A Human Rights-based Approach to Climate Change: Lessons from Developments of the CDM and REDD+

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Human rights issues have become of critical concern, where the environmental legal regime is infused by the economic justifications of market-based mechanisms alongside environmental considerations, with little consideration accorded to rights affected by such schemes. This article examines the varying causes of human rights violations in both the CDM and the REDD+ climate change mechanisms under the UNFCCC. The article identifies key issues in the CDM's additionality and sustainable development objectives, leading to the failure to safeguard human rights in cases such as the Bajo Aguán case example in Honduras. Through scrutinising the developments of this instrument and comparing it to the REDD+ projects currently under way, the article seeks to identify critical issues in the system which need resolving for the multinational REDD+ climate change mechanism to be successful in 2020. Through examining the issues that the REDD+ projects currently face in comparison, it is found to be imperative that social and ecological safeguards be recognised as a first step towards fair co-existence with human rights. This article argues that where adequate safeguards protecting human rights are put in place, not only could the emission reduction objectives under the UNFCCC be achieved, but in doing so this can support biodiversity, promote sustainable development and reduce poverty.

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1. INTRODUCTION

Recently, there has been an increasing global awareness of the fact that climate change is not only an environmental issue, but also has devastating implications for human rights over the land and homes of communities. The increase of atmospheric greenhouse gas (GHG) concentration has been caused by the anthropogenic activities of developed countries[1] in their achievement of prosperity through the consumption of fossil fuels.[2] Atmospheric GHG concentrations have increased approximately 100 ppm (parts per million) in the last 200 years (the global atmospheric concentration of carbon dioxide has increased from a pre-industrial concentration of about 280 ppm to 379 ppm in 2005).[3] The International Panel on Climate Change (IPCC), in its Fourth Assessment Report (2007), predicted an increase in the severity of droughts, floods, tropical cyclones and land degradation and desertification, ultimately leading to a loss of arable land, decreasing crop yields, and the spread of disease. For example, a warming climate could reduce agricultural productivity in China by up to 37 per cent and in India by up to 25 per cent. A warming climate will increase the spread of vector-borne diseases like malaria and increase sea levels, with the melting of the Himalayan glaciers increasing flood risk and threatening clean water availability for over one billion people on the Indian subcontinent.[4] In the last century alone, the global average temperature has increased by 0.748 degrees Celsius, the largest and fastest warming trend in the history of the Earth, and this is predicted to increase by around 1.8 to 6.48 degrees by the end of the 21st century.[5]

The United Nations Framework Convention on Climate Change (UNFCCC) was introduced by the United Nations Conference on Environmental Development (UNCED, or the Earth Summit) in Rio de Janeiro in 1992.[6] The UNFCCC and the Kyoto Protocol are the major environmental legal instruments aimed

1 Per capita, GHG emissions for Annex I countries are still ten times greater than those of developing countries: Christie Kneteman and Andrew Green "The Twin Failures of the CDM: Recommendations for the 'Copenhagen Protocol'" (2009) 2(1) Law and Development Review 225 at 227, n 11.

2 Alyssa Johl and Yves Lador *A Human Rights-based Approach to Climate Finance* (FES, Geneva, 2012) at 3.

3 IPCC *Climate Change 2007: The Physical Science Basis* Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Cambridge University Press, Cambridge, 2007).

4 Kneteman and Green, above n 1, at 227, n 7.

5 Lavanya Rajamani "The Increasing Currency and Relevance of Rights-Based Perspectives in the International Negotiations on Climate Change" (2010) 22(3) Journal of Environmental Law 391 at 392, nn 3 and 4.

6 Climate Leaders "What is the UNFCCC & the COP?" <http://www.climate-leaders.org/climate-change-resources/india-at-cop-15/unfccc-cop> at para 1.

at preventing further dangerous anthropogenic interference with the climate by reducing greenhouse gas emissions to 2 degrees above the pre-industrial global average temperature.[7] The UNFCCC treaty does not set mandatory limits on GHGs for individual countries but establishes protocols which do, the main one being the Kyoto Protocol. There are 192 parties to the UNFCCC who meet at the Conference of the Parties (COP) to negotiate legally binding obligations and to assess progress in dealing with climate change where the obligation to protect the climate system "on the basis of equality and in accordance with their common but differentiated responsibilities and respective capabilities" is undertaken (art 3(1)). This involves the common responsibilities of the parties to protect the environment at a national, regional and global level, as well as taking into account their respective abilities to prevent, reduce and control the threat.[8]

The responses and mechanisms put in place to address these environmental issues will additionally have a direct impact on the livelihoods of the people living in the poorer countries who are suffering as a result of a fundamental injustice from their incomparable contribution to emissions compared to the rest of the world.[9] In the Bali Action Plan, there is a demand for climate change response measures to consider economic and social consequences during their design and implementation.[10] Correspondingly, under art 2(3) of the Kyoto Protocol, states are urged to cooperate and allow human rights to influence the shaping of the climate change response measures.[11] A rights-based approach at this level would be consistent with the UN processes to incorporate human rights into their work, and enables the UNFCCC to make human rights a cross-cutting issue.[12] To protect these rights at a national level, the financial mechanisms put in place to help developing countries mitigate and adapt to the changing climate are of extreme importance and are gaining increased attention worldwide. A human rights-based approach to climate finance will provide safeguards against unethical mitigation and adaptation strategies, as well as working towards creating a future of sustainable low carbon development, reducing the anthropogenic effects on climate change.[13] Nevertheless, despite the central nature of these concerns in the climate change legal regime being

7 The United Nations website "The UN Climate Change Convention and the Kyoto Protocol" <http://www.un.org/wcm/content/site/climatechange/pages/gateway/the-negotiations/the-un-climate-change-convention-and-the-kyoto-protocol> at para 2.

8 Climate Leaders, above n 6, at paras 8 and 9.

9 Kneteman and Green, above n 1, at 227.

10 COP Decision 1/CP.13 under Declaration 1(b)(vi) of the Bali Action Plan 2007.

11 Zoe Loftus-Farren and Cáitrín McKiernan "Human Rights and Climate Change: Bridging the Divide" (2011) 7 Berkeley Journal of International Law Publicist <http://bjil.typepad.com/publicist/2011/04/publicist07-loftus-farren-mckiernan.html> at I.

12 At II.

13 Johl and Lador, above n 2, at 3.

addressed by the relevant COP decisions, human rights have been very much sidelined, whilst environmental and economic considerations have been at the centre of the regime.[14]

The consensus of the 2011 Durban climate conference was to develop a new global climate change agreement, negotiated through the Durban Platform for Enhanced Action, which will be adopted in the 2015 Paris climate conference, ready to be implemented in 2020.[15] This article will examine the varying causes of human rights violations in both the CDM and the REDD+ climate change mechanisms, in hope of clarifying key issues in need of acknowledgement in the Paris Protocol. It will analyse the Clean Development Mechanism (CDM) due to it being the largest mitigation instrument to arise out of the Kyoto Protocol, with 7,500 registered projects and 1,400 projects awaiting verification.[16] This will therefore have a large effect on developing countries that are more likely to experience human rights infringements due to greater socio-economic and socio-political inequalities as well as weak human rights institutions.[17] The CDM is currently failing and undermining the Kyoto Protocol through its minimal contributions to sustainable development, which is intrinsically linked to human rights. The REDD+, on the other hand, has not yet been implemented into national legislation, and poses a promising new venture for the post-Kyoto climate change regime; however, its trial projects are facing similar human rights issues. The article examines these issues through scrutinising the developments of the CDM and why it is failing to adequately protect human rights, and compares it to the REDD+ projects currently under way in an effort to identify critical issues in the system which need resolving for the multinational REDD+ climate change mechanism to be successful in 2020.

2. THE RELATIONSHIP BETWEEN HUMAN RIGHTS AND CLIMATE CHANGE POLICY

Firstly, it is necessary to understand the meaning and scope of the human rights-based approach. Simply put, this approach primarily promotes and protects human rights by examining the norms and values of a policy, institution or

14 *Reinvigorating the Clean Development Mechanism (CDM) Using the Human Rights-Based Approach to Development and the Principle of Sustainable Development as Toolboxes* (University of Oslo, Oslo, 2012) <https://www.duo.uio.no/bitstream/handle/10852/22743/DadixMasters.Pdf?sequence=2> at 20, n 53.

15 European Commission: Climate Action "The 2015 international agreement" <http://ec.europa.eu/clima/policies/international/negotiations/future/index_en.htm>.

16 Jeanette Schade and Wolfgang Obergassel "Human Rights and the Clean Development Mechanism" (2014) 27(4) Cambridge Review of International Affairs 717.

17 Schade and Obergassel, above n 16.

mitigation/adaptation mechanism in an effort to ensure compliance with the international law on human rights.[18] This conceptual framework aims to redress discriminatory or unjust practices that have a negative effect on a person's rights by strengthening the capacity of the right-holder to claim their rights. In turn, this enables the right-holder to enforce their rights against those with the duty to satisfy them according to the international law standard, as well as promoting sustainable development through empowering the people in the right to participate in decision-making and the right to a clean and safe environment.[19, 20]

UN development agencies have provided a more explicit outline of a human rights-based approach by highlighting four key elements:[21]

1. The identification of obstructions to a rights-based approach in a certain area, which includes acknowledging the human rights claims of right-holders and the corresponding obligations for the duty-holders to comply with;
2. Assessment of the capacity of right-holders to claim their rights and duty-holders to fulfil their obligations, and the strategies to build such capacities;
3. Monitoring and evaluating results and processes guided by human rights standards and principles; and
4. The implementation of programmes that are informed by recommendations from international human rights bodies and mechanisms.

