Provincial Bank v Ainsworth, [1965] 2 All E.R. 472 at 19. Available: <http://www.bailii.org/uk/cases/UKHL/1965/1.html> [accessed 13 April 2014].

⁴⁰ Hepburn S., Carbon Rights as New Property: The benefits of statutory verification. (2009) 31 *Sydney Law Review* 239 at 263.

⁴¹ Lyster R., The New Frontier of Climate Law: Reducing Emissions from Deforestation and Degradation, (2009) 26:6 *Environmental and Planning Law Journal*, 417-456, at 36.

rights either by way of a Bill of Rights or Directives of State Principle.⁴² Accordingly this then limits the options for identifying “property” in carbon according to first principles about the notion of property.⁴³

5.2.3 Property and Property Rights

Property law can arise from common law, statutes, and the Constitution.⁴⁴ However, the creation of new property rights presents challenges for property law.⁴⁵ This is so because there is no consensus on the meaning of “property” despite extensive discussion.⁴⁶ A convincing argument in this respect is that property is not a thing but rather a “power relationship” which one has with a thing.⁴⁷ One cannot therefore “own land or property, but rather a collection of right, obligations, and restrictions, or an individual right, over a [thing].”⁴⁸ This is why it is “possible for a number of people to acquire different, but compatible, rights in or over the same thing”.⁴⁹ It is contended that property rights that can be owned are rights to use.⁵⁰ Property rights to use include: the right of *usufruct* in civil law

⁴² Lyster indicates that these “are aspirational goals which may be relied upon by Supreme Courts to interpret other rights such as the fundamentally protected “right to life”.” See Lyster R., *The New Frontier of Climate Law: Reducing Emissions from Deforestation and Degradation*, (2009) 26:6 *Environmental and Planning Law Journal*, 417-456, at 36.

⁴³ *Ibid* Lyster R., (2009) at 36.

⁴⁴ Johnson D.R., *Reflections on the Bundle of Rights*, (2007) 32:247 *Vermont Law Review* at 248.

⁴⁵ O’Connor P., “The Extension of Land Registration Principles to New Property Rights in Environmental Goods.” In Dixon M. (ed.), *Modern Studies in Property Law*, Volume 5. (2009) at 364.

⁴⁶ Glazewski J. The bill of rights and environmental law, in, Glazewski J., *Environmental Law in South Africa*. 3 ed. (2013) Durban: Lexis Nexis at 23. Munby J. et. al., *Making land work: Easements, covenants and profits à prendre*, *The Law Commission (LAW COM No 327)* (2011) at 13. Available: http://lawcommission.justice.gov.uk/docs/lc327_easements_report.pdf [accessed 13 April 2014].

⁴⁷ Gray K. and Gray S.F., *The idea of property in land*, in Bright S. and Dewar J.K. (eds), *Land Law: Themes and Perspectives* (1998), 15-51. Available: <http://www.trin.cam.ac.uk/show.php?dowid=870>. [accessed 13 April 2014]. Gray K and Gray S., *Elements of Land Law*, 5th ed. (2009) at 98. See also Fairlie K. and Boydell S., *Representing carbon property rights*. FIG Working Week (2010) at 6. Lyster R., *The New Frontier of Climate Law: Reducing Emissions from Deforestation and Degradation*, (2009) 26: 6, *Environmental and Planning Law Journal*, 417-456 at 37.

⁴⁸ Fairlie K and Boydell S., *Representing carbon property rights*. FIG Working Week (2010) at 6. Available: http://www.fig.net/pub/fig2010/papers/ts01e%5Cts01e_fairlie_boydell_4224.pdf [accessed 18 April 2014].

⁴⁹ Gray K and Gray S., *Elements of Land Law* 5th ed. (2009) at 594.

⁵⁰ Bouckaert divides property rights into ownership rights and rights to use. See Bouckaert B., *Property* (ed.), *Law and Economics: Encyclopedia of Law and Economics*, 2nd ed. (2010) at 33. But Hepburn points out the confusion that may arise in some cases. The author indicates that it is not clear to draw the distinction between “ownership” and “right to use”. An example cited is the property rights in the human body. Hepburn S., *Principles of Property Law*, 2nd ed., (2001) at 26. Maguire explains that from a government “perspective, the most important considerations in the design of forest regulation are issues connected with forest tenure and use rights. Such rights lie at the heart of forest regulation, as they define who holds the right to use the forest area and how it may be used, depending on the nature of the right conferred.” Maguire R., *Global Forest Governance: Legal Concepts and Policy Trends*. (2013) at 15.

systems⁵¹ or *profit à prendre*⁵² in common law systems, the right of *servitude* in civil law systems, the right of “*easement*”⁵³ in common law and *covenant* in common law.⁵⁴ Boydell et al noted that “existing property law is vexed and often embedded over metaphors such as the “bundle of rights”⁵⁵ to explain a normative view of property. This is strange, given that “the categories of interests in land are not closed. They change and develop as society changes and develops.”⁵⁶ This general overview is important for the discussion on carbon rights because linking carbon rights to property rights would mean to represent a “claim to a benefit stream that the state agrees to protect through the assignment of duty to others who may interfere with the benefit stream.”⁵⁷

5.2.4 Potential Verification of Carbon Rights

There exist four main approaches in creating a new set of property rights. With respect to carbon sequestration in Australia, O’Connor observes that options for legislative drafters to create a new set of property rights are by: assimilation; analogy; full statutory specification as a new class of right; and specification through statutory agreements.⁵⁸

The assimilation approach is used to create new statutory rights by equating them with an existing common law class but that is subject to statutory modifications. The benefit of this approach is that it allows the import of a set of ready-made rules, but the danger is that it can lead to incoherence if the new right does not fit.⁵⁹ An example cited is a statutory endorsement of the concept of carbon rights as a *profit à prendre* as provided in some states

⁵¹ Bouckaert B., Property (ed.), *Law and Economics: Encyclopedia of Law and Economics*, 2nd ed. (2010) at 36.

⁵² The term *profit à prendre* refers to a right of taking. It confers upon the holder a right to “profit” from the natural produces obtained from the land. It is best understood within the broader framework of the concept of bundle of rights. Hepburn S., Carbon Rights as New Property: The benefits of statutory verification. (2009) 31 *Sydney Law Review* 239 at 245 and 258.

⁵³ “A conservation easement is a legal agreement, made between a landowner and an eligible organization, that serves to restrict the activities that may take place on the landowner’s property.” Cited in Aaronson D.L. and Manuel M.B., Conservation Easements and Climate Change. (2008) 8:2 *Sustainable Development Law and Policy* at 27.

⁵⁴ Gary C., Views of the forest: Property law and carbon rights. (2013) 15 *Asia Pacific Journal of Environmental Law* 69-94 at 70.

⁵⁵ Boydell S. et. al., Carbon Rights in Context. (2009) 11:2 *Environmental Practice* at 105-6.

⁵⁶ Ibid.

⁵⁷ Bromley D., *Environment and Economy: Property Rights and Public Policy*, (1991) Cited in Palmer C., Property rights and liability for deforestation under REDD+: Implications for “permanence” in policy design. (2011) 70 *Ecological Economics* 571-576 at 571.

⁵⁸ O’Connor P., Contractual Specification of New Property Rights in Resources: The Problem of Measurement Costs. (2013) 39:1 *Monash University Law Review* 38-65 at 52-53.

⁵⁹ Ibid at 53.

in Australia.⁶⁰ However, this approach has been criticised because this reference represents an inappropriate profile for carbon interests as it does not accurately reflect their character and form. For this reason, it does not respond to the variety of structural and conceptual issues underpinning their innovative character.⁶¹ For example, if carbon rights mean a profit then:

What is the physical scope of this right, what are its incidental rights and how does it affect the rights of the underlying landowner? A right of taking would ordinarily include any associated rights necessary to support the act of physically removing natural produce from the land. A right to the intangible benefit flowing from carbon storage does not, however, have any identifiable physical boundaries making the nature and scope of associated rights obscure in the absence of express articulation.⁶² [Therefore] the creation of new carbon land interests may generate interpretive difficulties for courts and other regulatory bodies to comprehend the nature and scope of these unique interests and their impact upon the property framework.⁶³

The analogy approach allows the specification of the new right by correlation with a conventional class of right, so that the rules applicable to that right are adopted.⁶⁴ The full statutory specification is undertaken to constitute the new right as a *sui generis* right, a novel statutory form with its own rule set.⁶⁵ Hepburn proposes that the fundamental difficulty of connecting carbon rights to pre-conceived and incompatible common law categories is avoided, if such interests are fully regulated within a statutory framework.⁶⁶ Therefore, the most effective way of formalising *and* responding to the carbon interest as a property right is through the implementation of specific regulatory provisions detailing the form, content and

⁶⁰ Hepburn S., Carbon Rights as New Property: Towards a Uniform Framework. Volume, DOI: (2005) at 7. McMahon M., Carbon Sequestration Rights as They Apply to a Conveyancing Practice. Speech Presented at the Brothers and Sisters in Law conference at Parramatta on 19th and 20th March, (2011). Available: <http://mmmlegal.com.au/public-speaking> [accessed 16 April 2014]. See also Boydell S. et. al., Carbon Rights in Context. (2009) 11:2 *Environmental Practice* at 105 and 110.

⁶¹ Ibid.

⁶² Hepburn S., Carbon Rights as New Property: The benefits of statutory verification. (2009) 31 *Sydney Law Review* 239 at 262.

⁶³ Hepburn S., *Carbon Rights as New Property: Towards a Uniform Framework.*, (2005) at 8.

⁶⁴ O'Connor P., Contractual Specification of New Property Rights in Resources: The Problem of Measurement Costs. (2013) 39:1 *Monash University Law Review* 38-65 at 53. Gary C., Views of the forest: Property law and carbon rights. (2013) 15 *Asia Pacific Journal of Environmental Law* 69-94 at 70. See also Hepburn S., Carbon Rights as New Property: The benefits of statutory verification. (2009) 31 *Sydney Law Review* 239 at 255 and 263. See also Boydell S. et. al., Carbon Rights in Context. (2009) 11:2 *Environmental Practice* at 105 and 110.

⁶⁵ O'Connor P., Contractual Specification of New Property Rights in Resources: The Problem of Measurement Costs. (2013) 39:1 *Monash University Law Review* 38-65 at 54.

⁶⁶ Hepburn S., Carbon Rights as New Property: Towards a Uniform Framework. Volume, DOI: (2005) at 8.

scope of this unique and important natural resource interest.⁶⁷ The author cites legislative provisions in Western Australia as a potential model law to draw from. In particular, the said law makes proprietary verification dependent upon registration.⁶⁸ Hepburn has also outlined advantages of articulating carbon sequestration rights as a *sui generis* statutory right. Drawing upon Merrill and Smith, she identifies the advantages as including clarity, universality, comprehensiveness, stability and implicit compensation.⁶⁹ She then points out that statute “is an appropriate method of introducing new proprietary interests that are associated with a difficult subject matter because it ensures the introduction of detailed provisions to regulate unclear or ambiguous areas.”⁷⁰ This is because “statutory proprietary interests can only arise where the requirements expressly set out in the statute are proven.”⁷¹ In addition, the statute will also clarify the rights attached to the interest.⁷² As mentioned earlier, while a fully elaborated statutory scheme is ideal, examples are rare due to the difficulty of the task.⁷³ At the same time statutory interests expressed as *sui generis* have been held to be inherently susceptible to change and legislative whim, and have therefore acquired a diminished proprietary status by comparison with their institutionalised common law counterparts.⁷⁴

There has also been an argument to derive carbon rights from conservation easements. This is an option recommended in place of the *profit à prendre* and pure statutory interest.⁷⁵ If the conception of carbon rights is compared to specific easements, then it becomes clear that they are owned by those who invest and compensate the land owner.⁷⁶ This means carbon rights

⁶⁷ Hepburn S., Carbon Rights as New Property: The benefits of statutory verification. (2009) 31 *Sydney Law Review*, 239 at 245.

⁶⁸ By the reference to “a pure statutory interest” Hepburn means “a property interest which is not aligned with any common law form.” Hepburn S., Carbon Rights as New Property: The benefits of statutory verification. (2009) 31 *Sydney Law Review*. 239 at 242.

⁶⁹ O’Conner P. et. al., From Rights to Responsibilities: Reconceptualising Carbon Sequestration Rights in Australia. (2013) 30:5 *Environmental and Planning Law Journal*, at 12.

⁷⁰ Hepburn S., *Principles of Property Law*, 2nd ed., (2001), at 26.

⁷¹ *Ibid.*

⁷² *Ibid.*

⁷³ O’Connor P., Contractual Specification of New Property Rights in Resources: The Problem of Measurement Costs. (2013) 39:1 *Monash University Law Review* 38-65 at 54.

⁷⁴ McMahon M., Carbon Sequestration Rights as They Apply to a Conveyancing Practice. Speech Presented at the Brothers and Sisters in Law conference at Parramatta on 19th and 20th March, (2011). Available: <http://mmllegal.com.au/public-speaking> [accessed 12 April 2014].

⁷⁵ Karsenty A. et. al., “Carbon rights”, REDD+ and payments for environmental services. *Environmental Science* (2012) at 24. Hepburn S., Carbon Rights as New Property: The benefits of statutory verification. (2009) 31 *Sydney Law Review*, 239 at 263.

⁷⁶ Karsenty A. et. al., “Carbon rights”, REDD+ and payments for environmental services. (2012) *Environmental Science* at 24.

must be separated from land tenure in order to be compared to easements.⁷⁷ However, the scope and character of such a benefit is still unclear in this case. Be that as it may, this approach has not yet been endorsed in any of the Australian legislative frameworks.⁷⁸

Having noted the above challenges, Australian legislators have increasingly resorted to a specification through statutory agreements. This approach requires that the rights be only partly defined and specified by the statute, and their content be regulated by individualised statutory agreements.⁷⁹ In some cases, the content of the agreements is partly structured through incorporated guidelines setting out standard requirements.⁸⁰

Apart from the above examples, others have proposed an option to classify carbon rights as a web of interests.⁸¹ This argument is motivated by the social dimensions of carbon property rights that need to be considered—such as who should be allowed to *own* carbon property rights. In particular, questions that arise are: do carbon rights represent an individual right, a right you can purchase or allocate, or a right that is held by countries or industry?⁸² The proponents of carbon rights as a web of interests argue that in the face of scientific, social, and legal uncertainty about the future direction of carbon property rights, what is needed is a new way to conceive of the complex web of interests.⁸³ The authors add that we “need to come to terms with the consequences of isolating carbon property rights from the unfortunate metaphor of ‘bundle of rights’ that currently make up Australian property law.”⁸⁴ This means that ownership:

is no more than a "bundle of rights" qualified in their extent by law and the limitations of the actions which can be brought to enforce the rights. The three elements of ownership - the right of indefinite user; the right of unrestricted disposition; and the unlimited duration of the right of enjoyment - are each subject to qualification, direct or indirect.⁸⁵

⁷⁷ Ibid.

⁷⁸ Hepburn S., Carbon Rights as New Property: The benefits of statutory verification. (2009) 31 *Sydney Law Review* 239 at 263.

⁷⁹ O'Connor P., Contractual Specification of New Property Rights in Resources: The Problem of Measurement Costs. (2013) 39:1 *Monash University Law Review* 38-65 at 54.

⁸⁰ Ibid.

⁸¹ Boydell S. et. al., Carbon Rights in Context.(2009) 11:2 *Environmental Practice* at 111.

⁸² Ibid.

⁸³ Ibid at 106 and 111.

⁸⁴ Ibid at 111.

⁸⁵ Food and Agriculture Organization of the United Nations (FAO). Available: <http://www.fao.org/docrep/007/y5672e/y5672e04.htm> [accessed 18 April 2014].

This chapter does not seek to engage and add to the critical analysis of the question of what has been presented above. As mentioned earlier, its focus is on an examination of what carbon rights intend as well as the actors or forces behind that intention. This analysis is useful because it will provide clues as to how carbon rights might be framed. Once that is done, we can find ways to identify potential perils and promises that might be associated with those forces.

5.2.5 Carbon Rights, Carbon Credits and Benefit Sharing

The concept of “carbon rights” appears to be synonymous with the term “benefit sharing” but the two concepts do not refer to the same thing.⁸⁶ In most countries these concepts are closely associated with land tenure and resource tenure.⁸⁷ Some scholars argue that defining carbon rights is the first stage in a process of distributing the benefits flowing from carbon sequestration amongst different stakeholders.⁸⁸ Given the challenges of verification of carbon rights discussed above, carbon rights can only be defined broadly as “intangible assets created by legislative and/or contractual arrangements that allow the recognition of separate benefits arising from carbon sequestration.”⁸⁹ Following this, the term “carbon rights” contains two fundamental concepts: (1) the property rights to sequestered carbon (i.e. emission reductions and any increases in stocks contained in the carbon sink; and (2) the rights to benefits that arise from the transfer of these property rights, such as through emissions trading schemes.⁹⁰

⁸⁶ Martijin W. et. al., *Creating an enabling legal framework for REDD+ investments in Kenya*. Ministry of the Environment, Sweden (2014) at 20. Angelsen A. et.al., *Analysing REDD+: Challenges and choices*. (2012) at 9.

⁸⁷ Angelsen A. et.al., *Analysing REDD+: Challenges and choices*, (2012) at 9.

⁸⁸ Ibid. Also see Martijin W. et. al., *Creating an enabling legal framework for REDD+ investments in Kenya*. Ministry of the Environment, Sweden (2014) at 20.

⁸⁹ Cited in Karsenty A. et. al., “Carbon rights”, REDD+ and payments for environmental services. (2012) *Environmental Science and Policy* at 2.

⁹⁰ Peskett L. and Brodnig G. Carbon Rights in REDD+: Exploring the Implications for Poor and Vulnerable People. World Bank/REDD-net 2011; 1-34 at 3. See also Skutsch M., *Slicing the REDD+ pie: controversies around the distribution of benefits*. Review (Undated). And Skutsch M. et. al., *Rights to carbon and payments for services rendered under REDD+: Options for the case of Mexico*. (2013) 23 *Global Environmental Change* 813-825 at 815. The authors point out that carbon rights do not necessarily imply ownership of carbon. As such the term could refer simply to the right to some share of the benefits. O’Conner P. et. al., *From Rights to Responsibilities: Reconceptualising Carbon Sequestration Rights in Australia*. (2013) 30:5 *Environmental and Planning Law Journal*, at 4.

It is emphasised that it is a misnomer to refer to carbon rights to mean land tenure or resource tenure.⁹¹ Carbon rights are generated by investment and are awarded once there are emission reductions below reference levels. This means carbon rights are not awarded based on the carbon found in the forest (see chapter 4 which indicates that in the third phase benefits i.e. payments will be based on performance).⁹² Karsenty added that if all the carbon credits were held by the landowner, then there would be no incentives to the investor to invest in REDD+ projects.⁹³ This is because in a market-based approach in forestry and land-use mitigation activities carbon credits are the only tangible financial expression of the carbon rights.⁹⁴ Using this line of thinking, having land tenure and resource tenure cannot be said to be owning carbon rights.⁹⁵ This has also been the case in the case of the CDM.⁹⁶ Karsenty cites the carbon rights ownership rules of the CDM to emphasise this point. In particular for an enterprise in the energy sector the carbon credits go to the investor whose investments triggered emission reductions.⁹⁷ If, by law, the “carbon rights” (the value of the expected carbon credits) were allocated to the landowner rather than to the investor, it would allow only large private landowners (with financial capacities and REDD+ opportunities) to undertake such projects.⁹⁸ However, government could decide by law that carbon credits must be shared between the investor and the forest owner or land owner (the communities) but this would not alter the ownership of carbon rights.⁹⁹

The arguments presented above are compelling but one has to take into account the context in which REDD+ has been negotiated in order to identify more possible ways of conceptualising carbon rights. Section 3.7 of chapter 3 has discussed how REDD+ can be construed as an offset or non-offset mechanism. With the twofold interpretation in mind, it is useful to think of carbon rights in two fundamentally different aspects as discussed by various authors who contend that “carbon rights” refer to:

⁹¹ Karsenty A. et. al., “Carbon rights”, REDD+ and payments for environmental services. (2012) *Environmental Science and Policy* at 5.

⁹² Ibid.

⁹³ Ibid at 25.

⁹⁴ Ibid at 9.

⁹⁵ Ibid at 5.

⁹⁶ Ibid.

⁹⁷ Ibid at 24.

⁹⁸ Ibid at 6.

⁹⁹ Ibid at 5.

1. The property rights to sequestered carbon, which is physically contained in land, trees and soil, but does not necessarily coincide with the property rights over the physical resources.¹⁰⁰ This gives the holder the rights to benefits from payments for emissions reductions from non-market sources. In this case no tradable carbon rights are created.¹⁰¹ Under this approach carbon rights may also define the management responsibilities associated with a specific area of forest.
2. The property right to sequestered carbon which is distinct from the right to benefit from selling carbon credits.¹⁰² Under this approach carbon rights may only define the commercial aspect and it is left up to the actors to define the management responsibilities associated with a specific area of forest. The purpose of distinguishing between carbon credit and carbon rights is that credits can be freely traded on the carbon market separately from the latter.¹⁰³ Viewed in this way, an observation from the Australian Carbon Farming Act becomes helpful. The Act provides that carbon credits are issued to the actor who holds carbon rights, “but thereafter the credits can be aggregated or disaggregated and traded in the market separately from the real property right.”¹⁰⁴ This means after the first transaction, the credit will pass to an actor who has no real property right in the land. At this stage there is no effective contractual or other means between the two actors of ensuring that the carbon remains sequestered or ensuring the permanence. The task of ensuring permanence is established by the legislation.¹⁰⁵

A decision of a preferable conceptualisation of carbon rights is likely to be determined by the source of finance as discussed in section 5.3.3 below. The twofold interpretation of carbon rights as illustrated above will have different legal implications when land tenure and forest tenure are taken into account. This is so because land tenure and forest tenure are provided by

¹⁰⁰ Luttrell C. et. al., *Who should benefit and why? Discourses on REDD+ benefit sharing*, In Angelsen A. et.al., *Analysing REDD+: Challenges and choices*, (2012) at 145. Costenbader J. (ed.), *Legal Frameworks for REDD: Design and Implementation at the National Level*. IUCN, Gland, Switzerland (2009) at 27.

¹⁰¹ REDD-net. Carbon Rights in REDD+: *Towards a Common Understanding*—Summary of Cancun Event December (2010). Available: <http://redd-net.org/resource-library/carbon-rights-in-redd+-towards-a-common-understanding-sum> [accessed 14 April 2014].

¹⁰² Ibid. See also Costenbader J.(ed.), *Legal Frameworks for REDD: Design and Implementation at the National Level*. IUCN, Gland, Switzerland (2009) at 27.

¹⁰³ O’Conner P. et. al., *From Rights to Responsibilities: Reconceptualising Carbon Sequestration Rights in Australia*. (2013) 30:5 *Environmental and Planning Law Journal*, at 5.

¹⁰⁴ Ibid. Also see McKellar R. and Eckert E., *Securing rights to carbon sequestration: The Western Australian experience*. (2007-2008) 8 *Sustainable Dev. L. and Pol’y* 30 at 30.

¹⁰⁵ Ibid O’Conner P. et. al., (2013) at 5. McKellar observed that while the scientific understanding of carbon sequestration is conceptually simple (as explained in section 5.2.1 above), there are significant challenges in converting those carbon removals or enhancement of carbon sequestration into commercially tradeable assets. This is because, any emission accounting or trading program which seeks to include carbon credits resulting from organic sequestration must address several key issues, of which additionality, permanence, and ownership are the most important. McKellar R. and Eckert E., *Securing rights to carbon sequestration: The Western Australian experience*. (2007-2008) 8 *Sustainable Dev. L. and Pol’y* 30 at 30.

statutes, therefore it is helpful to assess what different interpretations of carbon rights as provided above mean against the general backdrop of the respective statutes of the two case study countries. Such statutes set the framework for the structure and respective rights and obligations of different actors at a domestic level. This undertaking is discussed in chapter 6.

The above discussion brings us to the issue of benefit sharing. The claim for benefits can depend on whether the carbon rights holders are those who possess the rights to the carbon stock itself or those who have rights that affect (i.e. decrease emissions) the stock either directly or indirectly (i.e. within and outside carbon stock). This aspect is elaborated on in section 5.3.4. For now it is important to stress that since REDD+ is ultimately required to be implemented at a national level (see chapter 4) “a benefit distribution mechanism at the national level will need to be considered in addition to project-level arrangements.”¹⁰⁶ From a theoretical perspective, benefit sharing is often described as either “horizontal” or “vertical” as follows:¹⁰⁷

- “Vertical” distribution occurs between different institutional levels, such as a multilateral fund to a national government, and/or a national government to a sub-national government. A fund structure could be used for this purpose.
- “Horizontal distribution” refers to how benefits are distributed between participants at the local level, for example, between communities and/or between households. Legal vehicles used to distribute money “horizontally” could be community trust funds or contracts (among others).

5.2.6 Scope of Carbon Rights

Carbon rights have also been discussed from the interaction with human rights and ecological dimensions. Carbon rights can be interpreted as a means to eliminate property regimes that influence deforestation and degradation on the one hand and an incentive to enhance carbon stocks in forests. It is for this understanding that an effort is made to see how the scope of carbon rights will be in compliance with and possibly complement human rights,¹⁰⁸ land use law, land tenure and resource tenure, and environmental laws.¹⁰⁹

¹⁰⁶ Martijin W. et. al., *Creating an enabling legal framework for REDD+ investments in Kenya*. Ministry of the Environment, Sweden (2014) at 33.

¹⁰⁷ Chapman S. and Wilder M., *Defining the legal elements of benefit sharing in the context of REDD+*. REDD+ Law Project - *Working Paper* (2014) at 17.

¹⁰⁸ Peskett L. and Harkin Z., “Risk and Responsibility in Reduced Emissions from Deforestation and Degradation”, *Forest Policy and Environment Programme Forestry Briefing* (2007), 1, at 4. One can learn from the other fields how to define carbon rights so as to complement human rights law. An example of this approach

5.2.6.1 Interaction with Human Rights

How can carbon property rights “complement” or be “consistent” with the objectives of international human rights law? To answer this, one must begin by considering the objectives of human rights instruments. These objectives are well known to oblige states parties to respect, (i.e., to refrain from activities infringing upon rights), to take positive measures to fulfill rights and protect subjects within their jurisdiction against violations carried out by third parties.¹¹⁰ This means that, exclusory claims of property (in this case carbon) rights stop where the infringement of basic human rights and freedoms begins.¹¹¹ This is why the Supreme Court of New Jersey observed in *State v Shack* that property “rights serve human values. In so doing, property rights are recognised to that end, and are limited by human values.” The same court also concluded that, “an owner must expect to find the absoluteness of his property rights curtailed by the organs of society, for the promotion of the best interests of others for whom these organs also operate as protective agencies.”¹¹² Property rights can be curtailed if they violate human rights such as a right to life. With reference to the Indian Supreme Court jurisprudence, Lyster points out that, the Court curtailed property rights in tropical rainforests because such rights threatened the right to life of those who are regarded as “squatters”, or exercising rights of “resource” tenure, in such rainforests without any formal recognition of tenure.¹¹³ Lyster further noted that the “court held that since the eviction of pavement and slum dwellers would lead, in a vicious cycle, to the deprivation of their employment this would infringe the right to life which included the “right to

has been undertaken by property rights reform in the U.K. and they can be instructive in the REDD+ legal analysis. See Easements, Covenants and Profits À Prendre. The Law Commission Consultation Paper No 186. Available:

http://lawcommission.justice.gov.uk/docs/cp186_Easements_Covenants_and_Profits_a_Prendre_Consultation.pdf [accessed 12 April 2014].

¹⁰⁹ Decision 1/CP.16, FCCC/CP/2010/7/Add.1, 11 Dec. 2010, Appendix 1, para. 2 (a) which provides that REDD activities should “complement” or be “consistent with relevant international conventions and agreements”. Other concerns include the need to address the interconnectedness and the impact of carbon bio-sequestration on water rights in the same catchment. Fairlie K and Boydell S., Representing carbon property rights. FIG Working Week (2010) at 14.

¹¹⁰ Savaresi A., REDD+ and Human Rights: Addressing Synergies between International Regimes, (2013) 18:3: *Ecology and Society* 5.

¹¹¹ Gray K., Property in Thin Air, (1991) 50 *Cambridge Law Journal* 252-307 at 42. See also Gray K and Gray S., *Elements of Land Law* 5th ed. (2009) at 89.

¹¹² Gray K., Property in Thin Air, (1991) 50 *Cambridge Law Journal* 252-307 at 42.

¹¹³ Lyster R., REDD+, Transparency, Participation and Resource Rights: The Role of Law. *Sydney Law School Research Paper* No. 10/56, (2010) at 8. See also Lyster R., The New Frontier of Climate Law: Reducing Emissions from Deforestation and Degradation. (2009) 26:6, *Environmental and Planning Law Journal*, 417-456, at 43-44.

livelihood”.”¹¹⁴ The underlying obligation is to use property rights in a way which does not harm another.¹¹⁵

5.2.6.2 Interaction with Ecological Dimensions

In considering the environmental dimension, the process of incorporating carbon rights in the design of REDD+ policies should take into account sound land-use planning by considering the whole landscapes, rather than just forests.¹¹⁶ The language of ecosystem services has allowed shifts in policy away from treating the environment as an externality, and away from governing natural resources one by one.¹¹⁷ The conservation of biodiversity, however, does not necessarily complement carbon sequestration. As a matter of fact, a focus on maximising carbon stocks may have detrimental impacts on the provision of other ecosystem services. An example cited is that the plantations of invasive species could provide rapid carbon sequestration but with a negative impact on biodiversity.¹¹⁸ Therefore, the same line of thinking discussed above applies in the context of carbon rights. That is to say that carbon rights should be curtailed if they violate other ecosystem services such as biodiversity conservation.

5.3 Ownership

5.3.1 Introduction

The question of ownership in any given case is complicated by the potential for different owners, since a carbon sequestration project may be developed and managed by a person who is not the owner of the reservoir.¹¹⁹ The problem associated with ownership is the

¹¹⁴ Lyster R., REDD+, Transparency, Participation and Resource Rights: The Role of Law. *Sydney Law School Research Paper* No. 10/56, (2010) at 8. See also Lyster R., The New Frontier of Climate Law: Reducing Emissions from Deforestation and Degradation. (2009) 26:6, *Environmental and Planning Law Journal*, 417-456, at 43-44.

¹¹⁵ Glazewski J., “The rule of law: opportunities for environmental justice in the new democratic legal order” in D. McDonald (ed.), *Environmental Justice in South Africa*, (2002).

¹¹⁶ Rival L.M., From Carbon Projects to Better Land-Use Planning: Three Latin American Initiatives, (2013) 18:3 *Ecology and Society* 17.

¹¹⁷ Ibid.

¹¹⁸ Savaresi A., Reducing Emissions from Deforestation in Developing Countries under the UNFCCC: Caveats and Opportunities for Biodiversity. Forthcoming, (2011) 21 *Yearbook of International Environmental Law* at 13.

¹¹⁹ Emission Reduction Trading Protocol Team, *A Basis for Greenhouse Gas Trading in Agriculture* Calgary: Climate Change Central, (2002). Hepburn S., Carbon Rights as New Property: The benefits of statutory verification. (2009) 31 *Sydney Law Review* 239 at 245.

novel nature of the carbon sequestration right.¹²⁰ Complexity may be further increased where the title to particular land is already split in various ways (which may be incompatible with REDD+ objectives) through grants of surface and mineral rights,¹²¹ as well as other land use such as protected areas. Admittedly, the question of ownership “raises some of the most complex issues associated with the creation and trading of organic carbon sequestration rights, especially where other benefits, such as harvestable timber, improved ground water quality, erosion control, or biodiversity enhancement, are created by the same actions.”¹²² If you own the land, do you necessarily own the trees? If you own the trees, do you necessarily own the carbon?¹²³ It follows that in attempting to address the question of ownership the following issues below should be taken into account.

5.3.2 What can be Owned?

The distinction about what can be owned is essential for descriptive clarity. For example, if we say water is inalienable, for example, we need to know whether we are referring to the stock, the flow, or both.¹²⁴ The distinction is also important because it represents a “seam” of sorts in the common-pool resource that will often mark a change in property rights or ownership arrangements.¹²⁵ As discussed in chapters 3 and 4, REDD+ activities entail both increases in carbon stocks and estimated decreases in the rate of loss of carbon stocks.¹²⁶ Therefore, there is a need to make a legal distinction between rights to carbon stocks, including any increases in stocks and rights to reductions in emissions of carbon.¹²⁷ O’Conner et al point out that one of the conceptual deficiencies in past legislative attempts to define carbon rights was the failure to distinguish between a right to claim a credit for the emissions

¹²⁰ Kennett S. A. et. al., Property Rights and the Legal Framework for Carbon Sequestration on Agricultural Land. (2005-2006) 37 *Ottawa L. Rev.* 171 at 179. See also, Karsenty A. et. al., “Carbon rights”, REDD+ and payments for environmental services. (2012) *Environmental Science and Policy* at 5.

¹²¹ Ibid Kennett S.A. (2005-2006) at 179.

¹²² McKellar R. and Eckert E., Securing rights to carbon sequestration: The Western Australian experience. (2007-2008) 8 *Sustainable Dev. L. & Pol’y* 30 at 30.

¹²³ Takacs D. Forest carbon: Law and property rights. Arlington, USA *Conservation International* (2009) at 14.

¹²⁴ Fennell L.A. Ostrom’s Law: Property Rights in the Commons. (2011) 5:1 *International Journal of the Commons*.

¹²⁵ Ibid.

¹²⁶ Skutsch M., Slicing the REDD+ pie: controversies around the distribution of benefits. Review (Undated). See also Skutsch M. et. al., Rights to carbon and payments for services rendered under REDD+: Options for the case of Mexico. (2013) 23 *Global Environmental Change* 813–825 at 815.

¹²⁷ Skutsch M., Slicing the REDD+ pie: controversies around the distribution of benefits. Review (Undated). See also Skutsch M. et. al., Rights to carbon and payments for services rendered under REDD+: Options for the case of Mexico. (2013) 23 *Global Environmental Change* 813–825 at 815. Takacs, D. Forest carbon: Law and property rights. *Arlington, USA, Conservation International* (2009) at 13.

reduction from sequestered carbon (the credit) and a right to the tonne of sequestered carbon or increase the sequestered carbon in the relevant carbon pool on land (the real property right).¹²⁸ This raises the question of liability. Drawing from the analysis of carbon capture and storage by Glazewski,¹²⁹ there is a likelihood that the carbon sequestration project developer and manager and the owner of the reservoir will need to conclude a rental agreement for the utilisation of the reservoir. Such agreement will likely specifically assign, to one or other of the parties, duties that usually follow ownership/control of land but which can be modified by contract, e.g. liability for damage that might be caused by activities undertaken on the land or activities which might damage the object of the project such as forest fires.¹³⁰ An observation from Australian Carbon Farming Act is that a distinction is made between a carbon credit as a chose in action (personal property) and a carbon right as a real property.¹³¹ O’Conner et al cited Passero who argued that between the aforementioned distinctions, it is the credit that has value for exchange on the carbon market.¹³² By the same token, a carbon right as a real property is the one with value in a non-carbon market.

5.3.3 Should Carbon Property Rights be a Separate Property Right?

Having discussed what can be owned, what follows is an effort to determine whether it is preferable to separate carbon rights from land and resource tenure.¹³³ This is because it is not

¹²⁸ O’Conner P. et. al., From Rights to Responsibilities: Reconceptualising Carbon Sequestration Rights in Australia. (2013) 30:5 *Environmental and Planning Law Journal*, at 4. Also see Skutsch M., Slicing the REDD+ pie: controversies around the distribution of benefits. *Review* (Undated). See also Skutsch M. et. al., Rights to carbon and payments for services rendered under REDD+: Options for the case of Mexico. (2013) *Global Environmental Change* 23 813–825 at 815.

¹²⁹ Glazewski J. et. al., Carbon Capture and Storage (CCS): Towards a Regulatory and Legal Regime in South Africa Institute of Marine and Environmental Law (IMEL) and African Climate and Development Initiative (ACDI), University of Cape Town, Cape Town (2012) at 21.

¹³⁰ Ibid.

¹³¹ O’Conner P. et. al., From Rights to Responsibilities: Reconceptualising Carbon Sequestration Rights in Australia. (2013) 30:5 *Environmental and Planning Law Journal*, at 5.

¹³² Ibid. Others argue that the right to emissions reduction and/or the right to maintain or increase the tonne of sequestered carbon are the ones which will be “monetised”. Martijin W. et. al., Creating an enabling legal framework for REDD+ investments in Kenya. Ministry of the Environment, Sweden (2014) at 30. For the historical development of carbon rights from the commercial perspective see Thompson A. and Campbell-Watt R., Carbon Rights - Development of the Legal Framework for a Trading Market., (2004) 23 *Australian Resources and Energy L. J.* 156-162 at 157.

¹³³ Baker & McKenzie. “Background Analysis of REDD: Regulatory Frameworks”, 53–54. Report prepared for the Terrestrial Carbon Group and UN-REDD Programme. Sydney, Australia: Baker & McKenzie, (2009) at ii. Takacs, D. Forest carbon: Law and property rights. Arlington, USA, Conservation International (2009) at 13-14. Lyster R., The New Frontier of Climate Law: Reducing Emissions from Deforestation and Degradation, (2009) 26:6 *Environmental and Planning Law Journal*, at 35. See also Understanding REDD+: The Role of Governance, Enforcement and Safeguards in Reducing Emissions from Deforestation and Forest Degradation. Global Witness (2010).

automatically legally obvious that the owner of the tree, the forest, the soil, or the parcel of land will necessarily own the sequestered carbon.¹³⁴ In a legal context a tree is often considered to be part of the land from the perspective of real property in some countries (the United Kingdom and Australia) but not others (Uganda and Tanzania) since there is a possibility of individual tree ownership.¹³⁵ From an ecological perspective, carbon may be “captured” by trees in the process of sequestration – yet it cannot be separated from the tree while the tree is alive.¹³⁶ The search for an answer should perhaps begin by considering the potential complexities illustrated by the following example:¹³⁷

If X owns [rights over] the land and Y owns the carbon sequestration potential [rights], is it clear that Y can require X to manage the land as Y wishes? If X sells the [rights over that] land to Z, does Y still have full rights to manage the land to maximize the carbon sequestration potential, as one would wish for [achieving 3Es?] Can Y sell her property rights to manage the land to A, or if Y wishes to give up her property rights in carbon sequestration potential, do those rights revert to Z, the new owner of the land?

The above exposition “demonstrate[s] that concepts of ownership become more complex when the interdependencies of ecological systems are contrasted against individual rights across land elements.”¹³⁸ The example also raises the possibility of potentially competing claims by various legitimate claimants which has implications for the achieving the 3Es. Given this possibility, it is suggested that developed countries can provide lessons of how to address such problem. This is by separating carbon rights “from forest or land rights and how

<http://www.forestcarbonpartnership.org/sites/forestcarbonpartnership.org/files/Documents/PDF/Apr2011/Understanding%20REDD+.pdf> [accessed 12 April 2014].

¹³⁴ Baker & McKenzie. “Background Analysis of REDD: Regulatory Frameworks”, 53–54. Report prepared for the Terrestrial Carbon Group and UN-REDD Programme. Sydney, Australia: Baker & McKenzie, (2009) at ii. Takacs, D. Forest carbon: Law and property rights. Arlington, USA, Conservation International (2009) at 13-14. Lyster R., The New Frontier of Climate Law: Reducing Emissions from Deforestation and Degradation, (2009) 26:6 *Environmental and Planning Law Journal*, 417-456, at 35. See also Understanding REDD+: The Role of Governance, Enforcement and Safeguards in Reducing Emissions from Deforestation and Forest Degradation. Global Witness (2010).

