6 The legal protection of forests in international environmental law, shortcomings and comparative analysis

*Alois Aldridge Mugadza**

1 Introduction

The governance of environmental affairs at the international level provides directions for domestic laws. It also attracts the commitments of parties to international environmental agreements to contribute to achieving a common global target or provide solutions to domestic environmental challenges. As a structured multilateral system, thousands of treaties and related agreements have been concluded, resulting in multiple frameworks for state actors to subscribe to. Apart from treaty congestion, another challenge that has been identified, among others, by scholars is the increasing difficulty in implementing international environmental law.

African States, as parties to several multilateral environmental agreements, are responsible for adopting legal measures that will implement their international commitments in their domestic jurisdictions. But between the process of adopting treaties and implementing the recommended measures, there is likely to be the challenge of finding an enforcement strategy that will be receptive to the culture and peculiar social order that international environmental law may not be specific enough to envisage. This challenge is not limited to African countries; multilateral institutions have developed programmes they believe will align implementation strategies with the specific environmental challenge. An example of such policies is the United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD), a flagship collaborative initiative on forests and climate to reduce forest emissions and increase forest carbon stocks.

* LLB, LLM, PhD (*cum laude*), Postdoctoral Research Fellow, Groningen Centre of Energy Law and Sustainability, Faculty of Law, University of Groningen, the Netherlands. Email: a.a.mugadza@rug.nl. ORCID: 0000-0002-1854-9742.

The world's forest ecosystems sequestrate and store carbon more than any other terrestrial ecosystem. Tree roots fix carbon into the forest soil, and deforestation releases this carbon into the atmosphere. Forest ecosystems contain most of the stored carbon; thus, forest protection helps maintain the carbon level in the atmosphere at a stable level. The increased carbon in the atmosphere will increase the chances of climate change. Therefore, reducing carbon emissions from wood fuel use and deforestation is necessary. However, forests are not protected by a binding and specific international instrument. Notably, international climate change instruments have stepped in to try and protect forests to mitigate climate change and carbon levels. Nevertheless, whether climate change laws are adequate to protect forests remains to be seen.

2 Carbon sequestration

Carbon sequestration is the process of capturing and storing carbon from the atmosphere.[1] Carbon compounds emit heat energy from the sun; consequently, these compounds expand after being heated, trapping heat energy on the earth's surface. This causes the temperatures on the earth's surface to increase.[2] According to the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC), the global mean air temperature for 2016-2035, relative to 1986-2005, will likely be in the range of 0.3-0.7 degrees Celsius more.[3]

Natural forests are major carbon sinks.[4] Trees sequestrate carbon emissions and act as intermediate storage, but the long-term carbon storage is in the forest soil.[5] Forests play three vital roles in reducing carbon emissions: they store carbon in biological ecosystems, store carbon in durable wood products, and substitute fossil fuels.[6] Natural forests store an estimated 2.4Pg of carbon every year and sequester about 30 per cent

1 N Hanley, FJ Shogren & B White *Introduction to environmental economics* (2001) at 219, 1-350, 279.

2 A Trabucco, D Bosio & O van Straaten 'Carbon sequestration, land degradation and water' in D Bossio & K Geheb (eds) *Conserving land, protecting water* (2008) at 83.

3 L Gratani, L Varone & A Bonito 'Carbon sequestration of four urban parks in Rome' (2016) 19 *Urban Forestry & Urban Greening* 184 at 184.

4 NK Ninan & M Inoue 'Valuing forest ecosystem services: What we know and what we don't' (2003) 93 *Ecological Economics* 137 at 141.

5 P Gunderson et al 'Environmental services provided from riparian forests in the Nordic Countries' (2010) 39 *AMBIO* 555 at 555.

6 JS Chang 'Solving the problem of carbon dioxide emission' (2013) 35 *Forest Policy and Economics* 92 at 94.

of global carbon emissions, therefore reducing carbon concentrations in the atmosphere by about a third.[7]

Globally, natural forests store an estimated 54 per cent of the total carbon pool in terrestrial ecosystems.[8] Furthermore, the Kyoto Protocol[9] states that afforestation of degraded forests can reduce carbon emissions and protect carbon sinks.[10] Under Article 3.4 of the Kyoto Protocol, states are required to maintain healthy forest conditions to improve the function of forests as carbon sinks.[11]

3 Deforestation

Deforestation is cited for the release of carbon stored in forests into the atmosphere as carbon dioxide.[12] When trees are harvested for various products and land uses, the carbon stored in wood is released.[13] The rate at which natural forests are being degraded and cut down internationally is a cause for concern.[14] When natural forests are destroyed, species and their habitats are also destroyed or threatened with extinction. Also, water decreases in quality and quantity mainly due to soil erosion and soil infertility as nutrients are washed away, food insecurity increases, and carbon stored in trees and forest soil is lost.[15] Thus, deforestation increases the chances of climate change, biological diversity loss, droughts, and desertification. Forest fires, agricultural activities, illegal logging, pollution,

7 M Neumann et al 'Comparison of carbon estimation methods for European forests' (2016) 361 *Forest Ecology and Management* 397 at 397.

8 Z Yuan et al 'Pattern and dynamics of biomass stock in old growth forests: The role of habitat and tree size' (2016) 75 *Acta Oecologica* 15 at 15.