Development policies which explicitly recognise human rights are widely believed to be more sustainable, as the collaboration of climate change policy and human rights are mutually reinforcing, with the policies which effectively address human rights being able to more adequately promote effective and sustainable climate change policies.[22]

The critical importance of human rights as a motive for cooperation in countering the effects of climate change have been acknowledged by the UNFCCC, the Kyoto Protocol and the Cancún Agreements, with the consideration of human rights being in compliance with the UNFCCC's principle of

18 The Office of the United Nations High Commissioner for Human Rights (OHCHR) described a human rights approach as a "conceptual framework for the process of human development that is normatively based on international human rights based standards and operationally directed to promoting and protecting human rights"; OHCHR *Annual Report 2006* <www.ohchr.org/Documents/AboutUs/annualreport2006.pdf>.

19 *Reinvigorating the Clean Development Mechanism*, above n 14, at 47, n 159.

20 Mary Robinson *The Human Rights Approach to Sustainable Development: Environmental Rights, Public Participation and Human Security* (IDRC-CRDI, Insights Series 2) <http://unac.org/wp-content/uploads/2013/07/HRandSD-EN-PDF.pdf>.

21 *Reinvigorating the Clean Development Mechanism*, above n 14, at 47.

22 At 47.

"common but differentiated obligations" of states. This is used to effectively address the issues of climate change, and treaty obligations of developed states, providing support to developing countries in an effort to achieve the aims set out.[23] However, despite the urgency at the rate of increase in the damaging effects of climate change, an effective and universal solution has yet to be implemented, with the UNFCCC and the Kyoto Protocol containing emissions reduction commitments that have been referred to as both inadequate and poorly implemented.[24]

2.1 Relevant International Human Rights Instruments

Substantive and procedural human rights are contained in the UN Human Rights Charter which consists of two major international treaties, the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR), in addition to the Universal Declaration of Human Rights (UDHR).[25] Article 2(1) of the ICCPR protects the right to life (frequently used in human rights jurisdiction to condemn life-threatening changes in the environment) and art 7 promotes the right to physical, psychic and moral integrity, both being relevant in situations of violent conflict which have been known to ensue in displacement issues and land tenure disagreements, as seen in the Bajo Aguán case in Honduras (examined in the next part). Whilst there is not a codified international human right to land, various rights have been established in the international legal framework that relates to land access for particular groups (eg indigenous people). Additionally, art 11 of the ICESCR provides for the right to an adequate standard of living, "including adequate food, clothing and housing, and to the continuous improvement of living conditions", and for the right to health in art 12.[26]

Despite these efforts, human rights issues have become of critical concern where the legal regime is infused by the economic justifications of market-based mechanisms alongside environmental considerations, with little consideration being given towards the people being affected by such schemes, despite the treaties' efforts to "do no harm" which impliedly incorporates respect for human rights.[27] The UNFCCC 2010 Cancún Agreements in particular make frequent reference to the relevancy of taking note of human rights considerations in all climate change related action. Paragraph 7 of the COP

23 At 47.
24 Rajamani, above n 5, at 393.
25 Schade and Obergassel, above n 16, at 719.
26 At 719.
27 *Reinvigorating the Clean Development Mechanism*, above n 14, at 17, n 48.

decision 1/CP.16[28] recognises the adverse effects of climate change on human rights and that its impact will have a profound effect on the most vulnerable and disadvantaged sections of society.[29] It was emphasised that human rights should be fully respected in all climate change actions, including the development, implementation and monitoring of its mechanisms.

It is argued that a human rights-based approach, taking into account these values in the processing stage, would ensure that climate change mechanisms would endorse a positive effect on the rights of those individuals residing in the affected areas by promoting legal and moral values affirmed by the international treaties and customary laws.[30] However, at the present moment, essential rights, such as the rights to life, shelter, health, food and water, are at risk of being violated through the lack of attention given by the UNFCCC to safeguarding these critical rights, including association, expression and access to information — the building blocks for preserving culture, utilising science and realising the rights of full citizenship.[31] This concern will be examined further when analysing the CDM and the REDD+ mechanisms.

3. CLEAN DEVELOPMENT MECHANISM ANALYSED AGAINST INTERNATIONAL HUMAN RIGHTS

The Clean Development Mechanism is an energy transition policy defined in art 12 of the Kyoto Protocol, and is one of the flexibility provisions brought about to address the critical need to mitigate global warming and provide renewable energy systems for developing countries.[32] Akin to the other flexibility mechanisms of this protocol (Emissions Trading and Joint Implementation), the aim behind the CDM is to use alternative schemes to lower the overall costs of achieving its emission targets, effectively addressing global climate change issues.[33] Whereas the other two provisions involve either trading carbon emission credits between developed nations (Emissions Trading), and developed countries investing in emission-reducing activities

28 Which reiterates Resolution10/4 of the Human Rights Council on Human Rights and Climate Change.

29 *Reinvigorating the Clean Development Mechanism*, above n 14, at 23.

30 Johl and Lador, above n 2, at 4.

31 Loftus-Farren and McKiernan, above n 11, at n 45. See the Inuit and the small islands states petition in 2005 before the Inter-American Commission on Human Rights <http://www.ciel.org/Publications/ICC_Petition_7Dec05.pdf>.

32 Srikanth Subbarao and Bob Lloyd "Can the Clean Development System (CDM) deliver?" (2011) 39(3) Energy Policy 1600 <https://ideas.repec.org/a/eee/enepol/v39y2011i3p1600-1611.html>.

33 Anup Shah "Climate Change Flexibility Mechanisms" (2 April 2012) Global Issues <http://www.globalissues.org/article/232/flexibility-mechanisms>.

in other industrialised countries, gaining reduction units as a result (Joint Implementation), the CDM instead focuses on establishing a system to reward projects in developing countries that reduce GHGs. By doing so, this system aims to promote sustainable development in these countries, having huge implications on human rights. As a result, the sponsored entities earn carbon credits (Certified Emission Reductions, or CERs) which may be used to meet their own emission obligations, or to sell to other Annex I countries.[34] The CDM is a project-based approach where new CER credits (measured in tons of CO_2 equivalent) are created upon the verification and approval of a new project.[35] The two equally weighted objectives laid out in art 12(2) of the Protocol call for (1) giving assistance to parties (non-Annex I parties, or "developing countries") not included in Annex I (those countries listed in Annex I of the treaty, or "developed countries")[36] in achieving sustainable development, and to contribute to the ultimate objective of the UNFCCC in addressing the issues of climate change; and (2), to assist Annex I parties in complying with their reduction commitments under the treaty.[37]

3.1 Additionality and Sustainability Requirements under the CDM

This section will briefly review what is meant by additionality and the problems with sustainability in an effort to highlight the issues surrounding the CDM in relation to the lack of safeguards for the projects, which ties in with its failures to guarantee human rights in many of its projects.

Additionality comes into play when GHG emissions are lowered to a rate which would not have occurred but for the existence of that particular CDM project activity.[38] Article 12(5) of the Kyoto Protocol and the Marrakesh Accords require that in order to achieve the environmental integrity objective, emission reductions must be real and additional. Where additionality is not

34 Clifford Chance LLP, Advocates for International Development *Clean Development Mechanism: CDM and the UNFCCC* (2013) <http://a4id.org/sites/default/files/user/CDM%26UNFCCCcorrected.pdf> at 3.

35 Emily Body and others "Reforming the CDM for sustainable development: lessons learned and policy futures" (2009) 12(7) Environmental Science and Policy 820.

36 Annex I countries are industrialised countries and countries with economies in transition: Australia, Austria, Belarus, Belgium, Bulgaria, Canada, Croatia, the Czech Republic, Denmark, the European Union, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, the Netherlands, New Zealand, Norway, Poland, Portugal, Romania, the Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom of Great Britain and Northern Ireland and the United States of America. Non-Annex I countries are developing countries, which include all countries not listed in Annex I.

37 Schade and Obergassel, above n 16, at 717.

38 Article 43 CMP.1 of the UNFCCC (2002).

achieved but the CDM project is still accruing CER credits allowing Annex I countries to increase their GHG emissions, there would be a lack of balance in the system resulting in an increase of global GHGs.[39] However, the current methodology of measuring additionality has been criticised as "intention-based", and risks "expos[ing] every project to a highly subjective assessment of its CDM eligibility",[40] where project participants can demonstrate under which conditions they would be able to proceed, essentially allowing them to, as the foregoing quotation suggests, choose their own eligibility standards under the differing methodologies.[41] The lack of transparent and objective material alongside the level of ambiguity shown in recent studies[42] outlines the impracticality of these methods, with practical experiences showing that no clear rationale is provided to demonstrate additionality because it has been incorrectly applied.[43] Yet, more rigorous guidelines laying down strict criteria regarding additionality at the validation stage will increase the process costs of the CDM and the time it takes to get the project started, the implementation process already being regarded as too long and cumbersome.[44] However, if the emission reductions are not real, measurable and additional, then neither does the mechanism deliver any cost-efficient emission reductions so the process is circular.[45]

Additionally, just under 200 peer-reviewed studies have been carried out since 1997 aiming to find out whether the CDM is actually carrying out its aim in promoting sustainable development in poorer countries, as well as producing measurable and additional emission reductions worldwide.[46] Sustainable development does not have a universally agreed definition with most countries defining it in very broad terms with many different criteria.

39 Lambert Schneider *Is the CDM fulfilling its environmental and sustainable development objectives? An evaluation of the CDM and options for improvement* (Öko-Institut, Berlin, 2007) <http://www.oeko.de/oekodoc/622/2007-162-en.pdf > at 27–28.

40 International Emissions Trading Association (IETA) stated in a position paper for COP/MOP1: Schneider, above n 39, at 28.

41 *Reinvigorating the Clean Development Mechanism*, above n 14, at 28.

42 Eleven out of 16 studies conducted had a low probability of being additional due to this; see Tables 13 & 14 of Christoph Sutter and Juan Carlos Parreño "Does the current Clean Development Mechanism (CDM) deliver its sustainable development claim? An analysis of officially registered CDM projects" (2007) 84(1) Climatic Change 75 at 86 and 87.

43 Schneider, above n 39, at 45.

44 Friends of the Earth "Trading in Fake Carbon Credits: Problems with the Clean Development Mechanism (CDM)" <http://www.internationalrivers.org/resources/trading-in-fake-carbon-credits-problems-with-the-clean-development-mechanism-cdm-2650>.