¹³⁵ Fairlie K and Boydell S., Representing carbon property rights. FIG Working Week (2010) at 7, citing Fortman L., “The tree tenure factor in agroforestry with particular reference to Africa”, (1985) 2:4 *Agroforestry Systems*, 229-251.

¹³⁶ Fairlie K and Boydell S., Representing carbon property rights. FIG Working Week (2010) at 7.

¹³⁷ Takacs D., Forest carbon: Law and property rights. Arlington, USA, Conservation International (2009) at 14 citing Rosenbaum K.L. et. al., Climate Change and the Forest Sector: Possible National and Subnational Legislation 39 (Rome: Food and Agriculture Agency of the United Nations, 2004).

¹³⁸ Fairlie K and Boydell S., Representing carbon property rights. FIG Working Week (2010) at 7.

to manage land tenure and issues related to conflicting interests in land.”¹³⁹ Ogle, in contrast, argues that separating carbon rights is an approach that is more suited to Western-style property systems, such as those in Australia, which depends for its efficacy on a robust system of land registration and administration.¹⁴⁰ It is also being indicated that separating carbon rights could enable packaging of these rights into less risky instruments for investors.¹⁴¹ However, separation and trading of carbon rights carries with it increased risks of fraud and corruption as third parties may seek to improperly register carbon rights.¹⁴² It is also pointed out that the “intangible nature of ‘carbon rights’ means the only physical evidence of ownership is a piece of paper and/or an electronic record in a register. This makes fraudulent claims of ownership more difficult to detect.”¹⁴³ The separating of carbon rights means that one has to design a mechanism of administrative structures for carbon rights. In addition, if carbon rights are separated, then it implies that sequestered carbon can be assigned without reform of forest tenure and it could be detrimental to the poor.¹⁴⁴ Thus, it is argued that preliminary evidence suggests that dangers lurk for local tenure security where carbon rights are separated from land tenure.¹⁴⁵

¹³⁹ Baker & McKenzie. “Background Analysis of REDD: Regulatory Frameworks”, 53–54. Report prepared for the Terrestrial Carbon Group and UN-REDD Programme. Sydney, Australia: Baker & McKenzie, (2009) at ii and 31.

¹⁴⁰ Ogle L., REDD+ and Forest Carbon Rights in Melanesia. Synthesis Report of Country Legal Analyses. SPC/GIZ Regional REDD+ Project (2012) at 44.

¹⁴¹ Knox A. et. al., Land tenure and payment for environmental services: Challenges and opportunities for REDD+. (2011) *Land Tenure Journal* at 32.

¹⁴² Ogle L., REDD+ and Forest Carbon Rights in Melanesia. Synthesis Report of Country Legal Analyses. SPC/GIZ Regional REDD+ Project (2012) at 44. Sunderlin W.D. et. al., Forest tenure rights and REDD+: From inertia to policy solutions. In: Angelsen, A., et al. (Ed.), *Realising REDD+: National Strategy and Policy Options*. Centre for International Forestry Research, (2009) at 142. See also Sunderlin W.D., How are REDD+ Proponents Addressing Tenure Problems? Evidence from Brazil, Cameroon, Tanzania, Indonesia, and Vietnam, (2013) xxx *World Development* xx,–xxx, at 15. Knox A. et. al., Land tenure and payment for environmental services: Challenges and opportunities for REDD+. (2011) *Land Tenure Journal* at 32.

¹⁴³ Understanding REDD+: The Role of Governance, Enforcement and Safeguards in Reducing Emissions from Deforestation and Forest Degradation. Global Witness (2010). <http://www.forestcarbonpartnership.org/sites/forestcarbonpartnership.org/files/Documents/PDF/Apr2011/Understanding%20REDD+.pdf> [accessed 19 April 2014].

¹⁴⁴ Sunderlin W.D. et. al., Forest tenure rights and REDD+: From inertia to policy solutions. In: Angelsen, A., et al. (Ed.), *Realising REDD+: National Strategy and Policy Options*. Centre for International Forestry Research, (2009) at 141.

¹⁴⁵ Cotula L. and Mayers J., Tenure in REDD-Start-point or Afterthought? (2009) *Natural Resource Issues* 15. *International Institute for Environment and Development, London, UK* at 25.

From a cost-effective perspective, if rights to benefit from carbon rights are attached to these resources, compensating for opportunity costs will be straightforward.¹⁴⁶ This is because a single individual or group can make a choice whether or not to give up or adapt its other uses of those resources in exchange for the carbon benefits.¹⁴⁷ However, if rights are separated and vested in different individuals, it becomes difficult to align incentives and coordinate behaviours to achieve REDD+ objectives.¹⁴⁸ Those who hold carbon rights will need to find ways to compensate those who hold rights to uses that could interfere with carbon sequestration.¹⁴⁹ This in turn leads to high transaction costs and makes benefit sharing with those who hold other resource rights untenable.¹⁵⁰ To this end, the decision to separate carbon rights needs to take into account the country's land tenure, resource tenure and forest ownership among other issues.¹⁵¹

Earlier, this chapter has argued that in exploring the concept of carbon rights, we must examine what the term intends as well as the actors or forces behind that intention. This analysis is useful because it will provide clues as to how carbon rights might be framed. Martijin et al argue that in “order to attract and manage REDD+ investments (both public and private), countries need to decide on their approach to REDD+ implementation through a series of policy choices, and then implement those policy choices through strong legal frameworks.”¹⁵² An important question for REDD+ host countries to consider, therefore, is how to develop robust legal structures to facilitate REDD+ implementation.¹⁵³ Following from this line of thinking, it is not surprising that carbon rights are separated from the other rights. This is particularly crucial if private finance is part of the sources of finance. The interests of private sectors can be a powerful force to compel the decision to separate carbon

¹⁴⁶ Knox A. et. al., *Forest Carbon Rights Guidebook a Tool for Framing Legal Rights to Carbon Benefits Generated Through REDD+ Programming*. Report Prepared for the United States Agency for International Development, USAID (2012) at 18.

¹⁴⁷ Ibid.

¹⁴⁸ Ibid.

¹⁴⁹ Ibid. However, discussion is available about the issue of measurement costs and mechanism in which property law has conventionally controlled them. O'Connor P., *Contractual Specification of New Property Rights in Resources: The Problem of Measurement Costs*. (2013) 39:1 *Monash University Law Review* 38-65 at 41.

¹⁵⁰ Knox A. et. al., *Forest Carbon Rights Guidebook a Tool for Framing Legal Rights to Carbon Benefits Generated Through REDD+ Programming*. Report Prepared for the United States Agency for International Development, USAID (2012) at 18.

¹⁵¹ Ogle L., *REDD+ and Forest Carbon Rights in Melanesia*. Synthesis Report of Country Legal Analyses. SPC/GIZ Regional REDD+ Project (2012) at 42.

¹⁵² Martijin W. et. al., *Creating an enabling legal framework for REDD+ investments in Kenya*. Ministry of the Environment, Sweden (2014) at 3.

¹⁵³ Ibid.

rights from other rights. We have seen that private actors need to know that they can transfer rights to third parties in order to trade. However, if the source of finance is a public source, then it is possible that a developed country as a financier from a public source would be interested to acquire carbon credits for itself. In this case, carbon rights are likely to be construed to run parallel to the other rights. However, it should be known that both of the two viewpoints will depend on whether the forest is located on public land, private or communal land.

In light of the foregoing issues, it seems to me that a decision to separate carbon rights from land and resource tenure or let carbon rights run in parallel with land and resource tenure depends on two factors: (1) the objectives established in the REDD+ mechanism (taking into account what developing countries (hosts) have proposed and what developed countries (financiers) have agreed); and (2) the demands of the private sectors who wish to trade carbon rights in carbon markets. Given this dichotomy, it becomes clear as to why anyone can legitimately claim benefits arising from carbon sequestration or increase sequestration as explored below.

5.3.4 Legitimate Claim to Benefit from Carbon Credits

An argument in the REDD+ literature indicates that one of the preconditions in any incentive mechanism is to first identify who should be entitled to rewards for positive actions and punished for the negative actions.¹⁵⁴ Thus in REDD+ the question is: who should be rewarded for pursuing practices that reduce carbon emissions or enhance sequestration and held responsible for doing otherwise?¹⁵⁵ Therefore, it may be asked why anyone can legitimately claim benefits arising from carbon credits. This question helps us to investigate possible beneficiaries of the REDD+ activities and their resultant costs that must be met in order to achieve REDD+ objectives. Additionally, the question is pertinent in addressing equity. In discussing equity, the section takes into account a discussion in chapter 2 in section 2.4 where it was indicated that competing versions of what is perceived as equitable are often contested and aligned with the interests of individuals who support them. Such an undertaking allows us to appreciate why, when and how such claimants may claim benefits arising from carbon credits

¹⁵⁴ Robles F.F., *Forest Carbon Tenure in Asia-Pacific: A comparative analysis of legal trends to define carbon rights in Asia-Pacific*. (2012) 89 *FAO Legal Papers Online* at 9. Available: http://www.fao.org/fileadmin/user_upload/legal/docs/lpo89.pdf [accessed 19 May 2014].

¹⁵⁵ *Ibid.*

and why decision-makers should vindicate such claims in the legislation. The category of anyone is grouped in terms of entities that can claim carbon rights. These entities are governments (i.e. local government, central government), “communities”¹⁵⁶ and investors (such as sovereign governments, banks chartered to deal in mitigation credits, individuals, NGOs interested in environmental protection, entities emitting carbon and desiring offsets).¹⁵⁷

5.3.4.1 Host Governments

The host government can legitimately claim benefits arising from carbon sequestration based on two premises. The first relates to the issue of creation of duties and liabilities under international law while the second relates to the principle of permanent sovereignty over natural resources.

With regards to the rights, duties and liabilities under international law, it is well known that states are primary subjects in the creation and development of international law.¹⁵⁸ Such involvement is fueled by mutual agreements and consensus.¹⁵⁹ This collaboration of states in international law creates a blend of “hard laws” in the form of customary rules and treaties, and “soft laws” comprising conference resolutions, guidelines and programmes of action.¹⁶⁰ In turn, international law regulates relations between states but also relations between international organisations and individuals.¹⁶¹ Therefore, states have traditionally been the subject of international law in the sense that they bear rights and duties in international law.

¹⁵⁶ A “community is defined as a group of people grounded in a particular locality with a cultural attachment to forest spaces.” In addition, it is “sometimes suggested that indigenous peoples and environmental groups have appropriated the concept of “local communities” to the exclusion of other local interests with a stake in the forest, such as forest workers.” Humphreys D., *Logjam: Deforestation and the Crisis of Global Governance* (2006) at 15. Others make a distinction between “community” and “local community”. *Community* is defined “... a human group sharing a territory and involved in different but related aspects of livelihoods-such as managing natural resources, producing knowledge and culture, and developing productive technologies and practices”. Since this definition can apply to a range of sizes (such as a city, and the sum of all people inhabiting a watershed) , it has been specified that “*local community*” refers to those communities where members “are likely to have face-to-face encounters and/or direct mutual influences in their daily life”. Borrini-Feyerabend G. et. al., *Indigenous and Local Communities and Protected Areas: Towards Equity and Enhanced Conservation: Guidance on Policy and Practice for Co-Managed Protected Areas and Community Conserved Areas* (2004) at 9. Available: http://cmsdata.iucn.org/downloads/pag_011.pdf [accessed 8 April 2014].

¹⁵⁷ Rosenbaum, K.L., et. al., *Climate change and the forest sector. Possible national and subnational legislation*, FAO Forestry Paper 144. Rome, Italy: FAO (2004) at 32-34.

¹⁵⁸ States have the capacities and immunities to make treaties and agreements which are valid at international level. See Brownlie I., *Principles of Public International Law*, 5th ed., (1998) at 57.

¹⁵⁹ Brownlie I., *Principles of Public International Law*, 5th ed., (1998).

¹⁶⁰ Dugard J., *International law: A South African perspective*, 3rd ed., (2005) at 391-392.

¹⁶¹ Kotzé L.J., and Du Plessis A., “The inception and role of international environmental in domestic biodiversity conservation efforts: The South African experience” (2006) 6 *Queensland University of Technology Law and Justice Journal* 30 at 33.

This does not mean that non-state actors are not the subject of international law.¹⁶² To illustrate how non-state actors assume rights and duties under the climate change regime the reader should consider articles 6 (3) and 12 (9) of the Kyoto Protocol.¹⁶³ Accordingly, article 6 (3) allows Annex I parties to authorise legal entities to participate, under its responsibility, in actions leading to the generation, transfer or acquisition of emission reduction units. In the same vein, article 12 (9) authorises private and/or public entities to acquire certified emission reductions subject to guidance provided by the executive board of the CDM. Palmer has proposed that since international climate law as part of international law tends to be agreed and implemented by national governments, states will ultimately be held liable for maintaining emission reductions below pre-agreed reference levels.¹⁶⁴ This means that the REDD+ mechanism will, following carbon accounting procedure, attribute all “carbon credits” to the national or sub-national level in the first instance.¹⁶⁵ At this point, carbon credits are likely to be legitimately claimed in a legal sense by the governments pursuant to the principle of permanent sovereignty over natural resources as discussed below taking into account the concept of CBDR discussed in chapter 2.¹⁶⁶

¹⁶² Chirwa D.M., *Towards binding economic, social and cultural rights obligations of non-state actors in international and domestic law: A critical survey of emerging norms*. LLD Thesis University of the Western Cape (2005).

¹⁶³ Takacs indicates that the Kyoto Protocol “does not bind private investors, and thus they are not legally required to respect the fundamental goals of sustainable development.” Takacs D., *Forest Carbon Offsets and International Law: A Deep Equity Legal Analysis*. (2010) 22 *Georgetown International Environmental Law Review* 521 at 13. In contrast, Swayne points out that under the climate change regime, the COP and Meeting of the Parties to the Kyoto Protocol (MOP) hold a wide discretion to establish policy directions, create new standards required for the achievement of the UNFCCC objectives and make adjudicative decisions affecting sovereign rights and interests. This rule making discretion of the COP and MOP extends to the domestic sphere and to private individuals and firms. Therefore private parties may choose, following initial authorisation from their state, to participate in the market mechanism as project developers, carbon traders and accredited experts. When this occurs, those participants become subject to the jurisdiction of the regulatory bodies under this climate change regime. Therefore, the MOP and its subsidiary bodies may reach decisions affecting private interests and can enforce the rules of the regime against those private interests without any country involvement in that process. See Swayne N., *The Role of Law in Responding to Climate Change: Emerging Regulatory, Liability and Market Approaches*. PhD thesis Queensland University of Technology (2009) at 116.

¹⁶⁴ Palmer C., *Property rights and liability for deforestation under REDD+: Implications for “permanence” in policy design*. (2011) 70 *Ecological Economics* 571-576 at 575.

¹⁶⁵ Torres B. A. and Skutsch M., *Splitting the difference: a proposal for benefit sharing in reducing emissions from deforestation and forest degradation (REDD+)*. (2012) 3:1 *Forests*, 137-154 at 141.

¹⁶⁶ The extraction of CBDR can be inferred by the Brazil’s Federal Government which “argued that it cannot allow rights to carbon to be sold internationally, as this will simply result in a lower national baseline, which is a concern if it adopts a post-2012 target.” See chapter 6. For a discussion of legitimacy in a legal sense see chapter 2, section 2.4.1.

The principle of permanent sovereignty over natural resources is provided in various resolutions of the UN General Assembly and regularly adopted after 1952.¹⁶⁷ This principle gained significance in terms of seeking greater equity in the international order in 1962 after it was adopted by a landmark resolution of the UN General Assembly.¹⁶⁸ Since then, it has been reaffirmed by the UNFCCC and other related instruments.¹⁶⁹ The principle affords the right of a state to exercise full and permanent sovereignty over its natural resources.¹⁷⁰ So when confronted by the claim of carbon rights in the forests, it is expected that government leaders will assert that the principle of permanent sovereignty over natural resources means that carbon credits are simply the sovereign property of the state. Therefore the state is free to exercise whatever it wishes in the interest of their national development of the well-being of the people.¹⁷¹ It should also be said that the power to exercise such right is often contested by state agencies. Takacs noted that “REDD+ proposals”¹⁷² contain legal wrangling between different levels of government over who controls forests, and who can negotiate their uses. The expectation is that wealth will accrue to those who successfully claim sovereignty over a given forest.¹⁷³ Problems can be expected in the case of REDD+ and it is for this reasoning that it seems necessary to identify which government agencies can legitimately claim to own carbon rights. For example, some government agencies are tasked with the objectives which may complement or “conflict”¹⁷⁴ with REDD+ activities depending on how claims are being

¹⁶⁷ These include the UNGA Res. 523 (VI) (1950), as cited in Sands P., *Principles of International Environmental Law*, 2nd ed., (2003) at 236. For an extensive discussion on this principle see Schrijver N., *Sovereignty over natural resources: Balancing rights and duties*. (1997) at 132 and 306.

¹⁶⁸ Sands P., *Principles of International Environmental Law*, 2nd ed., (2003) at 236. The UNGA Res. 1803 (XVII) (1962) resolved that the “rights of peoples and nations to permanent sovereignty over their natural wealth and resources must be exercised in the interest of their national development of the well-being of the people of the state concerned.”

¹⁶⁹ The UNFCCC provides that states possess “the sovereign right to exploit their own resources pursuant to their own environmental and development policies,” See also the Preamble to the CBD and the Rio Declaration.

¹⁷⁰ Westing A.H., *Transfrontier reserves for peace and nature: A contribution to human security*. (1993) UNEP, Nairobi at 22. See also Schrijver N., *Sovereignty over natural resources: Balancing rights and duties*. (1997) at 206.

¹⁷¹ Takacs D., *Forest Carbon (REDD+), Repairing International Trust, and Reciprocal Contractual Sovereignty*, (2013) 37 *Vermont Law Review*, 653-736 at 709. Schrijver observes that the duty of a state is to exercise this right “in the interest of their national development and of the well-being of the people of the State concerned.” See Schrijver N., *Sovereignty over natural resources: Balancing rights and duties*. (1997) at 308.

¹⁷² These are Readiness Preparation Proposals (R-PPs) submitted by REDD+ Country Participants to the World Bank’s Forest Carbon Partnership Facility (FCPF). See <https://www.forestcarbonpartnership.org/> [accessed 9 May 2015].

¹⁷³ Takacs D., *Forest Carbon (REDD+), Repairing International Trust, and Reciprocal Contractual Sovereignty*, (2013) 37 *Vermont Law Review* 653-736 at 711.

¹⁷⁴ In Zambia Hansungule points out the inevitable conflicts between government agriculture and forestry staff, with Agriculture usually pushing for de-gazetting of forest reserves to allow human settlements and Forestry

addressed. Agricultural departments usually have a desire or mandate to stimulate growth in agriculture and this may require cutting of trees while forestry departments are usually charged with the sustainable use of trees.¹⁷⁵ Therefore, institutional analysis could add insight on the question of which government agency can legitimately claim to own carbon.¹⁷⁶

5.3.4.2 Communities

Indigenous peoples and local communities have emphasised that the principle of “state sovereignty does not and cannot preclude attention to and respect for indigenous peoples’ internationally guaranteed rights.”¹⁷⁷ Instead, the principle encompasses respect for the traditional land rights of indigenous peoples.¹⁷⁸ These claims are increasingly accepted as legitimate by many REDD+ scholarly publications.¹⁷⁹ Larson argued that “if historic and traditional rights and past abuses of traditional peoples are taken into account, many communities have legitimate claims to rights related to forests, and there is little justification for continuing to deny [them these rights].”¹⁸⁰ To acquire forest tenure, Lyster argues that local communities will need to base their claims on something other than “land” tenure.¹⁸¹ She points out that the concept of “resource” tenure provides an appropriate avenue for identifying forest tenure in publicly owned forests.¹⁸² The emphasis is made that the claim of resource tenure has its foundation in international law and domestic jurisdictions.¹⁸³ Given

desperately trying to defend forests against further encroachment. Hansungule M. et. al., Report on land tenure insecurity on the Zambian Copperbelt, Oxfarm GB in Zambia (1998) at 38.

¹⁷⁵ Maguire “explains the concepts of state sovereignty and property as principles creating rights and responsibilities in relation to forest use and management.” Maguire R., *Global Forest Governance: Legal Concepts and Policy Trends*. (2013).

¹⁷⁶ Questions relevant for institutional analysis for REDD+ are raised by Costenbader as follows: (1) which institutions’ activities are related to or have an impact on the forest? (2) What is the legal mandate of the institution? (3) Does the institution have the capacity to carry out its legal mandate? (4) Do officials or agencies within the institutions have the appropriate political clout for the institution to carry out its legal mandate? (5) How effective is the institution in carrying out its mandate? (6) Is there concurrent or conflicting jurisdiction between institutions? (7) Are there procedures for institutional coordination? *Legal Frameworks for REDD+ IUCN* at 114.

¹⁷⁷ Humphreys D., *Logjam: Deforestation and the Crisis of Global Governance*. (2006) at 5.

¹⁷⁸ Ibid.

¹⁷⁹ Cotula L. and Mayers J., Tenure in REDD-Start-point or Afterthought? *Natural Resource Issues* 15. International Institute for Environment and Development, London, UK (2009) at 15.

¹⁸⁰ Larson A.M., Forest tenure reform in the age of climate change: Lessons for REDD+. *Global Environmental Change* 21 (2011) 540-549 at 547.

¹⁸¹ Lyster R., REDD+, Transparency, Participation and Resource Rights: The Role of Law. Sydney Law School Research Paper No. 10/56, (2010) at 7.

¹⁸² Ibid.

¹⁸³ These instruments include, *inter alia*, the 2007 adoption by the United Nations General Assembly of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) which has built on the work of the International Labour Organization.

this possible intervention, experience has shown that it is “often difficult both politically and logistically to define the borders of the forest area to which communities have rights.”¹⁸⁴

5.3.4.3 Investors and Others

The CDM experience shows that climate change mitigation investors are motivated by the prospects of acquiring carbon rights.¹⁸⁵ The same approach can also be expected in REDD+ activities because both schemes deal with investment in the forestry sector. In some cases, some actors (e.g. agro-industries) will have to change their behaviours or stop their operations in order for REDD+ objectives to be fulfilled. In doing so, they can legitimately claim for the losses, damages and costs they incur. Some analysis indicate that there “is a lack of willingness – at both national and international levels – to fully compensate agro-industries for lost income from stopping business as usual forest conversions.”¹⁸⁶ However, in some cases, denying compensation to actors like this might not be possible. Tienhaara points out that where there is foreign direct investment agreement it is likely that such agreement would already contain “investor-state dispute settlement” provisions. Using this provision, a private sector can sue governments in an international forum over changes in regulation that negatively impact their investments.¹⁸⁷

The above exposition has shown a range of actors which can claim benefits or compensation as a result of implementation of REDD+ activities. This section discusses how REDD+ investors can acquire carbon rights and use them to benefit themselves in a self-regulation system (discussed in chapter 4) at the expense of the local community or government or both. This is undertaken through the lens of foreign direct investment.

5.4 Potential Perils: Private Sector Finance

Private sector finance is defined as revenue generated through a mechanism which is not controlled by a public body.¹⁸⁸ Private sector actors in REDD+ include individual, for-profit,

¹⁸⁴ Larson A.M., Forest tenure reform in the age of climate change: Lessons for REDD+. (2011) 21 *Global Environmental Change* 540-549 at 545.

¹⁸⁵ Karsenty A. et. al., “Carbon rights”, REDD+ and payments for environmental services. (2012) *Environmental Science and Policy* at 5.

¹⁸⁶ Angelsen A. et.al., *Analysing REDD+: Challenges and choices*, (2012) at 48.

¹⁸⁷ Tienhaara K., China free trade: is there a devil in the detail? Available: <http://www.abc.net.au/news/2014-11-17/tienhaara-will-there-be-a-devil-in-the-detail-of-the-china-fta/5896534> [accessed 19 May 2015].

¹⁸⁸ Streck C. and Parker C., Financing REDD+, in Angelsen A. et.al., *Analysing REDD+: Challenges and choices*, (2012) at 116.

and commercial enterprises or businesses; business associations and coalitions as well as corporate philanthropic foundations.¹⁸⁹ The roles played by these actors include *inter alia* the implementation of emissions reductions, advisory, brokering and buying of carbon credits.¹⁹⁰ To take advantage of the carbon rights, private actors are likely to rely on the foreign direct investment in order to protect their investments. On the other hand, this approach makes governments and/or the local communities susceptible to the pitfalls of foreign direct investment.¹⁹¹

Foreign direct investment constitutes the “transfer of tangible or intangible assets from one country to another for the purpose of their use in that country to generate wealth under the total or partial control of the owner of the assets.”¹⁹² In order to attract foreign direct investment, countries have increasingly provided certain forms of legal protection to foreign investors, including *inter alia* recourse to international arbitration mechanisms in the event of a dispute.¹⁹³ These protections are usually provided in national laws and bilateral investment treaties, in numerous regional treaties and many state contracts.¹⁹⁴ Under the international arbitration mechanism there are general principles which shape the rules in the area of foreign investment protection.¹⁹⁵ In many cases international tribunals have often selected rules that favour the promotion of investment protection and which are harmful to the interests of the host country.¹⁹⁶

Foreign direct investment (FDI) is increasingly being recognised as a vital tool in stimulating economic development. In developing countries, FDI flows have increased from an average of less than \$10 billion in the 1970s to a yearly average of less than \$20 billion in the 1980s

¹⁸⁹ Henderson I. et. al., *The Role of the Private Sector in REDD+: the Case for Engagement and Options for Intervention*. UN-REDD PolicyBrief Issue #04.

¹⁹⁰ *Engaging the Private Sector in REDD+: Challenges and Opportunities*. Discussion paper. The International Institute for Sustainable Development. (2012). Available: http://www.iisd.org/pdf/2012/redd_engaging_private_sector.pdf [accessed 27 May 2015].

¹⁹¹ Tienhaara K., *The Potential Perils of Forest Carbon Contracts for Developing Countries: Cases from Africa*. (2012) 39:2 *The Journal of Peasant Studies* 551-572 at 556.

¹⁹² Sornarajah M., *The International Law on Foreign Investment*. 3rd ed (2010) at 8.

¹⁹³ Tienhaara K., *What You Don't Know Can Hurt You: Investor-State Disputes and the Protection of the Environment in Developing Countries*. (2006) 6:4 *Global Environmental Politics* 73-100. Available: http://mwbdvjh.muse.jhu.edu/journals/global_environmental_politics/v006/6.4tienhaara.html [accessed 27 May 2015]. Sornarajah M., *The International Law on Foreign Investment*. 3rd ed (2010) at 9.

¹⁹⁴ *Ibid.*

¹⁹⁵ Sornarajah M., *The International Law on Foreign Investment*. 3rd ed (2010) at 86.

¹⁹⁶ *Ibid.*

to \$208 billion in 1999.¹⁹⁷ A recent study shows that FDI accounts for more than 50 percent of all resource flows to developing countries.¹⁹⁸ The private sector could become a significant source of finance for REDD+, with the potential to provide about US \$13 billion per annum by 2020.¹⁹⁹ However, private sources of finance have not been without significant risks in some cases.²⁰⁰ Tienhaara argues that there are similarities between foreign direct investment in the REDD+ mechanism and foreign direct investment in natural resource extraction.²⁰¹ With that comparison, the author draws on the investment scholarship in other natural resource sectors to highlight plausible issues of concern that are likely to arise in forest carbon deals.²⁰²

Tienhaara in her study of “forest carbon contracts” points out that the key to explaining how potential perils are created lies in a principle of the “sanctity” of contracts. Tienhaara cites Sornarajah to explain that this principle “denies the host state the right to change an investment contract unilaterally, continues to be accepted in mainstream international legal discourse despite the objections of critical legal scholars.”²⁰³ The author discusses this principle together with other issues-bidding, negotiation, government take, liability and indemnity-to illustrate the perils in REDD+.

On the issue of bidding, Tienhaara explains difficulties associated with the competitive bidding in the context of REDD+. In particular, due to the less capital-intensive nature of implementing REDD+ as opposed to other extractive projects such as gas, oil and mining, it is possible that a range of bidders will not be limited to a small group of large multinational corporations. The problem associated with this is that it can be difficult for governments to assess which actors are reputable and legitimate and which are “carbon cowboys”, purely looking to take advantage of a new and largely unregulated market.²⁰⁴

¹⁹⁷ Going Global. Available: http://www.going-global.com/articles/understanding_foreign_direct_investment.htm [accessed 27 May 2015].

¹⁹⁸ Nieman M.D. and Thies C.G., Democracy, Property Rights, and Foreign Direct Investment. University of Iowa citing World Bank. World Development Indicators. Washington, D.C. (2011).

¹⁹⁹ Streck C. and Parker C., Financing REDD+, in Angelsen A. et.al., *Analysing REDD+: Challenges and choices*, (2012) at 121.

²⁰⁰ For a detailed discussion on risks in foreign investment see Sornarajah M., *The International Law on Foreign Investment*. 3rd ed (2010) at 69.

²⁰¹ Tienhaara K., The Potential Perils of Forest Carbon Contracts for Developing Countries: Cases from Africa. (2012) 39:2 *The Journal of Peasant Studies* 551-572 at 556.

²⁰² Ibid.

²⁰³ Ibid at 552.

²⁰⁴ Ibid at 557.

With regards to negotiation, Tienhaara names three key factors: corruption, how investment contracts are drafted, and the lack of expertise to negotiate investment contracts. Regarding the first factor, she explains that sometimes investment contract negotiations are undertaken by corrupt government officials thereby lacking accountability. In this case, it can be difficult and costly for the government in question to later cancel or renegotiate these contracts.²⁰⁵ This is because foreign investors would rely on the principle of “sanctity” to prevent government to do so. She cites a case of mining companies in Indonesia, and a case of a carbon contract in Liberia to substantiate this point.²⁰⁶ With regards to how investment contracts are drafted, the author indicates that the agreements are drafted with the view to bind two discrete parties namely investors and states.²⁰⁷ In this case, it is usually one particular agency or ministry that is responsible for negotiating the contract and even other ministries and parts of government (e.g. parliament) may not have opportunities to review the contract or provide input.²⁰⁸ Also local communities and the benefits thereof may be mentioned in the contract, but in many cases communities are usually excluded in the negotiation process. As a result, benefits are likely to be lower in the “contractual hierarchy” of a project and, hence, less specific and less enforceable.²⁰⁹ The issue of lack of expertise is expounded by the difficulty for governments to retain lawyers and sector specialists in public service which have the necessary expertise to negotiate investment contracts. The problem is exacerbated when negotiators are dealing with a new type of foreign direct investment which they have little knowledge of. As such, forest authorities often lack knowledge of how much foreign companies might profit from carbon trading, and/or how long they plan to keep the forest land out of other uses to ensure that carbon continues to be sequestered and maintained that way.²¹⁰ These factors combined are likely to have detrimental effects on the “government take”.

Tienhaara defines government take as the economic deal inscribed in an investment contract. This can take different forms depending on the resource in question. Using the example of oil and gas contracts, she pointed out that there is usually a division of the resource (such as

²⁰⁵ Ibid.

²⁰⁶ Ibid.

²⁰⁷ Ibid at 558.

²⁰⁸ Ibid.

²⁰⁹ Ibid.

²¹⁰ Cited in *ibid* at 557.

profit oil) between the parties. In other sectors it is common for the government to use land rental fees, royalties and/or taxation.²¹¹ In terms of mineral extraction, it is difficult for government and investors to settle a fair deal where prices are volatile. However, this aspect becomes more complex in a situation like REDD+ because in addition to volatility issues, governments simply do not have enough experience (within the country or in foreign contexts) to draw on when valuing the resource.²¹² Sometimes it is not so easy to quantify opportunity cost forgone both from the monetary as well as non-monetary aspects.²¹³ The author cites a case of the Uganda Wildlife Authority and a German company to illustrate this point.²¹⁴

Tienhaara reminds us that all foreign direct investments have associated risks that can lead to liability disputes and foreign direct investments in REDD+ are not exempted.²¹⁵ The author cautions against various risks that are associated with REDD+ projects such as political risk (expropriation of carbon rights), local hostility to a project or civil unrest and the risk for the government that the investor may fail to meet his obligations or simply disappear and delivery risks (trees may not grow as quickly as modelled due to ecological or even climate change-driven factors as well as the possibility of forest fire).²¹⁶ A standard approach to address some of these issues is by including a “force majeure” clause in an investment contract that dictates that, for example, in the event of a natural disaster the contract will be terminated.²¹⁷ However, it is noted that getting a definition of force majeure that appropriately balances the interests of the parties can be very problematic. To address the other risks that are not covered by force majeure, investment contracts usually have clauses that are explicit about who is to be liable for what and to whom.²¹⁸ Among the contractual examples cited, it is the government that is liable for full reimbursement to the investors in the event of

²¹¹ Ibid at 558.

²¹² Ibid at 559.

²¹³ See chapter 2 for this discussion.

²¹⁴ Tienhaara K., The Potential Perils of Forest Carbon Contracts for Developing Countries: Cases from Africa. (2012) 39:2 *The Journal of Peasant Studies*, 551-572 at 559.

²¹⁵ Ibid at 560. See Christensen et.al., for a detailed discussion on the key risks and issues that must be considered in the drafting of a carbon sequestration agreement to support the successful operation of a biosequestration offsets project. Christensen S. et. al., Issues in Negotiating a Carbon Sequestration Agreement for a Biosequestration Offsets Project. (2013) 21:3 *Australian Property Law Journal*, 195-226, at 9-27.

²¹⁶ Tienhaara K., The Potential Perils of Forest Carbon Contracts for Developing Countries: Cases from Africa. (2012) 39:2, *The Journal of Peasant Studies* 551-572 at 560.

²¹⁷ Ibid.

²¹⁸ Ibid.

termination of the contract, loss or damage incurred by investors including for any shortfall in the production of carbon credits that may occur. On the other hand, investors are only liable for the fulfilment of payment obligations under the contract.²¹⁹

5.5 Potential Promise: Public Sector Finance

Public sector finance is referred to as revenue generated through a mechanism controlled by a public body.²²⁰ Forms of public sector finance are generated from a variety of “traditional” forms of public finance (e.g. Official Development Assistance (ODA) and domestic government spending allocated through general public budgets) and private bodies (e.g. through taxes or other fees).²²¹

In financing climate change mitigation mechanisms such as REDD+, public sector finance is not authorised with the expectation of acquiring carbon credits.²²² Activities that generate carbon credits are to be financed from the private sector and sales of REDD+ credits to Annex I governments for offsetting their carbon emissions.²²³ Thus, it has been observed that the increasing donor interest in REDD+ has boosted the amount of ODA available for capacity building and policy development for REDD+ activities.²²⁴ The financing through public sources is seen as an approach to support and strengthen government institutions and increases government’s ownership of the REDD+ mechanism.²²⁵ However, where carbon credits returns are guaranteed, financing can be provided through loans.²²⁶

Following the above exposition, some leading scholars in the field of REDD+ argue that more fragile states are likely to rely on ODA-type finance.²²⁷ It has also been argued that public finance is extremely relevant for emission reductions beyond forests and in forest frontiers

²¹⁹ Tienhaara K., The Potential Perils of Forest Carbon Contracts for Developing Countries: Cases from Africa. (2012) 39:2, *The Journal of Peasant Studies* 551-572 at 561.

²²⁰ Streck C. and Parker C., Financing REDD+, in Angelsen A. et. al., *Analysing REDD+: Challenges and choices*. (2012) at 116 and 119.

²²¹ Ibid at 119.

²²² Cited in Dutschke M. et al., *How Do We Match Country Needs with Financing Sources?*, in Angelsen A. (ed), *Moving ahead with REDD: Issues, options and implications*, (2008) at 45.

²²³ Dutschke M. et al., *How Do We Match Country Needs with Financing Sources?*, in Angelsen A. (ed), *Moving ahead with REDD: Issues, options and implications*, (2008) at 45.

²²⁴ Ibid at 47.

²²⁵ Ibid.

²²⁶ Ibid.

²²⁷ Streck C. and Parker C., Financing REDD+, in Angelsen A. et.al., *Analysing REDD+: Challenges and choices*. (2012) at 111.

that have comparatively weak land tenure systems and governance structures.²²⁸ In principle, public financing should be more “pro-poor” than private finance, particularly as the lead agencies are mandated to promote development agendas.²²⁹ Therefore, upfront public finance is needed to create policy environments that enable the delivery of effective REDD outcomes practically in weak governance contexts.²³⁰ The authors have noted that few developing countries have shown the ability or political will to finance the aforementioned aspect of REDD+.²³¹ Despite its advantages, public sector finance is generally known to be a short-term solution.²³² It is also said to weaken the link between payment and performance, and risks repeating the poor record of traditional aid to the forestry sector.²³³

5.6 Implications of Carbon Rights for Self-Regulatory System: Two Possible Futures

Chapter 3 concluded that objections to the forest convention by developing countries were motivated by the lack of substantial financial transfer and capacity building to help address poverty as the main cause of deforestation. Chapter 4 indicates that most countries argued for a dual funding approach, where financial transfer and capacity building would come from private and public mechanisms. These mechanisms of access to finance and capacity building lead the author of this study to make a number of claims about the potential implications of carbon rights in a self-regulatory system.

The first and most obvious claim is that foreign direct investment represents a platform in which self-regulation can take place and in doing so alter power relations. In chapter 4, the meaning of self-regulation entails the view that the role of government is removed from the governance of top-down. The discussion on FDI illustrates that within a self-regulation system states and state agencies are not conceived of as existing at the top of a pyramid of power and influence. Nor are they seen as capping the authority of governing auspices that devolves authority to others. Under circumstances like this, “the private sector steers and the

²²⁸ Dutschke M. et al., *How Do We Match Country Needs with Financing Sources?*, in Angelsen A. (ed.), *Moving ahead with REDD: Issues, options and implications*, (2008) at 47.

²²⁹ Brown D. et al., *How Do We Achieve REDD Co-Benefits and Avoid Doing Harm?* in Angelsen A. (ed.), *Moving ahead with REDD: Issues, options and implications*, (2008) at 110.

²³⁰ Dutschke M. et al., *How Do We Match Country Needs with Financing Sources?*, in Angelsen A. (ed.), *Moving ahead with REDD: Issues, options and implications*, (2008) at 47.

²³¹ Ibid.

²³² Ibid.

²³³ Brown D. et al., *How Do We Achieve REDD Co-Benefits and Avoid Doing Harm?* in Angelsen A. (ed.), *Moving ahead with REDD: Issues, options and implications*, (2008) at 111.

state rows.”²³⁴ This relinquishes the sovereign power of the host governments discussed in section 5.3.4.1 above. This power dynamic means that private sectors are able to compel states to adopt a conception of carbon rights which favour the private actors’ interests. The contractual examples of carbon credits investments in developing countries cited in the Tienhaara study illustrate how this approach is likely to happen.²³⁵

This chapter argues that, if developing countries rely on FDI for financial resources for REDD+ implementation, then host countries will be compelled to define carbon rights by separating them both from land tenure and resource tenure. As discussed in 5.3.3 above, the separation of carbon rights from land and resource tenure is problematic in developing countries. This is more suited to Western-style property systems because its effectiveness depends on a robust system of land registration and administration. These aspects are well known to be poorly approached in developing countries.

The discussion on FDI also establishes why a self-regulatory system is not necessarily democratic governance or governance that safeguards the interests of the population as a whole. As mentioned, the use of the private sector to finance REDD+ can undermine the principle of sovereignty. At the same time, such dependency runs contrary to the principle CBDR (discussed in chapter 2) which provides that countries “should protect the climate system [...] in accordance with their [CBDR] and respective capabilities.” Be that as it may, in order for a self-regulatory system to be democratic, private sector actors must satisfy tests of representativeness, accessibility and negotiation that were devised in light of some set of democratic ideals.²³⁶

This form of governance by private actors is not new. Examples of how private actors govern states have been explored in other fields such as in the case of the Federation of International Football (FIFA) and the World Trade Organization’s (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). In her study of how FIFA organised the security of the 2010 World Cup, Nakueira provided empirical evidence of how such a transnational private actor used agreements and self-enforcing contracts to enrol actors within

²³⁴ Shearing C. et. al., Nodal Governance. 30 *Australian Journal of Legal Philosophy* 30 (2005) at 111.

²³⁵ Tienhaara K., The Potential Perils of Forest Carbon Contracts for Developing Countries: Cases from Africa. 39:2, *The Journal of Peasant Studies* (2012) 551-572 at 561.

²³⁶ This line of thinking draws from Shearing C. et. al., Nodal Governance. 30 *Australian Journal of Legal Philosophy* (2005) at 27.

and beyond the state to achieve its desired outcome.²³⁷ Similarly, Shearing et. al., used the theory of Nodal Governance to discuss how “nodes” utilise “networks” to govern states. This is done through the cases of the WTO TRIPS Agreement and a “Zwelethemba Model.”²³⁸

The second claim which arises from the discussion above is on a positive note. The implication of public finance discussion means that host states can take ownership of REDD+. As such, government institutions are less compelled to adopt a particular type of carbon rights conceptualisation. Therefore, governments can decide to conceptualise carbon rights to run parallel with land tenure and resource tenure and still be able to attract some climate finance. The prospect of this classification is likely possible under REDD+ within the UNFCCC where countries can obtain REDD+ finance through the REDD+ public sector. Using the self-regulation framework discussed in chapter 4, governments may be compelled by financiers to develop a decentred regulation and attract regulatory bodies to play a role in the regulation of REDD+ activities. In this sense, the financiers are seen as active participants in the self-regulation.

It follows that under the public finance approach it is then possible for the government to declare the local community to be the owner of carbon rights. This would mean that a local community can participate in the self-regulatory system since holding carbon rights is inextricably linked to having control over the forest land. There is a vast literature which argues in favour of allocating carbon rights to the local community.²³⁹

5.7 Conclusion

The focus of this chapter was to investigate the underlying issues of the nature of carbon rights and related issues of ownership and ultimately who benefits from the entitlement to credit. It also shed light on how the sources of finance for REDD+ can dictate the conceptualisation of carbon rights and in turn facilitate or constrain the ability of the host state in a decentred regulatory context. Discussing the sources of finance provides insights

²³⁷ Nakueira S., *New Architectures of Governance: Transnational Private Actors, Enrolment Strategies and the Security Governance of Sports Mega Events*. PhD Thesis, University of Cape Town (2014) at 2 and 149.

²³⁸ Shearing C. et. al., *Nodal Governance*. 30 *Australian Journal of Legal Philosophy* 30 (2005) at 17. Drahos P. and Braithwaite J., *Information Feudalism: Who Owns the Knowledge Economy?* (2002). Braithwaite J. and Drahos P., *Global Business Regulation* (2000) at 475 on “Contests of Actors”.

²³⁹ Greenleaf M., *Using Carbon Rights to Curb Deforestation and Empower Forest Communities*. (2011) 18 *NYU Environmental Law Journal*. 507- 599 at 512-3.

into the underlying forces that influence the conceptualisation of carbon rights and who is likely to hold or own such rights. In short, sources of finance have a direct bearing on the framing of carbon rights. In turn, such a dichotomy of power relations has two implications for the self-regulatory system. First, a host state will be compelled to adopt a particular type of carbon right (i.e. either separating carbon rights from the land and resource tenure or allowing carbon rights to run with land and resource tenure). It has been argued that risks run with regard to the former approach because it is likely to have detrimental effects on the poor communities. The discussion on foreign direct investment illustrates how this can happen where local communities can object to the implementation of REDD+ for various reasons. In this case, the state is likely to use its police force to compel the local community to agree with the REDD+ implementation. If the state does not take this approach, then it will be liable to compensate private parties for the loss they have incurred. The latter is detrimental to the population as a whole because it means that tax payers money may have to be diverted for compensation instead of using such finance for other service delivery issues. Second, the implication of the public finance discussion means that host states are less compelled to adopt a particular type of carbon rights conceptualisation. Therefore, governments can decide to conceptualise carbon rights to run parallel with land tenure and resource tenure. The problem with this approach is that the ability of the state to attract some climate finance will be limited as discussed widely in the climate literature. Under these conditions, the question arises as to what version of carbon rights should government adopt to minimise potential perils?²⁴⁰ This question is taken into account while discussing costs and benefits in chapter 9.²⁴¹ The next chapter describes governance processes in each case study. The purpose of chapter 6 is to set the scene for chapter 7 to explore how the Tanzanian and Indonesian governments are envisaging REDD+ implementation.

²⁴⁰ This question is beyond the scope of this chapter but it informs the choices that can be made in defining benefits in chapter 9.

²⁴¹ See sections 9.2.4 and 9.2.5.

Chapter Six:

Governance in Tanzania and Indonesia

6.1 Introduction

Governance has become a central focus in the REDD+ debate. An argument advanced consistently in that debate is that a successful distribution of benefits depends in part on the governance arrangements.¹ Hence, some researchers consider improving forest governance as one of the vital preconditions in designing an optimal regulatory framework for REDD+.² However, the discussion thus far has been about REDD+ governance at the international level. Thus a discussion about domestic governance of forestry is needed. The relevant questions to guide that inquiry are: How does the legal system provide a legal basis for the government and non-government actors to utilise forests in the countries in question in this study? And who holds the legislative power to manage and distribute benefits?³ Arguably, answers to these questions provide a solid background for chapter 7 that explores how the governments under this study think they are going to achieve the vision of REDD+ that they have adopted.

In light of the above, the focus of this chapter is the administration of domestic forestry laws in Tanzania and Indonesia. The reasons for the selection of the countries are discussed in section 1.6 in chapter 1. Therefore the starting point in this chapter is the respective constitutions of the two case study countries.⁴ Constitutions set the framework for the

¹ Indonesia REDD+ National Strategy June 2012 at 8. See also Tassa D.T. et. al., Benefit sharing mechanisms and governance issues in Participatory Forest Management-REDD related projects: A Community Forest case-study in Tanzania. Berlin Conference on the Human Dimensions of Global Environmental Change, Berlin, 8-9 October (2010).

² Brockhaus M. et. al., Guide for country profiles: Global Comparative Study on REDD (GCS-REDD) Component 1 on National REDD+ Policies and Processes, (2011) at 5.

³ Civil society organisations are mainly concerned about this subject. See Peskett L. and Brockhaus M., When REDD+ goes national: A review of realities, opportunities and challenges in Angelsen A. (ed.), *Realising REDD+ National strategy and policy options*, (2009) at 40.

⁴ The rationale of beginning from the Constitution is that governments are increasingly asserting their sovereignty in relation to natural resources and this has been affirmed in REDD+ negotiations at the international level as discussed in chapters 3 and 4. This section also builds on chapter 5 on the question on legitimate claimants to benefits resulting from the emission reductions.

structure and respective rights and obligations of central, regional and local government in the context of the three tiers of government, namely Parliament, the executive and the judiciary.⁵ This background information is informative in the discussion of REDD+ in chapter 7. This is because since REDD+ in its 3rd phase (as discussed in chapter 4) is carried out at a national level, then the choice of regulation is indicative of the scope and impact of specific activities that are eligible for benefits sharing.

6.2 United Republic of Tanzania

Tanzania is a unitary state of two formerly sovereign states, namely, the Republic of Tanganyika and the People's Republic of Zanzibar.⁶ In each central Government, the Constitution establishes the three levels of government comprising three organs of the government, i.e. Parliament, the executive and the judiciary.⁷ The power to exercise and control over all union matters in the United Republic and over all other matters concerning mainland Tanzania is vested in the Government of the United Republic and the Revolutionary Government of Tanzania Zanzibar.⁸ At the same time, the power to legislate and oversight over public affairs are vested in the Parliament of the United Republic (hereafter Parliament) and the House of Representatives of Zanzibar.⁹ Legislative power in relation to all union matters and also in relation to all other matters, regarding mainland Tanzania is vested in Parliament.¹⁰ Legislative power in Tanzania Zanzibar over all matters which are not union matters is vested in the House of Representatives.¹¹ In this respect, laws and policies that apply to the environment in the mainland do not apply in Zanzibar.¹² As most of the forests are in the mainland, this chapter focuses on laws and institutions applicable to mainland Tanzania only, and a reference to Tanzania is a reference to mainland Tanzania.

⁵ Glazewski J. and Rumble O., Administration and Governance, in, Glazewski J., *Environmental Law in South Africa*. 3rd ed. (2013) at 2.

⁶ Article 1-4 of the Constitution of the United Republic of Tanzania, 1977.

⁷ Article 4 of the Constitution of the United Republic of Tanzania, 1977. For a discussion on Tanzanian constitution making and reform see Nchalla B.M., Tanzania's experience with constitutionalism, constitution-making and constitutional reforms. In Mbondenyi M.K. and Ojienda T., *Constitutionalism and democratic governance in Africa: Contemporary perspectives from Sub-Saharan Africa*. (2013) at 15-51.

⁸ Article 34 (1) of the Constitution of the United Republic of Tanzania, 1977.

⁹ Ibid Article 4 (2).

¹⁰ Ibid Article 64 (1).

¹¹ Ibid Article 64 (2).

¹² Ibid Article 64 (3)-(4).

The Constitution establishes Local Government Authorities (LGAs) to support each central government by performing various functions.¹³ This provision is given effect by the District Authorities Act¹⁴ and the Urban Authorities Act.¹⁵ Thus in urban areas, the Urban Authorities Act established three types of urban authority namely city, municipal and town councils.¹⁶ On the other hand in the rural areas, the District Authorities Act established two types of authority namely the District Councils and Village Council.¹⁷ The Constitution further provides that such authorities are established in each region, district, urban area and village.¹⁸ For the purpose of administration, Tanzania is divided into twenty five (25) regions.¹⁹ The Ministry for Regional Administration and Local Government is responsible for local government in mainland Tanzania and is currently located within the Prime Minister's Office.²⁰

According to the National REDD+ Strategy Tanzania had in 2010 a total of 33.428 million hectares (ha) of forests.²¹ This means that roughly 39.9% of Tanzania is forested.²² This forest land is divided into a number of classes as follows: 16 million ha are reserved forests, 2 million ha are forests in national parks and the rest (15.4 million ha) are unprotected forests in Village and General Land subject to "open access", thereby easily converted into other competing land uses (discussed in greater detail below).²³

Several factors contribute to the competing land uses in Tanzania and they are classified as direct and indirect causes. Overgrazing, firewood and charcoal production, uncontrolled fires, timber extraction, development of infrastructure/industry and bio-fuel production are some of the main direct causes of uncontrolled deforestation and thus forest degradation.²⁴ On the

¹³ Their structure and composition, sources of revenue and procedure for the conduct of their business are to be determined by enabling legislation enacted by Parliament or the House of Representatives. See Article 145 (2) of the Constitution of the United Republic of Tanzania, 1977. Available: <http://www.nyulawglobal.org/globalex/Tanzania.htm> [accessed 2 July 2015].

¹⁴ Local Government (District Authorities) Act 1982.

¹⁵ Local Government (Urban Authorities) Act 1982.

¹⁶ Section 5 (4) Local Government (Urban Authorities) Act 1982

¹⁷ Sections 5 (1) and 25 of the Local Government (District Authorities) Act 1982.

¹⁸ Article 145 (1) of the Constitution of the United Republic of Tanzania, 1977.

¹⁹ Available: <http://aadb.pmoralg.go.tz/regions.php> [accessed 20 July 2015].

²⁰ Prime Minister's Office Regional Administration and Local Government. Available: <http://www.pmoralg.go.tz/> [accessed 12 July 2015].

²¹ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at xi.

²² The REDD Desk. Available: <http://theredddesk.org/countries/tanzania> [accessed 2 July 2015].

²³ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at xi.

²⁴ Ibid at 14-15.

other hand, the rapid (and uncontrolled) rural settlement expansion, market and policy failures, population growth and rural poverty are listed as the main indirect or underlying causes of uncontrolled deforestation and thus forest degradation.²⁵ The failure of market and policy relates to the “inadequate capacity of the government to implement strictly the instituted centralised and decentralised management systems due to inadequate financial and management capacity.”²⁶ These factors resulted in the inefficient management of forest resources; inability of government to adequately define resource tenure rights thereby subjecting forests to “open access” with the consequent risk of over-exploitation and the inability to create the right investment incentives in forest activities.²⁷ Furthermore, non-forest incentives, namely: pricing policies such as tax incentives and other subsidies, encourage private investments in leading sectors such as transportation, energy, agriculture, and mining. Subsequently, these investments contribute to the conversion of forest to achieve their objectives.²⁸ With regards to rapid population growth and rural poverty, the Strategy indicates that such growths along with urbanisation often intensify pressure on forest areas and thereby convert them to other uses. This includes the exploitation of forests for short-term benefits in terms of food production and fuel wood supply.²⁹ That said, one would expect to find the strategy to use this background to inform the distribution of costs and benefits.³⁰

6.2.1 The Legal System

The major sources of law in Tanzania include the: common law,³¹ constitutional law, principles of equity, statutes of general application, Islamic law in some cases, customary law, case law, principal and subsidiary law as well as international instruments to which Tanzania is a party.³² It follows that the main sources of environmental law are the common

²⁵ Ibid at 15-16.

²⁶ Ibid at 15.

²⁷ Ibid.

²⁸ Ibid.

²⁹ Ibid at 16.

³⁰ Morgan B. and Yeung K., *An Introduction to Law and Regulation: Text and Materials*. (2007) at 16.

³¹ For a detailed discussion of the Common Law System in Tanzania see, Twaib F., *The legal profession in Tanzania*. (1997) at 19. Sawyerr G.F.A. and Hiller J.A., The doctrine of precedent in the Court of Appeal for East Africa. (1971) at 15. Court of Appeal of Tanzania, The history of administration of justice in Tanzania. Dar es Salaam, Tanzania: Mathew Bookstore and Stationers (2004) at 28. Hatchard J. et. al., Comparative constitutionalism and good governance in the (2004) at 12-15. Seidman, R.B., The reception of English law in colonial Africa revisited. (1969) 2:47 *Eastern Africa Law Review* at 47.

³² Sections 3 and 11 of the Judicature and Applications of Laws Act, Chapter 358. Available: http://www.tanzania.go.tz/egov_uploads/documents/JUDICATURE%20AND%20APPLICATION%20OF%20LAWS%20ACT.pdf [accessed 12 July 2015].

and the statutory law in the form of international law, constitutional law, principal legislation and subsidiary legislation.³³

6.2.2 The Roles of Central, Regional and Local Government

The roles of the three spheres of government in relation to the environment must be discussed within the broader legal framework of governance. The Central Government “executes its functions through Ministries led by Cabinet Ministers. Each Ministry is charged with a sector portfolio.”³⁴ The role assigned to each ministry is to formulate broad national policies, guidelines, and support the regional administration, local government authorities and the private sector to execute their assigned roles and functions.³⁵ The ministries execute their roles through the regions, which connect the central and local governments.³⁶ The relevant legal and institutional framework responsible for environmental management in Tanzania is provided in the Environmental Management Act (EMA).³⁷ The Division of Environment (DoE) is also the leading Agency and authorised to manage forests. It was established in 1991 under the Ministry of Natural Resources and Tourism (MNRT).³⁸ In 1995, it was transferred to the Vice President’s Office to “give it the requisite priority and attention on promoting management [of the] environmental agenda.”³⁹ The EMA provides for the establishment environmental sector in each Ministry. The responsibility is to ensure that all environmental matters contained in other written laws falling under each sector ministry are implemented

³³ Pallangyo D.M., *Environmental law in Tanzania: how far have we gone?* 3:1 *Law, Environment and Development Journal* (2007) 28 at 32.

³⁴ Article 53 (2) of the Constitution of Tanzania 1977.

³⁵ Association of Local Authorities in Tanzania (ALAT), *State of Local Democracy and Good Local Governance in Tanzania*. (2011) at 21.

³⁶ Section 5(1)-(2) of the Regional Administration Act 1997. Association of Local Authorities in Tanzania (ALAT), *State of Local Democracy and Good Local Governance in Tanzania*. (2011) at 21.

³⁷ Environmental Management Act, Cap 191 of 2004. The Vice President’s Office. <http://www.vpo.go.tz/environment/utawala.php> [accessed 15 July 2015]. For a graphical overview of the Environmental Management Organisational Structure see SADC Environmental Legislation Handbook 2012. Development Bank of Southern Africa 3rd ed (2012) at 349. Available: http://www.saiea.com/dbsa_book/tanzania.pdf [accessed 17 July 2015].

³⁸ Sections 1 and 75 (a) of Environmental Management Act (2004). <http://www.vpo.go.tz/environment/utawala.php>. This is unique compared to other SADC countries where they all have a ministry responsible for the environment. As indicated above Tanzania has instead the Ministry of Natural Resources and Tourism which is located under the Vice-President’s Office. SADC Environmental Legislation Handbook 2012. Development Bank of Southern Africa 3rd ed (2012) at 8.

³⁹ <http://www.vpo.go.tz/environment/utawala.php>.

and reported to the Director of Environment.⁴⁰ Such implementation must comply with the provisions of EMA.⁴¹

The Local Government Authority is exercised through Regional Commissioners (RC) and District Commissioners (DC).⁴² The RC represents the president at the regional level. The Regional Administrative Secretary (RAS), who is the head of the Regional Administration Secretariat, assists the RC.⁴³ Among other things the RC is required to assist the local government in his region to discharge its responsibilities.⁴⁴ The main purpose is to accelerate the development of the people.⁴⁵ Among other things, the RAS is composed of a Regional Environmental Management Expert mandated with the task of advising the Local Government Authorities on matters relating to implementation and enforcement of EMA within their jurisdiction.⁴⁶

District Councils are established by the Government (District) Authorities Act.⁴⁷ The functions of District Councils are *inter alia* to discharge their functions conferred upon them by the Act or by any other written law.⁴⁸ Therefore, the Councils are empowered to make by-laws applicable throughout their areas of jurisdiction, and to consider and approve by-laws made by village councils within their areas of jurisdiction.⁴⁹ Thereafter, the Act requires such by-laws to be submitted to the Regional Commissioner for approval who is required to submit them to the minister who is responsible for local government for his consent.⁵⁰ With respect to forests, the functions and duties of the District Council in relation to its jurisdiction is to⁵¹ make provision for the prohibition or regulation of livestock husbandry⁵² and to establish, preserve, maintain, improve and regulate the use of forests and forest produce subject to the

⁴⁰ Section 30 (b) of Environmental Management Act (2004).

⁴¹ Ibid Section 31 (2).

⁴² The Hauser Global Law School Program. Available: <http://www.nyulawglobal.org/globalex/Tanzania.htm> [accessed 15 July 2015].

⁴³ Van Dijk M.P., *The Impact of Decentralisation on Poverty in Tanzania*. In Crawford G. and Hartmann C. (eds), *Decentralisation in Africa: A Pathway out of Poverty and Conflict?* (2008) at 151.

⁴⁴ Section 5(3) of the Regional Administration Act 1997.

⁴⁵ Article 146 (2) (c) of the Constitution of the United Republic of Tanzania (1977).

⁴⁶ United Republic of Tanzania, National Report for the United Nations Conference on Sustainable Development, Rio+20. The Vice President's Office, Division of Environment (2012) at xiv.

⁴⁷ Section 5(1) of Government (District) Authorities Act No. 7 of 1982. Available: http://thereddesk.org/sites/default/files/local_government_district_authorities_act_1982_2.pdf [accessed 5 August 2015].

⁴⁸ Section 117 (1).

⁴⁹ Sections 118 (d) and 148 (1). Procedure for this process is provided in section 150.

⁵⁰ Section 150 (3).

⁵¹ Section 118 (1).

⁵² Section 118 (2) (f) (iii).

provisions of this Act or any other written law.⁵³ The discussion on the relationship between the local, provincial and central spheres of government in forest governance is provided below.

6.2.2.1 Co-operation and Co-ordination

In accordance with EMA, all environmental management issues including climate change adaptation and mitigation, are coordinated by the Division of Environment.⁵⁴ At the regional level, the Regional Secretariat shall be responsible for co-ordination of all advice on environmental management in their respective regions and liaison with the Director of Environment and the Director-General on the implementation and enforcement of EMA.⁵⁵ Thus the minister responsible for regional administration is obliged to appoint an environmental management expert who is a link between the region and the Director of Environment and the Director General.⁵⁶

The Forest Act No. 7 of 2002 also provides for an explicit relationship between the Ministry responsible for forests, LGAs and Forest Management Authorities where a director general is obliged to consult LGAs and Forest Management Authorities and keep them informed about the management of forests.⁵⁷ However, the legal framework in Tanzania does not guarantee local governments protection from interference by the central government. This is because the Constitution does not provide what type of central-local relationship should exist and inform operations of the two spheres of government.⁵⁸ In this regard the central government still exercises substantial authority over LGAs.⁵⁹

⁵³ Section 118 (2) (n).

⁵⁴ Sections 1 and 75 (a) of Environmental Management Act (2004). <http://www.vpo.go.tz/environment/utawala.php> [accessed 5 August 2015]. This is unique compared to other SADC countries where they all have a ministry responsible for the environment. As indicated above Tanzania has instead the Ministry of Natural Resources and Tourism which is located under the Vice-President's Office. SADC Environmental Legislation Handbook 2012. Development Bank of Southern Africa 3rd ed (2012) at 8.

⁵⁵ Section 34 of Environmental Management Act (2004).

⁵⁶ Section 35 (1)-(2) of Environmental Management Act (2004).

⁵⁷ Section 8 (1) Forest Act No. 14 of (2002).

⁵⁸ Association of Local Authorities in Tanzania (ALAT), State of Local Democracy and Good Local Governance in Tanzania. (2011) at 4. http://www.clgf.org.uk/userfiles/1/file/The_State_of_Local_Governance_and_Good_Local_Governance_in_Tanzania_2011.pdf [accessed 15 August 2015].

⁵⁹ Association of Local Authorities in Tanzania (ALAT), State of Local Democracy and Good Local Governance in Tanzania. (2011) at 15.

6.2.3 Forest and Land Tenure and Forest Categories

With regard to forest ownership the Forest Act⁶⁰ provides that all “biological resources and their intangible products, whether naturally occurring or naturalised within forests including genetic resources belongs to the government.”⁶¹ Thus the conservation and utilisation of such resources requires the guidance of the Act and any other written laws.⁶² In this respect it is important to review the Land Act and the Village Land Act⁶³ as they are the main statutes which provide for a land tenure system. The basic land tenure system in Tanzania provides the basis for which to discuss the forest tenure system. Taken together, these statutes provide three types of land namely Reserved Land, Village Land and General Land.⁶⁴ Added to this discussion is the Forest Act which provides categories of forest and their management. These are Community Forest Reserves (CFRs), National Forest Reserves (NFRs), Local Authority Forest Reserves (LAFRs), Village Land Forest Reserves (VLFRs), and Private Forests (PF). The discussion of these categories means the application of different rules and this has implications for the distribution of costs and benefits.

6.2.3.1 General (State) and Village Land

According to the Village Act⁶⁵ general land (also known as state land) refers to all public land which is not reserved land or village land. However, the Land Act⁶⁶ provides a different definition: it states that such land includes “all land which is not reserved land or village land *and includes any unoccupied or unused village land.*”⁶⁷ Forests on general land form part of National Forests.⁶⁸ Another type of forest which is found on general land is Local Authority Forests Reserve (LAFRs)⁶⁹ and Private Forests.⁷⁰ LAFRs are gazetted forests managed at the District Council level as production and protection forests. In this case they are regarded as a major source of district revenue from charcoal and timber extraction.⁷¹ Private Forests on

⁶⁰ Forest Act, No. 14 of 2002.

⁶¹ Section 69 (1) of the Forest Act, 2002.

⁶² Ibid.

⁶³ Caps 113 and 114, respectively 2002.

⁶⁴ Section 1 (4) (a)-(c) of the Land Act 1999.

⁶⁵ Section 2 of Village Land Act 1999.

⁶⁶ Section 4 (a)-(c) of the Land Act 1999.

⁶⁷ Section 4 (a)-(c) of the Land Act 1999.

⁶⁸ Section 4 (a) (iii) of the Forest Act, 2002.

⁶⁹ Section 4 (b) (ii) of the Forest Act, 2002.

⁷⁰ Section 4 (d) (ii) of the Forest Act, 2002.

⁷¹ Akida A. and Blomley R., Trends in Forest Ownership, Forest Resources Tenure and Institutional Arrangements: Are they contributing to Better Forest Management and Poverty Reduction? Case Study from the

general land are “forests [for] which the rights of occupancy or a lease has been granted to a person or persons or a partnership or a corporate body or a Non-Governmental Organisation or any other body or organisation for the purpose of managing the forest.”⁷² The general land which accounts for two (2) percent of Tanzanian⁷³ land is non-gazetted or non-reserved land.⁷⁴

The Village Land Act defines “village land” to mean the land declared to be village land and includes any transfer land transferred to a village.⁷⁵ The precise demarcation of village land is provided in section 7 of the Act. According to the information from the Ministry of Lands and Human Settlement Development, 70 percent of Tanzania’s land is village land.⁷⁶ It is also stated that most forests are on this land.⁷⁷ The classifications of forests within village land are: Village land forest reserves (VLFRs) and Community Forest Reserves (CFRs). Under village land, private forests are those “forests on village land held by one or more individuals under a customary right of occupancy.”⁷⁸

A further type of forest on village and general land is unreserved forests.⁷⁹ There is an anecdotal report which states that 16 out of the 35 million ha of forest land in Tanzania are unreserved, and most of these forests are reported to be on village land.⁸⁰ The Forest Act provides that village forests on village land include “forests which are not reserved which are on village land and of which the management is vested in the village council.”⁸¹ In view of this provision, the distinction between “reserve” and “unreserved” is not well provided as it

United Republic of Tanzania. Available: <http://www.fao.org/forestry/12511-0a38b2dd54443592fd647a92d27de18fc.pdf> [accessed 18 August 2015].

⁷² Section 4(d) (ii) of the Forest Act, 2002.

⁷³ Cited in Veit P.G. et. al., Threats to village land in Tanzania: Implications for REDD+ benefit sharing arrangement. A paper presented for presentation at the Annual World Bank Conference on Land and Poverty” the World Bank-Washington DC, April 23-26, 2012.

⁷⁴ Akida A. and Blomley R., Trends in Forest Ownership, Forest Resources Tenure and Institutional Arrangements: Are they contributing to Better Forest Management and Poverty Reduction? Case Study from the United Republic of Tanzania. (Undated) at 4. Available: <http://www.fao.org/forestry/12511-0a38b2dd54443592fd647a92d27de18fc.pdf> [accessed 19 August 2015].

⁷⁵ Section 2 of Village Land Act 1999 Cap 114.

⁷⁶ Cited in Veit P.G. et. al., Threats to village land in Tanzania: Implications for REDD+ benefit sharing arrangement. A paper presented for presentation at the “Annual World Bank Conference on Land and Poverty” the World Bank-Washington DC, April 23-26, 2012.

⁷⁶ Section 69(1) of the Forest Act, 2002.

⁷⁷ Ibid.

⁷⁸ Section 4(d) (i) of the Forest Act, 2002.

⁷⁹ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at 2.

⁸⁰ Zahabu E. et. al., Forestland tenure systems in Tanzania: an overview of policy changes in relation to forest management. INA fagrapport 14, (2009) at 6.

⁸¹ Section 4(c) (iii) of the Forest Act, 2002.

provides the management responsibility to the village council. This assigning of management responsibility seems to be the same criterion applicable to the “reserve forest” as the Act shows that local, village and national authorities are empowered to regulate forest activities depending on the object of the reserve, as alluded to above, and subject to different management plans.

6.2.3.2 Reserved Land

The Land Act provides that reserved land is land set aside for a number of activities including forest conservation.⁸² This land is reserved for *inter alia* national parks, wildlife conservation, marine parks and reserves, towns, and public utilities.⁸³

6.2.3.3 Participatory Forest Management

The management of forest on village land follows the decentralised approach where a number of actors including villages can exercise management activities under long-term management agreements and the state is no longer considered to be the statutory manager.⁸⁴ Thus two main approaches of Participatory Forest Management (PFM) are provided under the Forest Act.⁸⁵ The first approach is Community Based Forest Management (CBFM).⁸⁶ This approach takes place on village land and is managed by the Village Council. Thus Community Forest Reserves (CFRs) and Village Land Forest Reserves (VLFs) are managed by the Village Council on behalf of the village residents.⁸⁷ While a group of people living in or near to a forest or any other group of persons can be formed to manage CFRs⁸⁸ the supervision thereof is exercised by the District Council.⁸⁹

The second approach is a collaborative management approach, termed Joint Forest Management (JFM). JFM is a collaborative management approach that divides the costs and benefits of forest management between the forest owner (usually central or local government,

⁸² See categories of reserved land in section 6 (1) of the Land Act 1999.

⁸³ *Ibid.*

⁸⁴ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at xi. Dokken T. et. al., Tenure Issues in REDD+ Pilot Project Sites in Tanzania. *Forests* 5 (2014) 234-255 at 238.

⁸⁵ Sections 38 and 42 of the Forest Act, 2002.

⁸⁶ Robinson E. J. Z. et.al., Implementing REDD through community-based forest management: Lessons from Tanzania. *Natural Resources Forum* 37 (2013) 141–152.

⁸⁷ Section 34 of the Forest Act, 2002.

⁸⁸ Section 42 (1) of the Forest Act, 2002.

⁸⁹ Section 42 (4) of the Forest Act, 2002.

and even the private sector) and the forest managers (usually forest-adjacent communities).⁹⁰ JFM takes place in categories of forest stated above such as LAFRs, NFRs and private forest reserves. The Act establishes the legal basis for establishing JMAs and provides for forest concessions.⁹¹ Forest concessions refer to the process for establishing forest concession arrangements for the management of trees in forest reserves or general land.⁹² Forest policy elaborates on forest concessions by stating that the process means:

a long-term agreement between the government and a forest industry enterprise, the latter to manage a forest reserve, industrial plantation or part thereof mainly for timber production. The company is responsible for all harvesting and silvicultural activities including road construction and maintenance. The government collects the agreed royalty and concession fees.⁹³

The opportunities highlighted by the above view are opportunities where market based regulation such as the Coasian Approach: Payment for Environmental Services (PES) takes place. In Tanzania, PES has been explored to a small extent.⁹⁴

6.2.3.4 Implications for REDD+

As shown by the previous discussion, if a carbon right is interpreted to be separate from property rights over physical resources in the context of village land then it means the carbon

⁹⁰ United Republic of Tanzania. Joint Forest Management Guidelines; Forestry and Beekeeping Division, Ministry of Natural Resources and Tourism: Dar Es Salaam, Tanzania, (2007). Dokken T. et. al., Tenure Issues in REDD+ Pilot Project Sites in Tanzania. *Forests* 5 (2014) 234-255 at 238. Akida A. and Blomley R., Trends in Forest Ownership, Forest Resources Tenure and Institutional Arrangements: Are they contributing to Better Forest Management and Poverty Reduction? Case Study from the United Republic of Tanzania. (undated) at 5. Available: <http://www.fao.org/forestry/12511-0a38b2dd54443592fd647a92d27de18fc.pdf> [accessed 20 August 2015].

⁹¹ Sections 16 and 20 of the Forest Act 2002.

⁹² Akida A. and Blomley R., Trends in Forest Ownership, Forest Resources Tenure and Institutional Arrangements: Are they contributing to Better Forest Management and Poverty Reduction? Case Study from the United Republic of Tanzania. (undated) at 4. Available: <http://www.fao.org/forestry/12511-0a38b2dd54443592fd647a92d27de18fc.pdf> [accessed 20 August 2015].

⁹³ Cited in Akida A. and Blomley R., Trends in Forest Ownership, Forest Resources Tenure and Institutional Arrangements: Are they contributing to Better Forest Management and Poverty Reduction? Case Study from the United Republic of Tanzania. (undated) at 4. Available: <http://www.fao.org/forestry/12511-0a38b2dd54443592fd647a92d27de18fc.pdf> [accessed 20 August 2015].

⁹⁴ Zahabu E. et.al., Payments for Environmental Services as Incentive Opportunities for Catchment Forest Reserves Management in Tanzania. (undated) <http://www.communitycarbonforestry.org/NewPublications/Payments%20for%20Environmental%20Services%20-%20Zahabu.pdf> [accessed 25 August 2015]. Kaczan D. et.al., Payment for Ecosystem Services (PES) program design in Tanzania: Famers' preferences for enforcement and payment options. Selected Paper prepared for presentation at the Agricultural & Applied Economics Association's 2011 AAEA & NAREA Joint Annual Meeting, Pittsburgh, Pennsylvania, July 24-26, 2011. Available: [http://ageconsearch.umn.edu/bitstream/103673/1/Kaczan%20-%20PES%20design%20in%20rural%20Tanzania%20\(3\).pdf](http://ageconsearch.umn.edu/bitstream/103673/1/Kaczan%20-%20PES%20design%20in%20rural%20Tanzania%20(3).pdf) [accessed 26 August 2015].

rights holder will be required to negotiate with the customary rights holders. This is because such rights are recognised in the Village Land Act. In this sense, the REDD+ implementers will be obliged to involve local communities in forest management and to respect their customary rights over physical resources and social structures. In the same vein, if a carbon right is interpreted to run parallel to the property rights over physical resources in the context of village land, it will result in confusion as to what the incidental rights of carbon rights holders? are and how they affect customary rights of the local community. In this case, there is a possibility of carbon rights of clashing with or trumping customary rights over physical resources.

In the context of reserve land, the interpretation of carbon rights to run parallel to the property rights over physical resources mean that it is possible to delineate the incidental rights because reserved land is regulated by statutes as indicated in section 6.1 of the Land Act. This means carbon rights can be fully regulated within a statutory framework because the incidental rights can be clearly established. This is also the case for general land.⁹⁵

The PFM discussed in section 6.2.4.3 above indicates legal requirements for the establishment of PFM in the context of village land. The discussion also highlights rights and responsibilities for the parties concerned in the context of forests management. Such background provides a useful platform for defining the management responsibilities in the context of REDD+.

6.2.4 Enforcement of and Compliance with Forestry Regulatory Framework

As explained above, forest land in Tanzania is divided into a number of classes as follows: 16 million ha are reserved forests, 2 million ha are forests in national parks and the rest (15.4 million ha) are unprotected forests in village and general land subject to “open access” thereby easily converted into other competing land uses.⁹⁶ This classification has meant that different tools are provided to implement and enforce rules pertaining to forest conservation. The following sections discuss such tools.

⁹⁵ Sundet G., *The 1999 Land Act and Village Land Act: A technical analysis of the practical implications of the Acts*, Oxfam (2005) at 3. The author provides that the “distinction of Reserved Land from General Land does not alter much in relation to the present system of tenure. It does little more than to draw attention to the fact that Reserved Land has been set aside for a special purpose under a different legislation. For example, forestry reserves will continue to be administered according to the legal provisions of the Forests Ordinance.”

⁹⁶ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at xi.

6.2.4.1 Command and Control Approach

The state through different agents has retained exclusion, management, access and withdrawal rights for all land areas classified as reserved land.⁹⁷ The management of reserved land falls under sectoral pieces of legislation. In particular, these include the National Parks Ordinance, Forest Act, Wildlife Conservation Act, and Town and Country Planning Ordinance.⁹⁸ General land is managed by the Commissioner of Lands on behalf of the president but forests on this land (i.e. general land forests) are under the authority and jurisdiction of the Director of Forestry and Beekeeping.⁹⁹ Mainly, a number of approaches are deployed to regulate such areas as follows:

Statutory Enforcement

The Forest Act prohibits a number of activities both in the forest reserves and outside forest reserves. In the event that offences have been committed, the Act prescribes a number of fines.¹⁰⁰ To impose the fines, the Act authorises an officer, forestry officer or police officer to, *inter alia*, “arrest without warrant any person whom he has reasonable cause to suspect ... has committed or has been involved in an offence” and “prevent the movement of, seize and detain any such forest produce or livestock in respect of which there is reason to believe that an offence has recently been committed [...]”.¹⁰¹ In addition, if an individual commits an offence, the Act authorises the director or any officer authorised by the director to publish a notice in a Gazette to compound such offence by accepting from such person a sum of money together with the forest produce.¹⁰² Christy explains that “compounding” allows the executive to accept a fine instead of bringing criminal proceedings. This is only on condition that the offender accepts this procedure instead of insisting on exercising the right to be tried.¹⁰³

⁹⁷ Dokken T. et. al., Tenure Issues in REDD+ Pilot Project Sites in Tanzania. (2014) 5 *Forests* 234-255 at 238.

⁹⁸ Zahabu E. et. al., Forestland tenure systems in Tanzania: an overview of policy changes in relation to forest management. INA fagrapport 14, (2009) at 6.

⁹⁹ Section 6 (1) of the Land Act 1999.

¹⁰⁰ Part XI of the Forest Act 2002.

¹⁰¹ Section 93 (1) (c) and (d) of the Forest Act 2002.

¹⁰² Section 95 (1).

¹⁰³ Christy L.C. et. al., Forest Law and Sustainable Development Addressing Contemporary Challenges Through Legal Reform. The World Bank (2007) at 150.

Criminal Law

The Forest Act provides permits to carry out an activity or activities in the national and local authority forest reserve and the conditions thereof.¹⁰⁴ Breach of these conditions may amount to a civil or criminal offence.¹⁰⁵

Administrative Appeals

The Forest Act also provides for administrative appeals.¹⁰⁶ With respect to the procedures for the declaration of national and local authority forest reserve, any aggrieved person with regards to the decision made under the Act is allowed to appeal to the High Court.¹⁰⁷ Another example relates to management of local forest. If a village council fails to exercise the management of a local forest function as prescribed by the Act, the local authority may take over and exercise such management functions. However, a village council may appeal to the minister in charge of the local authority against any decision by a local authority to take over and exercise the said functions.¹⁰⁸

Permits and Licensing

The permit or licence system constitutes the prime regulatory technique as far as environmental conservation and pollution control are concerned. The Forest Act provides for how to issue permits and licences for activities carried out in national and local authority forest reserves.¹⁰⁹ These activities are felling or extracting timber for domestic commercial use and sale, export, mining purposes or prospecting and for exploration of mineral resources. In addition, the Act requires permits and licences for *inter alia* operating sawmills and other industrial processes and machinery, constructing roads, bridges, paths, waterways, railways or runways and gathering and taking away specified forest produce and picking or taking parts or extracts of any protected plant.¹¹⁰ The breach of these conditions may lead to an abatement notice, or a criminal offence.

¹⁰⁴ Part VI.

¹⁰⁵ Section 54 (5) (a) of the Forest Act, (2002). Available: http://theredddesk.org/sites/default/files/forest_act_tanzania.pdf [accessed 26 August 2015].

¹⁰⁶ Section 22 (1) (6).

¹⁰⁷ Section 22 (1) (6).

¹⁰⁸ Sections 34 and 41(1)-(3).

¹⁰⁹ Section 49.

¹¹⁰ Ibid.