45 Johannes Alexeew and others "An analysis of the relationship between the additionality of CDM projects and their contribution to sustainable development" (2010) 10 International Environmental Agreements 233 at 233–235.

46 Karen Holm Olsen "The clean development mechanism's contribution to sustainable development: a review of the literature" (2007) 84(1) Climatic Change 59.

The UN World Commission on Environment and Development (WCED) described it as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".[47] The United Nations incorporates within the term both land and human development issues, recognising respect for human rights as a precondition to sustainable development, where the objective of stable environmental and economic conditions in the future cannot be met without the realisation of the socio-cultural side too.[48] Proponents of the rights-based approach are supporting three main areas of focus upon which to promote sustainability: the right to a clean and safe environment; the right of access to information and public participation in decision-making; and the right to defend the protection of the environment and human rights.[49] Currently, however, there are no legally binding international manifestations of these rights, but they remain important if a credible definition of sustainable development is to be achieved.

The general conclusion is that when left subject to market forces and as part of the rapidly developing global carbon market, the CDM's contribution to sustainable development is minimal at best.[50] The CDM as a market-based mechanism is devoid of human rights concerns in its design and operation due to the lack of human rights reference in the UNFCCC's vague and partial definition of sustainability at the Rio+ 20 conference.[51] The 16th Conference of the Parties to the UNFCCC (COP 16) in 2010 briefly acknowledged rights when stating "that Parties should, in all climate change related actions, fully respect human rights".[52] For the non-binding COP agreement to specifically reference the legally binding international treaties implies that any international climate regime arising from these agreements should conform with human rights.[53] The Guiding Principles on Business and Human Rights endorsed by the Human Rights Council in June 2011 (the "Ruggie Guidelines") specifically address states' duties to protect human rights from violations by "third parties" as well as the duties of business actors themselves. Despite this, the set-up of the CDM modalities and procedures in the Marrakesh Accords of the Kyoto Protocol,

47 World Commission on Environment and Development *Our Common Future* (Oxford University Press, Oxford, 1987) <http://conspect.nl/pdf/Our_Common_Future-Brundtland_Report_1987.pdf>.

48 Robinson, above n 20, at 1.

49 At 2.

50 Olsen, above n 46, at 60.

51 A/CONF.216/L.1, "The future we want", United Nations, Rio de Janeiro, Brazil, 20–22 June 2012. Sustainable development was stated to comprise three mutually reinforcing dimensions; namely, economic development, social development, and environmental protection.

52 Decision 1/CP.16, FCCC/CP/2010/7/Add.1 of 15 March 2011, para 8.

53 EurActiv "Carbon credits tarnished by human rights 'disgrace'" (3 October 2011) <http://www.euractiv.com/climate-environment/carbon-credits-tarnished-human-r-news-508068>.

which contained detailed implementation rules specifically establishing the functioning of the flexibility mechanisms and emissions accounting (among other things), failed to make any reference to human rights.[54] The Project Design Document (PDD) required to be submitted for validation before any project only needs to meet the CDM requirements laid down by the CDM Executive Board that projects contribute to sustainable development and take account of stakeholders. However, because these deal solely with quantifying emission reductions, the Marrakesh Accords fail to provide safeguards as to whether the host country has implemented a project that assists in achieving sustainable development, simply requiring the country's confirmation of such matters,[55] regardless of sustainable development being one of the aims set out under art 12(2) of the Kyoto Protocol.[56] Without the acknowledgement and respect of human rights, sustainable development can never be fully achieved, rendering one of the objectives of the CDM unfulfilled.

There are no further specific internationally agreed criteria or assessment procedures obligating local stakeholder consultations or governing the CDM projects as to whether they meet the requirements regarding sustainable development. Any proposals put forth attempting to do so have been rejected due to issues of national sovereignty.[57] It is therefore left up to the host countries to define sustainable development criteria and local stakeholder consultation procedures (global stakeholder consultations have more guidance, with the PDD being required to be made publicly available for comments from the public, UNFCCC accredited non-governmental organisations and state parties 30 days prior to the implementation of the project),[58] and definitions of sustainable development vary depending on the differing development priorities of the host country in question.[59] Partly this is due to conflicts between the dual objectives of the CDM under the Kyoto Protocol, where studies have shown that the sustainability objective tends to be less favoured than the cost-effective reduction of GHGs, and therefore given less priority in the projects.[60]

54 Schade and Obergassel, above n 16, at 722.

55 The Marrakesh Accords affirm that "it is the host Party's prerogative to confirm whether a clean development mechanism project activity assists it in achieving sustainable development": UNFCCC *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), Part Two: Action taken by the Conference of the Parties, Volume II at 20.

56 Decision 3/CMP.1, FCCC/KP/CMP/2005/8/Add.1 of 30 March 2006, para 40(a), found in Schade and Obergassel, above n 16, at 723.

57 At 723.

58 Decision 3/CMP.1, above n 56, at para 40(c).

59 Olsen, above n 46, at 62.

60 HH Kolshus and others *Can the Clean Development Mechanism attain both cost-effectiveness and sustainable development objectives?* (Center for International Climate and Environmental Research (CICERO), Oslo, 2001); A Markandya and K Halsnæs (eds)

On a similar note, the competitive nature of the global market price for emission reductions could influence developing countries, who are looking for CDM investors, to set lower sustainability targets in a "race to the bottom" to undercut each other in order to attract more projects with low abatement costs.[61] By allowing host countries to define their own sustainable development criteria, development country participation in the CDM may reflect a different objective to one that was expected — a long-term development programme to assist in local development and alleviating poverty — instead preferring the economic dimension of sustainability.[62] Similarly, where there is no project-specific baseline representing the volume of GHG emissions that would have been released but for the CDM's intervention, there is a real risk of developing countries halting their climate change mitigation activities in order to receive financing from the CDM, effectively having a colossal effect on the credibility of additionality results. Until an international standard for sustainable development is set, giving a direct incentive to implement strict development criteria, there will be a continuing weakening of the sustainability objective which will have a profound effect on human rights where the cost-efficient emission reduction objective is favoured.[63]

A comprehensive draft was developed by the UNFCCC Secretariat in 2012 in response to extensive public criticism, in an effort to assess sustainable development impacts which included a human rights-based approach of "do no harm" and suggested detailed requirements for stakeholder consultations, effectively addressing key issues emerging from the CDM projects in developing countries.[64] Once again, the issue of incompatibility with national sovereignty was seen as prevailing which substantially restricted the scope of the proposed sustainability tool such that it no longer follows a human rights framework.[65] As a result, promises of sustainable development, helping local communities and consulting with them have not happened.[66] The host country conducts the environmental impact assessment in accordance with the procedures laid down by the country financing the project, resulting in a heavy reliance and input from the project participants and the host country whilst the

Climate Change and Sustainable Development: Prospects for Developing Countries (Earthscan, London, 2002).

61 Olsen, above n 46, at 62.

62 Teresia Rindefjäll, Emma Lund and Johannes Stripple "Wine, fruit and emission reductions: the CDM as development strategy in Chile" (2011) 11(1) International Environmental Agreements: Politics, Law and Economics 7 (The Governance of Clean Development Working Paper Series) <http://www.tyndall.ac.uk/sites/default/files/GCD_WorkingPaper004.pdf>.

63 Olsen, above n 46, at 62.

64 Schade and Obergassel, above n 16, at 723.

65 At 723.

66 Kolshus and others, above n 60.

local stakeholders experiencing the local environmental impacts of the project have no say in the matter.[67] The interest of the host country, of which many have intentions other than human rights and environmental concerns, as discussed above with the competitive carbon market, will not always represent that of the people. The Inter-American Commission on Human Rights (IACHR) regards access to information, participation in decision-making processes and access to legal remedies as crucial measures "to support and enhance the ability of individuals to safeguard and vindicate [their] rights".[68] Similarly, the Inter-American Court of Human Rights (IACtHR) has occasionally extended the obligation to consult the individuals who will be affected and obtain free, prior and informed consent.[69] This is so as to protect the indigenous peoples' way of life from breaches of procedural requirements, meaning that they must be, at a minimum, consulted in good faith with the objective of consent prior to the start of a project.[70] However, due to this lack of a universally accepted consensus of sustainable development, these human rights will continue to be threatened until adequate international and corresponding national safeguards are provided in respect of this in the PDD stage as one of the crucial requirements before receiving validation. An example of the continued ignorance of this procedure is discussed below.

3.2 An Assessment of the Bajo Aguán Case in Honduras

The right to property is laid down in art 17 of the UDHR and in all regional, civil and political human rights treaties, and works to protect individuals from expropriation without adequate compensation.[71] What is often the case with mitigation projects, such as the forest protection programmes or hydropower stations, is that conflict will arise when these expand into the territories of indigenous people. Human rights treaty bodies have often supported the right of indigenous people to their own lands (based on art 27 of the ICCPR definition of minority rights), meaning that land ownership should be protected from such projects where prior consent has not been extended.[72] In particular, CDM projects building large hydroelectric power dam constructions have caused serious human rights concerns by negating any input from the individuals affected by the schemes in both failing to consult, allow participation and receive consent from the local people on the entire process of project implementation, as well as resulting in the forced displacement and loss of lands and subsistence,

67 Kneteman and Green, above n 1, at 233.
68 Schade and Obergassel, above n 16, at 720, n 8.
69 *Saramaka People v Suriname* IACtHR 2007 (Ser. C) No. 172.
70 Schade and Obergassel, above n 16, at 720.
71 At 720.
72 At 720.

where there has been a clear failure to safeguard the rights of the indigenous communities living in these areas.[73] It has become a common case that where CDM schemes involve diverting water resources, health problems have increased amongst the local population where the water has been diverted. This has been caused by construction dusts, a decrease in the marine population and the consequent loss of agricultural capacity, resulting in displacement of the population from their own lands.[74] One example of such a case was the Bajo Aguán case in Honduras where, according to the PDD, the CDM project was implemented in order to address water treatment in the palm oil mill consisting of lagoons emitting biogas into the atmosphere.[75] Violent conflicts had ensued since 2004, after the family-owned corporation Grupo Dinant was accused of stealing farmers' land to convert into plantations and more than 50 peasants and supporters were reportedly killed in the fight between them and the public and private security forces. The Honduras government was accused of violating the peasants' human rights in relation to multiple issues. Honduras is a party to the ICESCR, the ICCPR and the American Convention on Human Rights, resulting in international protection of the farmers' rights by failing to acknowledge and respect the right to life, right to liberty and personal security as well as the right to physical, psychic and moral integrity (art 7 of the ICCPR), as the peasants were reportedly being subjected to constant harassment and threats.[76] The CDM did not take these rights into account upon implementation which led to these violations (as the mill reportedly sources its raw material from land that has been the subject of violent conflicts and thus not complying with due diligence standards set out by the Ruggie Guidelines),[77] despite Honduras ratifying ILO Convention No 169 in conjunction with supporting the United Nations Declaration on the Rights of Indigenous People (UNDRIP) and the Rio Declaration and subsequent declarations on sustainable development, meaning that human rights was one of the key factors that should have been considered in Honduras' definition of sustainability.[78] The validation report of the PDD failed to reveal the conflict going on at the time prior to implementation, as well as key publication at the time was not made publicly available, and therefore the adequacy of the stakeholder consultation cannot be assessed. The CDM Executive Board, being aware of these violations, allegedly have no way to block the registration of the CDM due to their mandate only being concerned with the GHG impact of projects, and seeing as the host country has primary

73 Subbarao and Lloyd, above n 32, at 38, n 117.
74 At 26.
75 Schade and Obergassel, above n 16, at 724.
76 At 724.
77 At 726.
78 At 724.

responsibility regarding sustainable development, backing up the claim made earlier about the cost-effective reduction of emissions being the developing countries' predominant goal in these projects. Although there are not yet any CER credits being generated from this particular project, when there are there is no mechanism to prevent them being issued to the European Union (EU) despite the complete lack of safeguards surrounding the sustainability objective of the CDM, resulting in the continued violation of rights which conflict with international law.[79]

It can be seen from this case and many others that the importance of mandatory human rights safeguards at UNFCCC level and mandatory human rights impact assessments was something clearly required at this time.[80] There is a critical need for universal definition of sustainable development which guarantees the safeguarding of human rights within the UNFCCC, with the result that CDM projects would no longer simply have a vague unspecified duty to protect human rights. Procedural requirements should be set up as a result, requiring the PDD to guarantee adherence to human rights by undergoing an impact assessment before validation of a project. Procedural requirements for the consultation of stakeholders are also a key instrument which combined with the safeguards, at a minimum, will prevent another case like the Bajo Aguán project, as the CDM project would not have been validated and therefore able to become involved in pre-existing conflicts over land rights and other human rights violations.[81] There needs to be the implementation of a procedure to deregister projects with severe human rights violations, along with applying international and national operational redress mechanisms to address and compensate victims of these violations, in compliance with the Ruggie Guidelines on business and human rights.[82]

A continuing problem is the strong opposition from developing countries to have a UNFCCC-level international definition of sustainable development. However, it has been suggested that developed countries could implement their own requirements for CDM projects which would be favourable to them as they would be in compliance with their international obligations to respect human rights, such as the EU being in compliance with the amendments of the Lisbon Treaty and their commitment to extraterritorial human rights obligations, rather than violating them by being the third-party financer.[83]

79 At 724.
80 At 724.
81 At 724.
82 At 724.
83 At 724.

4. REDD+

4.1 Introducing REDD+

The exploitation of natural materials by developing countries is a response to the economic opportunities created by the global demand for food and other raw materials.[84] This has led to deforestation on a massive scale so as to meet these demands, with agriculture, timber extraction, oil and gas development, and mining and infrastructure expansion being prioritised in these areas.[85] Due to deforestation levels rising and the resulting release of carbon contributing to around 15 to 17 per cent of GHGs,[86] developed and developing countries have been discussing an international mechanism which will provide positive incentives for countries to prevent deforestation and forest degradation activities to continue on their land, measured against an emission reference level (baseline).[87] The initiative of Reducing Emissions from Deforestation and forest Degradation in developing countries (REDD), which was launched in the 2005 UNFCCC negotiations, was expanded by the Bali Action Plan[88] to include the "conservation, sustainable management of forests and enhancement of forest carbon stock in developing countries" (REDD+), a mechanism which has been under negotiation by the UNFCCC since 2005 up to the present day. The potential UNFCCC scheme has the collaborative objective of removing GHGs through enhanced forest management, and to mitigate climate change effects via the reduction of these emissions.[89]

A core issue in the REDD+ programme is to create a multi-level (international and national) payments for environmental services (PES) scheme.[90] The UN Collaborative Programme on REDD (UN-REDD Programme) and the World Bank's Forest Carbon Partnership Facility (FCPF) have contributed to

84 O Venter and LP Koh "Reducing emissions from deforestation and forest degradation (REDD+): game changer or just another quick fix?" (2012) 1249 Annals of the New York Academy of Sciences 137 at 137.

85 At 137.

86 According to the IPCC, forestry accounts for around 17 per cent of global carbon emissions: IPCC *Climate Change 2007: Synthesis Report* (IPCC, 2007) at 36. According to subsequent estimates, this number may be closer to 15 per cent.

87 André Aquino and Bruno Guay "Implementing REDD+ in the Democratic Republic of Congo: An analysis of the emerging national REDD+ governance structure" (2013) 36 Forest Policy and Economics 71 <http://dx.doi.org/10.1016/j.forpol.2013.04.003> at 71.

88 Decision 1/CP.13, Bali Action Plan (FCCC/CP/2007/6/Add.1, 14 March 2008), para 1(b)(iii).

89 Annalisa Savaresi "The Human Rights Dimension of the REDD+" (2012) 21(2) Review of European Community & International Environmental Law 102.

90 A Angelsen *Moving ahead with REDD: Issues, Options and Implications* (CIFOR, Bogor, Indonesia, 2008) ch 2 at 12.

facilitating countries' capabilities to carry out REDD+ activities,[91] ensuring that financing can be carried out effectively in building technical and institutional capacities to benefit from a future REDD+ mechanism (REDD readiness).[92] At COP 15 in 2009,[93] substantive requirements for REDD+ were laid down via safeguards (reviewed later) and the national forest monitoring system was set up which provided elements of measurements, reporting and verification (MRV).[94] COP 16[95] in Cancún in 2010 (the Cancún Agreements) provided for key elements for a REDD+ mechanism, containing provisions on adaptation, REDD-plus, technology, mitigation and finance.[96] One of the main aims of the system was for countries to develop their own REDD+ mechanisms which included establishing their own set reference levels by reviewing their domestic capacity, and establishing a participatory approach to encourage the full engagement of indigenous peoples and the local communities in assisting in monitoring and reporting.[97] Importantly, REDD+ strategies at the national level will aim to bring about more effective forest management, broad policies such as tenure reforms, and policies aimed at mitigating deforestation by reducing demand for forest land and products.[98]

Whilst there are diverging opinions on REDD's effect on forests and societies worldwide, the debates surrounding the scheme have successfully helped in bringing the issue of forest protection to the forefront of the international environmental governance agenda.[99] Most institutions agree that REDD+ is critical to mitigating climate change; however, these simple ideas surrounding REDD+ are much more complex in practice and need resolving before a global agreement can be made. An example of this is the financing of REDD+, where there is a concern that if economic efficiency by the slowing of forest loss (acting as a relatively low-cost option for emission mitigation) is the objective set, then private investors will be more likely to bypass poor rural farmers and instead invest in commercial producers. Incorporating

91 For an overview of REDD readiness activities see the database of the REDD+ Partnership <http://reddplusdatabase.org>.

92 Savaresi, above n 89, at 103.

93 Decision 4/CP.15: "Methodological guidance for activities relating to reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries".

94 UNFCCC *Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009* <http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf>.

95 Decision 1/CP-16.

96 Sophie Lemaitre "Indigenous Peoples' Land Rights and REDD: A Case Study" (2011) 20(2) Review of European Community & International Environmental Law 150 at 151.

97 At 151.

98 Angelsen, above n 90, ch 2 at 13.

99 Christoph Aicher "Discourse practices in environmental governance: social and ecological safeguards of REDD" (2014) 23(14) Biodiversity and Conservation 3543 at 3544.

REDD+ into the market mechanism means running the risk of contributing to the commodification of forests via land clearance for monoculture plantation, potentially exacerbating land conflicts through the disposition of the local people in favour of such commodities, and other carbon accounting schemes where the safeguards of the UNFCCC simply serve as a means to manage risks to carbon investments.[100] In summary, it is argued that the main proponents of REDD+ which, at the national level, mainly comprise high-polluting governments and companies maintaining "business as usual", means that reducing the emissions at the source is set aside in favour of offset trading.[101] This article now turns to focusing on the issues impacting upon human rights, including analysing these land conflicts and rights violated by monoculture plantations, a consequence of the market mechanisms interlinking into the scheme.

4.2 Introduction to Violations against Indigenous Peoples

Several problematic aspects were being discussed, particularly at UNFCCC COP 13 in 2007 and COP 15 in 2009, where parties at COP 13 failed to acknowledge the concerns of the local communities being excluded from their lands in violation of their land rights (as well as other rights), simply stating that the needs of the local indigenous peoples should be addressed in actions to reduce emissions in these countries.[102] It was not until COP 15 in Copenhagen in 2009 that the draft decision on REDD contained any references to these rights.[103]

Indigenous people have a crucial role to play in mitigating climate change; their practices have developed a sustainable environment through their traditional knowledge, which acts to mitigate climate change.[104] The survival of the indigenous culture is continually threatened by the modern industrialised world which focuses on an economic growth paradigm, minimising the

100 Constance L McDermott and others "Operationalizing social safeguards in REDD+: actors, interests and ideas" (2012) 21 Environmental Science & Policy 63 at 70.