Institutions Enforcing Environmental Laws

The primary courts (i.e. the lowest courts in the hierarchy) and High Courts are the main enforcers of both civil and criminal law and are administered by the Ministry of Justice and Constitutional Affairs.¹¹¹ The Tanzania Police Force (TPF) which is part of the Ministry of Home Affairs is charged with enforcing the criminal law. Institutions, with an enforcement role in environmental management include *inter alia* Sector Ministries, the National Environment Management Council (NEMC)¹¹² and Local Government Authorities.¹¹³ EMA authorises Local Government Authorities to manage environmental matters and it has created Environmental Management Committees at the local level.¹¹⁴ The powers of these committees include to: initiate inquiries and investigations about any allegation related to the environment and the implementation or violation of the provisions of EMA and initiate proceedings of a civil or criminal nature against any person, company, department or institution that refuses or fails to comply with any directive issued by any such committee.¹¹⁵

6.2.4.2 Forest Certification Schemes

A voluntary enforcement mechanism such as the Forest Certification System is discussed in chapter 3. In Tanzania such approach appears to have few existing certificates programs.¹¹⁶ The experiences in two projects in Tanzania reveal that there is a potential for the scheme to allow costs to be shared between members, and which is easily expandable to include other communities and forests.¹¹⁷

¹¹¹ The Hauser Global Law School Program. Available: <http://www.nyulawglobal.org/globalex/Tanzania.htm> [accessed 26 August 2015].

¹¹² Established in section 3 of the National Environment Management Council Act, No 19 of 1983. Its powers, composition and functions with respect to the Environmental Impact Assessment are provided in Part III(d) of the Environmental Management Act of 2004. Available: <http://faolex.fao.org/docs/pdf/tan71740a.pdf> [accessed 26 August 2015].

¹¹³ The Vice President's Office: Available: <http://www.vpo.go.tz/environment/utawala.php> [accessed 24 August 2015].

¹¹⁴ United Republic of Tanzania, National Report for the United Nations Conference on Sustainable Development, Rio+20, Vice President's Office, Division of Environment (2012) at 38. Available: <https://sustainabledevelopment.un.org/content/documents/980tanzania.pdf> [accessed 24 August 2015].

¹¹⁵ United Republic of Tanzania, National Report for the United Nations Conference on Sustainable Development, Rio+20, Vice President's Office, Division of Environment (2012) at 38.

¹¹⁶ Kalonga S.K., Forest Certification Initiatives in Tanzania: Updates. (2010). Available: http://www.agref.info/files/resource_1/Documents/Forest%20Certification%20Initiatives%20in%20Tanzania%20-%20Updates%20revised%20100622.pdf [accessed 22 August 2015].

¹¹⁷ Kalonga S.K., Forest Certification Initiatives in Tanzania: Updates. (2010).

6.2.4.3 Implications of the Governance Approach to REDD+

The above exposition illustrates that the legal framework for governance of forests in Tanzania is found in segmented legislative provisions.¹¹⁸ Despite being segmented, there are some provisions regarding the coordination among such segmented statutes. As seen in section 6.2.2.1, the Forest Act requires a director general at the Ministry responsible for forests to consult LGAs and Forest Management Authorities and keep them informed about the management of forests and EIA process. Majamba has observed that most of the authorities mandated to oversee the institutional framework for the environment and natural resource management as well as those charged with implementing REDD+ lack a comprehension of the interplay of the legal framework that governs the resources.¹¹⁹ This piecemeal approach to governance which is based on command and control is expected to be a challenging task under REDD+ because the requirements of REDD+ (i.e. permanence, leakage and additionality) as discussed in chapters 3 and 4 mean that implementation of REDD+ activities will likely require a wider scope of intervention and coordination which is beyond what a forestry legal framework provides. As the previous chapters have shown, to address the issue of leakage, regulatory initiatives for implementing REDD+ are required from a wider scope including *inter alia* general laws and policies on the environment, forestry, land, agricultural, energy, property, tax and investment. To amend such laws and to improve the practical applications of such a corpus of law will likely prove to be a much more complex undertaking. This thesis provides recommendations to address this challenge in chapter 9.

6.3 Unitary State of Republic of Indonesia

Indonesia adopted a unified governmental structure as a founding component of its national philosophy under the 1945 Constitution.¹²⁰ In 1949 Indonesia temporarily adopted a federal system of government and abandoned it a year later and reverted back to a unified system.¹²¹ The Unitary State of Republic of Indonesia is divided into provinces which in turn are

¹¹⁸ Majamba H.I, Legislative frameworks for implementing REDD : the case of forest governance and management in Tanzania. (2012) 5:3 *Journal of African and International Law*, 489-507 at 506.

¹¹⁹ Majamba H.I, Tanzania's legislative framework in the context of Reducing Emissions from Deforestation and Forest Degradation Plus (REDD+) safeguards. (2012) 15: 2 *Recht in Afrika: Zeitschrift der Gesellschaft für afrikanisches Recht*, 187-205 at 203.

¹²⁰ Sakumoto N., The Participatory Forestry Management System in Indonesia. Policy Trend Report, (2002) 52-76 at 55.

¹²¹ Ibid.

subdivided into districts, municipalities, administrative municipalities, administrative cities, and sub-districts.¹²²

Indonesia has more than 130 million hectares of forests which cover about 70 percent of its land area.¹²³ Drivers of deforestation and degradation in Indonesia are classified as direct and indirect drivers. The direct drivers include illegal logging.¹²⁴ The indirect drivers are made up of *inter alia* international demand to produce and export both material commodities from forestry and agribusiness.¹²⁵ Recently, the country is reported to be the largest global emitter of carbon from land use change and forestry (but not point sources) with total emissions of 2.5 Gt per year. Thus Indonesia is ranked third overall after China and the USA, whose emissions derive from fossil fuel use.¹²⁶

6.3.1 The Legal System

The Indonesian legal system is said to be complex because it is a confluence of three distinct systems.¹²⁷ These are adat (customary) law, Dutch colonial law (based upon the civil law rather than the common law system)¹²⁸ and national law, which co-exist in modern Indonesia.¹²⁹ Pursuant to the Enactment of Laws and Regulations Act,¹³⁰ the sources and

¹²² Usa U.I. (ed), *Indonesia Company Laws and Regulations Handbook*. (2012) at 41. Sakumoto N., *The Participatory Forestry Management System in Indonesia*. Policy Trend Report, (2002) 52-76 at 55.

¹²³ Indonesian REDD+ National Strategy June 2012 at 2.

¹²⁴ Luttrell C. et. al., *Lessons for REDD+ from measures to control illegal logging in Indonesia*. *Working Paper 74 CIFOR* (2011).

¹²⁵ Dehm J., "REDD faces all around" *Implementing reducing emissions from deforestation and forest degradation in Indonesia* (undated) 98-125 at 100. Available: https://www.academia.edu/1589055/REDD_Faces_all_Around_Implementing_reducing_emissions_from_deforestation_and_forest_degradation_in_Indonesia [accessed 2 August 2015].

¹²⁶ Noordwijk M. et. al., *Reducing emissions from deforestation and forest degradation (REDD) in Indonesia: options and challenges for fair and efficient payment distribution mechanisms*. Working Paper nr 8, World Agroforestry Centre (2008) at 9. Available: http://www.unredd.net/index.php?option=com_docman&task=doc_view&gid=7525&tmpl=component&format=raw&Itemid=53 [accessed 4 August 2015].

¹²⁷ Law and technology resources for legal professionals. Available: <http://www.llrx.com/features/indonesia.htm> [accessed 8 August 2015], see also http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1002&context=lps_lsapr [accessed 8 August 2015].

¹²⁸ <http://indonesialawonline.com/IndoLaw%20Common%20and%20Civil%20Law%20.aspx> [accessed 8 August 2015]

¹²⁹ Law and technology resources for legal professionals. Available: <http://www.llrx.com/features/indonesia.htm> [accessed 8 August 2015].

¹³⁰ Article 7 (1) of the Enactment of Laws and Regulations Act No. 10 of 2004.

hierarchy of the legal framework in Indonesia are classified in at least five (5) themes as follows:¹³¹

1. The Constitution of Indonesia 1945,
2. Laws or Government Regulations Substituting for Law (*Perpu*),
3. Government Regulations (*Peraturan Pemerintah*),
4. Presidential Decree (*Peraturan Presiden of Perpres*) and
5. Regional Regulation (*Peraturan Daerah, Perda*) which comprises:
 - i. Provincial Regulation (*Peraturan Daerah Provinsi*)
 - ii. District Regulation (*Peraturan Daerah Kabupaten*)
 - iii. Village Regulation (*Peraturan Desa*).

The above legal framework stands in a hierarchical relationship. An example cited is that a Government Regulation is higher in rank than a Presidential Decree. Such vertical hierarchical relationship was meant to denote the legal power of each regulation. Therefore, the content of a lower regulation cannot contradict the content of a higher regulation.¹³² The statutes that are not mentioned by the Enactment of Laws and Regulations Act, such as the Ministerial Regulation (also known as ministerial decrees before 2004) or Governor Regulation also have legal binding power as long as they have been devised pursuant to the legislation of a higher category.¹³³ However, the Enactment of Laws and Regulations Act does not locate the position of ministerial regulations in the hierarchy of legislation. In this regard, Safitri states that the ministerial regulations are situated between presidential and regional regulations. This is because ministerial regulations are implemented nation-wide whilst regional regulations only apply to a specific region as the name suggests.¹³⁴ Other sources of laws in Indonesia include doctrine (this is the opinion of law from jurists or legal scholars applied to interpret a general conception of law within other legal sources or to provide explanation on the ambiguity of laws), and jurisprudence (but these court decisions merely have a persuasive force of precedence).¹³⁵

¹³¹ Safitri M.A., *Forest Tenure in Indonesia: The socio-legal challenges of securing communities' rights*. PhD Thesis Leiden University, (2010) at 69.

¹³² Article 7 (5) of the Enactment of Laws and Regulations Act No. 10 of 2004.

¹³³ Nurrochmat D.R., *Review Infrastructure Framework and Mechanism Related to SFM as Important Option in Reducing Emission from Deforestation and Forest Degradation*. Ministry of Forestry of Indonesia – International Tropical Timber Organization RED-PD 007/09 Rev. 2 (F) Report (2011) at 10.

¹³⁴ Safitri M.A., *Forest Tenure in Indonesia: The socio-legal challenges of securing communities' rights*. PhD Thesis Leiden University, (2010) at 69.

¹³⁵ The Hauser Global Law School Program. Available: <http://www.nyulawglobal.org/globalex/Indonesia.htm> [accessed 26 August 2015].

6.3.2 The Roles of Central, Regional and Local Government

The respective roles and responsibilities of the spheres of government with respect to forest governance must be understood within the broader initiatives to decentralise power as discussed in the introduction above. As such, the main statutes which laid out a broad framework for the decentralisation are the “Regional” Governance Act¹³⁶ and the Fiscal Balancing Act.¹³⁷ The main objective of the Regional Governance Act focused on “the delegation of governance authority” to autonomous regions – but more specifically to district and municipal governments. It empowered these regions “to govern and administer the interests of the local people according to their own initiatives, based on the people’s aspirations, and in accordance with the prevailing laws and regulations.”¹³⁸ The scope of that authority spans a number of fields including public works, agriculture, capital investment, industry and trade, environment, and land affairs.¹³⁹ The Fiscal Balancing Act on the other hand provides a framework for the redistribution of revenues among national and regional governments. In particular, the law provided considerably greater authority and responsibility to district and provincial governments to manage their own budgets, and to raise their own revenues.¹⁴⁰ However, the details of the said legislation did not provide clear guidance on the distribution of authority and administrative responsibilities. This led to many district and provincial governments issuing regulations that would seem to exceed the authority granted to them by such legislation.¹⁴¹

Given the above lack of legal clarity, two statutes were issued to clarify the rights, authority, respective roles and obligations of governments at each level of Indonesia’s administrative apparatus.¹⁴² Accordingly the Amended Regional Governance Act¹⁴³ and Amended Fiscal

¹³⁶ Governance Act No. 22 of 1999, the meaning of “Regional” in the Act refers to provinces, districts, and municipalities.

¹³⁷ Fiscal Balancing Act No. 25 of 1999. Also see Barr C. et. al. (eds.), *Decentralization of Forest Administration in Indonesia: Implications for Forest Sustainability, Economic Development and Community Livelihoods*. Center for International Forestry Research (2006) at 11 and 64.

¹³⁸ Barr C. et. al. (eds.), *Decentralization of Forest Administration in Indonesia: Implications for Forest Sustainability, Economic Development and Community Livelihoods*. Center for International Forestry Research (2006) at 52-53.

¹³⁹ *Ibid* at 11.

¹⁴⁰ *Ibid*.

¹⁴¹ *Ibid* at 14.

¹⁴² *Ibid* at 52-53. Darmawan R.E.D., *The practices of decentralization in Indonesia and its implication on local competitiveness*. University of Twente (2008) at 56. The Hauser Global Law School Program. Available: http://essay.utwente.nl/59282/1/scriptie_R_Darmawan.pdf [accessed 8 August 2015].

¹⁴³ Amended Regional Governance Act No. 32 of (2004).

Balancing Act¹⁴⁴ were issued to replace older versions described above. First, the Amended Regional Governance Act is aimed at promoting cooperative relations among regional governments and at ensuring effective coordination between regional governments. It articulates areas where regional governments can exercise autonomy, and areas where they are required to engage in “co-administration” functions, together with governments at other levels.¹⁴⁵ Therefore, the Amended Regional Governance Act provides authority to the central government to influence and control the activities of regional governments at each level.¹⁴⁶ A common interpretation of the “right to control” in the forestry sector has been taken to mean powers to regulate, plan and allocate natural resources.¹⁴⁷ However, Safitri points out that the Indonesian Constitutional Court has broadened this interpretation to include the authority of policymaking, regulating, governing, managing and supervising, for the greatest prosperity of the people.¹⁴⁸ The Court also clarified the term “regulating” to mean “the authority to legislate and implement laws and regulation and regulations-making”, and “governing” to mean the “authority of issuing and revoking licenses and concessions.”¹⁴⁹

Secondly, the Amended Fiscal Balancing Act provides for revenue sharing between the central government and the regional governments.¹⁵⁰ The purpose is to address two issues. First is the vertical imbalances between central and sub-national governments, and secondly, the horizontal imbalances among sub-national governments.¹⁵¹ The sources of funds are derived from a number of natural resources including forestry.¹⁵² The discussion on the relationship between local, provincial and central spheres of government in forest governance is provided below.

¹⁴⁴ Amended Fiscal Balancing Act 33 of 2004.

¹⁴⁵ Barr C. et. al. (eds), *Decentralization of Forest Administration in Indonesia: Implications for Forest Sustainability, Economic Development and Community Livelihoods*. Center for International Forestry Research (2006) at 52-53.

¹⁴⁶ Ibid at 52-53.

¹⁴⁷ Safitri M.A., *Forest Tenure in Indonesia: The socio-legal challenges of securing communities' rights*. PhD Thesis Leiden University, (2010) at 76.

¹⁴⁸ Constitutional Court Decision Case number OOI-021-022/PUU-I/2003, at 334; Decision on Case number OOI-021-022/pUU-Ij2003, at 211. Cited by Safitri M.A., *Forest Tenure in Indonesia: The socio-legal challenges of securing communities' rights*. PhD Thesis Leiden University, (2010) at 77.

¹⁴⁹ Cited in Safitri M.A., *Forest Tenure in Indonesia: The socio-legal challenges of securing communities' rights*. PhD Thesis Leiden University, (2010) at 77.

¹⁵⁰ Preamble of the Law No. 33 of 2004 on Fiscal Balancing Between the Central Government and Regional Governments. Available: http://www.bkpm.go.id/file_uploaded/uu_33_2004_en.pdf [accessed 8 August 2015].

¹⁵¹ Murniasih E., *Is the new intergovernmental equalisation grant in Indonesia equalising?* (Undated) at 1-2. Available: http://www.publicfinance.ru/filemanager/files/ind_2_transferts_indonesia.pdf [accessed 8 August 2015].

¹⁵² Article 11 (3) of the Law No. 33 of 2004 on Fiscal Balancing Between the Central Government and Regional Governments.

In order to manage forestry, the Forest Act¹⁵³ provides that Government shall delegate a part of its authority to Regional Administrations.¹⁵⁴ The Act provides that government regulation will provide more details to ensure this decentralisation. In this respect, the applicable regulation is the Government Regulation on forest arrangement and formulation of forest management plan as well as forest exploitation.¹⁵⁵ It provides that “government and/or provincial governments and/or municipal governments are responsible for Forest Management in accordance with the criteria established in the regulation.”¹⁵⁶ Thus the Agencies responsible for the management of forests in Indonesia at national level is the Ministry of Forestry, at provincial level is the Provincial Forest Service while at the Regency level is the District Forest Service.¹⁵⁷

6.3.2.1 Co-operation and Co-ordination

The co-operation and co-ordination in the context of forestry is provided by the Government Regulation.¹⁵⁸ This regulation was designed to restrict the authority of district and provincial governments and to reaffirm the dominant role played by the Ministry of Forestry (MoFo).¹⁵⁹ Some scholars observed that since 2003 MoFo used this regulation to stop the allocation of small-scale logging and forest conversion permits by district governments within the boundaries of the Forest Estate.¹⁶⁰ On the other hand, the MoFo is empowered to issue forest conversion licences for plantation development and renew the contracts of several large-scale timber concession-holders.¹⁶¹ However, the MoFo is required to seek approval from both the district and provincial governments before making such decisions. An example cited is that provincial governments have the power to determine how allocations from the Reforestation

¹⁵³ Forest Act No. 41 of 1999.

¹⁵⁴ Article 66 (1) of the Law of the Republic of Indonesia No. 41 of 1999. The REDD Desk. Available: http://theredddesk.org/sites/default/files/uu41_99_en.pdf [accessed 8 August 2015].

¹⁵⁵ Government Regulation No. 6/2007.

¹⁵⁶ Article 8 of Government Regulation No. 6/2007.

¹⁵⁷ Karyaatmadja B., Indonesia law and forest tenure. Available: http://www.rightsandresources.org/documents/files/doc_1767.pdf [accessed 28 August 2015].

¹⁵⁸ Regulation No. 34 of 2002 on Forest Administration and the Formulation of Plans for Forest Management, Forest Utilization, and the Use of the Forest Estate. Article 8 provides that the government and/or provincial governments and/or municipal governments in accordance with their respective scopes of authority stipulate organisations of forest management areas.

¹⁵⁹ Barr C. et. al., Decentralization of Forest Administration in Indonesia: Implications for Forest Sustainability, Economic Development and Community Livelihoods. Center for International Forestry Research (2006) at 123.

¹⁶⁰ Ibid.

¹⁶¹ Ibid.

Fund¹⁶² will be distributed to districts and municipalities within their jurisdictions. This stands in contrast to the centralisation era, when the central government managed the Reforestation Fund in a highly unrestricted manner with allocations largely made through presidential decree.¹⁶³

Other scholars argued that the issue of coordination across government agencies, and coordination between central, provincial and district governments is still a major challenge for Indonesia.¹⁶⁴ This is because the Amended Regional Governance Act severely curtailed the “all inclusive” authority of districts.¹⁶⁵ The law provides for forests to be managed as Forest Management Units where district governments have only technical responsibilities while decisions regarding issues such as financing, design and establishment are made at higher levels. Despite this legal provision, many districts still lay claim to control of forests and thus coordination and cooperation is limited in practice.¹⁶⁶ This situation is likely to have a significant effect on the way distribution of costs and benefits in REDD+ will be addressed.¹⁶⁷

6.3.3 Forest and Land Tenure and Forest Categories

6.3.3.1 Forest Tenure/Property Status

In Indonesia, arrangements for forests are usually separate from those for land use. The Forestry Act¹⁶⁸ regulates forest land use, while the Basic Agrarian Law¹⁶⁹ regulates regions outside forest areas.¹⁷⁰ The Basic Agrarian Law provides for the status of customary land as a separate entity.¹⁷¹ In non-forest areas, recognition of such rights is stronger while in forest

¹⁶² This is one of the mechanisms which distributes State revenues from natural resources. See Article 14 of the Law No. 33 of 2004 on Fiscal Balancing Between the Central Government and Regional Governments.

¹⁶³ Barr C. et. al., *Decentralization of Forest Administration in Indonesia: Implications for Forest Sustainability, Economic Development and Community Livelihoods*. Center for International Forestry Research (2006) at 14.

¹⁶⁴ Larson A.M. and Ribot J.C., Lessons from forestry decentralization in Angelsen A. (ed.), *Realising REDD+ National strategy and policy options*. (2009) at 178.

¹⁶⁵ Ibid.

¹⁶⁶ Ibid. See also Indrarto G.B. et.al., The context of REDD+ in Indonesia: Drivers, agents and institutions. Working Paper 92, CIFOR (2012) at 21.

¹⁶⁷ Ibid Larson A.M., (2009) at 178.

¹⁶⁸ Forestry Act of 41 of 1999.

¹⁶⁹ Basic Agrarian Law No 5 of 1960.

¹⁷⁰ Safitri M.A., *Forest Tenure in Indonesia: The socio-legal challenges of securing communities' rights*. PhD Thesis Leiden University, (2010) at 71. Indrarto G.B. et. al., The context of REDD+ in Indonesia: Drivers, agents and institutions. Working Paper 92 (2012) at 35. Available:

http://www.cifor.org/publications/pdf_files/WPapers/WP92Resosudarmo.pdf [accessed 12February 2014].

¹⁷¹ Ibid.

areas recognition of such rights is weak in forestry law.¹⁷² To understand how Indonesian forestry legislation regulates state and community property rights, it is necessary to be acquainted with some legal terms, concepts and classifications used by forestry legislation regarding the property status and formal functions of forest.¹⁷³

(a) State and private forests

According to the Forest Act,¹⁷⁴ forest is divided into two categories: the first being state, where forests on untitled land form are regarded as state forests and the second being private forests, which are located on titled land.¹⁷⁵ There are two factors determining the status of private forest: the presence of a land certificate which verifies a private right, and the administrative decision of a head of district or mayor to assign the land as private forest.¹⁷⁶ Private forests are regulated under the jurisdiction of district or town governments.¹⁷⁷

(b) Forest Area

The Forest Act provides the term “forest area” as a concept which refers to an area designated and or specified by government to be reserved as permanent forest.¹⁷⁸ Forest area must be distinguished from the term “forest”. The former is based on a government's administrative decision to distribute and utilise certain land - forested or not - as forest while the latter is designated primarily on the basis of its physical qualities.¹⁷⁹ The Forest Areas are under the jurisdiction of and administered by the Ministry of Forestry.¹⁸⁰ However, the power to control forest areas can be changed and transferred to other parties.¹⁸¹ Thus other government agencies, private companies and the people can establish land ownership rights on forest areas as per procedures established in the Act.¹⁸²

¹⁷² Safitri M.A., *Forest Tenure in Indonesia: The socio-legal challenges of securing communities' rights*. PhD Thesis Leiden University, (2010) at 87.

¹⁷³ Safitri M.A., *Forest Tenure in Indonesia: The socio-legal challenges of securing communities' rights*. PhD Thesis Leiden University, (2010) at 87.

¹⁷⁴ Article 5 (1).

¹⁷⁵ *Ibid* at 88.

¹⁷⁶ *Ibid*.

¹⁷⁷ *Ibid*.

¹⁷⁸ *Ibid* at 89.

¹⁷⁹ *Ibid*.

¹⁸⁰ *Ibid* at 90.

¹⁸¹ *Ibid* at 98.

¹⁸² *Ibid*.

6.3.3.2 Categories of Forest

The management of forests in Indonesia is organised according to the functions of forest, which are legally defined. The Forest Act states that forests (state or private) have three major functions: production, protection and conservation.¹⁸³ The permitted activities in the production forest are clear cutting forests and industrial timber plantations.¹⁸⁴ Within the production forest category, the Act establishes “Convertible Production Forests”. These are defined as production forests that can be converted into non-forestry functions, particularly for other development objectives such as agriculture.¹⁸⁵ They consist of national parks, wildlife sanctuaries, grand forest parks, nature recreation parks and nature reserves.¹⁸⁶ The permitted activities include extraction of non-timber forest products, forest area utilisation activities, cultivating medicinal/decorative plants, capturing wildlife, apiculture, and cattle feed. Conservation forest which varies according to its sub-classification (national park, natural reserve, wildlife reserve, grand forest park, nature recreational park, hunting park) allows for research, education, cultivation activities, cultural activities, and limited tourism to take place.¹⁸⁷

6.3.3.3 Participatory Forest Management (PFM)

The Forest Act provides for the rights of the community as follows:¹⁸⁸

1. Individuals who have lost rights to property as a result of a decision to develop a forest area have the right to seek compensation in accordance with law.
2. Communities have a right to knowledge and information regarding plans for benefit sharing in relation to forestry and forest products.
3. Communities have the right to offer information, advice and ideas regarding forest development.
4. Communities have the right to utilise forests and their products according to the relevant laws.
5. Communities affected by forestry operations and by forest disappearance may seek compensation for losses.
6. Communities have the right to oversee forest development, either directly or indirectly.
7. Society has the right to enjoy environmental quality as derived from forests.

¹⁸³ Safitri M.A., *Forest Tenure in Indonesia: The socio-legal challenges of securing communities' rights*. PhD Thesis Leiden University, (2010) at 99.

¹⁸⁴ Compiled from Law 41 of 1999 on Forestry, Minister of Forestry Regulation P.50 of 2009, Minister of Forestry Regulation 37 of 2007, and Government Regulation 68 of 1998.

¹⁸⁵ *Ibid* Safitri M.A., (2010) at 100.

¹⁸⁶ *Ibid*.

¹⁸⁷ Compiled from Law 41 of 1999 on Forestry, Minister of Forestry Regulation P.50 of 2009, Minister of Forestry Regulation 37 of 2007, and Government Regulation 68 of 1998.

¹⁸⁸ Article 68.

The relevance of the above rights for REDD+ in Indonesia is established in the next section.

6.3.3.4 Implications for REDD+

Given that in Indonesia arrangements for forests are usually separate from those for land use, it is beneficial to define carbon rights as separate from property rights (as provided above) over physical resources. This implies that the eligible beneficiaries are those with the right over use of environmental services rather than land tenure. In this sense the management responsibilities will depend on the negotiations between carbon rights holders and those with rights over the use of environmental services. In the same vein, if the definition of carbon rights is to run parallel to the property rights over physical resources, it means that eligibility for benefits and responsibilities for the community will be limited since their customary rights are not strongly protected in the forest areas.

6.3.4 Enforcement of and Compliance with Forestry Regulatory Framework

6.3.4.1 Command and Control Approach

The Indonesian Environmental Management Act (EMA)¹⁸⁹ and Forest Act are heavily based on the command and control approach. Under the Forest Act, the use of protected forest is through the use of area utilisation operation permits, environmental service utilisation operation permits and non-timber forest produce collection permits.¹⁹⁰ When a licence holder does not act in accordance with the terms stipulated in a licence or uses forest resources without a licence, there are in theory three ways of enforcement. These are administrative law, criminal law and civil law.¹⁹¹

Administrative Measures

The Forest Act provides administrative sanctions for anyone who violates the “utilization operation permit, environmental service utilization operation permit, forest produce utilization operation permit, or forest produce collection permit.”¹⁹² This includes the

¹⁸⁹ Environmental Act No. 32 of 2009.

¹⁹⁰ Article 26.

¹⁹¹ Stroink F., Supervision and enforcement in the Law Concerning Environmental Management, Law No. 23 of 1997. In Faure M. and Niessen N. (eds), *Environmental Law in Development: Lessons from the Indonesian Experience*. (2006) at 184.

¹⁹² Article 80 (2) of the Law of the Republic of Indonesia No. 41 of 1999.

suspension of administrative service, suspension of activity in the field, fine, or revocation of licence.¹⁹³

Permits, Licensing

The Forest Act allows anyone to utilise state forests by holding licenses of forest utilisation.¹⁹⁴ Using this Act and its implementing Regulation,¹⁹⁵ the Ministry of Forestry has developed a number of initiatives to strengthen forest governance. These include: the establishment of a one-roof forestry permit system - including an online system - which aims to reduce direct interface between government officers in the ministry and clients,¹⁹⁶ and six online permit systems within the Ministry of Forestry. The permits are: the logging utilisation permit, timber plantation permit, ecosystem restoration, forestry permit for mining activity in state forest areas, forestry permit for exploration and surveying in state forest areas, and forest conversion for other land uses.¹⁹⁷

Administrative Law Enforcement Procedure

The Minister, governors or regents/mayors are empowered by the EMA to supervise the compliance of personnel in charge of business in order to ensure environmental conservation. Such supervisors are empowered to impose sanctions on the aforementioned personnel if an environmental permit is violated.¹⁹⁸ Such sanctions consist of written warning, government coerciveness, freezing of an environmental permit and revocation of an environmental permit.¹⁹⁹ However, administrative sanctions remain unclear under the Ministry of Forestry. It is reported that the Minister of Forestry has no power to impose administrative sanctions for violations in state forests if permits were issued by another government agency such as mining or estate crops.²⁰⁰ This complicates the issue of control, and eventually law enforcement, over the permits issued by other government agencies.²⁰¹

¹⁹³ Article 128 (1) of Government Regulation No. 6/2007 on forest arrangement and formulation of forest management plan as well as forest exploitation.

¹⁹⁴ Articles 26 to 39 of Law 41/1999 regulate forestry licensing.

¹⁹⁵ Regulation, GR 6/2007 on Forest Systematization, and Planning for Forest Management and Utilization.

¹⁹⁶ Syarif L.M., Current Development of Indonesian Environmental Law. *IUCN Academy of Environmental Law e-Journal* (2010) 1 at 14.

¹⁹⁷ Ibid.

¹⁹⁸ Articles 71 and 76 (1) of Environmental Act No. 32 (2009).

¹⁹⁹ Article 76 (2) of Environmental Act No. 32 (2009).

²⁰⁰ Indrarto G.B. et.al., The context of REDD+ in Indonesia: Drivers, agents and institutions. *Working Paper 92, CIFOR* (2012) at 20-21.

²⁰¹ Ibid.

Criminal Law

In relation to criminal enforcement, the EMA empowers civil servant investigators to undertake investigations and they can request the national police for assistance.²⁰² In this respect the EMA provides that in environmental criminal enforcement, civil servant investigators, the Attorney General Office and the national police shall collaborate and coordinate under the supervision of the Minister of Environment.²⁰³ Syarif indicated that this requirement was in response to the prior difficult experience in coordination among such authorities.²⁰⁴

Institutions Enforcing Environmental Laws

The judiciary is among the institutions that enforce environmental laws. It consists of four different jurisdictions under the Supreme Court. Two sub-systems are closely related to environmental cases, namely the general judiciary and the administrative judiciary.²⁰⁵ The second is the Public Prosecutor. The duty of a prosecutor in an environmental criminal context involves (a) carrying out prosecutions against violators, (b) executing judge rulings and court decisions, (c) supervising and administering conditional criminal decisions, and (d) completing cases sometimes requiring coordination with investigators.²⁰⁶ The third is National Police. The roles of the police officer include enforcing the Criminal Procedure Code that deals with environmental crimes.²⁰⁷ The fourth is regency or city governments which are responsible for implementing environmental management policy within their own territory.²⁰⁸ Lastly, the provincial governments are empowered to address environmental problems pertaining to cross-regency/city matters and impose several administrative sanctions within their jurisdiction.²⁰⁹

6.3.4.2 Forest Certification Schemes

Apart from the command-and-control enforcement measures for forestry in Indonesia, there are Forest Certification System initiatives operating as voluntary enforcement measures. There are two major forest certification systems in Indonesia: the “Lembaga Ekolabel (LEI)

²⁰² Article 94 (2).

²⁰³ Article 94.

²⁰⁴ Ibid Syarif L.M., (2010) at 15.

²⁰⁵ Environmental Compliance and Enforcement in Indonesia Rapid Assessment. (2008) at 11.

²⁰⁶ Ibid.

²⁰⁷ Article 77 (1) of the Law of the Republic of Indonesia No. 41 of 1999.

²⁰⁸ Environmental Compliance and Enforcement in Indonesia Rapid Assessment. (2008) at 11.

²⁰⁹ Ibid.

scheme”²¹⁰ and the Forest Stewardship Council (FSC) Scheme.²¹¹ Although these two systems are different in origin and have been developed independently they are currently collaborating to certify Indonesia timber products.²¹² To this end, the World Wide Fund for Nature (WWF) along with other organisations pursuing the preparation of logging companies for certification, such as the Tropical Forest Foundation and Tropical Forest Trust, all use the FSC certification standard. Nevertheless, progress with certification in Indonesia has been slow.²¹³

6.3.4.3 Implications of the Governance Approach to REDD+

Indonesia faces similar challenges that affect the governance of REDD+ activities in Tanzania. Problems are seen particularly when it comes to decision-making and coordination. In the case of Indonesia, it has been observed that even though initiatives have been undertaken to address the problems related to the issues of decentralisation, in practice, many authors appear to express doubt on the prospects of effective coordination and decision-making. These practical realities are likely to persist through the REDD+ implementation under the command and control approach discussed in Indonesia. Thus addressing issues of leakage and permanence cannot be expected at least in the short term.

6.4 Conclusion

This chapter has outlined governance approaches and illustrated the challenges in realising the implementation of sustainable forest management. As discussed in chapters 3 and 4, REDD+ is more challenging than previous efforts to deal with forest. Whereas in previous efforts to avoid deforestation aimed merely at forest conservation in general, the primary object of REDD+ is reducing and control of carbon by avoiding deforestation and degradation, conservation of forest carbon stocks, sustainable management of forest and enhancement of forest carbon stocks. The complexities brought by this objective are how to deal with leakage, additionality and MRV, the aspects which have never been undertaken in forestry in the countries in this study. Reiterating this complexity here is a reminder that when

²¹⁰ The Indonesian Eco-labeling Institute. Available: <http://www.lei.or.id/tentang-sertifikasi-lei> [accessed 12 February 2015].

²¹¹ Sakumoto N., The Participatory Forestry Management System in Indonesia. *Policy Trend Report* (2002) 52-76 at 61.

²¹² Luttrell C. et al., Lessons for REDD+ from measures to control illegal logging in Indonesia. *Working Paper 74 CIFOR* (2011) at 12.

²¹³ Ibid at 11.

countries are dealing with the question of governance, there is a need to assess whether the same governance approach used in previous efforts with limited success is the same approach that is envisaged to deal with REDD+. The argument advanced in this chapter is that the governance processes required for REDD+ must be broad and all-encompassing in their scope.²¹⁴ As discussed in chapters 8 and 9, this thesis departs from the governance processes discussed in this chapter.

²¹⁴ Ibid at 15.

Chapter Seven:

Aspiring to Achieve Equity, Environmental Effectiveness and Cost-Effectiveness Outcomes (3Es)

7.1 Introduction

Having discussed the governance, compliance and enforcement of forest related laws, this chapter explores how the Tanzanian and Indonesian governments envisage how they are going to achieve Equity, Environmental Effectiveness and Cost-Effectiveness (3Es) outcomes.¹ The chapter explores the distribution of benefits and costs, and regulatory nuts and bolts discussed or envisaged in the regulatory frameworks for REDD+. This analysis is made against the conceptual framework set out in chapter 2 in order to judge whether such regulatory framework can be said to be an optimal and feasible model legislative framework sufficient to implement REDD+ in developing countries. Such investigation provokes the following pertinent questions: first, do the regulatory frameworks for REDD+ have a regulatory technique for allocating burdens and benefits and enforcement (hereinafter regulatory framework), or they have just devised *ad hoc* policy responses driven by nothing other than pragmatic politics? The analysis suggests that there is, indeed, a strong regulatory framework implicit in each regulatory framework. One response to this claim may be that there is no underlying regulatory framework intentionally adopted in Tanzania and Indonesia, but (for the purpose of this thesis) that is irrelevant. The question is whether there is a regulatory framework in each country's regulatory framework that is identifiable, not whether it was intended.² Secondly, following the regulatory nuts and bolts that follow the theories, what relationships exist between types or strategies of regulation, on the one hand, and the potential 3Es outcomes on the other? This focus is necessary because one needs to distinguish

¹ For a detailed discussion on the 3Es, see chapter 2.

² It should be emphasised that an outcome might be positive or negative but the chances of having an outcome that is positive is unlikely if deliberate actions are not taken to prevent potential barriers. This aspect is crucial to the decision-makers who are charged with devising regulatory frameworks for REDD+ because they should be mindful of the potential inhibitors while they are exercising their duties on the behalf of the public. In this sense, many would agree that decision-makers have to pay attention to the regulatory technique vs the potential outcome and impacts.

whether the compliance and enforcement mechanisms for REDD+ replicate the same institutional and equity framework that has dominated forest governance interventions for decades. As argued later in chapter 8, different governance models are likely to produce different results. Thus, the chapter advances this argument by identifying whether and how the three dimensions of equity (distributive, procedural, and contextual) discussed in chapter 2 are envisioned in REDD+ regulatory frameworks in each country. Further the chapter advances this argument by looking at the governance model that is aimed at reinforcing the mentioned dimensions of equity and examines the extent to which REDD+ offers an alternative normative basis/structure for the pursuit of the 3Es outcome.

7.2 Tanzanian Approach to Climate Change Mitigation

Tanzania is party to the UNFCCC and Kyoto Protocol.³ In fulfilling its obligations,⁴ Tanzania developed the Initial National Communication to the UNFCCC in 2003. The objective of this communiqué was in response to the UNFCCC requirement to develop an inventory of human induced greenhouse gas emissions and removals and to communicate to the COP.⁵ The major sectors covered in the inventory are energy, agriculture, industrial process, waste management, forestry and land use.⁶ In the current international climate negotiations, Tanzania is advocating for an approach to the REDD+ mechanism that “establishes a pathway to engage in voluntary Nationally Appropriate Mitigation Actions (NAMAs) by developing countries in the context of sustainable development.”⁷ The country agreed to the terms of the Bali Action Plan and Copenhagen Accord⁸ and pledged to reduce greenhouse gas emissions economy wide between 10 and 20% by 2030 relative to the BAU scenario of 138-153 million tons of carbon dioxide equivalent (MtCO₂e) - gross emissions.⁹ In the context of forestry the

³ UNFCCC. Available: http://unfccc.int/essential_background/convention/status_of_ratification/items/2631.php and UNFCCC. http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php [both accessed 11 February 2015].

⁴ Obligations for developing countries are discussed in chapter 3, section 3.3.

⁵ See chapter 3.

⁶ Initial National Communication to the UNFCCC (in July 2003) at 7. Available: <http://unfccc.int/resource/docs/natc/tannc1.pdf> [accessed 12 February 2015].

⁷ FCCC/AWGLCA/2009/MISC.1/Add.4 at 4. Also see Peskett L. and Brockhaus M., When REDD+ goes national: A review of realities, opportunities and challenges in Angelsen A. (ed.), *Realising REDD+ National strategy and policy options*, (2009) at 38.

⁸ Burian B.S., Minister of State Vice-Presidents Office - 3rd February, 2010. Available: http://unfccc.int/files/meetings/cop_15/copenhagen_accord/application/pdf/unitedrepublictanzaniacphaccord.pdf [accessed 12 February 2015].

⁹ The United Republic of Tanzania Intended Nationally Determined Contributions (INDCs) 2015 at 5.

Tanzanian “NDCs”¹⁰ mention enhancing carbon sinks through forest conservation, afforestation and reforestation activities as an approach to mitigate climate change.¹¹ The implementation of the identified INDCs will strongly depend on how the international community meets its commitments in terms of financial and technological support.¹² In addition, Tanzania has developed a National Strategy on REDD+.¹³ Therefore the approved national REDD+ Strategy and its Action Plan are (so far) the main regulatory framework for implementing REDD+ activities in Tanzania.¹⁴ The main goal of REDD+ “is to facilitate well-coordinated and effective implementation of REDD+ related policies, processes and activities so as to contribute to the climate change agenda and overall sustainable human development, enabling Tanzania to benefit from a system based on results-based payments for demonstrated emission reductions from deforestation and forest degradation.”¹⁵

7.2.1 Distribution of Costs and Benefits

7.2.1.1 Institutional Arrangements

On 5 February 2007 the President of Tanzania approved the Division of Environment to coordinate climate change adaptation and mitigation at the national level.¹⁶ At the regional and district levels, the coordination of REDD+ activities follows the existing local government institutional structure discussed in chapter 6. This is to say that the Regional Administrative Secretariat serves as the link between the Ministries and the District Councils. At the district and municipal levels, Environmental Management Committees as established by the Environmental Management Act, 2004, will function as coordinators for REDD+ activities in their respective areas.¹⁷

¹⁰ See chapter 3 for a discussion on NDCs.