101 Carbon Trade Watch "REDD+" <http://www.carbontradewatch.org/issues/redd.html>.

102 Decision 2/CP.13 "Reducing emissions from deforestation in developing countries: approaches to stimulate action" in UNFCCC *Report of the Conference of the Parties on its thirteenth session, held in Bali from 3 to 15 December 2007*, Addendum, Part Two, at 8. Retrieved from Lemaitre, above n 96, at 151, nn 11 and 13.

103 Draft decision -/CP.15: "when undertaking activities … Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws" "should be [promoted] [and] [supported]" in *Report of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention on its eighth session, held in Copenhagen from 7 to 15 December 2009* <http://unfccc.int/resource/docs/2009/awglca8/eng/17.pdf> at 34–35.

104 Lemaitre, above n 96, at 150, n 2.

importance of indigenous cosmologies, philosophies and world views.[105] The International Labour Organization (ILO Convention No 169) concluded the Convention concerning Indigenous and Tribal Peoples in Independent Countries in 1989 which was the first internationally legally binding instrument dealing with indigenous peoples' rights.[106] This entrenched important rights such as free and informed consent in art 16(2) and further acknowledged by art 32 of UNDRIP, compensation in art 16(3) and (4), and consultation (art 15(2)). Article 14 compels states to recognise a right to possession and ownership of indigenous peoples, and is seen as the key provision on the right to land. UNDRIP acknowledges numerous collective rights, alongside art 26 which states that legal recognition must be given to the lands which are traditionally owned and occupied by indigenous people, and that customary land tenure must be respected. Other rights include the right to self-determination (art 3) and the right to cultural heritage and intellectual property (art 31), and the collective and individual nature of indigenous peoples' rights.[107] Article 25 fills the void left by ILO Convention No 169 by recognising the right to redress including restitution and a right to compensation if restitution of the land is not possible.[108] A downside to this declaration is that it is a non-binding soft law instrument; however, this represents a major step forward by the UN in the protection of indigenous rights throughout the world, being compatible with ILO Convention No 169 which is legally binding once ratified.[109]

The International Indigenous Peoples Forum on Climate Change (IIPFCC) and other international human rights bodies, at the 2007 Bali climate negotiations, explicitly stated that the REDD+ is likely to lead to further violations of indigenous peoples' human rights, where due to states and carbon traders having control, territories and resources will be lost. This will lead to forced evictions, access and agricultural practices being prevented, and where nothing is done to address these issues, social conflicts, and severe damage to both biodiversity and cultural diversity. An example of this can be shown in a case reviewed by the Inter-American Court of Human Rights, *Mayagna (Sumo) Awas Tingni Community v Nicaragua*, where a petition was lodged denouncing the state of Nicaragua for failing to take measures protecting the Community's property rights over the land and its resources, acknowledged by the American

105 *No REDD Papers: Volume One* (November 2011) <http://www.ienearth.org/docs/No-Redd-Papers.pdf > at 13.

106 Lemaitre, above n 96, at 151.

107 United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) (UNGA Res 61/295, 13 September 2007) adopted by a majority of 144 states in favour, four against and 11 abstentions, at art 1. Retrieved from Lemaitre, above n 96, at 152.

108 Lemaitre, above n 96, at 152.

109 International Labour Organization "Indigenous and Tribal Peoples: Conventions" <http://www.ilo.org/indigenous/Conventions/lang--en/index.htm>.

Convention on Human Rights, and for failing to guarantee access to an effective remedy for their claims over the concession of 62,000 acres of tropical land. It was found that by granting logging concessions to third parties to utilise resources in the area where the people lived and worked, Nicaragua violated the human rights of these members.[110] This is a further reflection of the effect of the market mechanism in offsetting carbon emissions, where REDD+ is indeed a mechanism that aims to meet an environmental aim, but by attempting to do so is utilising economic means at the cost of human rights. The third parties in this case were the private investors looking to add monetary value to the forest by commodifying its resources. Despite being a party to the American Convention on Human Rights, Nicaragua ignored the rights of its indigenous communities to use of their ancestral land, neither consulting the Community nor informing them that the logging would take place. However, this case is set to become a model for legal and political human rights.[111] It was further ruled that until effective remedies were put in place, any acts which affected or may affect the value, use or enjoyment of the property in that set geographic area must be avoided by the state.[112] The significance of this case is that this was the first judgment issued in favour of the indigenous peoples' right to their land by the Inter-American Court, rendering the decision an important one in upholding these rights.[113]

4.3 Indigenous Rights and Monoculture Plantations

There is a debate in the UNFCCC as to the ecological costs and co-benefits of REDD+ depending on the types of land classed as having a need to be maintained or enhanced under the regime.[114] The UNFCCC is yet to

110 *The Case of the Mayagna (Sumo) Awas Tingni Community v Nicaragua* IACtHR 2001 (Ser. C) No. 79 <http://www.escr-net.org/docs/i/405047> at [153].

111 J Vuotto "One Year After Breakthrough Court Order, Nicaragua Government Still Ignores Awas Tingni Rights" (2002) 26(4) Cultural Survival <http://www.culturalsurvival.org/publications/cultural-survival-quarterly/nicaragua/one-year-after-breakthrough-court-order-nicaragua>.

112 *The Case of the Mayagna (Sumo) Awas Tingni Community v Nicaragua*, above n 110, at [153].

113 See a similar case in Panama: Britnae Purdy "Indigenous Peoples in Panama Call Out UN on Violating FPIC, Withdraw Support for REDD" (2013) First Peoples Worldwide <http://firstpeoples.org/wp/indigenous-peoples-in-panama-withdraw-support-for-un-redd>; Chris Lang "COONAPIP, Panama's Indigenous Peoples Coordinating Body, denounces UN-REDD" (30 August 2012) REDD Monitor <http://www.redd-monitor.org/2012/08/30/coonapip-panamas-indigenous-peoples-coordinating-body-denounces-un-redd/>.

114 Meridian Institute *Reducing Emissions from Deforestation and Degradation (REDD): An Options Assessment Report Prepared for The Government of Norway* (Meridian Institute, Washington DC, 2009) <http://www.REDD-OAR.org>.

comprehensively define what constitutes a forest,[115] and as a result, some developing countries have allowed monoculture plantations of commercial tree species, as opposed to natural ecosystems, to be included within this definition therefore allowing them to accumulate CER credits. Monoculture plantations in these areas have the potential to have a great impact upon these rights if the precautionary steps are not undertaken. Allowing them to be classed as forests enabling the production of CERs creates perverse incentives due to the conversion of natural forests by wood/paper product and oil palm plantation companies.[116] When displacing low-carbon native systems, tree plantations produced for carbon sequestration pose real ecological risk, with up to 80 per cent of carbon lost to the atmosphere depending on the type of forest ecosystem and the type of plantation which replaces it.[117] An example of this is seen in the Cerrado woodlands and savannas of Brazil, a richly diverse area being replaced by plantations of species native to Australia (eucalyptus) in a project to earn carbon credits.[118] These trees may benefit the programme in terms of carbon benefit; however, their planting causes degradation of the landscape, therefore proving counteractive in the buffer against climate change.[119] Furthermore, land grabbing and forced evictions are strongly linked to the expansion of monoculture plantations, due to the displacement of people, ignoring their land rights and rights to the resources upon those lands, violating art 14 of ILO Convention No 169.[120] By not clarifying what is meant by the term "forest", the

115 Simply defining a forest in terms of tree cover, rather than specifically referring to the complex ecosystems and the livelihood of people relying on the sustainable nature of these ecosystems, has led to many human rights violations and risks the failure of REDD+ in the future. Louis Verchot, director of forests and environment research with the Center for International Forestry Research (CIFOR): "Definitions set the parameters by which you gather past, present and future information on your forests, which enable you to design a more effective REDD+ scheme"; in Catriona Moss "Defining 'forest' could improve REDD+ monitoring in Indonesia: Choosing the right definition for forests in order to curb deforestation" (7 November 2013) Forests News <http://blog.cifor.org/20055/defining-forest-could-improve-redd-monitoring-in-indonesia?fnl=en>.

116 Civil Society Submission to the SBSTTA meeting of the Convention on Biological Diversity *The Need for the Review of the UNFCCC's Forest Related Terms, Definitions and Classifications* (2010) <http://www.wetlands.org/Portals/0/publications/submission%20or%20policy%20doc/Annex%20on%20the%20Need%20for%20the%20Review%20of%20the%20UNFCCC.pdf> at 2.

117 Civil Society Submission, above n 116.

118 Claudia Stickler and others "The potential ecological costs and co-benefits of REDD: a critical review and case study from the Amazon region" (2009) 15(12) Global Change Biology 2803 at 2806. See S Mansourian, D Vallauri and N Dudley (eds) *Forest Restoration in Landscapes: Beyond Planting Trees* (Springer, New York, 2005).

119 Mansourian, Vallauri and Dudley (eds), above n 118, at 33.

120 Carbon Trade Watch "Monocultures" <http://www.carbontradewatch.org/issues/monoculture.html>.

UNFCCC will undermine the future REDD+ system through unethical climate change mitigation strategies having a detrimental effect on indigenous rights.

The expansion of forest plantations meets the rising demand for wood products, showing a need for these highly productive systems; however, they are viewed as "biological deserts"[121] where plantations replacing forest ecosystems are least likely to contribute to biodiversity partly due to seed germination in some plants requiring the natural high level of structural complexity provided for in tropical forests.[122] Plantations, especially industrial ones, which contain species of trees that have been genetically modified[123] have been found to possess lower diversity levels in terms of function, composition and structure, which are devised for short-term demands rather than the longevity of natural forests.[124] Eliminating a large ecosystem with their natural cycles requires a lot of artificial mineral and chemical input to grow a large amount of homogenous plants in one area and boost crop yields in general, but this comes at a great expense to biodiversity.[125] Monoculture plantations often require heavy machinery for establishment and management, plus the use of pesticides and fertilisers, which increases the risk of soil degradation and chemical contamination, as well as usually producing fewer native plant and animal species than the areas which they are replacing.[126]

A further problem occurs where non-native plants are used which have a devastating impact on the hydro and soil resources, and lack the ability to form the collaborative relationship that native plants and animals have which result in their survival.[127] These areas are susceptible to diseases which, due to the single crop system as opposed to a biodiverse ecosystem, can have devastating

121 SS Stephens and MR Wagner "Forest plantations and biodiversity: a fresh perspective" (2007) 105(6) Journal of Forestry 307 at 308.

122 Leah L Bremer and Kathleen A Farley "Does plantation forestry restore biodiversity or create green deserts? A synthesis of the effects of land-use transitions on plant species richness" (2010) 19(14) Biodiversity and Conservation 3893 at 3905.

123 Such as fast-growing exotic species, aged and uniformly spaced species; see Food and Agriculture Organization *Global Forest Resources Assessment 2005: Progress towards sustainable forest management* (FAO, Rome, Italy, 2006).

124 Alain Paquette and Christian Messier "The role of plantations in managing the world's forests in the Anthropocene" (2010) 8(1) Frontiers in Ecology and the Environment 27 at 30. These concerns are supported by many studies comparing biodiversity levels in plantations with those of natural forests: see ML Hunter *Maintaining Biodiversity in Forest Ecosystems* (Cambridge University Press, New York, 1999).

125 Stickler and others, above n 118, at 2806.

126 At 2806. See LA Bruijnzeel *Hydrology of Moist Tropical Forests and Effects of Conversion: A State of Knowledge Review* (UNESCO, Paris, Vrije Universiteit, Amsterdam, 1990) at 224; J Barlow, T Haugaasen and CA Peres "Effects of ground fires on understory bird assemblages in Amazonian forests" (2002) 105 Biological Conservation 157.

127 Carbon Trade Watch "Monocultures" <http://www.carbontradewatch.org/issues/monoculture.html>.

consequences for the indigenous population who utilise these resources either for income as farmers, or as vital sustenance, resorting to the plantations due to the loss of their land and the resources that they had accompanying rights to.[128] Furthermore, the effect of genetically modified crops and pesticides results in water shortages and contamination for the small-scale farmers remaining on their land as the local species adapts to this new monoculture environment, upsetting the local ecological balance causing outbreaks of illnesses and negative feedback cycles, violating the right to health under art 12 of ICESCR.[129] An example of this was seen in a hospital in Sri Lanka which showed that per year 13,000 patients are admitted with pesticide poisoning, this proving fatal for 1,000 patients.[130]

The Food and Agriculture Organization (FAO) tells us that approximately 60,000 km^2 of remaining primary forest are either lost to deforestation or modified annually, this loss leading to the rapid increase of plantation allocation.[131] This is causing severe human rights violations, and alternative options should be considered under the REDD+ system, such as enrichment plantations carried out in secondary degrading forests, or where a well-designed multi-purpose plantation can protect the remaining natural forests through increased productivity, preserving biodiversity and at the same time avoiding forestry, reducing pressure on natural forests and their resources.[132] The definition of forest by the UNFCCC is crucial to preventing the perverse incentives of creating non-biodiverse monocultures for CER production. Furthermore, the inclusion of REDD+ adding further monetary value to these areas has acted as a disincentive to some states respecting property rights, favouring to exclude indigenous people from their lands or avoid reforestation by building plantations in order to receive REDD funding.[133] The recognition of indigenous peoples' land rights has occurred at different levels, with the ILO Convention No 169 and UNDRIP taking a massive leap forward in raising awareness of these rights and providing protection for them, including involving the UN which has undertaken several initiatives in favour of this cause. In 1994 the UN General Assembly launched the International Decade of the World's Indigenous Peoples to promote and protect indigenous peoples' rights. The UN Permanent Forum on Indigenous Issues and the International Forum of Indigenous Peoples on Climate Change were set up, providing advice to the UN Economic and Social Council. Finally, domestic and regional courts

128 Carbon Trade Watch, above n 127.

129 Stickler and others, above n 118, at 2806.

130 Stephen A Vosti and Thomas Reardon (eds) *Sustainability, Growth and Poverty Alleviation: A Policy and Agroecological Perspective* (IFPRI, Baltimore, MD, 1997) at 73.

131 Food and Agriculture Organization, above n 123, at 27.

132 Stickler and others, above n 118, at 2807.

133 At 2807.

have repeatedly acknowledged the rights of indigenous peoples to land through case law (an example being the *Mayagna (Sumo) Awas Tingni Community v Nicaragua* case).[134] Ensuring that rights of ownership of land are secured in tenure before the launch of REDD initiatives is fundamental.

4.4 Land Tenure and Unfair Benefit Distribution

Land tenure and forest property rights have become key issues in an aim to safeguard indigenous peoples and local communities due to the increased market value of their lands.[135] Land tenure is a set of institutions and policies which define how property rights to land are to be allocated within a society, and regulates how access is granted to rights to use, conditions of use, control and transfer of lands.[136] They have become of critical importance in policy decisions shaping the social and environmental impact of REDD+ due to clarity of tenure and usage rights determining who is eligible to receive the incentives from the reduction of deforestation, and who holds the risks.[137] It has been found that the world's most rich and biodiverse forests have ownership issues, where the unsecured land tenure thwarts any efficient REDD+ programme due to conflicts surrounding ownership and a consequential unequal distribution of benefits.[138] Comprehensive legal reforms are vital to REDD+ in tropical forests in order to ensure that the positive impacts of the benefits are distributed to the affected people upon the reduction of emissions from deforestation and degradation.[139]

Land-based property rights can be upheld by society through security in land tenure, which can influence forest use due to the landowner preventing deforestation of his own land. However, this is hardly reassuring, as has been seen with logging companies, where the landowner is offered a higher financial

134 Lemaitre, above n 96, at 156.

135 S Alexander and others "Opportunities and Challenges for Ecological Restoration within REDD+" (2011) 19(6) Restoration Ecology 683 at 687.

136 JW Bruce and others "Whom to pay? Key Concepts and Terms Regarding Tenure and Property Rights in Payment-based Forest Ecosystem Conservation" (December 2010) Land Tenure Center Tenure Brief No 15.

137 Anna Bolin, Leonie Lawrence and Matt Leggett *Land tenure and fast-tracking REDD+: time to reframe the debate?* (Global Canopy Programme, Oxford, 2013) <http://www.globalcanopy.org/sites/default/files/GCP_May%202013_Land%20tenure%20and%20fast-tracking%20REDD+.pdf> at 1.

138 Bolin, Lawrence and Leggett, above n 137. See T Sikor and others "REDD-plus, forest people's rights and nested climate governance" (2010) 20(3) Global Environmental Change 423; WD Sunderlin and others "Forest tenure rights and REDD+: From inertia to policy solutions" in A Angelsen and others (eds) *Realising REDD+: national strategy and policy options* (CIFOR, Bogor, Indonesia, 2009) at 139; and JD Unruh "Carbon sequestration in Africa: The land tenure problem" (2008) 18(4) Global Environmental Change 700.

139 Bolin, Lawrence and Leggett, above n 137, at n 89.

incentive for allowing deforestation than for maintaining the forest. Significant financial incentives are needed to avoid this discrepancy, but those incentives will only go to the person acting on his own land where the land is secured in his name, rather than benefiting the indigenous people who may be investing in climate mitigation strategies whilst not reaping the benefits.[140] Public and communal landholdings are generally non-transferable and constitute tens of thousands of hectares of land, which is important for REDD projects as carbon contracts are designed to be long term, and in order for transaction costs of implementation to be lowered.[141] However, it is these carbon rights which further complicate the land tenure and forest use relationship, where assigning rights under REDD+ may be independent of land rights, or may lead to leakage where carbon rights are assigned to one area alone, meaning that those coveting the forest's resources simply continue doing so on unprotected land whilst reaping the benefits of leaving that protected area free from intervention.[142] Although with REDD+ the infrastructure is still in the developing stages, and challenges can still be addressed, the contradictory current legal and institutional framework must first be resolved and strengthened, and forestry regulations clarified, to ensure that REDD+ projects will avoid causing local residents to lose rights to more powerful interests.[143] In an effort to take a closer look into these issues and the potential reforms that should be made in the post-Kyoto negotiations in 2020, the article will now examine Peru's experience with the REDD+ since the Peruvian government positioned itself as a leading advocate of REDD+ and its finance through carbon markets in 2008.[144]

Over a third of Peru's 69 million acres of forest are occupied by Amazonian indigenous peoples, seeking security of tenure over their possession of these lands. Despite the international consensus at COP 16 in Cancún that the REDD+ programme can only succeed if the rights of people living in the affected forests are respected, up until recently, Peru's national strategy has produced minimal efforts in securing these rights, despite the ongoing REDD activities.[145] The legislative framework undermines rather than strengthens the indigenous

140 Cathy Day and Lisa Naughton-Treves "Lessons from Early Efforts to Secure Land Tenure within Forest Carbon Management Projects" in Lisa Naughton-Treves and Cathy Day (eds) *Lessons about Land Tenure, Forest Governance and REDD+: Case Studies from Africa, Asia and Latin America* (UW-Madison Land Tenure Center, Madison, Wisconsin, 2012) <www.rmportal.net/landtenureforestsworkshop> at 3.

141 At 3.

142 At 3.

143 At 3.

144 Roberto Espinoza Llanos and Conrad Feather *The reality of REDD+ in Peru: Between theory and practice — Indigenous Amazonian Peoples' analyses and alternatives* (Forest Peoples Programme, November 2011) <http://www.forestpeoples.org/sites/fpp/files/publication/2011/11/reality-redd-peru-between-theory-and-practice-website_0.pdf> at 12.