¹¹ Ibid at 4-5.

¹² Ibid at 8.

¹³ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at 2.

¹⁴ REDD Readiness Progress Fact Sheet. November 17, (2013). Available: <http://forestcarbonpartnership.org/sites/fcp/files/2013/Nov2013/REDD%20Readiness%20Progress%20Fact%20Sheet.docx%20November%202013.pdf> [accessed 15 February 2015].

¹⁵ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at viii.

¹⁶ The REDD Desk. Available: <http://theredddesk.org/countries/actors/division-environment-vice-president%E2%80%99s-office-tanzania> [accessed 12 February 2015].

¹⁷ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at 21.

A review funded by the Royal Norwegian Embassy established that the Vice-President's Office's (VPO) "mandate to coordinate REDD+ is agreed by all, however, capacities remain low, institutional behaviour is unchanged and private sector is uninvolved. As a result of the project there is a widespread consensus among National REDD+ Task Force (NRTF) members regarding the legal mandate of DoE in the VPO for coordinating issues of climate change, including REDD+. The mandate of VPO over REDD+, which is essentially a forestry initiative, was contested in the beginning. It is unclear whether the acceptance of VPO's mandate has been translated into increased capacity within VPO. It is currently too early to say whether this consensus will continue into the future."¹⁸ However, the private sector and the Ministry of Finance are not yet involved in REDD+ discussions at national level.¹⁹ A study on how REDD+ has been unfolding on the ground has pointed out that the Tanzanian government has been reluctant to develop the institutional arrangements necessary to see REDD+ beyond the pilot phase, in particular for finance and benefit-sharing mechanisms.²⁰

7.2.1.2 Authority with Jurisdiction to Distribute Costs and Benefits

The Tanzania REDD+ Strategy envisages the establishment of National REDD+ Fund to consolidate and distribute funds at the national level.²¹ This idea has its foundation in the previous views expressed in the NRTF. Accordingly, the task force expressed that both forms of benefits i.e. market or non-market payments must be administered through a REDD+ trust fund. They saw central coordination as necessary for equitable benefit-sharing, suggesting that the government is in the best position to oversee the achievement of this objective, thereby protecting local communities from the tricky business of carbon trading.²² This view was opposed by a civil society organisations coalition who argued that such approach would

¹⁸ National REDD Policy Project Tanzania End-of-project Review Final Report. February 25th, (2014) at 23. Available:

<http://www.norway.go.tz/PageFiles/713138/Final%20review%20report%20REDD%20Policy%20Project%2025-2-2014.pdf> [accessed 19 February 2015].

¹⁹ Ibid.

²⁰ Sills E.O. et.al. (eds.), REDD+ on the ground: A case book of subnational initiatives across the globe. (2014) at 220 CIFOR, Bogor, Indonesia.

²¹ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at 20.

²² Rantala S. and Di Gregorio M., Multistakeholder environmental governance in action: REDD+ discourse coalitions in Tanzania. *Ecology and Society* 19:2 (2014) 66. Also see Rantala S., Equity in REDD+: Varying logics in Tanzania. *Environmental Policy and Governance* (2015) at 3.

prevent benefits from reaching local communities, thus threatening both the equity and environmental effectiveness criteria.²³

At sub-national level, the REDD+ national strategy does not propose benefit-sharing options. It does, however, refer to Participatory Forest Management (PFM) and Wildlife Management Areas (WMAs) as possible models upon which to build. The interview of MNRT officials has revealed that the option favoured by the government is the creation of “aggregates”, that is, cooperatives or federations (composed of groups of villages and communities) that would receive money from the National REDD+ Fund. These “aggregates” would then be charged with responsibility for distributing money to communities. The role of government in this respect is to assist in the establishment of such “aggregates” and maybe to establish general rules on how to use REDD+ funds.²⁴

7.2.1.3 Eligible Emission Reductions Activities and/or Factors

The eligible activities for REDD+ interventions in Tanzania are not provided by the strategy. It appears, however that activities that aim at reducing deforestation, forest degradation, forest conservation, sustainable management of forests and enhancement of forest carbon stocks form part of the main eligible activities. This is because the strategy indicates three categories of REDD+ activities to mean:

- (i) “forest land converted to other land” – deforestation
- (ii) “forest land remaining as forests” – degradation, forest conservation, sustainable forest management, and enhancement of carbon stocks
- (iii) “other land converted to forest” – afforestation/reforestation of non-forest land.²⁵

Many government officials and NGOs interviewed by Davis expect that the performance measure will be “increased carbon sequestration.”²⁶ At this point it is not clear how other sources of carbon emissions such as agriculture and soil will be included.

²³ Rantala S. and Di Gregorio M., Multistakeholder environmental governance in action: REDD+ discourse coalitions in Tanzania. *Ecology and Society* 19:2 (2014) 66. Available: <http://www.ecologyandsociety.org/vol19/iss2/art66/> [accessed 25 February 2015].

²⁴ Davis C. et. al., Analysis of institutional mechanisms for sharing REDD+ benefits: Case studies: Property Rights and Resource Governance Project (PRRGP). *World Resources Institute* (2012) at 48.

²⁵ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at 33.

²⁶ Davis C. et. al., Analysis of Institutional Mechanisms for Sharing REDD+ Benefits. Property Rights and Resource Governance Project (PRRGP), *World Resources Institute* (2012) at 47-8.

7.2.1.4 Determining the Source and Object of Distribution

The object of distribution is not defined. However, the strategy indicates that if REDD+ is properly designed then it is expected to contribute to multiple benefits. Depending on the location and type of REDD+ activity, these benefits may include poverty alleviation, technology transfer, sustainable use of forest resources, biodiversity conservation, and forest dependent communities' rights.²⁷ Tanzania is at this moment envisaging its participation in the REDD+ mechanism under fund based financing arrangements. However, this might change depending on the outcome of the ongoing UNFCCC negotiations.²⁸

7.2.1.5 Determining REDD+ Beneficiaries

In order to be successful, a National REDD+ strategy must target both direct and indirect drivers of deforestation and forest degradation.²⁹ Whether this is a benchmark that is used to decide on who should be fit is not clear. The strategy identifies “a wide range of beneficiaries for REDD+ funds to be distributed by NRTF,” including “government ministries, communities, researchers, students, NGOs and civil society organizations implementing REDD+ related activities,” based on submission of proposals by “registered organizations or individuals.”³⁰ A discussion about engagement of public-private partnership in REDD+ activities in Tanzania has been ongoing in parallel with REDD+ strategy development. However, differences of opinion within the National REDD+ Task Force, Institute of Resource Assessment,³¹ and Royal Norwegian Embassy, on how to address this output and promote local government engagement, coupled with a poor definition of outcomes in the project document have resulted in long delays in achieving any real progress under this output.³² It is noted that two project proposals have been generated by consultants, but these proposals are very provisional and much work will be needed to provide any basis for

²⁷ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at 52.

²⁸ Ibid at 17.

²⁹ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at 47.

³⁰ Ibid Davis C. et. al., (2012) at 47.

³¹ The REDD Desk. Available:

http://theredddesk.org/sites/default/files/ira_redd_policy_development_and_implementation_contract_1_0.pdf [accessed 25 March 2015].

³² National REDD+ Strategy Development and Implementation Process in Tanzania. Mid Term Review, Final Report. April, (2013) at v-vi.

engagement of said partnerships and for attracting donor funding.³³ Subsequently, the REDD+ strategy is silent on the public-private partnerships engagement.

7.2.1.6 Identifying Distributive Equity

With regard to whom should get paid within the communities, Salas indicates that there are two dominant views (i.e. views of government officials, members of NGOs and international organisations) in Tanzania.³⁴ One view is that funds should be used to pay communities according to the accountability principle.³⁵ The basis for this view is that most surveyed forests are on village land. However, the type of performance that should be rewarded was not clarified.³⁶ Thus this leaves open the debate on whom to reward: those who provide efforts to sequester carbon, or those who produce results based on the eligible activities described above.³⁷ The second view is that all communities in the country should be paid according to the egalitarian principle.³⁸ The former view is said to find support with most government officials and NGOs.³⁹ Other non-dominant views are that payments to the communities should be according to the need principle (i.e. forest dependency) and compensation principle specifically elaborated as to take account for the opportunity cost of the land and the time spent in forest conservation tasks.⁴⁰ Apart from that, other studies point out that the exposure of the NRTF officials to the REDD+ pilot projects has resulted in their openness to the view that the benefit sharing mechanism should be flexible and community-driven within participating communities and groups.⁴¹ However, it is noted that less progress has been made on identifying how “vertical” benefit sharing will take place (between national and local actors).⁴² With regards to the engagement of public-private partnerships there are no provisions on applicable principles this aspect.

³³ Ibid.

³⁴ Salas P.C., Implementation of REDD+ Mechanisms in Tanzania. Policy Research Working Paper 6815, The World Bank Development Research Group Environment and Energy Team (2014) at 28.

³⁵ Ibid. See also Davis C. et. al., Analysis of Institutional Mechanisms for Sharing REDD+ Benefits. Property Rights and Resource Governance Project (PRRGP), *World Resources Institute* (2012) at 47-8.

³⁶ Ibid.

³⁷ Ibid.

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ National REDD Policy Project Tanzania End-of-project Review Final Report. February 25th, (2014) at 25.

⁴² Ibid.

7.2.2 Determining Regulatory Approach

Command and Control

There are two approaches envisaged by the Tanzanian government to implement REDD+ activities. In an attempt to address ineffective forest governance, REDD+ strategy provides that there is a need to ensure “adequate financial, technical and managerial capacity for efficient centralized and decentralized management of forest reserves at all levels.”⁴³ This section argues that the latter is an extension of the centralised forest management and thus the strategy mainly provides for the command and control approach. This argument is substantiated by two points. First, the regulatory powers given to the National REDD+ Fund as discussed in section 7.2.1.5 means that conceptually, nothing stops a government from using REDD+ funds to enforce new forest regulations that keep people out of the forests.⁴⁴ Secondly, in contrast to the previous attempt to manage forest, Community Forest Management (CFM) under REDD+ is largely a command and control model. This view is expressed by some scholars who rightly argue that “when other forces external to designated REDD communities drive forest change, REDD+ through CFM becomes an enforcement programme that faces similar issues to all previous ‘fence and fine’ deforestation prevention programmes [...]”⁴⁵ The difference to be observed here is that “local communities rather than government agencies being responsible for the enforcement.”⁴⁶

Regarding the choice of CFM models⁴⁷ to be used, Tanzanian REDD+ strategy only identifies CBFM as the model to contribute to REDD+.⁴⁸ It identifies a number of factors which makes JFM incompatible with REDD+. Among these factors are the challenges of establishing and operationalising a cost-benefit sharing mechanism, and the long processes involved in establishing JFM.⁴⁹ This decision then suggests a narrow approach to the CFM. To explain further the limitations associated with CFM in REDD+, a study which aims to discern the role

⁴³ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at 48.

⁴⁴ Robinson E.J.Z. et.al., Implementing REDD through community-based forest management: Lessons from Tanzania. (2013) 37 *Natural Resources Forum* 141–152 at 146.

⁴⁵ *Ibid* at 142.

⁴⁶ *Ibid* at 142.

⁴⁷ CFM models emanated from the CFM are CBFM and JFM as discussed in chapter 6.

⁴⁸ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at 9.

⁴⁹ *Ibid*.

of CFM in REDD+ established that that role is to take actions against deforestation and to some extent enhance the carbon stocks through sustainable forest management.⁵⁰ However, the study argues that it is doubtful that CFM can play a significant role against deforestation which to a large extent is driven by outside economic forces. Moreover the opportunity costs pertaining to the economic forces are much higher.⁵¹ The conditions in which CFM can contribute meaningfully to REDD+ have to be moderately to heavily populated.⁵² These revelations suggest that although CFM has a role to play, the benefits associated with their role are likely to be insignificant if the criterion to benefits is based on the accountability principle. Empirical evidence suggests that “it is likely that REDD+ project could be accepted easily in the villages which are far from town with both low population and abundance forest resources.”⁵³ This then suggests that opportunities for maximising benefits are dependent on low population growth. Nevertheless, it is argued that “carbon credits for this will be difficult to claim as it is almost impossible to construct a reliable baseline for past forest degradation.”⁵⁴

Market Based

Section 7.2.1.6 above, indicated that REDD+ strategy does not provide for the engagement of public-private partnerships. However, REDD+ strategy indicates that “a mechanism to engage the private sector in the forest sector for the entire value chain of forest products, from planting to end-product development” is underway.⁵⁵ In addition, the strategy lists Payment for Environmental Services (PES) to be used as one of the strategic actions to address underlying market failures as drivers of deforestation and deforestation.⁵⁶ The purpose of PES is to be a poverty reduction strategy for communities involved in REDD+ activities.⁵⁷

⁵⁰ Skutsch M. and McCall M.K., The role of community forest management in REDD+. (2012) 63:1 *Unasylva* 239, at 54.

⁵¹ Ibid.

⁵² Ibid.

⁵³ Mukama K. et. al., Participatory Forest Carbon Assessment and REDD+: Learning from Tanzania. (2012) *International Journal of Forestry Research* at 7.

⁵⁴ Skutsch M., REDD+: What’s in it for community forest management? In: Forest-people interfaces: understanding community forestry and biocultural diversity. (2012) 139 - 148.

⁵⁵ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at 49.

⁵⁶ Ibid.

⁵⁷ Ibid.

7.2.3 Determining Compliance and Enforcement

The focus of the enforcement mechanism envisaged in the Strategy is largely on the command and control of forests as the Strategy lists a number of laws applicable to forestry.⁵⁸ Having discussed the governance, compliance and enforcement of forest related laws in Tanzania, the equivalent issues in Indonesia are now turned to.

7.3 Indonesian Approach to Climate Change Mitigation

Indonesia is party to the UNFCCC and its Kyoto Protocol. Both were ratified by Law Number 6 of 1994 and Law Number 17 of 2004 respectively.⁵⁹ In recent time, Indonesia's commitment to climate change action has been increasing. In 2007 the country hosted the COP 13 in Bali⁶⁰ and subsequently published its National Action Plan (NAP)⁶¹ for addressing climate change. The purpose of NAP is to provide guidance to the Government of Indonesia for a coordinated and integrated approach to addressing climate change.⁶² Since then the Indonesian President has announced Indonesia's commitment to reduce emissions by up to 26% through domestic effort and 41% with international support by 2020.⁶³ This commitment is regarded as the largest absolute reduction made by any developing country.⁶⁴ Beyond 2020, Indonesia envisions 29% as the unconditional reduction target of the business as usual scenario by 2030.⁶⁵ In 2008, Indonesia established the National Council on Climate Change (NCCC) which is headed by the President. The NCCC is charged with developing strategies, policies and programmes to coordinate climate change activities and strengthening Indonesia's position in international negotiations.⁶⁶ This led to an agreement between the Indonesian Government and Norwegian Government where a Letter of Intent ("LoI") was signed between the two governments in 2010. Under the terms of the LoI, the Norwegian Government has pledged to contribute US\$ 1 billion to Indonesia's REDD+ efforts. As part

⁵⁸ Ibid at xvi.

⁵⁹ Cited in the Minister of Forestry Regulation No P. 68/Menhut-II/2008.

⁶⁰ See chapter 3.

⁶¹ Indonesia National Action Plan 2007.

⁶² Brown J. and Peskett L., *Climate Finance in Indonesia: Lessons for the Future of Public Finance for Climate Change Mitigation*. *Overseas Development Institute* (2007) at 8.

⁶³ Ibid at 9.

⁶⁴ Ibid at 9.

⁶⁵ The Indonesian Intended Nationally Determined Contributions (INDCs) 2015 at 2.

⁶⁶ Ibid at 8.

of this initiative, the Indonesian government has established a Presidential Task Force to devise a national strategy on REDD+ and an instrument for financing.⁶⁷

7.3.1 Distribution of Costs and Benefits

7.3.1.1 Institutional Arrangements

The implementation of REDD+ activities is overseen by the REDD Commission established under the Ministry of Forestry. This is in addition to the NCCC and has raised questions as to how the REDD Commission relates to the NAP or the NCCC.⁶⁸ Brown and Peskett argue that in terms of the effectiveness of the REDD Commission and NCCC with respect to their authority and coordinating roles, it is a matter of experiment.⁶⁹ The commitment of the different government agencies involved in the REDD Committee and NCCC depends on and is regularly limited by the formal mandate they enjoy.⁷⁰ Despite these challenges, a National REDD+ Taskforce was established in 2010 to fast-track national REDD+ readiness Processes.⁷¹ This led to the formation of the REDD+ Agency charged with the task of preparing a regulatory framework for REDD+.⁷² The REDD+ Agency operates outside the mandate of MoFo and this decision created political tensions which emanated from MoFo because MoFo “has long been the authoritative agency in forest governance and was instrumental in initiating REDD+ in Indonesia.”⁷³

At the sub-national level, each provincial government may create a REDD+ Institution to organise and implement its Regional REDD+ strategy and Action Plan which is developed from the REDD+ National strategy.⁷⁴ In this regard, Regional REDD+ Agencies are required to coordinate a number of activities from the following themes: (i) measurement, reporting and verification of emission reductions; (ii) assurance of the effectiveness of REDD+ funding; and (iii) periodic reporting on developments in regional programs or projects to the

⁶⁷ Ibid at 9.

⁶⁸ Ibid at 8.

⁶⁹ Brown J. and Peskett L., *Climate Finance in Indonesia: Lessons for the Future of Public Finance for Climate Change Mitigation*. *Overseas Development Institute* (2007) at 8.

⁷⁰ Ibid.

⁷¹ Ibid McGregor A. et. al., (2015), at 146.

⁷² Indonesia REDD+ National Strategy June 2012 at 9.

⁷³ McGregor A. et. al., *Beyond carbon, more than forest? REDD+ governmentality in Indonesia*. 47 *Environment and Planning*, (2015) 138–155 at 146.

⁷⁴ Indonesia REDD+ National Strategy June 2012 at 8.

national REDD+ Agency.⁷⁵ The role of districts is also recognised. Districts can establish REDD+ institutions to consistently and efficiently coordinate all aspects of district-level REDD+ activities and report results to the provincial level.⁷⁶ Thus government regulations on forests⁷⁷ provide a key legal basis for provincial and district governments to authorise permits for the utilisation of environmental services.⁷⁸

7.3.1.2 Authority with Jurisdiction to Distribute Costs and Benefits

Following the establishment of a REDD+ Agency, the strategy establishes two more institutions at the national level namely: a REDD+ Funding Instrument and MRV Agency.⁷⁹ The relationship between the agencies is as follows: the REDD+ Agency is empowered to control the Funding Instrument and the MRV Institution by *inter alia* determining the priorities, strategies, and policies for funds management.⁸⁰ Therefore, the Agency will need to establish policies, regulations, and standards for measurement, reporting and verification.⁸¹ In turn, the MRV Institution will be required to provide verification results for emissions reduction to the Funding Instrument for performance-based payment.⁸² To do this there is a need for cooperation between the Funding Instrument and the MRV Institution in terms of *inter alia* developing evaluation protocols for social and environmental safeguards.⁸³ In an effort to manage funds in a decentralised fashion, the strategy indicates that the Funding Instrument will be managed with a multi-stake holder approach with a variety of potential sources and a wide variety of users.⁸⁴ However, the strategy does not provide details regarding the power given to the said multi-stakeholder. Moreover, there is the obligation to harmonise “regulations relating to fiscal transfers from the Central Government to Regional Governments as incentives to ensure the success of the REDD+ program.”⁸⁵

⁷⁵ Ibid.

⁷⁶ Ibid.

⁷⁷ GR 6 of 2007 and GR 3 of 2008.

⁷⁸ Loft L. et. al., Taking Stock of Carbon Rights in REDD+ Candidate Countries: Concept Meets Reality. (2015) 6 *Forests*, 1031-1060 at 1047.

⁷⁹ Indonesia REDD+ National Strategy June 2012 at 8.

⁸⁰ Ibid at 16.

⁸¹ Ibid.

⁸² Ibid.

⁸³ Ibid.

⁸⁴ Ibid at 11.

⁸⁵ Ibid at 26.

7.3.1.3 Eligible Emission Reductions Activities and/or Factors

REDD+ strategy does not explicitly provide eligible activities for REDD+ implementation. However, to ascertain eligible activities it is perhaps appropriate to begin with the approach taken by Indonesia. In particular, Indonesia intends to implement REDD+ within the low carbon and green economy framework. This approach is said to ensure that efforts to mitigate land use-driven climate change are carried out in line with Indonesian policies and the need for sustainable development.⁸⁶ Against this background, the strategy provides the framework and pillars. These include a threefold strategic program namely: conservation and rehabilitation, sustainable agriculture, forestry and mining, and sustainable management of landscapes.⁸⁷ It is evident that eligible activities are contained within the details of these programs.⁸⁸ Apart from this strategy, the Regulation on procedures for REDD+ activities defines REDD+ as “all efforts of forest management to prevent or reduce the decline of forest quality and/or quantity of forest covers and carbon stock through various activities that support sustainable national development.”⁸⁹ However, the more recent Regulation on the Implementation of Forest Carbon does not reference REDD+.⁹⁰

7.3.1.4 Determining the Source and Object of Distribution

The object of distribution in the Indonesia legal framework appears to be defined almost entirely as cash distribution.⁹¹ For example, the strategy envisages that in order to take advantage of the carbon market, it provides for an independent third party verification process so that Verified Emissions Reduction (VER) and Certified Emissions Reduction (CER) certificates can be issued. Such certificates are the basis for the disbursement of performance payment for the financial benefit of those carrying out REDD+ programs and activities.⁹²

⁸⁶ Ibid at 2.

⁸⁷ Ibid at 7.

⁸⁸ See Indonesia REDD+ National Strategy June 2012 at 7 where these programs are expected to contribute to emissions reduction and increased carbon stocks.

⁸⁹ Article 1(12) of the Minister of Forestry Regulation No. P.30/Menhut-II/2009 on the Reduction of Emissions from Deforestation and Forest Degradation Procedure.

⁹⁰ Ministerial Regulation P.20/Menhut-II/2012 on Implementation of Forest Carbon.

⁹¹ Indonesia REDD+ National Strategy June 2012 at 14. Also see http://theforestdialogue.org/sites/default/files/presentation_2_iwan_wibisono.pdf [accessed 25 March 2015].

⁹² Ibid.

7.3.1.5 Determining REDD+ Beneficiaries

The provisions for determining REDD+ beneficiaries are found in a number of instruments that form part of the regulatory framework. In the National REDD+ Strategy, regional governments, all parties with rights over the area of the REDD+ program/project/activity, and communities are all set to receive benefits.⁹³ To ascertain REDD+ beneficiaries in REDD+ regulation, it is important to begin by mentioning REDD+ implementers. These are provided in chapter 3 of the regulation and are classified as national and international entities.⁹⁴ The entities at a domestic level are classified as any forestry licence holder in a specified location, customary forest managers, right forest owners or managers, and village forest managers.⁹⁵ However, the regulation does not provide for obligations for local communities, forest-dependent peoples, tenure security or indigenous people's rights, or benefits that will flow to these communities.⁹⁶ At the international level, the entities include government, business agencies, international organisations and individuals who bear the funds for REDD implementation.⁹⁷

Having established the entities, the regulation provides that national entities will receive payment from an international entity for emissions reduction.⁹⁸ Following from this it is not clear whether other actors can receive payments directly from the international entity. Also it appears from this regulation⁹⁹ that both implementers may buy and sell¹⁰⁰ REDD+ certificates for post-2012 REDD carbon trading associated with the implementation of emission reduction commitment of developed countries.¹⁰¹ According to Agus Sari,¹⁰² the government

⁹³ Indonesia REDD+ National Strategy June 2012 at 29.

⁹⁴ Article 4 (1) of the Minister of Forestry Regulation No. : P. 30/Menhut-II/2009.

⁹⁵ Article 4 (1)-(2) read together with Article 14 (1) of the Implementation Procedures of Reducing Emissions from Deforestation and Forest Degradation], No. P.30/Menhut-II/2009.

⁹⁶ Johnstone N., Indonesia in the "REDD": Climate Change, Indigenous Peoples and Global Legal Pluralism. (2010) 12:1 *Asian-Pacific Law and Policy Journal* at 106.

⁹⁷ Article 4 (1)-(2) read together with Article 14 (1) of the Implementation Procedures of Reducing Emissions from Deforestation and Forest Degradation, No. P.30/Menhut-II/2009.

⁹⁸ Article 14 (1) (a) of the Minister of Forestry Regulation No. : P. 30/Menhut-II/2009.

⁹⁹ Ibid Article 14 (1) (c).

¹⁰⁰ A question may arise as follows: Does this implicitly suggest that implementers have carbon rights? As such "carbon rights have been defined by experts, as a form of property that 'commoditize' carbon and allow it to be traded in voluntary and regulatory markets." See Robles F.F., Forest Carbon Tenure in Asia-Pacific: A comparative analysis of legal trends to define carbon rights in Asia-Pacific. (2012) 89 *FAO Legal Papers Online* at 14. Available: http://www.fao.org/fileadmin/user_upload/legal/docs/lpo89.pdf [accessed 5 April 2015].

¹⁰¹ Article 14 (1) (c) of the Minister of Forestry Regulation No. : P. 30/Menhut-II/2009.

¹⁰² He is the Deputy Chair on Planning and Funding REDD+ Management Agency and he is responsible for developing Indonesia's REDD+ Funding Instrument.

intends to “not only buy and sell [REDD certificates] like traditional dealers, but [also] package them so that [the government] buy insecure credits and sell secure credits.”¹⁰³ The purpose is to increase the value of such credits and in so doing the government’s efforts would offer offset buyers a degree of certainty that they may not enjoy when purchasing offsets directly from private projects.¹⁰⁴

International entities are allowed to use REDD certificates as part of emission reduction commitments of developed countries.¹⁰⁵ This is in contrast to the decision by Brazil as noted in chapter 5 that the Federal Government has argued that it cannot allow rights to carbon to be sold internationally. Such a move, Brazil argues, will simply result in a lower national baseline, which is a concern if it adopts a post-2012 target. The approach that is taken in Indonesia¹⁰⁶ seems to be contradictory to the objective of the CBDR principle as explained in chapter 2.

7.3.1.6 Identifying Distributive Equity

Arrangements regarding procedural equity are provided by Indonesia’s strategy. It requires the REDD+ Agency to implement and apply the principles of Free, Prior and Informed Consent (FPIC) in all REDD+ programs and projects.¹⁰⁷ A number of principles have been outlined. The most relevant for the distribution of costs and benefits requires that the FPIC should be “through their traditional authorities, or through representative organizations selected on the basis of traditional systems adhered to by the given indigenous community” in order to seek indigenous and local communities’ consent.¹⁰⁸ In obtaining this consent, the strategy requires that consent be obtained through legal mechanisms. Such consent must be categorised as tentative, temporary, partial, with specific stipulations, with other options, or full agreement.¹⁰⁹ In addition, consultation with the public must be complete, balanced, honest, unbiased, in language that they understand, and done within an adequate frame of time before permits are legalised or activities commenced.¹¹⁰ The question of who is

¹⁰³ Zwick S., Indonesian Government May Buy Carbon Offsets from Domestic Forest Conservation. (2014).

¹⁰⁴ Ibid.

¹⁰⁵ Article 14 (1) (b) of the Minister of Forestry Regulation No. : P. 30/Menhut-II/2009.

¹⁰⁶ I.e. to allow international entities to use REDD certificates as part of emission reduction commitments of developed countries.

¹⁰⁷ Indonesia REDD+ National Strategy June 2012 at 27.

¹⁰⁸ Ibid.

¹⁰⁹ Ibid at 28.

¹¹⁰ Ibid.

considered the “public” in the context of REDD+ is not addressed. The strategy is silent on the question of whether such public must prove the existence of customary rights. This is important because it is likely that communities would invoke their customary property rights to the forests and therefore refuse or qualify (as aforementioned) their consent for others to implement REDD+. Wright concluded that “specific regulations must be adopted that detail not only the ‘commercial’ side of a REDD+ project but also address how FPIC is to be obtained, how Indigenous People will participate in REDD+, and how the financial benefits will reach them.”¹¹¹ In addition in order to consult with the public there are other factors that must be taken into account but are not provided in the strategy. These issues relate to the need to “consult on ongoing bases” as discussed in chapter 8.¹¹²

Regarding the distributive equity, the strategy provides a number of principles. For instance, community members are entitled to receive payments either individually or collectively in line with the accountability principle (i.e. their roles played). However, this is done within the context of having rights over resources and provision of services.¹¹³ Hence the strategy provides that all “parties with rights over the area of the REDD+ program/project/activity location have the right to payment.”¹¹⁴ This requirement is similar to the libertarian principle discussed in chapter 2. Therefore, these provisions combine the accountability principle with the libertarian principle. Elsewhere, a provision is made for the members of communities who do not have rights but contribute to the achievement of VER/CER.¹¹⁵ The strategy also points out that “[r]egional governments are among the parties with the potential to receive benefits from REDD+ projects if VER/CER can be achieved as a result of their policies and public sector investments.”¹¹⁶ In this case, the strategy only provides for the accountability principle as the basis for distributing benefits. The reference to the compensation principle in the REDD+ framework in Indonesia does not seem to exist in the strategy. However, this principle

¹¹¹ Wright G., Indigenous People and customary land ownership under domestic REDD+ frameworks: A case study of Indonesia. (2011) 7:2 *Law, Environment and Development Journal* 119-131 at 131.

¹¹² Here one of the key issues is to consult on an ongoing basis. This takes into account the discussion in chapter 2 where it was pointed out that environmental effectiveness should also be seen not only in terms of outputs and outcomes but also in terms of inducing their subjects to comply with systems of rules and regulations and address successfully the distributional justice issues among other issues. This line of thinking provides chapter 8 with some ideal means of successfully addressing these issues given some challenges related to information dissemination.

¹¹³ Indonesian REDD+ National Strategy June 2012 at 32.

¹¹⁴ Ibid.

¹¹⁵ Ibid.

¹¹⁶ Ibid.

is implicitly provided for by making reference to the Forest Act¹¹⁷ as required by the strategy.¹¹⁸ In particular, the Forest Act gives the right to communities to “obtain compensation in case its access to the forest is removed as a consequence of forest classification.”¹¹⁹

Apart from the strategy which is applicable at a national level, there are a number of regulations which authorise provincial and district governments to authorise benefits distribution within their jurisdictions as indicated above.¹²⁰ The Forestry Regulation determines who can apply for a REDD+ project to the Head of District and the conditions thereof.¹²¹ With regards to benefits distribution, this regulation provides that benefits are to be distributed to the state (in the form of non-tax state revenue), developer and surrounding communities.¹²² The egalitarian principle is used to provide a set of uniform percentage-based splits.¹²³ In addition, the regulation provides that payment and the use of state revenues from the REDD+ implementation will be regulated under stipulated regulations.¹²⁴ However, part of such revenues will be used as a collateral of REDD implementation at the national level.¹²⁵ This is for the managing of a national registry and/or addressing national emissions reduction.¹²⁶ This requirement also resembles the accountability principle. However, as chapter 2 illustrates, it is very difficult and time consuming to obtain evidence of emission reductions of the policies which are aimed at reducing emissions. Therefore, the justification of receiving benefits resulting from their policies and public sector investments seems to be unfounded.

A further observation in the strategy is a provision of an egalitarian principle but differentiation is made dependent on the specific target group. Specifically, the strategy

¹¹⁷ Forest Act No. 41 of 1999.

¹¹⁸ With reference to the forestry legislative framework, the REDD+ Strategy provides that the strategic plan was devised to serve as the government’s main reference to implement forestry and land use climate change policy. Indonesian REDD+ National Strategy June 2012 at 6.

¹¹⁹ Article 68 (3) Act 41/1999. Also see Arnscheidt J., “*Debating*” *Nature Conservation: Policy, Law and Practice in Indonesia, a discourse analysis of history and present*. (2008) at 152.

¹²⁰ Thus the relevant regulations in this case are Ministry of Forestry Regulation (MoFo-R) No 36 of 2009 and Minister of Forestry Regulation (MoFo-R) No. 30 of 2009.

¹²¹ Article 5 of the MoFo-R 36 of 2009.

¹²² Ministry of Forestry Regulation (MoF-R) No 36 of 2009 Annex III. Also see Loft L. et. al., Taking Stock of Carbon Rights in REDD+ Candidate Countries: Concept Meets Reality. (2015) 6, *Forests*, 1031-1060 at 1048.

¹²³ Ibid.

¹²⁴ Article 20 of MoFo-R 30 of 2009.

¹²⁵ Article 21 (1) of the Minister of Forestry Regulation No.: P. 30/Menhut-II/2009.

¹²⁶ Article 21 (2) (b) of the Minister of Forestry Regulation No.: P. 30/Menhut-II/2009.

provides that distributing revenues will depend on forest type licence and the project developer entity. Government would receive between 10 and 50 percent and communities between 20 and 70 percent although in most cases both communities and government each would receive 20 percent and project developers between 20 and 60 percent.¹²⁷ The rationale for this distribution is not justified. The lack of reasons for this means the legitimacy of the decree may be contested. Costenbader points out that a potential difficulty with the egalitarian principle for revenue-sharing arrangements lies in the fact that economic theory would suggest various sub-national regions have different opportunity costs for avoided deforestation.¹²⁸ The basis for such factors includes distance to markets, local forest land carbon content, micro-climates and land quality.¹²⁹ A recent economic analysis has confirmed this theoretical problem in Indonesia particularly because of competing land uses.¹³⁰ In addition, Chokkalingam points out that some areas in Indonesia have low emissions and want to develop intensively, while others have poor and declining forest conditions.¹³¹ It follows that a decision to use the egalitarian principle for distribution of costs and benefits may be seen to be unfair to those who incur the greatest costs.

The contextual dimensions in Indonesia include widespread lack of effective rights to land, lack of legal status to obtain licences for selling carbon credits, and lack of access to legal texts translated into local languages and cultures.¹³² This contextual equity has been recognised by the strategy as it provides for land tenure reform provision.¹³³

¹²⁷ Attachment III of Indonesia Decree number: P. 36/Menhut-II/2009, regarding procedures for licensing of commercial utilisation of carbon sequestration and/or storage in production and protected forests.

¹²⁸ Costenbader J., REDD+ Benefit Sharing: A Comparative Assessment of three National Policy Approaches. The Forest Carbon Partnership Facility (FCPF) and UN-REDD Programme (2011) at 36.

¹²⁹ Ibid.

¹³⁰ Olsen, N. and Bishop, J. 2009. The Financial Costs of REDD: Evidence from Brazil and Indonesia. Gland, Switzerland: IUCN. 64 pp, at vi-vii cited in Costenbader J., REDD+ Benefit Sharing: A Comparative Assessment of three National Policy Approaches. The Forest Carbon Partnership Facility (FCPF) and UN-REDD Programme (2011) at 36.

¹³¹ Chokkalingam U., UKP4 workshop discusses legal aspects of REDD+ MRV in Indonesia DEC Forest Carbon Asia Articles 13, (2013) <http://www.forestcarbonasia.org/articles/ukp4-workshop-discusses-legal-aspectsredd-mrv-indonesia/>.

¹³² Ituarte-Lima C. et. al., Assessing equity in national legal frameworks for REDD+: The case of Indonesia. (2014) xxx *Environmental Science and Policy* 1-10 at 6.

¹³³ Indonesia REDD+ National Strategy June 2012 at 18.

7.3.2 Determining Regulatory Approach

Command and Control

The REDD+ Strategy requires the harmonisation of “regulations relating to fiscal transfers from the Central Government to Regional Governments as incentives to ensure the success of the REDD+ program.”¹³⁴ This appears to be the first effort to decentralise several tasks and responsibilities in the forestry sector from central to regional governments. Even with this provision, however, Indonesia’s REDD+ Strategy seems to have some key limitations. Questions remain as to the authority for decision-making of finance and oversight at a district level. It is reported that the decentralisation era has generated competition and conflict between the Ministry of Forestry, provincial governments, and district governments over the authority to control, plan, and allocate rights within the forest estate.¹³⁵ In a recent study of REDD+ governance, most interviewees from the Ministry of Forestry blamed the high deforestation rate in the early 2000s on decentralisation and the lack of capacity within sub-national governments to regulate forest access.¹³⁶ The role of law in contributing to deforestation has also been highlighted elsewhere.¹³⁷

Market Based

The Indonesian strategy advocates the use of market-based incentives to implement REDD+ activities. As discussed in section 7.3.1.4 above, the strategy establishes procedures for the authorisation of VER/CER certificates which constitute the basis for the disbursement of performance payment for the financial benefit of those carrying out REDD+ programs and activities.¹³⁸ The discussion of the reflexive aspect of market-based regulation is discussed in chapter 8 section 8.3.3.

¹³⁴ Ibid at 26.

¹³⁵ Cited in Davis C. et. al., Analysis of institutional mechanisms for sharing REDD+ benefits: Case studies: Property Rights and Resource Governance Project (PRRGP). World Resources Institute (2012) at 89.

¹³⁶ Mulyani M. and Jepson P., REDD+ and Forest Governance in Indonesia: A Multistakeholder Study of Perceived Challenges and Opportunities. (2013) 22 *The Journal of Environment Development* 261 at 269.

¹³⁷ Arnold concludes that “law has created key flaws in the division of authority between the Central Government and regional governments, namely an unclear division of power, an inappropriate allocation of power and an insecure transfer of devolved power.” See Arnold L.L., Deforestation in decentralised Indonesia: What’s law Got to do with it? (2008) 4:2 *Law, Environment and Development Journal*, 75-100 at 100.

¹³⁸ Indonesia REDD+ National Strategy June 2012 at 14.

7.3.3 Determining Compliance and Enforcement

The focus of the enforcement mechanism envisaged in the strategy is largely on the command and control of forests but it does not explain how the distribution of benefits is linked with enforcement.¹³⁹ Nevertheless, the general enforcement practices in the field of natural resources is carried out by the joint enforcement team, comprising MoFo, MoE, public prosecutors, the corruption eradication commission, the financial intelligence unit, the Presidential Task Force, the police and the special working group on Legal Review and Law Enforcement under the REDD+ Task Force which work to eradicate judicial corruption.¹⁴⁰ To compliment that approach, the Indonesian Supreme Court, the Ministry of Environment, the Indonesian Centre for Environmental Law and the Asian Environmental Compliance and Enforcement Network have created the practice of environmental certification of judges. The purpose is to authorise only certified judges to address environmental and natural resources related cases.¹⁴¹ The certification programme is under the authority of the Supreme Court.¹⁴² This is different compared to the establishment of environmental courts established in other countries such as South Africa.¹⁴³ Under the program, only judges who have obtained environmental certificates are allowed to adjudicate environmental cases at the court of first instances and of appeals.¹⁴⁴ In the event that a court of first instance and court of appeal panel do not have certified judges, then the requirement is that the chair in the panel of judges is set to be certified.¹⁴⁵ Whereas in a court of first instance, there is no certified judge, the chief of the court of appeal who has jurisdiction over the court of first instance is required to appoint a certified judge from other courts of first instance within his jurisdiction.¹⁴⁶ Similarly, if in a court of appeal there is no certified judge, the chief justice is required to appoint a certified judge from other courts of appeal.¹⁴⁷

¹³⁹ Ibid at 19-20.

¹⁴⁰ Santosa M.A and Khatarina J., REDD+ in Indonesia. Law and Governance Perspectives. In Faure M. and Wibisana A., (eds.), *Regulating disasters, climate change and environmental harm: Lessons from the Indonesian experience* (2013) at 183.

¹⁴¹ Ibid. Also Santosa M.A. et.al., *Indonesia*. In Lord R. et.al., *Climate Change Liability: Transnational Law and Practice*. (2012) at 205.

¹⁴² Supreme Court Directive Number 134/KMA/SK/IX/2011 on the certification of environmental judges.

¹⁴³ Rahmadi T., The Indonesian Judicial certification program on the environment. TRAFFIC, Environmental Courts Prove to be effective. Stop Illegal Fishing Case Study Series 02. (Undated).

¹⁴⁴ Ibid.

¹⁴⁵ Ibid.

¹⁴⁶ Ibid.

¹⁴⁷ Ibid.

Regarding the regulations that authorise the provincial and districts governments to implement REDD+, Loft et al argue that there are essential questions about the validity and enforceability of some of the regulations¹⁴⁸ used to distribute benefits at provincial and district level.¹⁴⁹ The authors question whether the Forestry Regulation¹⁵⁰ will be implemented due to three main reasons:¹⁵¹ The first is that the regulation indicates that it will be elaborated on by another regulation which has not yet been formulated to date. The second reason is that the Ministry of Finance rather than the Ministry of Forestry is empowered to deal with revenue sharing arrangements. As such the Ministry of Finance has already challenged the regulation. The final reason is that the determination of REDD+ revenues as non-tax revenues should be stipulated by a Government Regulation, rather than a Ministerial Regulation. The former has higher legal status than the latter.¹⁵²

7.4 Comparative Analysis

7.4.1 Benefits Comparison

Determining the Sources and Object of Distribution

The object of distribution in the Indonesia legal framework appears to be defined almost entirely as a cash distribution, while in Tanzania there is a wider scope of the object of distribution. The advantage of defining and expanding the object of distribution makes it possible to identify criteria for their distribution. For example, when the object of distribution is financial, it means it is likely that the libertarian principle based on land and resource tenure is a criterion for distribution of such benefit. This is the case for Indonesia. As indicated in chapter 5, this approach faces considerable practical problems in terms of attaining the benefits for local communities especially the most vulnerable. However, this problem could be addressed if the object of distribution is access to technology, or “clean” energy, because the other principles such as utilitarianism or egalitarianism can be used as criteria with less practical problems. The choice of criterion will obviously depend on the clear definition of what type of technology or energy is made available. Chapter 5 also

¹⁴⁸ Such as MoFo-R No. 36 of 2009 and MoFo-R No. 30 of 2009.

¹⁴⁹ Loft L. et. al., Taking Stock of Carbon Rights in REDD+ Candidate Countries: Concept Meets Reality. (2015) 6 *Forests*, 1031-1060 at 1048.

¹⁵⁰ MoFo-R No. 36 of 2009.

¹⁵¹ Ibid.

¹⁵² Ibid at 1048.

established that the source of benefits has implications for the self-regulatory system. Where the benefits arise from private finance, the risks are much higher compared to where the benefits arise from the public sources.

Comparing the Distributive Equity and the Principles

In Tanzania, very limited progress has been made in terms of agreeing on a REDD+ financing mechanism, this is largely due to the uncertainty over the level of future REDD+ financing and the ongoing national level discussions between the VPO, Ministry of Finance and development partners on options for the financing of climate change activities.¹⁵³ This revelation can be one of the reasons to explain why the Tanzanian REDD+ Strategy only indicates that a system to ensure equitable sharing of benefits will need to be established.¹⁵⁴ Thus there is no explicit reference to the distributive equity principles relating to REDD+ benefits. However, one can note that the accountability principle and egalitarian principle are said to be the dominant views in the Forestry and Beekeeping Division within the Ministry of Natural Resources and Tourism.¹⁵⁵ In contrast to the Tanzanian Strategy, the Indonesian Strategy provides for benefit sharing.¹⁵⁶ It states that a fair distribution of benefits is based on the libertarian principle, accountability principle, egalitarian principle and compensation principle as discussed above. However, it is noted that both countries do not provide for the need principle and the utilitarian principle.

The procedural aspect for distribution of costs and benefits in Tanzania must be seen in the context of the World Bank's policies. This is because the Tanzanian REDD+ strategy adopts a number of the World Bank's policies to implement REDD+.¹⁵⁷ Among these policies, the OP 4.01 - Environmental Assessment requires the borrower to consult "project-affected groups and local Non-Governmental Organizations (NGOs) about the project's environmental

¹⁵³ National REDD Policy Project Tanzania End-of-project Review Final Report. February 25th, (2014) at iv.

¹⁵⁴ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at 10.

¹⁵⁵ Davis C. et. al., Analysis of Institutional Mechanisms for Sharing REDD+ Benefits. Property Rights and Resource Governance Project (PRRGP), *World Resources Institute* (2012) at 47-8.

¹⁵⁶ Indonesian REDD+ National Strategy June 2012 at 32.

¹⁵⁷ These are Environmental Assessment (OP/BP 4.01), Natural Habitats (OP/BP 4.04), Forests (OP/BP 4.36), Involuntary Resettlement (OP/BP 4.12), and Indigenous Peoples (OP/BP 4.10). United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at 53.

aspects and takes their views into account.”¹⁵⁸ Thereafter, the policy requires the borrower to provide “relevant material in a timely manner prior to consultation and in a form and language that are understandable and accessible to the groups being consulted.”¹⁵⁹ The borrower is further obliged to provide “for the initial consultation a summary of the proposed project’s objectives, description, and potential impacts; for consultation after the draft Environmental Assessment (EA) report is prepared, [and] provide a summary of the EA’s conclusions.” Lastly, the policy requires the borrower to make the draft EA report available at a “public place accessible to project-affected groups and local NGOs.”¹⁶⁰ In contrast, Indonesia provides for Free, Prior, and Informed Consent (FPIC) through their traditional authorities, or through representative organisations selected on the basis of traditional systems of governance adhered to by the given indigenous community in order to seek indigenous and local communities’ consent. In addition, the Indonesian Strategy goes further to explain the categories of such consent.¹⁶¹ This category is commendable because there is no clarity about the nature of REDD+ in terms of the positive incentives. As discussed in chapters 3 and 4 questions still remain as to when to expect positive incentives, type of incentives to receive, for how long REDD+ will be implemented and thus the timeframe to expect the incentives and periodicity. This situation raises questions about their implications for liability or accountability.

The contextual equity gives rise to issues that are context specific.¹⁶² Therefore, in defining the context in Tanzania, one must include the drivers of deforestation and forest degradation and explain how these factors are relevant to distribution of costs and benefits. The determination of the causes of the deforestation and forest degradation is important to the subject of benefit sharing because it creates scope for the identification of beneficiaries. The Tanzania REDD+ Strategy correctly states that in “order to be successful, a National REDD+ Strategy must target both direct and indirect drivers of deforestation and forest degradation”. However, no reference is made to these causes of deforestation and degradation in the context

¹⁵⁸ OP 4.01 - Environmental Assessment at 5. Available: <http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTOPMANUAL/0,,contentMDK:20064724~menuPK:4564185~pagePK:64709096~piPK:64709108~theSitePK:502184,00.html> [accessed 25 April 2015].

¹⁵⁹ OP 4.01 - Environmental Assessment at 5.

¹⁶⁰ Ibid.

¹⁶¹ See above.

¹⁶² See chapter 2 section 2.4.4.

of benefit distribution, and nothing is stated on the vitally important issue of how these causes are to provide clues in the identification of beneficiaries. Consequently the importance of such link may not be appreciated. Instead the following provision concludes with the broad statement that REDD+ is expected to contribute to multiple benefits. These benefits are “poverty alleviation, technology transfer, sustainable use of forest resources and biodiversity conservation, and forest dependent communities’ rights.”¹⁶³ To discuss the benefits that could be further elaborated a following link could be made. It is well understood that small-scale farmers’ “agricultural practices are associated with poor socio-economic conditions [that] create a vicious cycle in which poor small-holder farmers have to deforest and use new often marginal lands, so increasing deforestation and overall degradation.”¹⁶⁴ In this regard, the benefits that arise out of this linkage could be measures which are proposed to assist small-scale farmers. For instance Watson has proposed that efforts “should be placed on developing cooperatives, farmer organizations, business associations, scientific organizations explicitly supporting the needs of small-scale agricultural producers, and entrepreneurs to capture and add value to on-farm, post-harvest and off-farm enterprises.”¹⁶⁵ Such emphasis should be complimented by trade reforms. In particular, trade reforms specific to small-scale farmers should be accompanied by a number of factors. These are removal of resource-use distorting subsidies, taxes on environmental and social externalities, increased public investment in rural infrastructure and public goods, increased access to credit for small-scale farmers, addressing property rights and financial payments to farmers for carbon sequestration.¹⁶⁶ The Strategy should have defined benefits in this way. Once a wider scope for the definition of benefits has been addressed such as indicated, a further effort should be taken to set conditions for attracting such benefits. For example the provision for “public-private partnership” participation should be made conditional on the sustainable practices to agriculture.

¹⁶³ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at 52.

¹⁶⁴ Watson R.T., Presentation to ECOSOC. International Assessment of Agricultural Knowledge, Science and Technology for Development. Key Findings from Global Summary for Decision Makers. Available: http://www.un.org/en/ecosoc/docs/statement08/robert_watson.pdf [accessed 15 September 2015].

¹⁶⁵ Watson B., How to Assist the Small-Scale Farmer. http://www.un.org/en/ecosoc/docs/statement08/robert_watson.pdf [accessed 8 April 2015].

¹⁶⁶ Ibid.

7.4.2 Compliance and Enforcement Approach Comparison

The issue of governance, compliance and enforcement of both countries appear to rely largely on command and control regulation. This is not a surprise because in the environmental field legislatures have traditionally employed a command-and-control approach to prohibit certain activities, set standards to protect or improve environmental quality and set up a regulatory agency to monitor and enforce compliance with the legal standards and police power.¹⁶⁷ As such, command and control capitalises on the threat of sanctions to achieve its objectives.¹⁶⁸ Yet, it is acknowledged that many individuals comply out of a sense of good citizenship.¹⁶⁹ Thus, the system is designed to compel the few who are not inclined to comply out of a sense of good citizenship.¹⁷⁰ Command and control regulations are effective because they rely on fear as the motivating deterrent. When sanctions are not feared because they are not severe enough or they are not likely to be administered effectively, such regulations are likely to fail to achieve their objectives.¹⁷¹ This is not to say that the command and control approach is naturally inefficient, not cost-effective, and inequitable compared to alternatives. Rather what is optimal and feasible is always relative to an environmental situation.¹⁷²

Apart from command and control used in both countries, they also envisage the use of market based approaches particularly the use of the Payment for Environmental Services (PES). PES is attributed to the Coasian economic approach as one of the market based regulations. Orts discusses four main conventional economic approaches to environmental governance.¹⁷³ The first, approach (known as the Pigouvian approach) imposes taxes or charges on activities that are environmentally harmful.¹⁷⁴ A second assigns rights of "ownership" in the natural

¹⁶⁷ Orts E.W., Reflexive Environmental Law. (1995) 89:4 *Northwest University Law Review* at 1257. Karpf D.R. and Gauling C.L., Motivational Underpinnings of Command-and-Control, Market-Based, and Voluntarist Environmental Policies. (1995) 48:5 *Human Relations*, 439-465 at 442.

¹⁶⁸ Karpf D.R. and Gauling C.L., Motivational Underpinnings of Command-and-Control, Market-Based, and Voluntarist Environmental Policies. (1995) 48:5 *Human Relations*, 439-465 at 440.

¹⁶⁹ *Ibid* at 442.

¹⁷⁰ *Ibid*.

¹⁷¹ *Ibid* at 449.

¹⁷² Cole D. and Grossman P., When is Command and Control Efficient? Institutions, Technology, and the Comparative Efficiency of Alternative Regulatory Regimes for Environmental Protection. (1999) *Wisconsin Law Review* 887 at 88.

¹⁷³ Orts E.W., Reflexive Environmental Law. (1995) 89:4 *Northwest University Law Review* at 1242.

¹⁷⁴ *Ibid*. An example of this approach in climate change mitigation is carbon tax. See for instance Putting a Price on Carbon with a Tax. http://www.worldbank.org/content/dam/Worldbank/document/SDN/background-note_carbon-tax.pdf [accessed 15 April 2015].

environment. The expectation is that if natural resources are reduced to “human ownership, then the market will, in theory, accurately value the newly created property.”¹⁷⁵ This approach is attributed to Coase.¹⁷⁶ A third market-based approach to environmental regulation involves the creation of tradeable pollution rights.¹⁷⁷ It assigns marketable pollution “rights” as a sort of property. Here the market based approach relies on command-and-control to establish the overall level of pollution allowed.¹⁷⁸ Lastly, a fourth type of market-based regulation attempts to harness the consciences of consumers to favour environmentally friendly products. This type of environmental marketing regulation is used to aid consumer identification of “green products” or environmentally harmful products and to assure truthful environmental advertising claims.¹⁷⁹ This involves creating and administering programs for “green labels”.¹⁸⁰

7.4.3 Implications for Achieving the 3Es Outcome

Following the regulatory framework established in the Tanzanian case study, what relationships exist between the type of regulatory framework, on the one hand, and the potential 3Es outcomes on the other? Accordingly, recommendations in the REDD+ literature¹⁸¹ to design legislation or amend existing forestry legislation to address REDD+ inadvertently overlook the implications that are likely to arise from recommendations to design command and control regulations. For example, sectoral legislative amendments are time-consuming and sometimes amendments do not come to effect.¹⁸² In addition, the absence of discussion on the issue of rights to carbon rights would result in government

¹⁷⁵ Orts E.W., *Reflexive Environmental Law*. (1995) 89:4 *Northwest University Law Review* at 1243.

¹⁷⁶ *Ibid*.

¹⁷⁷ An example is carbon trading. “Under a carbon trading scheme, the government establishes a limit or cap on emissions and then allocates the cap as allowances or permits amongst emitters, who are required to “hold allowances equal to their emissions” at the end of a defined period, either by mitigating their emissions or trading allowances.” Tyler E. et al., “Emissions Trading as a Policy Option for Greenhouse Gas Mitigation in South Africa” (2009) *The Economics of Climate Change Mitigation*. Available at http://www.erc.uct.ac.za/Research/publications/09Tyler-et-al-Emissions_trading.pdf [accessed 18 September 2015].

¹⁷⁸ Orts E.W., *Reflexive Environmental Law*. (1995) 89:4 *Northwest University Law Review* at 1244.

¹⁷⁹ *Ibid* at 1246.

¹⁸⁰ *Ibid*.

¹⁸¹ Enabling Legislative and Institutional Framework for Climate Change Response in Kenya. The International Development Law Organization (IDLO) Italy (2012) at 12. Martijin W. et. al., *Creating an enabling legal framework for REDD+ investments in Kenya*. Ministry of the Environment, Sweden (2014).

¹⁸² The delays in amending legislation can be too long and sometimes can continue to infinity. An example of this is the delays of the new Forestry Act in Zambia which was entered into the government gazette in 1999 to repeal the old Forestry Act of 1973 but that amendment has not come into effect. See <http://www.fao.org/docrep/003/x6824e/X6824E04.htm> [accessed 15 September 2015].

agencies facing challenges in the exercising of functions and obligations in the distribution of costs and benefits because of difficulties in defining carbon rights as discussed in chapter 5. In section 5.3.4.3 it was established that because of the “eminent domain” it might not be possible stop actors like agro-industries from losing income from stopping business as usual forest conversions without just compensations. These aspects are taken into consideration in the development of the REDD+ legal frameworks.

7.5 Conclusion

A survey of the regulatory framework for REDD+ has revealed that the main instruments for REDD+ in the countries under study are inadequate to deal with the 3Es because they rely mainly on the command and control models. In Tanzania, the government has argued that the policy failures are a result of, *inter alia*, “inadequate capacity of the government to implement strictly the instituted centralised and decentralised management systems due to inadequate financial and management capacity.”¹⁸³ These factors resulted in the inefficient management of forest resources; inability of government to adequately define resource tenure rights thereby subjecting forests to “open access.”¹⁸⁴ This is similar to what is widely advocated by the *Tragedy of the Commons*.¹⁸⁵ In this scenario, unregulated demand from “rational” individuals exceeds the physical carrying capacity of the resource. The author then argues for privatisation of resource access and enclosure of resources through allocation of clear property rights as a means of preventing degradation.¹⁸⁶ Re-examination of Harding’s work has identified that the origins of resource over-extraction is the failure of cooperative property arrangements rather than the lack of establishing private property rights in resource management.¹⁸⁷ The Harding’s argument only apply to a minority of situations.¹⁸⁸ Lyster and others indicate that “PES depends on deliberate social interventions and political will for their creation” and *function*.¹⁸⁹ In this case, PES interventions cannot be considered to be

¹⁸³ United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at 15.

¹⁸⁴ Ibid.

¹⁸⁵ In his book, Harding’s classic problematisation of resource degradation of the grazing commons under “open-access management regime”.

¹⁸⁶ Lyster R, et al., *Law, Tropical Forests and Carbon: The Case of REDD+*. (2013) at 210.

¹⁸⁷ Ostrom E., *Governing the Commons: The Evolution of Institutions for Collective Action*. (1990). Lyster R, et al., *Law, Tropical Forests and Carbon: The Case of REDD+*. (2013) at 210.

¹⁸⁸ Ibid.

¹⁸⁹ Lyster R, et al., *Law, Tropical Forests and Carbon: The Case of REDD+*. (2013) at 211. Emphasis is mine.

politically neutral.¹⁹⁰ However, the chapter has argued that the overall implementation of REDD+ is based on command and control with limited decentred management systems. This theme runs through from chapters 6 to 7. Given the regulatory framework considered in Tanzania and in Indonesia, this and earlier chapters have prepared the ground for constructing the optimal and feasible model legislative framework sufficient to give effect to REDD+. In light of this conclusion, the following chapter addresses how the inadequacy of the command and control approach can be addressed by a reflexive approach.

¹⁹⁰ Ibid.

Chapter Eight:

Reflexive Regulatory Framework for Achieving Equity, Environmental-Effectiveness and Cost-Effectiveness Outcomes (3Es)

8.1 Introduction

Government officials at various levels in REDD+ host countries are engaged in developing, implementing, and enforcing REDD+ regulations.¹ However, these aspects are already happening through a self-regulatory system.² The conception of REDD+ as a self-regulatory system provides new insights about interactions among actors involved in implementing REDD+ activities. In particular, it reveals the emergence of a decentred governance model (as opposed to “decentralisation” and “devolution”)³ where public and non-public actors interact to define what needs to be regulated; apply the standard-setting role; and apply the roles of MRV, implementation, enforcement and adjudication. As discussed in the command and control section 7.4.2, these roles have traditionally been undertaken largely by command and control regulatory regimes.⁴ The point of departure in this section is that command and control has been highly ineffective, inequitable, and cost-ineffective in addressing many environmental problems.⁵

In the context of climate change mitigation, some scholarly critics of command and control have recommended an alternative in the form of a market based regulatory system. This system seeks to achieve its objectives by providing diverse motivation incentives. Section

¹ See chapters 6 and 7 on the Tanzanian and Indonesian case studies.

² This should form the basis for devising a legislative framework to give effect to REDD+ activities.

³ As discussed in chapter 6, decentralisation means “transferring authority and responsibility for government functions from the central government to subnational governments”, while devolution refers to the transferring of power and responsibility for government functions from the state to non-state bodies. The main distinction between a decentred governance model and “decentralisation” and “devolution” is that in the latter arrangement, central government still exercises substantial control over the main key decisions both of the lower levels of governments and of non-public actors. In the former arrangement, government is removed from the top-down decision-making position. Here the roles are interchangeable depending on the different roles of the actors which are determined by their know-how.

⁴ Chapter 4.

⁵ Discussed in chapter 4. Also see Orts E.W., Reflexive Environmental Law. (1995) 89:4 *Northwest University Law Review* at 1235.

7.4.2 reviewed various types of market-based regulation in the context of climate change mitigation. Against this background the following questions are considered: should Tanzania and Indonesia continue with the command and control approach to implementing REDD+? If not, what other regulatory framework would be optimal and feasible? What might the new regulatory framework look like? How can private actors be accommodated in this approach?

These questions have not received extensive attention although there is a proliferation of legal and policy analysis specific to REDD+.⁶ In particular, what cannot be avoided is how to deal with the nature of rights pertaining to carbon rights and legal protection associated with such rights in the preferred policy tool. Thus, in the context of thinking about the type of REDD+ regulation, this chapter explores a new model. The argument is that reflexive law (elaborated on in section 8.2) holds potential to become an optimal and feasible legal framework to give effect to the REDD+ mechanism. Thus the chapter assesses how the 3Es identified in the conceptual framework in chapter 2 can be motivated. The chapter proceeds with a discussion on how the said legal framework could be selected, followed by analysis of emerging reflexive elements in existing legal frameworks in Tanzania and Indonesia. The main questions that arise relate to: how the reflexive law might be designed and how it could be implemented in practice as it is a departure from conventional contract law. These issues and many others will be explored in-depth so as to understand the factors which are likely to make the policy choice an optimal and feasible framework.

8.2 Reflexive Law

It is noted that policy tools grounded on reflexive law have become common in the USA and elsewhere.⁷ As noted in chapter 1, Gunther Teubner pioneered the concept of reflexive law as

⁶ In the study of REDD+ policy making in Nepal, Bushley investigated whether policy processes and the configurations of actors involved reflect state-centric, market-oriented, or polycentric governance. The author concluded that REDD+ policy making is dominated by a tripartite coalition of key government actors, external organisations (international NGOs and donors), and select civil society organisations. This came at a cost to other important stakeholders because their views were marginalised thus threatening recentralised forest governance. Bushley B.R., REDD+ policy making in Nepal: toward state-centric, polycentric, or market-oriented governance? (2014) 19:3 *Ecology and Society* 34. Martijin W. et. al., Creating an enabling legal framework for REDD+ investments in Kenya. Ministry of the Environment, Sweden (2014). Ituarte-Lima C. et. al., Assessing equity in national legal frameworks for REDD+: The case of Indonesia. *Environmental Science and Policy* 44 (2014) 291-300. Chapman S. and Wilder M., Defining the legal elements of benefit sharing in the context of REDD+. REDD+ Law Project - Working Paper (2014). *Legal Frameworks for REDD+*. IUCN (2009). Greiber T. (ed.), *Payments for Ecosystem Services: Legal and Institutional Frameworks*. IUCN Environmental Policy and Law Paper No. 78 (2009). Baker & McKenzie. "Background Analysis of REDD: Regulatory Frameworks", 53–54. Report prepared for the Terrestrial Carbon Group and UN-REDD Programme. Sydney, Australia: Baker & McKenzie, (2009).

⁷ Fiorino D.J., *The New Environmental Regulation*. (2006) at 160.

a response to the problem of “regulatory trilemma”.⁸ The concept of regulatory trilemma is formulated by observations of the interactions and inappropriate relations between the political system (political decision), the legal system (legal norm-making), and the social area of life (social guidance).⁹ The author explains the regulatory trilemma, by asserting that every regulatory intervention which goes beyond the limits of the respective self-regulation is irrelevant because it either produces disintegrating effects on the social area of life or disintegrating effects on regulatory law itself.¹⁰ As noted by Black, the failure of command and control regulation is precisely because it disregards the limits of self-reproduction of the involved sub-systems.¹¹ This occurs because such regulation attempts to impose modes of functioning, criteria of rationality and forms of organisation which are not appropriate from the perspective of the regulated social areas.¹² In the event that command and control regulation succeeds, it does so at the cost of destroying the aforementioned structures.¹³ To elaborate further on this argument consider the example below:

In Korea, legal precedents and legislation changed over recent decades to protect and promote the interests and rights of patients. However, as this policy has been strengthened, so-called “defensive medicine” has spread among doctors; they tend to concentrate their efforts on preventing medical accidents rather than on providing the best treatment. This means that their behaviour becomes strategic and preventive. The point is that such attitudes may destroy the social trust between doctors and patients, and their relationship may become reformulated as strategic relations between two traders who compete with each other to maximize their profits. [...] a strong orientation towards the protection of patients may lead to the destruction of the original principles of contract law and criminal law in relation to medical accidents. [...] [e]ventually, the original aim of protecting the rights of patients cannot be undertaken.”¹⁴

The debate created by the above view is a debate over whether, when and to what extent the command and control approach will promote the public interest. The regulatory trilemma as illustrated in the above may likely manifest in the context of REDD+ where the attempts to devise a strong protection on the part of either investors, government or the public may result

⁸ Teubner G., Substantive and reflexive elements in modern law. (1983) 17:2 *Law & Society Review*, 239.

⁹ Teubner G., “Juridification”, in G. Teubner (ed.), *Juridification of Social Spheres: A Comparative Analysis in the Areas of Labor, Corporate, Antitrust and Social Welfare Law*, (1987) 3-48 at 21.

¹⁰ Teubner, G. *Juridification of Social Spheres, A Comparative Analysis in the Area of Labor, Corporate, Antitrust and Social Welfare Law*, Series A Law, European University Institute (1987) at 21.

¹¹ Black, J., Constitutionalising Self-Regulation. (1996) *The Modern Law Review* 24-55 at 26.

¹² Ibid.

¹³ Ibid.

¹⁴ Yi S. and Hong S.S., *The legal development in Korea: juridification and proceduralisation*. In Yang H. (ed.), *Law and Society in Korea*. (2013) at 116.

in the said strategic relationships. In chapter 5 it was concluded that attempts to devise a precise definition of carbon rights may be counterproductive in the sense that it would not result in creating the conditions for balancing of the 3Es outcomes. Thus what is obviously needed is the policy approach that is likely to promote and balance the 3Es outcomes. Teubner proposed a solution of systems concept to the regulatory dilemma of the welfare state by introducing a reflexive law. To explain the idea of reflexive law, the author argues that legal systems develop in an evolutionary fashion. The common law rules that govern market transactions (which he refers to as “formal law”¹⁵ systems) begin with a view to creating and applying a universal body of rules. Within this set of rules, private actors are allowed to pursue their own interests as long as they conform to such rules. Put differently, a formal law system “relies on a body of legal professionals who employ peculiarly legal reasoning to resolve specific conflicts.”¹⁶ Over a period of time, state regulation advances and technology-based and outcome-based standards (which Teubner conceptualises as “substantive law” systems) emerge. The main objective of substantive law is to empower the state to establish a “purposive, goal-oriented intervention.”¹⁷ In contrast to a formal law which authorises autonomy of the regulated actors, a substantive law focuses on the achievement of pre-determined outcomes through regulation and standards.¹⁸ Thus reflexive law differs from both the formal and substantive law as illustrated by considering the contract law example as discussed by Teubner.

As such the author indicates that within the formal law systems, if there is a contractual dispute, the law will only look to see if certain elements establishing a valid contract have been met. Put differently, the law would establish whether there was mutual assent (i.e. offer and acceptance)¹⁹ and whether there was a “meeting of the minds”.²⁰ It then becomes clear that an emphasis is on rule-oriented resolution of private disputes.²¹ This means that the law

¹⁵ “Formal law is associated with the idea of giving private rights to individuals and emphasizing private dispute resolution.” Orts E.W., *Reflexive Environmental Law*. (1995) 89:4 *Northwest University Law Review* at 1255.

¹⁶ Teubner G., *Substantive and reflexive elements in modern law*. (1983) 17:2 *Law & Society Review*, 239 at 240.

¹⁷ *Ibid* at 239-40. Hirsch D.D., *Green business and the importance of reflexive law: what Michael Porter didn't say*. (2010) 62:4 *Administrative Law Review* at 1106. Hess D., *Social Reporting: A Reflexive Law Approach to Corporate Social Responsiveness*. (1999) 25 *Iowa Journal of Corporation Law* 41.

¹⁸ Teubner G., *Substantive and reflexive elements in modern law*. (1983) 17:2 *Law & Society Review*, 239-286 at 239-40. Hirsch D.D., *Green business and the importance of reflexive law: what Michael Porter didn't say*. 62:4 *Administrative Law Review* (2010) at 1106. Hess D., *Social Reporting: A Reflexive Law Approach to Corporate Social Responsiveness*. (1999) 25 *Iowa Journal of Corporation Law* 41.

¹⁹ Teubner G., *Substantive and reflexive elements in modern law*. (1983) 17:2 *Law & Society Review* 239 at 240.

²⁰ *Ibid* at 255-256. See also Orts E.W., *A Reflexive Model of Environmental Regulation*. (1995) 5:4 *Business Ethics Quarterly*, The Environment, 779-794 at 780.

²¹ Orts E.W., *Reflexive Environmental Law*. (1995) 89:4 *Northwest University Law Review* at 1253.

disregards other social issues that a formal law allows contracting parties to create.²² The substantive law, proceeds with establishment of outcomes and is characterised by direct intervention of law makers and courts in setting and altering contract terms.²³ Thus it places an emphasis on administrative, bureaucratic regulation to address social problems.²⁴ In contrast, reflexive law approaches the contract differently. It seeks to structure bargaining relations so as to equalise bargaining power, and at the same time seeks to subject contracting parties to mechanisms of “public responsibility”.²⁵ This is its goal.²⁶ It achieves this goal by creating incentives (either or both negative and positive) and procedures that induce contracting parties to continually assess their actions (hence the “reflexivity”) and adjust them to society’s goals, rather than telling them what to do in all cases.²⁷ Moreover, it “focuses on enhancing self-referential capacities of social systems and institutions outside the legal system, rather than direct intervention of the legal system itself through agencies, highly detailed statutes, or delegation of great power to courts.”²⁸ In achieving this goal, reflexive law opens vital new perspectives on the role of law.²⁹ It should be noted that under this approach, substantive ends of that law do not disappear, but only the means for achieving them change.³⁰ The change is that the substantive norms should be determined through decentred governance processes instead of centralised legislation.³¹ The goal envisaged is that society "has to give up concepts of comprehensive social planning since they are utopian and

²² Teubner G., Substantive and reflexive elements in modern law. (1983) 17:2 *Law & Society Review* 239 at 255.

²³ Ibid at 255-6.

²⁴ Orts E.W., Reflexive Environmental Law. (1995) 89:4 *Northwest University Law Review* at 1253.

²⁵ Teubner G., Substantive and reflexive elements in modern law. (1983) 17:2 *Law & Society Review* 239-286 at 256. Black, J., Constitutionalising Self-Regulation. (1996) *The Modern Law Review* 24-55 at 46-47.

²⁶ Gaines S.E., Reflexive Law as a Legal Paradigm for Sustainable Development. (2002-2003) 10 *Buffalo Environmental Law Journal*, 1 at 3.

²⁷ Teubner G., Substantive and reflexive elements in modern law. (1983) 17:2 *Law & Society Review*, 239-286 at 256. Orts E.W., A Reflexive Model of Environmental Regulation. (1995) 5:4, *Business Ethics Quarterly The Environment*, 779-794 at 780. Fiorino D.J., The New Environmental Regulation. (2006) at 19, 159-60. Orts E.W., Reflexive Environmental Law. (1995) 89:4 *Northwest University Law Review* at 1253.

²⁸ Orts E.W., Reflexive Environmental Law. (1995) 89:4 *Northwest University Law Review* at 1232.

²⁹ Gaines S.E., Reflexive Law as a Legal Paradigm for Sustainable Development. (2002-2003) 10 *Buffalo Environmental Law Journal* 1 at 3.

³⁰ “Those means can include incentives from economic instruments, such as taxes, or subsidies, the exploitation of existing conflicts or tensions, adjusting them so that they achieve a desirable balance, the deployment of the informational and governance capacities of organisations”. See Black J., Proceduralizing Regulation: Part I. 20:4 *Oxford Journal of Legal Studies* (2000) 597-614 at 598 citing Teubner. Cited in Hirsch D.D., Green business and the importance of reflexive law: what Michael Porter didn’t say. 62:4 *Administrative Law Review* (2010) at 1114-5. Hess D., Social reporting: a reflexive law approach to corporate social responsiveness. (1999) *The Journal of Corporation Law* 42-84 at 61. Also see Deakin S. et. al., Gender inequality and reflexive law: the potential of different regulatory mechanisms for making employment rights effective. Centre for Business Research, University of Cambridge Working Paper No. 426 (2011) at 21. Rendtorff J.D. (ed), *Power and Principle in the Market Place: On Ethics and Economics*. (2010) at 185.

³¹ Gaines S.E., Reflexive Law as a Legal Paradigm for Sustainable Development. (2002-2003) 10 *Buffalo Environmental Law Journal*, 1 at 3.

unrealistic.”³² This is to say as long as “certain procedural norms and principles of justice are respected, the relevant parties are free to strike whatever substantive agreements they wish.”³³ In so doing, reflexive law complements substantive law as a regulatory tool and offers an alternative.³⁴

It follows that, “adopting a reflexive law approach also does not mean that all substantive law, top-down regulation is abandoned.”³⁵ Instead some functions are highly centralised. “As a practical matter, reflexive law strategies are more appropriate for use in concert with other regulatory approaches, including command and control regulation,”³⁶ polycentric systems,³⁷ network governance,³⁸ nodal governance,³⁹ and responsive regulation.⁴⁰ These concepts differ in some respects but they all (except command and control) share the same concept of plural governance that any regulated space has multiple actors with decision-making power and influence. Therefore no single actor has the monopoly of authority in all matters.⁴¹

³² Hess D., Social reporting: a reflexive law approach to corporate social responsiveness. (1999) *The Journal of Corporation Law* 42-84 at 61 citing Teubner.

³³ Cohen J.L., *Regulating Intimacy: a new legal paradigm*. (2004) at 4-5.

³⁴ Rendtorff J.D. (ed.), *Power and Principle in the Market Place: On Ethics and Economics*, (2010) at 185.

³⁵ Hess D., Social reporting: a reflexive law approach to corporate social responsiveness. (1999) *The Journal of Corporation Law* 42-84 at 61. See also Deakin S. et. al., Gender inequality and reflexive law: the potential of different regulatory mechanisms for making employment rights effective. Centre for Business Research, University of Cambridge Working Paper No. 426 (2011) at 21. Rendtorff J.D. (ed.), *Power and Principle in the Market Place: On Ethics and Economics*. (2010) at 185.

³⁶ Stewart R., New Generation of Environmental Regulation? (2001-2002) 29 *Capital University Law Review* 21-182.

³⁷ “Polycentric systems are characterized by multiple governing authorities at differing scales rather than a monocentric unit (see Ostrom, 1999). Each unit within a polycentric system exercises considerable independence to make norms and rules within a specific domain (such as a family, a firm, a local government, a network of local governments, a state or province, a region, a national government, or an international regime).” Cited in Ostrom E., Polycentric systems for coping with collective action and global environmental change. (2010) 20 *Global Environmental Change* 550–557 at 552. Ostrom E., Nested externalities and polycentric institutions: must we wait for global solutions to climate change before taking actions at other scales? (2012) 49 *Econ Theory* 353–369. Ostrom E., Polycentric systems for coping with collective action and global environmental change. (2010) 20 *Global Environmental Change* 550–557. Ostrom E., Beyond markets and states: Polycentric governance of complex economic systems. 100 *American Economic Review* (2010): 1–33. Available: <http://bnp.binghamton.edu/wp-content/uploads/2011/06/Ostrom-2010-Polycentric-Governance.pdf> [accessed 29 September 2015].

³⁸ Castells M., *The Information Age: Economy, Society, and Culture*. 2nd ed. (2010).

³⁹ Shearing C. et. al., Nodal Governance. (2005) 30 *Australian Journal of Legal Philosophy* 30.

⁴⁰ This refers to the use of an appropriate approach to a specific problem, but within a collaborative framework. Braithwaite J., *Responsive Regulation and Developing Economies* in Woods N. and Brown D.L. (eds.), *Making Global Self-Regulation Effective in Developing Countries*. (2007) at 167. See also Black, J., Constitutionalising Self-Regulation. (1996) *The Modern Law Review* 24-55 at 46-47. Deakin S. et. al., Gender inequality and reflexive law: the potential of different regulatory mechanisms for making employment rights effective. Centre for Business Research, University of Cambridge Working Paper No. 426 (2011) at 4.

⁴¹ Bogg A. and Novitz T. (eds.), *Voices at Work: Continuity and Change in the Common Law World*. (2014) at 390 on the discussion of “command and control regimes” and decentred regulatory models such as responsive and reflexive regulation. See Braithwaite J., *Regulatory Capitalism: How it works, ideas for making it work better*, (2008). On Nodal governance, metagovernance, 199-206. Meuleman L., *Public Management and the*

Orts discussed the modern tax law to further illustrate the concept of reflexive law. The author points out that modern tax laws are a triumph of substantive law. However, a reflexive component appears when one looks at the enforcement approach.⁴² This is because it has been realised that millions of taxpayers cannot be compelled directly by a substantive law. Therefore, the tax law uses a reporting system or disclosure requiring every taxpayer to file a form with the Internal Revenue Service.⁴³ As such, the tax law relies to a great extent on the honesty of taxpayers, combined with a more or less randomly introduced element of fear of strict enforcement. This last component is often reserved for questionable cases. Therefore, a modern tax law in this way consists of a complex body of substantive law (the tax code) as well as a reflexive element (tax returns).⁴⁴ At this point, it is expected that the reader is convinced by the theoretical perspective of reflexive law. However, from a practical aspect of legal and policy, it may not be very satisfactory. A question may arise as to what kind of strategies may be envisaged in order to move beyond the theoretical discussion. This question is addressed in section 8.6 below. That said, reflexive law is not without criticisms.⁴⁵ In section 9.5 a discussion will return to those criticisms. They are helpful in understanding some impediments to the realisation of a reflexive law. The next section continues with issues regarding the reflexive aspects of the current legal framework for regulating forestry activities. Therefore in what follows, this chapter considers the reflexive themes related to regulating forestry activities in general in the existing legal framework. These are information systems and disclosure, environmental self-audits and market based regulation.

8.3 The Emergence of Reflexive Elements in the Existing Regulatory Framework

8.3.1 Information System and Disclosure

The Indonesian National REDD+ strategy is a good example for expounding on reflexive law. The relevant provision is titled “safeguards framework and information system”.⁴⁶ Its purpose is to “ensure a risk evaluation reference point for REDD+ activities, and to facilitate

Metagovernance of Hierarchies, Networks and Markets: The Feasibility of Designing and Managing Governance Style Combinations. (2008) at 35 on forms of network governance. For a discussion on polycentric governance and the network governance see Araral E. and Hartley K., Polycentric Governance for a New Environmental Regime: Theoretical Frontiers in Policy Reform and Public Administration. (Undated). Available: http://www.icpublicpolicy.org/IMG/pdf/panel_46_sl_araral_hartley.pdf [accessed 21 September 2015].

⁴² Orts E.W., Reflexive Environmental Law. (1995) 89:4 *Northwest University Law Review* at 1264.

⁴³ Ibid.

⁴⁴ Ibid.

⁴⁵ Blankenburg E., “The Poverty of Evolutionism: A Critique of Teubner's Case for 'Reflexive Law,’” (1984) 18 *Law and Society Review*, 273–289.

⁴⁶ Indonesian REDD+ National Strategy June 2012 at 29.

the preparation of monitoring and control steps relating to program management, financial accountability, and the impact of programs on vulnerable groups and the natural environment.”⁴⁷ To achieve its purpose the strategy requires the REDD+ activity implementers to take concrete steps to ensure risk mitigation as part of the implementation process, through periodic monitoring, evaluation, and reporting.⁴⁸ It also requires these actors to provide information regarding the implementation of safeguards in their work area in a manner compatible with the information system for REDD+ safeguard implementation.⁴⁹ The preparation of a safeguards framework for REDD+ involves *inter alia*: the formulation of criteria, indicators, evaluation procedures, and the handling of risks within the framework of fiduciary safeguards. The latter is based on basic principles of financial management accountability.⁵⁰ The requirement on the part of the REDD+ implementer to provide information regarding the implementation of safeguards means that the actor has to make a self-assessment of its activities. In addition the requirement to take concrete steps to mitigate risk through periodic monitoring, evaluation, and reporting is in itself a tool to encourage self-reflection of the actors’ actions regularly.⁵¹ The strategy, however, does not define the term “periodic” in order to “clarify” the time frame that is required. The danger of not defining the term means that it will be difficult to assess the performance systematically.