145 At 8.

population's rights under REDD+ due to the fact that the current policies fail to benefit people who live in the forest due to an estimated 20 million hectares of indigenous territories being unrecognised in terms of secured tenure, likely to lead to land grabbing and marginalisation of the indigenous people.[146] Even within titled areas, where there are rights to use the land, the ownership of these lands is claimed by the state. Indigenous people are now increasingly reliant on manufactured products where the value of agriculture is low, resulting in very limited means for families to earn an income other than working for extractive industries. Until such a time that reforms are made to protect these rights, the REDD+ activities in these areas will continue to violate the indigenous peoples, either in the disposition of their lands or restrictions on their livelihoods.[147] It is not only these conflicting systems that are damaging the rights of the indigenous peoples of Peru, the underlying conflicts between the policies and practices of the Peruvian government favouring industrial resource extraction is impeding any progress made. In 2007 President Alan Garcia counteracted the indigenous peoples' protest against exploitation of the Amazon's natural resources by stating: "There is too much unproductive land in the hands of people without education and resources … the progress of Peru will not be held back by a minority who are not the most advanced in this country."[148] This is a further example of economic interests prevailing where there are a lack of human rights instruments safeguarding a reductionist view of the forest and its resources. The commonly held belief is that where there are fewer mechanisms in place recognising a set human rights standard, there will be enough finance to save the forest through logging activities, and so forth, taking place on indigenous peoples' land. However, in August 2011, after a long campaign by indigenous peoples' organisations, the rights recognised by ILO Convention No 169 were affirmed, as well as the text on the Peruvian national law of free, prior and informed consent being approved by Congress, in compliance with art 10 of UNDRIP which states: "Indigenous peoples shall not be forcibly removed from their lands or territories. No relocation shall take place without the free, prior and informed consent of the indigenous peoples concerned and after agreement on just and fair compensation and, where possible, with the option of return."

Peru has received financial endorsement from several international donors[149] in REDD readiness activities; however, its Readiness Preparation Proposal (R-PP), up until 2011, had largely failed to address issues advanced on behalf of indigenous peoples.[150] It instead mainly acknowledged the issue of land rights

146 At 48.
147 At 48.
148 At 15.
149 Including the World Bank's FCPP (2009) and FIP (2010), and the UNREDD+ programme (2011).
150 Llanos and Feather, above n 144, at 20.

and the R-PP's consistent failure to produce concrete measures to resolve applications made concerning indigenous territories; adequately consulting indigenous people and allowing their participation in REDD implementation projects; and recognising that the legal reforms surrounding indigenous rights actually weaken them by refusing to acknowledge customary land rights, instead limiting themselves to interpreting national legislation which fails to adequately address indigenous rights to free, prior and informed consent and where it would apply to REDD+.[151] Furthermore, the R-PP failed to consider the need for community-based forest management by the state. This abandonment has had the consequence in the past of forcing communities into inequitable agreements with industrial-scale loggers; however, with the REDD+ initiatives taking place this undermines the programme as well as the rights of indigenous people though carbon pirating. A lack of management of these communities exposes them to carbon consultants and investors where deals are being conducted with no legal support for communities who are being asked to agree to binding complex commercial contracts despite not being literate in that language and not fully understanding the nature of the agreement.[152] An example of the huge carbon trading industry opening up an opportunity for inequitable scams was seen by the "carbon cowboy", Australian entrepreneur David Nilsson, who falsely promised profits of billions of dollars to vulnerable indigenous people, such as the Yagua, many of whom cannot read or write. These contracts offer the investor extremely favourable terms and no clear guarantees for indigenous rights to use and access customary resources, instead containing hidden clauses which effectively gives them ownership of the native people's carbon and forest, intending to replace the natural rainforests with palm oil plantations.[153] Carbon piracy such as this is a result of a lack of national guidelines and no clear measures to regulate sub-national projects where the indigenous population are not seen as stakeholders or having rights to the land; rather, they are disempowered and community ownership is seen as a simple obstacle for investors to gain access to the forest.[154]

Lessons for REDD+ implementations in the future can be learnt from this case study. The view has been put forth that until ecological integrity can be guaranteed, as well as the fundamental rights of indigenous peoples to their lands through secure land tenures, community-based forest management schemes must be implemented to protect these communities from signing inequitable contracts with carbon developers which threaten to further

151 At 20.

152 At 20.

153 Friends of the Amazon "Stop Carbon Cowboy from Logging the Amazon Forest!" <http://www.friendsoftheamazon.org/carbon-cowboy.html>.

154 Llanos and Feather, above n 144, at 5.

marginalise them.[155] These controversial voluntary carbon offsetting ventures threaten to weaken the REDD+ system through the selling of offset credits leading to the inevitable result of exacerbating climate change, rather than mitigating it, by permitting fossil fuel consumption elsewhere.

5. LESSONS LEARNED FROM THE CDM AND THE REDD+ PROJECTS

This article puts forth the view that the REDD+, as a successor to the CDM, should be implemented into international legislation of the UNFCCC alongside the Paris Protocol, subject to various amendments which shall be discussed. The existing CDM framework cannot form the basis for REDD+ activities in the future, as it is a project-based approach to climate change mitigation focused solely on reducing emissions from afforestation and reforestation, excluding forest conservation and deforestation (despite deforestation representing 18 to 25 per cent of climate change).[156] In comparison, the potential multi-scalar nature of REDD+ activities addresses deforestation and degradation issues, as well as focusing on forest carbon stocks and the sustainable management of forests.[157] However, with higher host country involvement, there is a critical need for forest governance reform. The CDM, due to low involvement of host countries, never addressed this problem, leading to the failure to ensure participation, transparency, and responsiveness of government practices that impact upon forest land allocation, which resulted in various human rights issues. There are lessons to be learnt from the two frameworks which must be addressed in order to implement a successful REDD+ system in 2020.

5.1 Safeguards

Safeguards regarding policy approaches and positive incentives in the system were issued in the 2010 UNFCCC COP 16 decision 1/CP.16[158] in Cancún,

155 At 58.

156 L Bhullar "REDD+ and the Clean Development Mechanism: A comparative Approach" (2013) International Journal of Rural Law and Policy <http://epress.lib.uts.edu.au/journals/index.php/ijrlp/article/view/3229/3521> at 5. Various practical, ethical and political reasons are behind this exclusion; see W Lawrence "A New Initiative to Use Carbon Trading for Tropical Forest Conservation" (2007) 39(1) BIOTROPICA 20.

157 Bhullar, above n 156, at 5.

158 More detail found in UNFCCC *Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010*, Addendum, Part Two, III.C "Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks

in order to ensure that in a national REDD+ strategy, a dominant economic and reductionist perspective on tropical forests and their management is prevented.[159] Along with this, a safeguard information system (SIS) was developed to report on the safeguards in relation to the REDD+ mechanism, as well as arguably encouraging parties to avoid inefficient use of resources by considering overlaps between reporting processes.[160] These safeguards are supposed to ensure that REDD+ activities "complement or are consistent with relevant international conventions and agreements",[161] defined as defensive measures in the form of standards for good practice.[162] The right safeguards, appropriately implemented, would not only help minimise or manage risks, they would also safeguard options and enhance benefits.[163] It is recognised that the REDD+ scheme has the potential to expose itself to the risk of causing social and environmental harm where the primary focus is on reducing emissions; however, it has also been acknowledged that not only could the emission reduction objectives under the UNFCCC be achieved, but in doing this can also support biodiversity, promote sustainable development and reduce poverty.[164]

The REDD+ safeguards have the potential to be a bridge linking fragmented areas of forest governance, including human and indigenous peoples' rights, promoting good governance by guarding against undesirable results, consequently improving transparency, sustainability and instilling confidence in the programme. However, they have since been criticised as being too generic and therefore non-enforceable, where the broad notion of the safeguards surrounding the REDD+ leaves a considerable gap for the interpretation of what is meant by "damage" or "harm", which left a summary of requirements for REDD rather than any specifics. Without guidance on overlaps between REDD+ and other instruments dealing with forest-related law, cooperation between states will be limited.[165]

The IPCC has recommended that countries participating in the REDD+ scheme use an internationally recognised definition of "forest", such as one

in developing countries" <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf> at 12.

159 Aicher, above n 99, at 3544.

160 Feja Lesniewska "UNFCCC REDD+ COP Decisions: The Cumulative Effect on Forest Related Law Processes" (2013) 15 International Community Law Review 103 at 119.

161 UNFCCC, above n 158, Appendix I, para 2(a), at 26. This includes encompassing elements included in international human rights instruments.

162 Including measures or procedures to protect communities and the environment against social and/or environmental damages or harm; Bhullar, above n 156, at 4.

163 N Moss and R Nussbaum *A review of three REDD safeguard initiatives* (Forest Carbon Partnership Facility & UN-REDD Programme, June 2011) <http://www.cbd.int/forest/doc/analysis-redd-plus-safeguard-initiatives-2011-en.pdf> at 3.

164 At 3.

165 Lesniewska, above n 160, at 121.

produced by the FAO.[166] The issue of the UNFCCC's failure to do this is likely to have a similar effect on the future implementation of REDD+ projects as the lack of definition of sustainable development has had on contributing to the failure of the CDM in satisfying its Kyoto objectives. The expansion of industrial-scale plantations has led to detrimental social and environmental effects due to the commercial interests taking precedence. However, a fundamental constraint to reaching global agreement about forest conservation and management has been the reluctance of countries to allow their sovereign rights to be impinged upon by an agreement.[167] We can learn from the failure of the CDM in terms of sustainable development, that the legitimacy of REDD+ activities in the future regime depends upon the ability of national governments to develop successful validation procedures based on universally accepted definitions in relation to forests, sustainable management of these forests, and offering sufficient clarification and safeguards regarding such matters.[168] Furthermore, indigenous peoples and local communities demand the UNFCCC to take action to produce safeguards which fully acknowledge and protect their rights in a specific and binding manner, taking into account the differing international human rights treaties and forming multi-dimensional and context-specific safeguards which recognise the cultural identity and diversity of the people affected by REDD activities.[169]

One proposed human rights-based measure is the implementation of the SIS by non-governmental organisations and indigenous communities to "protect the protecting system",[170] which was brought about to ensure the provision of information by countries detailing how they respect the internationally binding safeguard. This opens the potential for countries to comply with the safeguards they have agreed to in order to avoid the moral embarrassment of being caught out.[171] Incorporating this into the future REDD+ scheme could have a considerable effect on the social and ecological safeguards, a first step towards a fairer dialogue between different knowledge systems by providing a space of friction and negotiation where any violations can be challenged at an international level.[172] Safeguard (e) ("Actions that are consistent with the conservation of natural forests and biological diversity, ensuring that actions are not used for the conversion of natural forests, but are instead used to incentivize

166 FAO Corporate Document Repository "Appendix 1: Definitions as in FRA Working Paper 1 and comments" <http://www.fao.org/docrep/006/ad665e/ad665e06.htm>.