By comparison, the Tanzanian REDD+ strategy adopts a number of the World Bank’s policies to implement REDD+.⁵² Among these policies, the OP 4.01 - Environmental Assessment displays “information disclosure”⁵³ can be cited as an approach to display the reflexive aspect.⁵⁴ To observe the reflexivity, this provision must be read together with the public consultation provision. In particular the borrower is required to consult “project-affected groups and local nongovernmental organizations (NGOs) about the project’s

⁴⁷ Ibid.

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ Ibid.

⁵¹ Ibid.

⁵² These are Environmental Assessment (OP/BP 4.01), Natural Habitats (OP/BP 4.04), Forests (OP/BP 4.36), Involuntary Resettlement (OP/BP 4.12), and Indigenous Peoples (OP/BP 4.10). United Republic of Tanzania (URT) National Strategy for reduced emissions from deforestation and forest degradation (REDD+) February, (2013) at 53.

⁵³ This is elaborated more in section 8.6.2 below.

⁵⁴ OP 4.01 - Environmental Assessment at 5. Available: <http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTOPMANUAL/0,,contentMDK:20064724~menuPK:4564185~pagePK:64709096~piPK:64709108~theSitePK:502184.00.html> [accessed 1 September 2015].

environmental aspects and takes their views into account.”⁵⁵ Thereafter, the policy requires the borrower to provide “relevant material in a timely manner prior to consultation and in a form and language that are understandable and accessible to the groups being consulted.”⁵⁶ The borrower is further obliged to provide “for the initial consultation a summary of the proposed project's objectives, description, and potential impacts; for consultation after the draft environmental assessment (EA) report is prepared, [and] provide a summary of the EA's conclusions.” Lastly, the policy requires the borrower to make the draft EA report available at a public place accessible to project-affected groups and local NGOs.”⁵⁷ By disclosing information about the effects of the projects to the affected people, the borrower is pressured to invite more input from the affected people. This means that the information received can assist the borrower to internalise decision and take into account the additional input. For these reasons, this provision has a reflexive aspect. However, in the context of REDD+ it is not clear to whom the policy applies. This is because the original policy was designed to apply to the borrowing country and such a country was required to disclose that information to the World Bank where the Bank makes it available through its InfoShop.⁵⁸ The failure to explain who the target of this policy is, means that no accountability and transparency is placed on the actors who deal with distribution of costs and benefits. Thus, it can be expected that the 3Es outcomes are unlikely to be realised since there is no clear avenue to hold such actors accountable.

Other requirements to provide information in Indonesia can be observed in the Environmental Management Act and Forestry Act. The former obliges the government and regional governments to develop an environmental information system to support the implementation and development of environmental protection and management policies.⁵⁹ Thereafter the Act requires the aforementioned governments to make that information available to communities.⁶⁰ By making this information available to the public, this provision seems to encourage governments to self-reflect about the decision that they are making regarding environmental protection. Hence it can be said that the Act encourages a reflexive aspect. The reflexive scope of this Act, however, is quite limited. By its terms, the Act applies only to government's actions. Therefore the Act is limited to encouraging reflexive processes within

⁵⁵ OP 4.01 - Environmental Assessment at 5.

⁵⁶ Ibid.

⁵⁷ Ibid.

⁵⁸ OP 4.01 - Environmental Assessment at 5-6.

⁵⁹ Article 62 (1) of the Indonesian Environmental Protection and Management Act No. 32/ 2009.

⁶⁰ Ibid Article 62 (2).

the government's agencies. This means the scope for exploring possibilities of realising the goal of the Act is limited to the actions of the government only. The latter Act provides for forest inventory-taking. The requirement is to undertake the forest inventory on the status and physical condition of forest, flora and fauna, human resources as well as community social conditions in and around the forest.⁶¹ The Act does not stipulate who is to undertake this task. However, it is presumed that this role has to be performed by the state since it is empowered to administer forestry resources.⁶²

8.3.2 Environmental Self-audits

In the case of Indonesia, the Environmental Protection and Management Act appears to provide a voluntary self-audit. The Act encourages personnel in charge of business and/or activities to undertake environmental audits with the view to enhancing environmental performance.⁶³ At the same time the Act requires auditing for businesses and/or activities which are highly risky to the environment and/or activities which do not comply with the Act.⁶⁴ If the personnel in charge of aforementioned businesses and/or activities does not execute such obligations, the minister in charge is empowered to assign an independent third party to do so at the expense of the aforementioned personnel.⁶⁵ Similar to the approach taken in Indonesia, the Tanzania Environmental Management Act provides for two types of audits, namely control audits and self-audits.⁶⁶ The latter is relevant to the subject of reflexive law. The main objectives of environmental audits are *inter alia* to “provide a mechanism to learn from experience and to refine design and implementation procedures of a project or undertaking so as to mitigate adverse environmental impacts.”⁶⁷ Section 50 (1) provides for self-auditing annually. This follows after the environmental impact statement has been approved. The criteria to be used for the audit are based on the environmental impact assessment process.⁶⁸ Orts argues that the emphasis on “self-auditing”, “self-disclosure” and “self-policing” fits with an emerging model of *reflexive* environmental regulation.⁶⁹ The Tanzanian Environmental Management Act provides that an “environmental audit shall,

⁶¹ Article 2 of the Forest Act No. 41 of 1999.

⁶² *Ibid* Article 4.

⁶³ *Ibid* Article 48 fn 59 above.

⁶⁴ *Ibid* Article 49 (1).

⁶⁵ *Ibid* Article 49 (2).

⁶⁶ Sections 49 (1) and 50 (1) of Environmental Management Act No. 20 of 2004.

⁶⁷ *Ibid* Section 44 (1) (b).

⁶⁸ *Ibid* Section 50 (1).

⁶⁹ Orts E.W., *Reflexive Environmental Law*. (1995) 89:4 *Northwest University Law Review* at 1277. Gaines S.E., *Reflexive Law as a Legal Paradigm for Sustainable Development*. (2002-2003) 10 *Buffalo Environmental Law Journal* 1 at 11-12.

unless it is a self-auditing” “be conducted by a qualified and authorized environmental auditor or environmental inspector who shall be an expert or a firm of experts.”⁷⁰ Similarly, article 48 of Indonesian Environmental Management Act encourages environmental audits with the view to enhancing environmental performance.⁷¹

Following the requirements for self-auditing, all the said Acts do not offer incentives for doing so. Because these Acts do not provide clear provisions of when environmental auditing would be protected from findings, they leave businesses to decide for themselves the costs and benefits of environmental self-auditing.⁷² As it is argued by Orts, it is possible that “environmental auditing may reveal evidence of environmental violations to regulators” (including prosecutors).⁷³ Under these circumstances governments should credibly commit to cooperation with such businesses in advance by establishing regulatory relief programs and environmental audit policies that grant significant immunity to businesses’ violations discovered through self-audits and voluntarily disclosed to regulators.⁷⁴ However, the relief should not be granted in perpetuity. Instead a timeframe should be indicated to allow the parties concerned to address such violations. A timeframe allows regulators to assess performance and make informed decisions about appropriate steps to take place in the event that assessment determines that violations have taken place.

8.3.3 Market Based Regulation

Market-based regulations (the Pigouvian approach and environmental marketing) are, usually, very flexible in the sense that they often do not specify in detail how the targeted actors are to respond.⁷⁵ As discussed above (section 7.4.2 above) these instruments create and manipulate incentives, but targeted actors make their own decisions and choices based on the available incentives.⁷⁶ The use of market based regulation (the Pigouvian approach) has been recognised in the Indonesian Environmental Protection and Management Act. The Act empowers the government and regional governments to develop economic instruments (i.e. environmental taxes, levies and subsidies) with the view to creating incentives and/or

⁷⁰ Section 46 (3) The Tanzanian Environmental Management Act No. 20 of 2004.

⁷¹ Article 48 of the Indonesian Environmental Protection and Management Law No. 32/ 2009.

⁷² A similar point was made by Orts about the Environmental Act in the U.S.A. Orts E.W., *Reflexive Environmental Law*. (1995) 89:4 *Northwest University Law Review* at 1277.

⁷³ *Ibid.*

⁷⁴ Potoski M. and Prakash A., *The Regulation Dilemma: Cooperation and Conflict in Environmental Governance*. (2004) 64:2 *Public Administration Review* 152-163 at 155.

⁷⁵ Hepburn G., *Alternatives to Traditional Regulation*. OECD Report. (Undated) at 30. Available: <http://www.oecd.org/gov/regulatory-policy/42245468.pdf> [accessed 20 September 2015].

⁷⁶ *Ibid.*

disincentives for the preservation of the environment.⁷⁷ Similarly in Tanzania, the Forest Act provides for forestry charges and royalties.⁷⁸ The Act requires the minister to consider principles of sustainability in connection with harvesting of the produce in determining the level of royalties in connection with any particular produce.⁷⁹

Orts argues that the market based regulation attributed to Coase (the Coasian economic approach discussed in section 7.4.2 above) is not considered to be flexible.⁸⁰ The Coasian economic approach has been used to commercialise ecological goods and services by internalising environmental externalities and has recently expanded to include environmental services known as Payment for Environmental Services (PES).⁸¹ A discussion on Indonesian experience with regards to PES is provided by Fauzi.⁸² This author examined PES cases in Indonesia and concluded that both PES schemes are not voluntary transactions as conceived in PES theory.⁸³ This is because challenges such as land ownership forced the government to intervene by means of establishing regulations at both the national and local levels.⁸⁴ This made such scheme “mandatory” as opposed to voluntary as intended in the ideal PES scheme.⁸⁵ The mandatory element therefore meant that PES is not flexible partly because it compels the regulated to achieve a particular outcome. Similarly, Tanzania has piloted some PES programmes in sectors such as water.⁸⁶ As indicated in the previous chapter, efforts to implement REDD+ in Tanzania using the PES approach is being considered.⁸⁷

⁷⁷ Article 43 (3) (b) of the Indonesian Environmental Protection and Management Law No. 32/ 2009.

⁷⁸ Section 77 of Tanzania Forest Act 2002.

⁷⁹ Ibid Section 78 (2) (d).

⁸⁰ Orts E.W., Reflexive Environmental Law. (1995) 89:4 *Northwest University Law Review* at 1270-1.

⁸¹ Fauzi A., Can commercialization really solve externalities in the forested area? Lessons learned from payment for environmental services schemes in Indonesia. (2013). Available: https://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/8888/FAUZI_0640.pdf?sequence=1 [accessed 8 September 2015].

⁸² For a detailed discussion on this matter a reader is directed to Fauzi A., Can commercialization really solve externalities in the forested area? Lessons learned from payment for environmental services schemes in Indonesia. (2013).

⁸³ Fauzi A., Can commercialization really solve externalities in the forested area? Lessons learned from payment for environmental services schemes in Indonesia. (2013) at 7.

⁸⁴ Ibid.

⁸⁵ Ibid.

⁸⁶ Kwayu E.J., Farmer participation in the Equitable Payments for Watershed Services in Morogoro, Tanzania. University of Leeds Sustainability Research Institute Paper No. 42 (2013). Available: http://www.see.leeds.ac.uk/fileadmin/Documents/research/sri/workingpapers/SRIPs-42_01.pdf [accessed 8 September 2015].

⁸⁷ Kulindwa K. et. al., Payment for Environmental Services (PES) and REDD. REDD Workshop - Oasis, Morogoro 31st-3rd September (2009). Kaczan D. et. al., Designing a payments for ecosystem services (PES) program to reduce deforestation in Tanzania: An assessment of payment approaches. (2013) 95 *Ecological Economics*. 20–30, also see chapter 7.

8.4 Determining the Optimal and Feasible Regulatory Instrument

In deciding which policy instrument is optimal and feasible to give effect to REDD+, the following elements may be helpful. As discussed in chapters 3 and 4, REDD+ offers incentives for a range of objectives. Apart from the emission reductions objective (which has wide support from many countries) there are other multiple objectives to be achieved.⁸⁸ What has been argued in this thesis is that the implementation must strike a balance between the 3Es to be considered successful.⁸⁹ To achieve this balance, a choice or combination of different regulatory approaches can be adopted. At this point, command and control regulation, market based regulation and reflexive law have been discussed. In what follows, the discussion centres on assessing how these regulatory instruments can help attain the 3Es outcomes.

8.4.1 Equity Concerns

In chapter 2 it was established that law is a “product of struggle, negotiation, compromise and power dynamics, and may represent the dominant views or social compromise”.⁹⁰ This means that there is a danger of promulgating rights that favour a particular group or individuals. In this regard, benefits are allocated to a few individuals while the costs are distributed collectively. The implication for the command and control approach is that the mentioned factors are likely to be the case because the substance of the command and control legislation is in many cases imposed by the powerful actors. In the event that the views of the powerful actors are not captured in the substance of the legislation, such actors can still be able to use their resources in the litigation to ensure that the legal system takes decisions in their favour.

Among the aforementioned types of market based instruments,⁹¹ it was concluded that the PES which is attributed to Coase is the main regulatory choice for both countries under the study. Therefore the issue of equity has to be discussed from the PES perspective. Accordingly, some have argued that there is little evidence of adverse effects on equity from the PES schemes in select case studies in Indonesia.⁹² However, these scholars admitted that such PES projects were operating at a small scale.⁹³ Against these findings, they caution that

⁸⁸ Chapter 4 section 4.3.1.

⁸⁹ Chapter 2.

⁹⁰ Ibid.

⁹¹ Section 7.4.2.

⁹² Bond I. et al., *Incentives to sustain forest ecosystem services: A review and lessons for REDD*. International Institute for Environment and Development (UK) (2009) at 32.

⁹³ Ibid.

if “and when REDD+ payments are implemented at much larger spatial scales and/or where governance is weak, facilitators and brokers will have to guard against elite and rent capture.”⁹⁴ To understand how these risks arise, a connection is made between REDD+ as the largest PES experiment and the concept of “neoliberalisation”.⁹⁵ The neoliberal approach is characterised by the re-regulation of state and non-state driven forms of conservation. The implication of this is “a process of territorialization that demarcates new spaces for controlling people and natural resources; and the subsequent uneven realization and distribution of accompanying benefits and costs.”⁹⁶ The neoliberal approach to REDD+ means the:

... role of the state is to create and preserve an institutional framework appropriate to such practices. The state has to guarantee, for example, the quality and integrity of money. It must also set up those military, defence, police and legal structures and functions required to secure private property rights and to guarantee, by force if need be, the proper functioning of markets⁹⁷

The above exposition is essentially an approach to privatisation. This means having to reduce the involvement of the state in the economic activities by expanding the market and privatisation of the private sector.⁹⁸ However, a key problem with privatisation has been state capture, defined as “the capacity to affect the formation of the basic rules of the game (i.e. laws, and regulations) through private payments to public officials”.⁹⁹ Indeed, privatisation in Africa should be seen as part of the efforts by firms to shape the laws, regulations and policies of the state to their own advantage by offering unlawful private gains to public officials.¹⁰⁰ Under these conditions, it is possible for elites as well as private actors to capture many of the benefits arising from REDD+ at the expense of the wider population at large.

⁹⁴ Ibid.

⁹⁵ Corbera E., *Problematizing REDD+ as an Experiment in Payments for Ecosystem Services*. (2012) 4 *Environmental Sustainability* 612–619 at 616. McGregor A. et. al., *Beyond carbon, more than forest? REDD+ governmentality in Indonesia*. (2015) 47 *Environment and Planning*, 138–155 at 150.

⁹⁶ Corbera E., *Problematizing REDD+ as an Experiment in Payments for Ecosystem Services*. (2012) 4 *Environmental Sustainability* 612–619 at 616.

⁹⁷ Thorsen D.E. and Lie A., *What is Neoliberalism?* Department of Political Science, University of Oslo. Available: <http://folk.uio.no/daget/neoliberalism.pdf> [accessed 20 September 2015]. Castree N., *Neoliberalism and the Biophysical Environment: A Synthesis and Evaluation of the Research*. *Environment and Society: Advances in Research*, (2010) 1, 5–45 at 10.

⁹⁸ Kajsiu B., *A Discourse Analysis of Corruption: Instituting Neoliberalism Against Corruption in Albania, 1998-2005*. (2014) at 6.

⁹⁹ Cited in Conteh C. et.al., *Public Sector Reforms in Developing Countries: Paradoxes and Practices*, (2014) at 180.

¹⁰⁰ Ibid.

A consideration of reflexive law in contribution to equity requires a revisit to the concept of reflexive law discussed above.¹⁰¹ In particular, by structuring bargaining relations to equalise bargaining power and subjecting contracting parties to mechanisms of “public responsibility” (section 8.2.), the reflexive law addresses the contextual equity thereby raising the prospects of advancing the procedural and distributive equity. In other words, by allowing parties to carry out self-regulatory arrangements which, as a result, cease to be completely mandatory means that the application of the law is tailored to local conditions or contextual equality.¹⁰²

8.4.2 Environmental-Effectiveness Concerns

As discussed above, command and control regulation is the dominant form of regulation in the countries under the study. Such an approach has not been effective in those countries. This lack of effectiveness is particularly evident when one looks at both the input and output effectiveness as discussed in chapter 2.¹⁰³ Where there has been input effectiveness, it has been argued that many individuals comply out of a sense of good citizenship.¹⁰⁴ It is also expected that a command and control approach to regulation would mean that an enforcement measure may be prevented by a range of factors such as corruption, and therefore compromises the effectiveness of the law. In contrast, market based regulation would in theory be able to reduce the involvement of the state in the economic activities by expanding the market and privatisation of the private sector. However, as indicated earlier on, a market based approach in many cases operates within the context of command and control. One of the problems indicated above has to do with property rights to carbon. Hence it becomes difficult to allocate rights to carbon and this affects the ability to allocate cost and benefit in a balanced manner. While much of this has major implications on the attaining of equity issues, the resulting implication is the inability of a market based approach to achieve environmental effectiveness. This is because the exclusion of a certain portion of the beneficiaries could lead to a sabotage of the entire programme altogether. An example of this is in New Zealand

¹⁰¹ As such an explanation of reflexive law in a contract law above shows that law disregards other social issues that formal law allows contracting parties to create. This is similar to disregarding contextual equity discussed earlier (Chapter 2). This is even though it is established that the ability to attain distributional and procedural equity is conditioned by context. Chapter 2 points out that examples of contextual factors such as capacity, power, cultural values, social capital have a direct bearing on the equity of distribution (chapter 2 section 2.4.4).

¹⁰² Deakin S. and McLaughlin C., *The regulation of Women's Pay from Individual Rights to Reflexive Law?* In Scott J.L. et.al., (eds) *Women and Employment: Changing Lives and New Challenges*. (2008) at 320.

¹⁰³ The input effectiveness is concerned with the extent to which the policy instrument realises its objectives, while output effectiveness is concerned with inducing subjects to comply with systems of rules and regulations. See chapter 2 section 2.5.

¹⁰⁴ Section 8.4.2.

where farmers threatened to cut down trees if they were excluded from carbon rights ownership.¹⁰⁵

Another issue to consider that may affect environmental effectiveness of the market based regulation is the interpretation of rights in the legislation as discussed in chapter 5. What was established is that carbon rights is not a concept that has been and can be defined clearly. Thus carbon rights definitions will likely raise possibilities of contradictory or conflicting judicial approaches and decisions from bodies such as a quasi-judicial body on the distribution of costs and benefits. Hence a command and control approach to REDD+ is likely to fail.

8.4.3 Cost-Effectiveness

Some of the justifications for the use of PES as a preferred market instrument to implement REDD+ focuses on the issue of resources. One view is that PES came into being after the failure of command and control approaches as well as a lack of resources by government to manage natural resources.¹⁰⁶ However, this view fails to realise or ignores that “environmental free marketers often do not take full account of the economic costs of the government regulation required to administer the new property rights they wish to establish.”¹⁰⁷ According to arguments put forward, “new forms of private property require registers to record ownership and methods of enforcing the new property rights against trespassers. Also, technical advances may be needed, which may often entail substantial costs, to establish ‘tracers’ for private ownership of formerly common resources.”¹⁰⁸

To add to the above discussion, another cost that seems to be ignored is the fact that the establishment of market instruments such as PES or command and control requires the government to compensate the loss of those who have legal rights to property. This is well known as a just compensation clause in some jurisdictions such as the USA.¹⁰⁹ Following this requirement, if a government subsequently wants to stop an existing use, or alter the planning

¹⁰⁵ Gould K. et al., *Legislative approaches to forest sinks in Australia and New Zealand. Working models for other jurisdictions?* in Streck C. et al. (eds), *Climate change and Forests. Emerging Policy and Market Opportunities*. (2008).

¹⁰⁶ Kulindwa K. et. al., *Payment for Environmental Services (PES) and REDD*. REDD Workshop - Oasis, Morogoro 31st-3rd September (2009).

¹⁰⁷ Orts E.W., *Reflexive Environmental Law*. (1995) 89:4 *Northwest University Law Review* at 1244. Also see O’Connor P., “The Extension of Land Registration Principles to New Property Rights in Environmental Goods.” In Dixon M. (ed), *Modern Studies in Property Law*, 5. (2009) at 384.

¹⁰⁸ Ibid.

¹⁰⁹ Barros D.B., *Defining "Property" in the Just Compensation Clause*. (1995) 63:5 *Fordham Law Review*.

conditions that it deems appropriate for the implantation for REDD+, the government will be obliged to purchase that right back from the landholder, that is, to compensate for its removal or regulation.¹¹⁰ This speaks to the point alluded to in chapter 5 where other actors who have legitimately obtained their rights to forestry resources which are not compatible with REDD+ will need to be compensated so as to make it equitable. This then means that more resources will be required to compensate land use actors in order to meet the objectives of REDD+. Viewed in this way, the use of command and control would require more resources compared to alternatives, hence compromising the possibility of attaining the cost-effective criterion. This does not mean that reflexive law will not compensate these actors. However, the central point is that in the former approach the government will be liable for such compensation.

Another point to take into account in terms of a choice between command and control and other alternatives is the issue of potential delays. Accordingly, it is expected that legislation that is required to give effect to REDD+ may be in conflict with other laws relating to land use. Thus it means that to pass a law that requires a single objective of keeping the trees standing will be difficult due to the many demands of forestry resources or the forest land. The potential effect of this is the delay in the passing of such a law. If the law will be delayed in being passed or amended, then surely, that cannot be cost-effective due to opportunity costs that may be forgone. At the same time that cannot also be environmentally-effective because forest degradation and deforestation and degradation will continue. Therefore in this sense, it is hard to see the tradeoff among the 3Es outcomes. As discussed in chapter 2, a policy is said to be cost-effective if it meets a given goal at least cost compared to alternatives.

8.4.4 The Optimal and Feasible Regulatory Instrument

In deciding the optimal and feasible regulatory instrument, perhaps the first approach is to determine the background against which the regulatory framework should be determined. As such, since the threats to environmental degradation take many forms, the optimal and feasible regulatory instruments to address the problem are likely to be context-specific.¹¹¹ Therefore the choice of regulatory framework to be devised will be highly dependent upon

¹¹⁰ Macintosh A. et. al., *Limp, Leap or Learn? Developing legal frameworks for climate change adaptation planning in Australia*. National Climate Change Adaptation Research Facility. Gold Coast, Final Project Report (2013) 277 at 45-46.

¹¹¹ Gunningham N. and Sinclair D., *Designing Smart Regulation*. Available: <http://www.oecd.org/env/outreach/33947759.pdf> [accessed 10 September 2015].

the characteristics of the environmental issue under consideration.¹¹² The drivers of forest degradation and deforestation are complex and come from a range of sources.¹¹³ REDD+ as a mechanism to address the problem is also complex because of the requirement to understand its technical issues. This has led to the formation of self-regulatory bodies to devise standards and measures to implement REDD+.¹¹⁴ In the context of thinking of how the implementation of REDD+ can balance the 3Es outcomes, the reader is reminded about the existing synergies or contradictions among the 3Es discussed in chapter 2. Against this background, the answer to the quest of balancing the 3Es outcomes lies in the regulatory choice and the specific contexts in which it is applied.

As discussed above, a choice of command and control regulation carries a pessimistic message in terms of setting extensive and detailed prescription on how to distribute costs and benefits. A market-based instrument such as PES is unlikely to be the most appropriate instrument because of the difficulties of establishing the proprietary aspect of carbon which is primarily caused by the problem of land tenure, as well as conceptual challenges of defining carbon rights. Reflexive law seems to offer an optimal and feasible solution in terms of achieving tradeoffs and balance among the 3Es outcomes.¹¹⁵ This is due to the fact that it structures the bargaining relations so as to equalise bargaining power among parties concerned. In this way it is helpful in terms of inducing compliance by the application of positive incentives rather than negative incentives enforced through law and police power. At the same time, since bargaining relations also take account of the broader contextual factors (e.g. capacity, power, cultural values, and social capital), then this lays a foundation for procedural and distributive equity.¹¹⁶ In this way, it can be accepted that reflexive law is the cost-effective instrument compared to the alternatives. For the aforementioned reasons, this

¹¹² Ibid.

¹¹³ Chapter 1.

¹¹⁴ Chapter 4.

¹¹⁵ A similar study of REDD+ in Tanzania expresses similar views. The author contends that the “concept of adaptive governance can at times come across as idealistic when faced with dominant market interests and political actors. However, it also offers a solution to identifying and balancing off trade-offs.” See Bolin A., *REDD+ planning from a community perspective: linking the local context with national and global frameworks, A Tanzanian case study*. Master’s Thesis University of Leeds (2010). Available: <http://blogs.helsinki.fi/tzredd-actionresearch/files/2011/01/Anna-Bolin-Masters-Dissertation-Leeds-University-AY-2010.pdf> [accessed 1 September 2015].

¹¹⁶ Chapter 2, section 2.8.

section argues that reflexive law should be used, but not exclusively to give effect to REDD+.¹¹⁷

8.5 Some of the Impediments to Using Reflexive Law

The survey in section 8.3 reveals some of the emerging aspects of reflexive law in the existing legal framework for forestry conservation. The traditional command and control approach to environmental governance in Tanzania and Indonesia although still dominant, reveals signs of transition. However, such reflexivity appears to occur serendipitously instead of drawing consciously from the theory. Before proceeding to establish how reflexive law would operate in practice, it is worth considering why a comprehensive type of reflexive regulation has not already been made. Put differently, what are some of the impediments to using alternatives to traditional regulation?

8.5.1 Economic and Institutional Impediments

The discussion of reflexive law above reveals that an incentive is one of the key issues in designing reflexive law. Traditionally, in the area of forestry, there has been a lack of incentives to ensure sustainable use of forestry resources. This aspect might change because of the introduction of REDD+. Chapter 3 has established that policy-makers in developing countries have been adamant about establishing an effective approach in avoiding deforestation in the past because of a lack of incentives. Thus it can be reasonably pointed out that the only means of reducing deforestation without incentives is through command and control regulation and a voluntary approach. This means that the likelihood of considering policy approaches such as market based regulation and reflexive law is limited. In addition, special groups (such as businesses) may prefer the government to continue to use traditional approaches rather than alternative regulatory instruments. This is because such groups may be concerned about the uncertainty generated by a shift to an alternative regulatory instrument.¹¹⁸

8.5.2 Legal Impediments

As discussed throughout the thesis command and control in many cases dictates how specific outcomes should be achieved. In this way command-and-control instruments are considered

¹¹⁷ Section 8.8 will return to this discussion to explain the possible complementarity from the market and command and control regulations.

¹¹⁸ Hepburn G., Alternatives to Traditional Regulation. OECD Report. (Undated) at 14. Available: <http://www.oecd.org/gov/regulatory-policy/42245468.pdf> [accessed 20 September 2015].

to be more “secure”, in that non-compliance would lead to the imposition of sanctions.¹¹⁹ This arguably provides assurance that the objectives of the law in question will be achieved.¹²⁰ On the contrary, reflexive law allows both public and private actors to determine substantive outcomes through reflexive process.¹²¹ As such, because of an entrenched regulatory command and control culture among some policy-makers there might be reluctance to recognise it as law. This is because reflexive law seems to lack clarity on how to achieve the outcome.

8.6 Reflexive Legal Framework for REDD+

8.6.1 Incentives to Participate

This approach to regulation is used by states to influence behaviour through a mixture of reward and risk (i.e. incentives and sanctions).¹²² Incentives to participate in voluntary self-regulation have been observed in the field of environmental law. Orts has argued that without sufficient reason for actors to participate in a mechanism that would expose them to public scrutiny and incur substantial costs of developing environmental management and auditing processes, any voluntary system will fail.¹²³ Thus, a number of incentives should be built in to encourage participation.¹²⁴ The following possibilities are considered:

- In the field of labour law, Cynthia Estlund has argued that preferential regulatory rules and processes, such as fewer inspections, should be offered to actors who adopt a process of self-regulation of employment practices that includes some form of independent representation by their employees.¹²⁵ This also means that for those who do not undertake self-regulation, punishment could be imposed upon violations.
- It is also recommended that if an actor opts in to voluntary self-regulation, then the Justice Department should state unequivocally that underlying auditing information will not be used against participating companies.¹²⁶ Finally, some sort of formal recognition of businesses participating in the program should be adopted; an example cited is an EPA-certified "Green Business" decal.¹²⁷ As such, a marketable emblem

¹¹⁹ Du Toit L., Promoting renewable energy in South Africa through the inclusion of market-based instruments in South Africa's legal and policy framework with particular reference to the feed-in tariff . *PhD Thesis University of Cape Town* (2014) at 93.

¹²⁰ Ibid.

¹²¹ Hess D., Social Reporting: A Reflexive Law Approach to Corporate Social Responsiveness. (1999) 25:1 *Journal of Corporate Law* 41 at 51.

¹²² Doorey D.J., A Model of Responsive Workplace Law. (2012) 50 *Osgoode Hall Law Journal* at 63.

¹²³ Orts E.W., Reflexive Environmental Law. (1995) 89:4 *Northwest University Law Review* at 1324.

¹²⁴ Ibid.

¹²⁵ Doorey D.J., A Model of Responsive Workplace Law. (2012) 50 *Osgoode Hall Law Journal* at 64.

¹²⁶ Orts E.W., Reflexive Environmental Law. (1995) 89:4 *Northwest University Law Review* at 1325-6.

¹²⁷ Ibid at 1327.

may be used to attract economic consumer awareness. This approach may offer an additional incentive for businesses to participate.¹²⁸

- Doorey has presented a policy approach and referred to it as “variable sanctioning models”. The objective of this model is to provide reduced penalties or exemptions thereof for statutory infringements when private actors have taken the precautionary procedural steps that the state desires.¹²⁹ The exemption of penalty or reduced penalties happens when an actor has established the internal management checks and balances which are devised to reduce the possibility of a violation but still violation occurs.¹³⁰ This is to say that although the violation is the same in each case, the justification for penalising the actor to a lesser degree is that it is beyond the control of the actor since it made reasonable efforts to avoid the problem in a manner endorsed by the state.¹³¹
- Other incentives can be tax relief for the businesses which submit information. The amount of relief can be spread over a period of time.¹³²

8.6.2 Public Information Disclosure and Dissemination

Public disclosure implies public scrutiny.¹³³ By so doing, the disclosure of information can empower the private actors and the public in their activities with the disclosing actor. By providing information about firm behaviour to private watchdogs, it can alter the relative balance of power between the firms and the watchdogs and thereby alter the dynamic of the negotiations.¹³⁴ This balance of power is of course enhanced when there is a possibility of public or private action to penalise false or misleading statements.¹³⁵ This is why it is one of the preferred tools in reflexive law.¹³⁶

The use of disclosure based regulation as a tool for influencing entities’ practices is not novel.¹³⁷ Many countries have relied on it to address an array of issues.¹³⁸ Observations can be seen in consumer law, where regulated entities are required to disclose risk information in the form of product labelling,¹³⁹ environmental law, where corporations are obliged to create

¹²⁸ Ibid.

¹²⁹ Doorey D.J., A Model of Responsive Workplace Law. (2012) 50 *Osgoode Hall Law Journal* at 65.

¹³⁰ Ibid.

¹³¹ Ibid.

¹³² Tax relief has been awarded for a number of reasons. In South Africa, criteria for tax relief are provided in South African Revenue Service: Tax Guide for Small Businesses 2013/14 at 34.

¹³³ Orts E.W., Reflexive Environmental Law. (1995) 89:4 *Northwest University Law Review* at 1232.

¹³⁴ Doorey D.J., A Model of Responsive Workplace Law. (2012) 50 *Osgoode Hall Law Journal* at 67. Orts E.W., Reflexive Environmental Law. (1995) 89:4 *Northwest University Law Review* at 1232.

¹³⁵ Orts E.W., Reflexive Environmental Law. (1995) 89:4 *Northwest University Law Review* at 1232.

¹³⁶ Doorey D.J., A Model of Responsive Workplace Law. (2012) 50 *Osgoode Hall Law Journal* at 67.

¹³⁷ Doorey D.J., Who made that?: influencing foreign labour practices through reflexive domestic disclosure regulation. (2005) 43:4 *Osgoode Hall Law Journal* 353-405 at 373.

¹³⁸ Ibid.

¹³⁹ Ibid.

Toxics Release Inventory (TRI) and disclose the amounts of designated toxins released into the community;¹⁴⁰ consumer protection law which mandates regulated entities to disclose a racial breakdown of loan recipients to discourage racially based lending practices;¹⁴¹ and laws that govern the securities industry which oblige entities to disclose important financial information through the registration of securities.¹⁴² It should also be noted that though the “common laws of tort and contract have long required some disclosure of information that was [of] special relevance to consumers; legislative requirements to disclose are a relatively recent development.”¹⁴³ In the field of environmental law, it is noted that there has been a lack of emphasis to utilise disclosure of information as a primary focus.¹⁴⁴ Instead, use of environmental informational regulation has been "piecemeal," "inchoate," and "haphazard."¹⁴⁵

As indicated above, one of the core elements of reflexive law is information disclosure as a regulatory strategy with the view to instigating and regulating self-regulation. Generally, scholars agree that regulating through disclosure can have a normative influence on the behaviour of those who are regulated.¹⁴⁶ This influence is created by the inducement of a risk and opportunity elements that must be addressed by the regulated entities.¹⁴⁷ An example cited in the USA is that, information disclosure has been used to get entities to internalise environmental norms based on three subcategories: (1) collect and disseminate negative information about the entities’ environmental impacts and in doing so create the need for such entities to want to reduce environmental damages; (2) “collect and disseminate positive information about the entities’ environmental performance and thereby use a carrot, rather than a stick, to encourage improvement; (3) and those that disclose other types of relevant

¹⁴⁰ United States Environmental Protection Agency (EPA). Available: <http://www.epa.gov/tri> [accessed 20 September 2015] cited in Doorey D.J., Who made that?: influencing foreign labour practices through reflexive domestic disclosure regulation. (2005) 43:4 *Osgoode Hall Law Journal* 353-405 at 374.

¹⁴¹ Repetto R., Making disclosure work better: the experience of investor-driven environmental disclosure. In Woods N. and Brown D.L., Making global self-regulation effective in developing countries. (2007) at 86 citing the U.S.A. Home Mortgage Disclosure Act 1975.

¹⁴² Ibid at 86 citing the U.S.A Securities and Exchange Acts of 1933 and 1934.

¹⁴³ Freiberg A., *The Tools of Regulation*. (2010) at 167.

¹⁴⁴ Case D. W., Corporate Environmental Reporting as Informational Regulation: A Law and Economics Perspective, Case, (2005) 76 *University of Colorado Law Review* 379-442 at 384.

¹⁴⁵ Ibid.

¹⁴⁶ Doorey D.J., Who made that?: influencing foreign labour practices through reflexive domestic disclosure regulation. (2005) 43:4 *Osgoode Hall Law Journal* 353-405 at 353 and 358. Hirsch D.D., Green business and the importance of reflexive law: what Michael Porter didn’t say. (2010) 62:4 *Administrative Law Review* at 1112. Case D. W., Corporate Environmental Reporting as Informational Regulation: A Law and Economics Perspective, Case, (2005) 76 *University of Colorado Law Review* 379-442 at 387.

¹⁴⁷ Doorey D.J., Who made that?: influencing foreign labour practices through reflexive domestic disclosure regulation. (2005) 43:4 *Osgoode Hall Law Journal* 353-405 at 353.

information, such as descriptions of green business success stories.”¹⁴⁸ With such an undertaking, it has been reported that some environmental groups have used such negative information to expose and publicly shame the entities with the worst environmental practices, and sometimes work with such entities to identify ways to reduce their environmental pollution.¹⁴⁹ By the same token, those with the positive environmental performance use such platform to boost their public image. To this end, once this potential is realised by regulators, then the challenge for such regulators is to identify the scope of disclosure that constrains the regulated entities to respond to the intended objectives.¹⁵⁰ To have the said effect, policy-makers need to devise policies that share five basic design features. These are the scope and contents of disclosed information, information discloser and timeframe, communication-based regulation, and decentred experimentalism. These elements are elaborated on below.

8.6.2.1 Determining the Scope and Contents of Disclosed Information

Defining the scope of what must be disclosed relates to the aspect of the information disparity that the policy seeks to redress.¹⁵¹ Information to be disclosed for the purpose of this thesis relates to the distribution of costs and benefits in a way that balance the 3Es outcomes. Usually, information disclosure targets two aspects. First the requirement is to disclose what is already available to the discloser.¹⁵² That is to say that the information to be disclosed is that which was created for managerial decision-making. Secondly, the scope of information requires disclosers to generate new information that is not yet available to the regulated entity.¹⁵³

The contents of the information disclosure in REDD+ can be influenced by at least three factors. The first factor is determined by the way effectiveness is being understood. Chapter 3 states that one way of arguing that the law is effective is that the law has resolved the problem in question with some level of success. This is known as output effectiveness. Effectiveness of the law is also understood from the input activities with the view to achieving output effectiveness. This discussion informs what information needs to be disclosed in the context of reflexive law for REDD+. This is to say that the disclosers need to disclose the information

¹⁴⁸ Cited in Hirsch D.D., Green business and the importance of reflexive law: what Michael Porter didn't say. (2010) 62:4 *Administrative Law Review* at 1113.

¹⁴⁹ Doorey D.J., Who made that?: influencing foreign labour practices through reflexive domestic disclosure regulation. (2005) 43:4 *Osgoode Hall Law Journal* 353-405 at 374.

¹⁵⁰ *Ibid* at 353.

¹⁵¹ Fung A. et. al., *Full Disclosure: The Perils and Promise of Transparency*. (2007) at 42.

¹⁵² *Ibid*.

¹⁵³ *Ibid*.

regarding the costs (both the opportunity forgone from the monetary as well as non-monetary aspects) and compensation on the one hand, and the benefits (either in monetary or non-monetary aspects or both) of changing behaviour on the other hand.

However, the above requirement is not an easy task because, as it has been discussed in chapter 4, activities that may lead to emission reductions in a way that is permanent and ensures permanence are classified as type 1 (activities to be developed within the forests), type 2 (activities to be developed outside forests) and type 3 (change of policies which have detrimental effects on forests). What has also been discussed in chapter 4 is that the costs and benefits related to type 1 can be easily calculated while types 2 and 3 possess significant challenges in attributing the costs and the benefits that should be incentivised. The problem is exacerbated because no one actor (such as a REDD+ investor) has control of all the types of activities. At most, an actor can be able to have control of type 1 and type 2 while another actor (possibly the government) can have some degree of control of type 3. This has to be kept in mind when deciding who needs to disclose information.¹⁵⁴

The second factor that follows from the above discussion is the next information to be disclosed. This relates to the question of the eligibility criteria for benefits. In this case the World Bank Involuntary Resettlement OP 4.12 which is adopted by the Tanzania REDD+ strategy can be instructive. Criteria for benefits are:

- (a) those who have formal legal rights to land (including customary and traditional rights recognised under the laws of the country);
- (b) those who do not have formal legal rights to land at the time the census begins but have a claim to such land or assets--provided that such claims are recognised under the laws of the country or become recognised through a process identified in the resettlement plan... and
- (c) those who have no recognisable legal right or claim to the land they are occupying.¹⁵⁵

Similarly, it would be necessary to disclose what the costs which warrant compensation and benefits thereof are.¹⁵⁶ Following this third factor, one has to make sure that all persons included in all sections above are provided compensation for loss of assets other than land. With regards to the compensation relating to land, persons covered under sections (a) and (b) above are provided compensation for the land they lose, and other assistance. Persons covered

¹⁵⁴ This aspect is discussed in the following section.

¹⁵⁵ The World Bank OP 4.12 - Involuntary Resettlement. Operational Manual. December, (2001).

¹⁵⁶ Ibid.

under section (c) above are provided resettlement assistance in lieu of compensation for the land they occupy, and other assistance, as necessary, to achieve the objectives set out in the policy. However, persons who encroach on the area after the cut-off date are not entitled to compensation or any other form of resettlement assistance. This example of what information needs to be disclosed obviously assumes that the causes of forest degradation are only within the forestry areas and can be said to take into account type 1 activities only.

As discussed above, the criteria for disclosing what principles are used to compensate type 2 and type 3 also need to be taken in to account. The procedural and distribution equity principles discussed in chapter 2 can be helpful to disclose what criteria are used. For example it is clear from the above adopted policy in Tanzania that the Need Principle, Accountability Principle, Egalitarianism Principle and Utilitarianism Principle have not been taken into account although they have different implications for the benefits sharing as discussed in chapter 2. To this end, a further requirement for information disclosure is whether benefit sharing has occurred or not and in what form (e.g. financial or technology). The above information should be revealed in connection to what counts from procedural equity. For example, actors could explain whether the principle of Free, Prior and Informed Consent (FPIC) has been obtained or not. Additional information should be whose consent was sought and at what stages that information was needed. Is it prior to the beginning of the project or at some stage in the implementation of the project? Some authors have indicated that the question of “who counts” is typically neglected in FPIC discourse, but it has important implications.¹⁵⁷

One might ask whether the said requirements should be mandatory or voluntary. In deciding this aspect, relying on some empirical investigations regarding this question can be informative. In their study of women and employment, Deakin and McLaughlin cited an empirical finding which points to the limitations of an involuntary approach in persuading private sector firms to conduct pay reviews.¹⁵⁸ Similarly, Gunningham has argued that voluntary audits are unlikely to be adequate where businesses are not willing to comply voluntarily for a number of reasons including lack of sufficient incentives. In these

¹⁵⁷ Mahanty S. and McDermott C.L., How does “Free, Prior and Informed Consent” (FPIC) impact social equity? Lessons from mining and forestry and their implications for REDD+. (2013) 35 *Land Use Policy* 406-416 at 413. These authors recommended that a legal framework for regulating land may help to determine who participates in FPIC processes.

¹⁵⁸ Deakin S. and McLaughlin C., *The regulation of Women’s Pay from Individual Rights to Reflexive Law?* In Scott J.L. et.al., (eds) *Women and Employment: Changing Lives and New Challenges*, (2008) at 322.

circumstances, a mandatory approach is expected to achieve much more than its voluntary counterpart.¹⁵⁹ Although, there are incentives proposed above it is possible that businesses or other REDD+ implementers might still be able to avoid information disclosure if it is voluntary unless there are credible losses to them if they refuse to disclose information. To devise a regulatory approach to address this aspect is likely to be complex partly because it requires additional administrative oversight. Therefore making information disclosure mandatory should be considered as a viable option here. It should be emphasised that this provision does not amount to committing business to any specific outcome. Rather it would oblige them to undertake a regular evaluation practice and to disclose the results.

The mandatory requirement raises a question of how actors and regulators would know that certain actions or lack thereof constitute violations. Accordingly, the answer lies not in the definition of what action or lack thereof is a wrong-doing. Instead, the fact that the distribution of costs and benefits are likely to exclude certain groups of people means there is always a room for improvement. The principles in chapter 2 can provide guidance. Under the REDD+ mechanism, for instance, once a specific timeframe for information disclosure has been reached, information relating to the distribution of costs and benefits must be disclosed and concerns of the affected parties must be addressed with justifications as to how the said principles have been used for guidance. For this reason the regulatory instrument can specify that it will not seek punitive measures if disclosed information exposes some negative practices. In fact the information disclosure should disclose both negative and positive aspects. What is then required is the provision to compel information disclosers to rectify their negative aspects following their disclosure. Hence a timeframe should be set according to appropriate laws and practices. The failure to do so exposes the company to government agency enforcement and civil penalties. This can be backed up by an aggressive citizen suit provision that awards a certain amount of the penalties to any person who brings a successful suit against a business for failing to provide information.

8.6.2.2 Determining the Information Discloser and Periodicity

The question of who needs to disclose is related to the question of who needs to compensate. For instance type 3 activities involve general policies in a sense that some sectorial and macro-economic policies and planning laws have a direct bearing on deforestation and

¹⁵⁹ Gunningham N., *Thinking about Regulatory Mix: Regulating Occupational Health and Safety, Futures Markets and Environmental Law*. In Grabosky P. and Braithwaite J. eds., *Business Regulation and Australia's Future*, (1993) at 143.

degradation in a broad way. In this way it is not expected that the private actor who is implementing REDD+ needs to compensate the state for a policy shift. One way is to allocate compensation to the state from the international fund sources. The requirement is then for a state to disclose policy change information and compensation received thereof.

In chapter 7, in the cases of Tanzania and Indonesia, it occurs that the implementer or the finance distributor is the state where the finance is received via the fund-based financing arrangements at the international level. In this case the state or an agency of state will need to disclose such information. The second option is that if the market becomes a source of finance even if it is complementary to the state fund, then the private sector would be obliged to disclose that information. The timing of disclosing such information can be informed by the principle of FPIC discussed above. In attempting to define what is meant by prior, some have argued that the “informed consent must be sought first as a precondition before implementing any activity on the ground. It is an advanced authorization from affected indigenous peoples’ communities before the commencement of any activities or project.”¹⁶⁰ A question that might arise here is whether FPIC should be only prior to the beginning of the project or also at some stage in the implementation of the project. Certainly, the timing and the frequency of consultations shape both the scope and extent to which costs and benefits can be evaluated and communicated among parties involved.¹⁶¹

An example of a timeframe recommended in the extractive sector can be instructive in the distribution of costs and benefits in cases where REDD+ is implemented in the areas occupied by indigenous and local communities.¹⁶² As such, it is recommended that the timeframe for the conduct of FPIC processes should take into account the cultural practices of the community in question.¹⁶³ Research has shown that this may be quick or may take a long time, however, the crucial aspect before that is that parties must reach consensus after having a complete understanding of the information.¹⁶⁴ Therefore, a timetable should be agreed upon in consultations with the community, and not set by the law.¹⁶⁵ This recommendation is

¹⁶⁰ Training Manual on Free, Prior and Informed Consent (FPIC) in REDD+ for Indigenous Peoples. Asia Indigenous Peoples Pact (AIPP) and International Work Group for Indigenous Affairs (IWGIA) (2012) at 60.

¹⁶¹ See section 8.6.2.3 below.

¹⁶² Doyle C. and Cariño J., Making Free Prior & Informed Consent a Reality Indigenous Peoples and the Extractive Sector. (2013) at 21. Available: <http://www.socialimpactassessment.com/documents/Consortium+FPIC+report+-+May+2103+-+web+version.pdf> [accessed 21 September 2015].

¹⁶³ Ibid.

¹⁶⁴ Ibid.

¹⁶⁵ Ibid.

consistent with the objectives of the reflexive law discussed above. Thus a provision in the reflexive law should require a REDD+ implementer to provide information on the timeframe agreed by the parties and frequency of information prior to the implementation of REDD+ activities.

8.6.2.3 Challenges of Devising Effective Disclosure Regulation

Information disclosure has its limitations. The use of informational tools is premised on the assumption that people understand and respond to information in a rational way, and in a way intended by the provider of the information.¹⁶⁶ However, these premises are not always valid.¹⁶⁷ In some cases, people may make their choices on emotional grounds.¹⁶⁸ Also, people are not always rational and do not always make their decisions on the basis of information only.¹⁶⁹ In addition, information may affect different groups of people in a society differently. Those with less education and access to a wider variety of sources of information may find it more difficult to understand and process such information.¹⁷⁰ Nor do people necessarily seek out all of the available information. Their time may be limited, or they may be stressed, distracted or overloaded, uninterested or intimidated by the information provider and the complexity of the information or they may lack confidence in their own ability to weigh the information.¹⁷¹ Extensive empirical evidence regarding the mandated procedural requirement in forest management in Laos reveals that participatory protected area management places a substantial time burden on communities with respondents indicating little to no understanding of or impact on the process.¹⁷² This may be explained by the fact that “environmental problems are inherently complex and are often characterized by significant uncertainties.”¹⁷³ The questions then emerge: what yardstick should the regulators use to ensure that they compel the regulated to disclose acceptable levels of information? What level of threshold should be used to assign punitive measures? These questions are not very easy to answer fully. However, answers to them depends on a requirement that the regulated entities be

¹⁶⁶ Freiberg A., *The Tools of Regulation*, (2010) at 176. See also, Stewart R., New Generation of Environmental Regulation? (2001-2002) 29 *Capital University Law Review* 21-182 at 141.

¹⁶⁷ Ibid.

¹⁶⁸ Ibid Freiberg at 176 citing Hadden S.G., *Read the Label: Reducing Risk by Providing Information*, (1986).

¹⁶⁹ Ibid.

¹⁷⁰ Ibid. See also Ben-Shahar O. and Schneider C.E., *More Than You Wanted to Know: The Failure of Mandated Disclosure*. (2014).

¹⁷¹ Freiberg A., *The Tools of Regulation*. (2010) at 176-7 citing multiple authors.

¹⁷² Cited in Suisseea K.R.M., A Retreat from Justice in Global Forest Governance: REDD+ and the “Do No Harm” Principle. A paper presented at the 3rd Annual UCSB Environmental Politics Conference UC Santa Barbara June 5, (2015) at 10.

¹⁷³ Stewart R., New Generation of Environmental Regulation? (2001-2002) 29 *Capital University Law Review* 21-182 at 141.

required to assess those who may have been left out and indicate how they have attempted to improve the situation by utilising information communication over time based on the principles discussed in chapter 2. This is another component of reflexive law as discussed below.

8.6.3 Communication-Based Regulation

Reflexive law also seeks to boost self-reflection of the actors' actions by enhancing communication between stakeholders and the businesses that affect them.¹⁷⁴ For instance, the government might oblige investors to reach out to and meet with communities to establish that it has given due consideration to their input concerning environmental conservation. In this way government officials become what the author terms the “structural engineers of communicative systems.”¹⁷⁵ It is generally expected that when stakeholders are well-informed they will be more eager to communicate with business actors and more persuasive to make their case. This aspect then links communication-based regulation to information-based regulation.¹⁷⁶ This requirement can be incorporated in the reflexive law for REDD+ to oblige the REDD+ implementer to communicate with the communities and take their inputs regarding distribution of costs and benefits into account.

8.6.4 Decentred Experimentalism

The concept of “decentred experimentalism” is based on experiments in decentred participatory decision-making under the overall coordinating supervision of an actor such as an agency of government.¹⁷⁷ As such it has been observed that “locally-based private or quasi-public groups” have demonstrated greater flexibility and effectiveness in managing environmental conservation than would have been achievable through formal government approaches.¹⁷⁸ This is because the rules and approaches by self-regulatory agencies are less formalised compared to those of public regulatory regimes.¹⁷⁹

¹⁷⁴ Hirsch D.D., Green business and the importance of reflexive law: what Michael Porter didn't say. (2010) 62:4 *Administrative Law Review* at 1113 citing Teubner.

¹⁷⁵ *Ibid* at 1114.

¹⁷⁶ *Ibid*.

¹⁷⁷ Gaines S.E., Reflexive Law as a Legal Paradigm for Sustainable Development. (2002-2003) 10 *Buffalo Environmental Law Journal* 1 at 14-15.

¹⁷⁸ *Ibid*.

¹⁷⁹ Schepel H., The Constitution of Private Governance: Product Standards in the Regulation of Integrating Markets *International Studies in the Theory of Private Law*. (2005) at 30.

Given the complexity of technical issues in REDD+ it would be helpful to allow organisations such as described in chapter 4 to assist in *inter alia* MRV of costs and benefits distribution. Schepel reminds us that self-regulatory agencies usually possess a higher degree of expertise and technical knowhow and innovatory possibilities in some areas compared to government agencies.¹⁸⁰ Thus, allowing such actors to take part in regulation allows information costs for the formulation and interpretation of standards to be lower compared to the alternative.¹⁸¹ By the same token, monitoring and enforcement costs of the government can also be reduced, because such costs are shifted to such agencies, given that such interaction is fostered by mutual trust.¹⁸² The case study of Indonesia illustrates how the above requirement can be attained. For instance the most advanced project (the Rimba Raya project) in terms of implementation in Indonesia (at the time of writing), has gained certification from two self-regulatory agencies. These are the Verified Carbon Standard (VCS) and the Climate, Community and Biodiversity Standards (CCBS).¹⁸³ These agencies are overseen by a partnership from government, business and nonprofit actors.¹⁸⁴

8.7 Conclusion

Countries will need to consider a wide variety of issues before they can identify their optimal (and feasible) legal framework to give effect to REDD+. As such countries differ dramatically in their institutional structures, resource endowments, and their levels of industrialisation. Like many other issues their policymakers will invariably consider the regulatory framework for REDD+ in intensely political environments. A policy-making process which supports and encourages the consideration of alternative regulatory frameworks is essential if countries are to make informed decisions concerning the options available to give effect to REDD+. It is imperative that such policy-makers are encouraged to consider (earlier rather than later), in the legal regulatory making process, the merits and demerits of the options available. To achieve this objective, this chapter has advocated for a reflexive law which is a departure from the regulatory approaches that have been envisaged in the legal regulatory frameworks for REDD+ in Tanzania and Indonesia discussed in chapters 6 and 7. Reflexive law can overcome the problems (such as rent-seeking behaviour) by

¹⁸⁰ Ibid.

¹⁸¹ Ibid.

¹⁸² Ibid.

¹⁸³ McGregor A. et.al., Beyond carbon, more than forest? REDD+ governmentality in Indonesia. (2015) 47, *Environment and Planning* 138–155 at 145.

¹⁸⁴ See chapter 4 for more details.

increasing the prospect of exposure through the requirement for public disclosure. However, such requirement also has some limitations.¹⁸⁵ Thus reflexive law is an alternative that can be explored further to assess how it can be strengthened. Additionally, a number of impediments are likely to stand in the way of realising such a regulatory framework. As explained above, reflexive law requires a paradigm shift from “hard law” and litigation-based approaches to a variety of self-regulatory systems.

¹⁸⁵ It has been discussed elsewhere that “disclosure does not necessarily reduce corruption”. Arguments for this are not repeated here and the reader is directed elsewhere. Gilbert M.D. and Aiken B.F., Disclosure and Corruption. 14 *Election Law Journal* (2015) 148. Also see Mol P.J., The Future of Transparency: Power, Pitfalls and Promises. 10:3 *Global Environmental Politics*, (2010) 132-143. Dingwerth K. and Eichinger M., Tamed Transparency: How Information Disclosure under the Global Reporting Initiative Fails to Empower. 10:3 *Global Environmental Politics*, (2010) 74-96.

Chapter Nine:

Conclusion and Recommendations

9.1 Overview

The research underlying this thesis was undertaken during 2013 to 2015, a period during which the legal and policy frameworks in Tanzania and Indonesia for REDD+ were being developed. The approach taken in this study focused on the international and the domestic dimensions of climate change. At the international level, the study was broadly concerned with describing and discussing the emerging REDD+ governance approaches focusing on institutional considerations, legal issues, and finance as well as potential additional benefits. In light of these findings, the study focused on discussing the optimal and feasible model legislative framework sufficient to give effect to REDD+ specifically in the two case study countries and generally.

To achieve the overall objective, chapter 2 developed the framework which entails concepts and principles (sustainable development, CBDR, equity, environmental-effectiveness and cost-effectiveness) and how rights relate to them. Chapter 3 discussed the place of REDD+ in the post-Kyoto regime. It has argued that the place of a REDD+ mechanism must be considered within the broader framework of a “bottom-up approach” whereby each country determines its own level of ambition. This means that the future global regime appears to be one of self-regulation. Thus, developing countries face different sets of compliance questions, many arising out of REDD+ projects undertaken in the context of reporting on forest carbon stock changes in national communications. The compliance requirements are not new per se, but in the context of REDD+ these issues will be the basis for which incentives will flow once verified. In order to comply with these procedural requirements in line with positive incentives requirements, a wide set of legal and institutional approaches may have to be undertaken by developing countries. These include *inter alia* conventional matters of improving forest conservation protection and assessment and new ways of looking at property ownership, land use, forest management and forest inventories and social and environmental impact. To this end, the legal nature of REDD+ is only procedural in nature. With such

observations, chapter 4 argued that REDD+ should be seen as a self-regulating governance system with potential challenges and prospects for realising the 3Es outcomes. From the foregoing analysis, chapter 5 discussed the issue of carbon rights with the object of identifying the property nature of carbon rights and did so with a view to suggesting a self-regulatory system for the governance of REDD+. The chapter concluded with two potential options for a self-regulatory system. The first is that when the source of funding is from private actors, then the private sector will acquire significant power and compel the host country to adopt a conception of carbon rights which favour the private actors' interests. The advantage of this option is the possibility of securing substantial funding for REDD+ from the private sector.

The second aspect is that when the source of funding is from public finance, then host states can take ownership of REDD+. As such, government institutions are less compelled to adopt a particular type of carbon rights conceptualisation. This approach may also be associated with limited financing particularly in the long term. This means a tradeoff approach has to be adopted as discussed in section 9.2.4 below. The chapter was not set to resolve the debate on land tenure or carbon rights. Instead it discussed such issues with the view to identifying the optimal (and feasible) model legislative framework sufficient to implement REDD+.

Chapter 6 considered forest governance in Tanzania and Indonesia respectively. The research was broadly concerned with (a) describing governance models for distribution of power which in turn affects how benefits are distributed. The chapter also described the enforcement mechanism. Chapter 7 explored the distribution of benefits and costs, and regulatory nuts and bolts discussed or envisaged in the regulatory frameworks for REDD+ in each country under the study. This was done against the conceptual framework set out in chapter 2 with the view to judging whether such regulatory framework can be said to be an optimal and feasible model legislative framework sufficient to implement REDD+ in developing countries. It concluded that the overall implementation of REDD+ is based on the command and control approach with limited decentred approach. Thus such regulatory framework was deemed insufficient to govern REDD+ implementation. In light of this conclusion, chapter 8 discussed how the inadequacy of the command and control approach can be addressed by a reflexive approach. Due to the complexity of the subject in question and the ongoing development of REDD+ regulatory frameworks in Tanzania and Indonesia, there is a lack of finality in this thesis. Nevertheless the preliminary finding and assessment is made in this

chapter. Thus, the following discussion presents recommendations and conclusions regarding the optimal and feasible model legislative framework sufficient to implement REDD+. This is done against the background assessments of the preceding chapters.

9.2 Towards a Reflexive Regulatory Framework to give Effect to REDD+

The basic architecture for the optimal and feasible model legislative framework sufficient to implement REDD+ should comprise provisions regulating issues, such as scope, substantive, procedural and contextual guiding principles, concepts or terminology, the legal nature, sources of positive incentives and institutional arrangements.

9.2.1 The goals and scope of a REDD+ mechanism

The goals of a REDD+ mechanism should include *inter alia*:

- Ensuring equitable distribution of costs and benefits;
- Reducing emissions from deforestation and forest degradation;
- Protecting biodiversity; and
- Respecting the rights of indigenous peoples and vulnerable communities.

The scope of a REDD+ mechanism should include *inter alia*:

- Direct and indirect sources of deforestation and degradation instead of focusing predominantly on the direct sources. Although the countries under this study have indicated indirect causes of deforestation and degradation in their regulatory approach, they have not yet established the extent to which these factors are included in defining the scope of REDD+ activities as well as how they affect the distribution of costs and benefits.

9.2.2 Definitions

There is a need to define certain terms, particularly “carbon rights” and “carbon credits” in order to avoid ambiguity. However, given the variety of complicated new legal and technical concepts and methodologies that are required to implement the REDD+ mechanism, “administrative procedures and workloads could be reduced by employing universal definitions and standards, ideally tied to internationally-agreed definitions and indices.”¹ For example, given the potential dangers and advantages brought by the types of climate finance

¹ Costenbader J. (ed)., *Legal Frameworks for REDD: Design and Implementation at the National Level*. IUCN, Gland, Switzerland (2009) at 104.

as established in chapter 5, and the advantages of separate property rights to sequester carbon (chapter 6, sections 6.2.3.4 and 6.3.3.4), this thesis agrees with Costenbader that:

[...] it may be more efficient for countries to adopt a generally accepted definition of carbon rights such as ownership interest [separate from property rights over the physical resources] in order to facilitate carbon investments, rather than persisting in using unworkable definitions of carbon rights in terms of land or forest ownership. To ensure harmony across national legal systems, however, carbon ownership interests then should be recognized under other sectors of law according to the same definition.²

However, to achieve the above general definition both public and private sector actors must satisfy tests of representativeness, accessibility and negotiation that are to be devised in light of some set of democratic ideals. Actors should have a choice of formal or informal negotiations and agreements and should be seen as an ongoing process, and be legally guaranteed.

9.2.3 The Legal Nature

The discussion regarding the legal nature of REDD+ in chapter 3 established that REDD+ must be seen within the overall international climate change regime where REDD+ is incorporated within the Nationally Determined Contributions (NDCs). In this context, the legal obligation for the host country includes *inter alia* reporting on forest carbon stock changes and to provide information on financial, technology transfer and capacity-building support needed and received. This is a possible basis for which to expect benefits to flow to developing countries both from public and private sectors. In this sense the legal nature of REDD+ at a domestic level should only be procedural in nature. This is to say that reflexive law should not compel the actors to achieve the goals of REDD+ at a domestic level but rather compel them to follow the procedural aspects related to achieving the goals of REDD+ as discussed in the relevant sections in chapter 8.

9.2.4 Determining the Sources of Positive Incentives

The funding instruments (National REDD+ Funds)³ advocated in the case studies should be used to attract private investment through the “public-private partnership” (PPP) model. If PPP is well designed, it could leverage additional funding as well as other positive incentives

² Ibid.

³As already discussed in chapter 7 the sources of such funding are initially expected to come from a bi-or multilateral fund.

that may be adequate for addressing other competing land uses that prevent the achieving of REDD+ objectives.⁴ In such a set-up, the investment risks are reduced because they are shared between the public and the private investors.⁵ This implies that the government can retain some sovereignty rights and be able to influence how carbon rights may be defined. In this case, carbon rights should run with land and/or resource tenure. The second type of positive incentives relates to private engagement in “corporate social responsibility”. This type can be categorised as a demonstrative business model, considering that the objective is not conducted for profitability purposes.⁶ The third business model constitutes the “main investor” as the private company. In this case the project is fully financed and owned by one or more private companies, which implement the project from its inception with support from a private consultancy company.⁷ Lastly, the discussions of sections 4.3.1 and 7.4.1 point to the “governments” as the source of the fourth type of positive incentives. These incentives relate to sectorial and macro-economic policies and planning laws. Within these categories, a further discussion is needed to decide the beneficiaries, benefits and eligibility criteria thereof.

9.2.5 Determining Beneficiaries, Benefits and Eligibility Criteria

The positive incentives for those who contribute to emission reductions are likely to be most effective when they are based on the principles of equity discussed in chapter 2 and “set at a level that motivates participation beyond merely offsetting participants' opportunity costs.”⁸ The point of departure should take into account the following elements discussed below.

9.2.5.1 Community as Beneficiaries

The decision to ascertain the beneficiaries within the community should be informed by the object of regulation discussed in section 4.3.1 of chapter 4. Thus, positive incentives for the community should be those who reside within the forests areas, and those outside the forests

⁴ It is noted that “there is no substantial experience of establishing PPP systems in most developing countries.” Chang M. et. al., *International experience of Public-Private Partnerships for urban environmental infrastructure, and its application to China. 4:2 International Review for Environmental Strategies*, (2003) 223-248. Thus, more research is necessary to assess how the PPP model can assist developing countries to finance and manage the REDD+ mechanism.

⁵ Møller L.R., “Emerging Lessons from Financing REDD+ Projects” A brochure presents the key results from the forthcoming publication “Translating lessons learnt from financing forest projects into national REDD-plus strategy development and implementation”. UNEP DTU Partnership.

⁶ Ibid.

⁷ Ibid.

⁸ Lofts K., *REDD+ Benefit Distribution in Viet Nam*. The Centre for International Sustainable Development Law (CISDL) Working Paper No 1 (2015) at 8-9.

areas. The positive incentives to be granted to the community should include *inter alia*: land tenure and resource tenure; development of cooperatives, farmer organisations, business associations, scientific organisations; removal of resource-use distorting subsidies, taxes on environmental and social externalities; increased public investment in rural infrastructure and public goods; increased access to credit for small-scale farmers; and financial payments to farmers for carbon sequestration.

Criteria

The criteria for community involvement should be the principles discussed in chapter 2. It is expected that these principles are to be applied in a reflexive manner as they are dependent on the context in which they are applied. The context depends on the socio-economic situation of a particular society, the threats to the deforestation and degradation as well as particular culture. The REDD+ investors (i.e. private sectors and governments) are expected to work out how these principles are to be applied on the ground, capture how that information is implemented and subject it to the public as referred to under the institutions and administrative aspects below.

9.2.5.2 Private Actors as Beneficiaries

The provision for available positive incentives and criteria thereof should vary according to the types of private actors. For this reason, it is important to classify beneficiaries by reiterating the type of private actors discussed above. These are private actors within the “PPP” model, “corporate social responsibility” model and “main investor” model.

The Positive Incentives for Private Actors in the “PPP” and “Main Investors” Models

The benefits to be granted to private actors in the “PPP” and “main investors” business models (see section 9.2.4) should be carbon rights and tax incentives (where necessary and possible). However, the said benefits needs to be differentiated because the private actors in a PPP model face different risks compared to the private actors in the “main investors” model as indicated above. The extent to which such positive incentives are afforded within these models is beyond the scope of this chapter.

Criteria

Within the “PPP” and “main investors” models, the accountability principle should find application in this aspect. The participation of private actors in REDD+ should be made conditional on the investment in the access and use of clean and green technology i.e. technology transfer. This is not an inconceivable idea.⁹ It is also expected that access to some technology such as energy will reduce pressure from utilising forest resources and will also not depend on land tenure for individuals to access the benefits.¹⁰ This raises the question of the type of technology needed. Usually companies that invest in developing countries are offered tax allowance incentives.¹¹ However, these incentives target only the manufacturing industry and entail the strict allocation of points based on criteria, resulting in preferential status being assigned to a project.¹² The criteria for “the points are allocated based on the contribution that the project makes to employment, small, medium and micro enterprises, and energy efficiency, among other things.”¹³ This approach should be extended to REDD+ investment. The objective is to avoid or minimise potential perils of carbon rights and investments as discussed in chapter 5 and maximise the potential gains for the community and the host country. This will provide a safety net for the host state and communities. At the same time, reflexive law should provide a legal duty for a private actor to establish an in-company cost and distribution system and be required to undertake information disclosure as discussed in chapter 8. This legal duty should not be extended to business models that aim to undertake “corporate social responsibility”. This is because actors who are aiming to engage in social responsibility are not motivated to maximise their benefits within that particular jurisdiction. For this reason, they should also not be offered tax allowance incentives.

⁹ A recent report jointly released by the International Finance Corporation (IFC) and World Bank about the “Lighting Africa Program” indicates that Africa was set to become the world’s largest market for clean off-grid lamps, with up to 140 million people having access to better lighting by 2015. Walter B., IFC-World Bank Report: 140 million in Africa Could Access Clean Lighting by 2015. Available: <http://ifcext.ifc.org/IFCExt/Pressroom/IFCPressRoom.nsf/0/03BFD7EF6A604D0785257BD4002D468F> [accessed 17 September 2015].

¹⁰ As discussed in chapter 5, land tenure is one of the complex issues to resolve in order to get carbon rights which in turn is seen as a first step towards accessing REDD+ incentives. Thus it is argued that technology transfer can reach or benefit both those who have land tenure and those that do not have. Under this case, it is seen as a quicker way of benefiting the local people since land tenure usually takes a very long time to resolve.

¹¹ Samuel C., *The Dark Side of Foreign Direct Investment: A South African Perspective*. Occasional Paper No 167, *Economic Diplomacy Programme, South African Institute of International Affairs* (2013) at 15.

¹² *Ibid* at 16.

¹³ *Ibid*.

9.2.5.3 Public Actors as Beneficiaries

The case study of Indonesia in chapter 6 is instructive in this aspect. The national strategy indicates that regional governments can receive positive incentives as a result of their efforts and performance in developing conditions that enable emissions reduction in their areas through both strategic activities and/or the formulation of supportive policies.¹⁴

The Positive Incentives for the Public Actors

In providing positive incentives to the public actors, it must be made clear whether such positive incentives as payments are to be made to the national government and or local governments in the form of taxes or royalties. A further consideration should be “whether the national government will be eligible to receive a portion of credits from REDD+ activities to be channeled into other climate change related activities.”¹⁵

Criteria

The criteria for positive incentives should include *inter alia* the administrative aspects such as for managing the national registry and/or addressing national emissions reduction, development of favourable sectoral and macro policies and planning laws which are essential or complements to meet the objectives of REDD+.

9.2.6 Institutions and Administrative Aspects

The administrative aspect should be reflexive by following the discussion in chapter 8. The housing of reflexive law for REDD+ should also be determined. The roles of the government and its agencies should also be determined. The determination of these aspects is beyond the scope of this thesis.

9.2.7 Compliance and Enforcement

The question of compliance and enforcement must distinguish who is the subject of such approach. In this case, one can distinguish between public actors, private actors and communities. However, with all these actors the main approach to be undertaken is a self-

¹⁴ Indonesia REDD+ National Strategy June 2012 at 12.

¹⁵ The REDD Desk. Available: http://theredddesk.org/sites/default/files/resources/pdf/2010/Background_Analysis_of_REDD_Regulatory_Frameworks.pdf [accessed 14 September 2015].

enforced approach. The public sector is already self-enforced and several approaches can be undertaken.

For private and public actors a self-enforcing approach can happen if the following conditions for more effective self-regulation are created. Reflexive law for REDD+ should require actors to provide information on the distribution of costs and benefits. This provision should be followed by the provisions on the scope and contents of disclosed information, information disclosure and timeframe, communication-based regulation, and decentred experimentalism. These elements are discussed in detail in the previous chapter and are repeated in this section.

In the event that the state is the implementer of REDD+, it is expected that third parties can MRV the information disclosed as discussed in chapters 2, 3 and 4. Regarding the compliance and enforcement of the communities, the issue of incentives is the only approach. The way such incentives are structured and carried out should be left to the REDD+ implementers taking into account the principles discussed in chapter 2.¹⁶

9.3 Concluding remarks

The thesis argues that detailed legal prescription cannot effectively regulate REDD+ activities, in a top-down manner. More power should be delegated to groups and associations capable of taking self-regulatory measures. Thus the role of the state should be *inter alia* creating the conditions for more effective self-regulation and regulation of self-regulation as discussed in chapters 4 and 8. The command and control approach has significant limitations in terms of holding responsible the actors for deforestation and degradation. Chapter 4 has argued that when attempting to regulate (“target”) groups, one has to consider their interests, objectives, and structure. However, these are difficult to define because the causes of deforestation and degradation are multidimensional and complex. Consequently, the regulatory approach is very diffuse, scattered over several statutes and agency regulations.

¹⁶ A “self-enforcement contract” can be cited here as an example of how investors can structure and carry out this incentive approach. Salas argued that because third-party enforcement is imperfect, the buyer must offer a contract through which he provides additional incentives for the seller to avoid deforestation and forest degradation. A contract is self-enforceable if the parties find cooperation to be the optimal strategy. The buyer pays p as a fixed payment regardless of what the seller's performance is, and the contingent payment takes the form of a bonus that the buyer promises to pay as long as the seller does not shirk. Because enforcement is imperfect after the seller accepts a contract yp , parties may renege without a formal penalty. Then, since both parties can deviate from the contract, the contingent payment must be sufficient to ensure a self-enforcing contract. Salas C.P., *Designing Contracts for Reducing Emissions from Deforestation and Forest Degradation. Selected Paper No. 11305 prepared for presentation at the Agricultural & Applied Economics Association 2010 AAEA, CAES, & WAEA Joint Annual Meeting, Denver, Colorado, July 25-27, (2010) at 19 and 21.*

Thus it is even harder to hold all major actors (especially indirect causes of deforestation and degradation) responsible for the breach of the forestry legal framework because in some cases the breach of such law can be a result of authorisation by different statutes as part of the developmental approaches structured in the national economy. It has also been discussed that governments have been lacking the capacity to enforce the command and control approach and this problem will continue in REDD+ implementation if the command and control approach is employed exclusively as discussed in chapters 6 and 7. To address this problem, REDD+ must be implemented in the context of the overall strategy to reduce carbon emissions from all sectors (the “low carbon economy” strategy) rather than focusing on just the forestry sector. This is one of the main reasons that one has to consider another form of regulation such as reflexive law. This shift in approach does not imply that the government thereafter simply stands on the sideline. On the contrary the state should *inter alia* create conditions for effective self-regulation to take place.

9.4 Contribution of the thesis

9.4.1 Contribution to Climate Change Governance Scholarship

In climate change governance, it is indicated that equity issues (both at the domestic and international levels) have always been among the most difficult for governments and other actors to address.¹⁷ The discussion of the corpus of statutes in chapter 6 demonstrated that the governance of forest resources in Tanzania and Indonesia relies predominantly on the command and control. This thesis departed from this approach by discussing reflexive law. In doing so, it contributes to our understanding of a governance model which takes a reflexive approach. The thesis was able to get to the core of the governance arrangements and conclude that, in order to realise the 3Es outcomes, the regulatory approach needed should enroll the relevant actors in a reflexive architecture and subject such parties to mechanisms of public responsibility. In this quest the researcher did not prioritise the state and state agencies as the actors in deciding how costs and benefits should be determined. Instead it argues that that should be left to the contracting parties themselves. In this regard, efforts by the state should be directed to devising a mechanism that can facilitate the realisation of such outcomes.

¹⁷ Meadowcroft J., Climate change governance. A paper contributing to the 2010 World Bank World Development Report. *The World Bank* (2009) at 4

9.4.2 Contribution to Foreign Direct Investment Scholarship

The core issue under FDI discussed in chapter 5 is the potential perils that might arise in REDD+ implementation. Tienhaara has argued that in a new area of FDI like forest carbon, where the use of model contracts have yet to be developed and legislation is limited, the content of contracts is likely to be largely determined in the course of negotiations.¹⁸ The author has discussed potential dangers that can be brought by FDI. This thesis extended such view by looking at how FDI can compel the particular form of conceptualisation of carbon rights in a way that advances the interests of investors at the expense of the host communities, or interests of investors at the expense of the state and communities. Such awareness has become helpful in identifying elements for creating some safety net in the recommendations of the regulatory framework for REDD+ as seen above, instead of forest authorities speculating “how much foreign companies might profit from carbon trading, or how long they plan to keep plantation land out of other uses to ensure that carbon continues to be stored on it.”¹⁹ As seen above it is recommended that a Public-Private Partnership for REDD+ investment should be conditional on investment in the access to and use of clean and green technology amongst other things. This is a useful caveat to avoid potential perils as it is hard to realise how foreign companies might profit from REDD+ investment.

9.4.3 Contribution to the REDD+ Debate

Literature on developing legal frameworks for the REDD+ mechanism recommends that host countries should define “applicable conditions and setting up of benefit-sharing mechanisms, as well as monitoring of compliance.”²⁰ This thesis extends this recommendation by suggesting the reflexive law as a convincing tool for achieve the 3Es outcomes through communicative instruments that allow for monitoring, compliance and enforcement. Accordingly, reflexive law differs from the previous approaches such as command and control, and Participatory Forest Management because its objectives, structure, and approach of achieving the 3Es outcomes has a reflexive aspect of subjecting contracting parties to mechanisms of public responsibility.

¹⁸ Tienhaara K., The Potential Perils of Forest Carbon Contracts for Developing Countries: Cases from Africa. (2012) 39:2, *The Journal of Peasant Studies* 551-572 at 557.

¹⁹ Ibid.

²⁰ Costenbader J. (ed.), *Legal Frameworks for REDD: Design and Implementation at the National Level*. IUCN, Gland, Switzerland (2009) at 107.

A further contribution to the REDD+ literature relates to the definition of the REDD+ mechanism. When one is dealing with the question of choice of regulatory framework, chapter 4 argued that it should be defined as a self-regulatory system. Following the insights of the scholars of governance, this thesis articulated not only a broad understanding of REDD+ but also of the broad range of new actors, their interests and structure that are involved in contributing to the implementation of its activities. As discussed in chapter 4, this way of conceptualising has helped to unpack *inter alia* the self-regulatory nature of the REDD+ mechanism and, thus, by arguing that REDD+ should be viewed as a self-regulatory system, we begin to gain a new and clear understanding of the conditions of possibility of a form of governance that can be harnessed to provide a new type of regulation which holds the potential for the realisation of the 3Es outcomes.

9.5 Questions for Further Research

A question might arise about what could stand in the way of realising the reflexive law for REDD+. The most powerful potential objection to the proposed approach is that the very idea of ensuring self-regulation in the REDD+ mechanism is fundamentally flawed because it is grounded on an inherently unsound suggestion that self-regulatory actors under a reflexive law model can be trustworthy in regulating the distribution of costs and benefits. This is because such actors may be in a position to generate high profit by avoiding balancing the 3Es outcomes. Thus, it is difficult to counter these criticisms, as they raise the most fundamental and practical concerns about the future of the REDD+ regulatory framework. It is entirely possible that none of the regulatory design measures discussed in this thesis would make a new model of self-regulation in the forestry sector more feasible in practice. Nonetheless, it is equally true that, without engaging non-state actors in the regulatory process in a way such as discussed in reflexive law, any efforts to devise an optimal (and feasible) model of regulation for REDD+ in light of the complexities brought about by such mechanism will most likely be unsuccessful in Tanzania and Indonesia, at least in the short term. Chapter 8 has identified some emerging elements of reflexive law. Thus future researchers may need to examine why a comprehensive type of reflexive regulation has not already been made in the context of forestry regulation. Put differently, what are some of the impediments to using alternatives to traditional regulation? And how can they be addressed? Some have pointed out that there is every reason to argue whether reflexive law is at all possible and advisable in the absence of substantial involvement of the state and its

agencies.²¹ Thus, the question that emerges is in what role and to what extent can the state and its agencies take part in creating the conditions for more effective self-regulation for REDD+? What types of powers will the state and its agencies have in respect of monitoring and enforcement of self-regulation systems?

²¹ Aalders M. and Wilthagen T., Moving Beyond Command-and-Control: Reflexivity in the Regulation of Occupational Safety and Health and the Environment. (1997) *Law and Policy* 415-443 at 433 citing Gunningham 1995.

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