167 P Kanowski, C McDermott and B Cashore "Implementing REDD+: lessons from analysis of forest governance" (2011) 14(2) Environmental Science & Policy 111 at 112.

168 Bhullar, above n 156, at 8.

169 Llanos and Feather, above n 144, at 56.

170 Aicher, above n 99, at 3551.

171 At 3551.

172 At 3555.

the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits") aims to protect these forests, and in doing so the SIS has the potential to shame countries into producing an adequate national definition of forests by combining it with safeguards (c) and (d), which demand respect for the knowledge and rights of indigenous peoples and members of local communities. It does so by requiring them to take into account international obligations, and ensuring the full and effective participation of relevant stakeholders in these communities.[173] In producing a national-level definition (as sovereignty issues prevents a universal consensus for the time being), it will be up to the UNFCCC to ensure that the proposed REDD+ projects uphold the safeguards, where plantations are inadequate in this respect due to violating safeguards (c), (d) and (e)[174] for the reasons discussed. Therefore, by combining the use of validation systems and avoiding the mistakes of the CDM in this respect,[175] a common standard for the criteria of human rights issues in sustainable development for forest management would prevent the implementation of REDD+ projects which did not comply with the UNFCCC safeguards, with the SIS providing a redress mechanism for non-compliance.

Furthermore, addressing the issue of land tenure and forced displacement, a key condition enabling success of an equitable REDD+ scheme in 2020 is the legally enforceable and secure land tenure rights for local communities and individual forest owners, satisfying a right to property under art 17 of the Universal Declaration of Human Rights, and protocol 1, art 1 under the European Convention on Human Rights.[176] A reform such as this, in the light of the 2007 UN Declaration on the Rights of Indigenous Peoples, will act as a safeguard to the rights of these communities, and also as an incentive for their full and voluntary participation in the restoration of the forest, which the UNFCCC has repeatedly called for.[177] Registration of tenure will ensure that

173 Safeguards found at UNFCCC "Guidance on systems for providing information on how safeguards are addressed and respected and modalities relating to forest reference emission levels and forest reference levels as referred to in decision 1/CP.16" <http://unfcc.int/files/meetings/durban_nov_2011/decisions/application/pdf/cop17_safeguards.pdf> at 1. See also <http://reddplussafeguards.com/?p=274>.

174 (c) Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations …; (d) Full and effective participation of relevant stakeholders, including, in particular, indigenous peoples and local communities; (e) Actions that are consistent with the conservation of natural forests and biological diversity …

175 Where most countries developed simple checklists often consisting of social, environmental and economic benefits; Bhullar, above n 156, at 8, n 56.

176 Bolin, Lawrence and Leggett, above n 137, at 5.

177 Sasha Alexander and others "Opportunities and Challenges for Ecological Restoration within REDD+" (2011) 19(6) Restoration Ecology 683 at 687.

actual occupation and use of the land is acknowledged, leading to customary rights being formalised in statutory law.[178] State ownership of land, despite the indigenous peoples' ancestral rights, is high in most developing countries; however, law reforms would allow the redistribution of land between different owners living on that land and using its resources. Nevertheless, it is argued that where legal reform of land tenure is attempted, there will be many issues undermining its sustainability and effectiveness, such as high costs, limited enforcement and poor regulation. This makes it likely that a full legal reform securing indigenous rights to their lands will not be available before the global agreement of 2020.[179] Even if rights were secured in clear tenure, land grabbing can still take place due to inequality of power and social structures, as was shown by the land redistribution programme in the Philippines. Here, land grabbing is a common thing having been going on for over a century, where the local farmers' land would be given to the public authorities or wealthy families, depriving the farmers of their key livelihood source. Attempts to address this came about through the establishment of the Department of Agrarian Reform (DAR) and the Agrarian Reform Special Account Fund in 1971 and the promulgation of the Comprehensive Agrarian Reform Law (CARL) in 1988 whose activities were regarded as a success in returning the land. However, in reality, large tracts of land have not yet been allocated two decades after the implementation of the programme, and there are cases of land being titled and privatised rather than redistributed.[180] Local tenure insecurities are mostly brought about by dominating political and economic factors driven by the low cost of forest land occurring on such a large scale that community control is unable to prevent it.

There are several reforms that have been proposed by the Interethnic Association for the Development of the Peruvian Rainforest (AIDESEP) which has broadly applicable principles within context-specific criteria. The narrow focus on carbon and a results-based system should be excluded from the REDD+ scope in regard to high-density plantations and biofuel (mentioned above), coupled by not allowing offset mechanisms to overpower the scheme. When these are combined with reforms to recognise land and territorial rights and align national legislation with international obligations on indigenous peoples' fundamental rights prior to REDD+ implementation, there is a focus on a more rights-based approach to the REDD+.[181] Furthermore, for REDD+ programmes to succeed, they must be implemented in a phased approach, as

178 Bolin, Lawrence and Leggett, above n 137, at 2.

179 At 8.

180 La Via Campesina, The International Peasant's Voice "Report on the Solidarity Mission to Stop Land Grabbing" (11 March 2014) <http://viacampesina.org/en/index.php/main-issues-mainmenu-27/agrarian-reform-mainmenu-36/1568-land-grabbing-in-philippine>.

181 Llanos and Feather, above n 144, at 55.

stated in the Cancún Agreements. The consequence of not doing this can be seen in Peru, where, like many other countries, readiness activities are not taking place before implementation, resulting in unclear expectations to ensure integration with the readiness preparation programme; to develop a national forest strategy; as well as securing indigenous peoples' rights through protection of their land rights and adequate consultation, in accordance with UNDRIP and free, prior and informed consent.[182] The consequences would be a "learning by doing approach" where policies and practices will be brought about and adapted as issues arise, undermining the whole of the national REDD+ regime through the exploding threat of carbon pirates, and rather than mitigating human rights issues before they come about, it is inevitable that for the adequate protections to be put in place, violations must occur.[183]

As it stands, REDD+ implementation focuses on the technical issues of climate change, such as MRV and reference levels, whilst ignoring the need for legal reforms to recognise and secure outstanding rights in territorial applications as right-holders over the forest and their resources, rather than simply participants in the project.[184] Readiness for REDD+ must ensure these rights so that, upon implementation, specific safeguards are in place to monitor these needs before they rise at such a colossal scale as they are currently. As the situation is now in Peru, the indigenous rights to free, prior and informed consent is being negated by the lack of reforms where little or no consultation with communities in Peru due to not wanting to raise undue expectations about carbon markets is an unacceptable violation of these rights to self-determination. The underlying assumption that the project developers "know best" and that the complex issues would not be understood is leading to "consultations" that are simply to reach an agreement in developing offset credits, where lack of knowledge due to not being informed of such things is leading to the signing of these projects without being aware of the commercial, climatic, ethical or social implications of these deals.[185] A proposed solution is the establishing of an official open-access registry of REDD+ projects which should be provided in the readiness stage of REDD+ to allow indigenous communities to have advanced knowledge of all proposed initiatives, and give their consent to the changes that will occur to their livelihood and any benefits or consequences this will bring.[186]

Similarly, additional regulatory controls are also required in order to challenge the business as usual practices occurring on forest land, where effective enforcement measures can challenge competing agendas and overlapping legal frameworks which pose a significant risk to the legal reform

182 At 49.
183 At 48.
184 At 48.
185 At 51.
186 At 58.

process.[187] This is also likely to hinder effective future REDD+ implementation, as well as leading to inequitable distribution of future benefits. This issue of enforcement must be tackled through improved governance otherwise rendering any legal reform a slow and costly process. Alternatively, policy-makers could work on establishing requirements that upon the validating process of a REDD+ project, it must be shown that attempts were made to map national laws and policies across sectors to help identify obstructive incentives and conflicting priorities driving deforestation and affecting land tenure of the indigenous people living there, whilst collaborating with national forestry initiatives to track and improve tenure security for forest owners within that nation's legal frameworks.[188] With the recognition of community-developed maps of territories, land use and traditional occupation, these interactive maps could lead some way to improving tenure rights before a legal reform of the framework, with proposed REDD+ projects reviewing the community-based research to avoid conflicting interests before validation and implementation.[189]

6. CONCLUSION

REDD+ alone cannot adequately mitigate climate change — the implementation must coincide with reforms of land tenure, forest governance and reforms of the UNFCCC SIS system to produce co-existing emission reductions in both developed and developing countries. So far, proposed designs of REDD+ have utilised private-sector investment and economic influence as a fundamental means for funding the expensive, but environmentally laudable, mechanism. However, in placing such a function with market actors, resulting definitions and interpretations have been made in ways that maximise economic benefits and often inflate claims of environmental benefits. Crucially, these actions have also had substantial impacts on the human rights of local and indigenous peoples through their displacement. Until the international community places better protections for these rights in legally binding international instruments, it is imperative that the design of mechanisms which have such a capacity to impact on human rights, such as REDD+, be designed in a way that protects and values the maintenance of such rights. With the impending 2015 negotiations in a Paris Protocol of 2020, REDD+ social and ecological safeguards must be recognised as a first step towards fair co-existence with human rights.

187 Bolin, Lawrence and Leggett, above n 137, at 5.
188 At 6.
189 Day and Naughton Treves, above n 140, at 3.