9 Kyoto Protocol to the United Nations Framework Convention on Climate Change, 10 December 1997, 2303 UNTS 162 (1997).

10 M Hoel & MT Sletten 'Climate and forests: The tradeoff between forests as a source for producing bioenergy and as a carbon sink' (2016) 43 *Resource and Energy Economics* 112 at 112. Also see R Wennersten, Q Sun & L Hailong 'The future potential for carbon capture and storage in climate change mitigation: An overview from perspectives of technology, economy and risk' (2015) 103 *Journal of Cleaner Production* 724 at 726.

11 A Susaeta et al 'Economics of carbon sequestration under fluctuating economic environment, forest management and technological changes: An application to forest stands in the Southern United States' (2014) 20 *Journal of Forest Economics* 47 at 48.

12 Trabucco, Bosio & Van Straaten (n 2) at 84.

13 JS Chang 'Solving the problem of carbon dioxide emission' (2013) 35 *Forest Policy and Economics* at 94.

14 KS Ehui, WT Hertel & VP Preckel 'Forest resource depletion, soil dynamics and agricultural productivity in the tropics' (1990) 18 *Journal of Environmental Economics and Management* 136 at 136.

15 Alix-Garcia 'A spatial analysis of common property deforestation' (2007) 53 *Journal of Environmental Economics and Management* 141 at 141.

urban development, and invasive species are examples of human-caused forest degradation and deforestation.[16]

It is estimated that about 19 to 36 per cent of forests have been deforested and degraded by anthropogenic influences.[17] Approximately 1.4 per cent of the forest land cover has been deforested and degraded due to agricultural activities and forest fires. The loss of forest ecosystems in Europe has resulted in a decrease in fauna and flora species. This, however, has been mainly due to forest land-use changes to agricultural land, industrial uses, and urban developments.[18]

Furthermore, forest land-use change and degradation contribute to an estimated 12 per cent of the world's greenhouse gases (GHG).[19] The world degrades about 13 million hectares of forest annually; this is usually countered by reforestation, making the net annual forest loss of approximately 5.6 million hectares, approximately the size of Costa Rica.[20] In addition, given the rate of deforestation internationally, 9 per cent of tree species are currently threatened with extinction.

For these reasons, combating deforestation and forest degradation is necessary to mitigate climate change. Researchers have suggested that reducing forest degradation and deforestation may be a less expensive alternative to mitigating climate change.[21] This has resulted in significant efforts in carbon credit programmes, which are funded by multilateral organisations such as the UN and the World Bank. In addition, the role of forests in sequestrating carbon contributed to the negotiation and

16 S Polasky, C Costello & C McAusland 'On trade, land-use, and biodiversity' (2004) 48 *Journal of Environmental Economics and Management* 911 at 911. Also see MD Kashian et al 'Carbon storage on landscapes with standing-replacing fires' 2006 56 *BioScience* 598.

17 HMJ Busa 'Deforestation beyond borders: Addressing the disparity between production and consumption of global resources' (2013) 6 *Conservation Letters* 192 at 192.

18 T Schatzki 'Options, uncertainty and sunk costs: an empirical analysis of land use change' (2003) 46 *Journal of Environmental and Management* 86 at 87. Also see NE Broadbent et al 'Forest fragmentation and edge effects from deforestation and selective logging in the Brazilian Amazon' (2008) 141 *Biological Conservation* 1745 at 1745.

19 World Bank Website http://www.worldbank.org/en/topic/forests/overview (accessed 11 November 2016).

20 As above.

21 As above.

agreement that birthed the United Nations Framework Convention on Climate Change (UNFCCC),[22] programmes, and protocols.[23]

4 Climate change laws relating to forest protection

The international environmental community has quickly recognised the importance of reducing deforestation and forest degradation for carbon sequestration, storage, and carbon reservoirs and sinks. Initiatives have resulted in climate change mitigation projects, the Kyoto Protocol, REDD[24], REDD+, and now the Paris Agreement. These instruments have sought to raise awareness and protect forests to mitigate climate change. The international community negotiated with the UNFCCC to keep greenhouse gas (GHG) concentrations in the atmosphere stable. The instruments provide a negotiation platform, an institutional framework, and the technical infrastructure required for inter-party climate change mitigation solutions.

4.1 The United Nations Framework Convention on Climate Change (UNFCCC)

The UNFCCC[25] was adopted in 1992, and its objective is to reduce and prevent anthropogenic interference with the earth's climate and atmospheric system. It requires states to stabilise GHGs at levels that do not threaten ecosystems and species. This level should also not threaten food production or sustainable economic development.[26] Notably, the international community now recognises forests as carbon sinks. Therefore, the mention of sinks in the UNFCCC will add value to the conservation and protection of natural forests. Thus, the conservation and protection of sinks, such as natural forests, will maintain the stability of the climate system.

22 UN General Assembly, United Nations Framework Convention on Climate Change: Resolution/adopted by the General Assembly, 20 January 1994, UN Doc A/RES/48/189 (1994) (UNFCCC).

23 V Bellassen & S Luyssaert 'Management forests in uncertain times' (2014) 506 *NATURE* 153 at 153.

24 The United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (2005) (UNREDD).

25 UNFCCC.

26 SA Mori et al 'Reframing ecosystem management in the era of climate change: Issues and knowledge from forests' (2013) 165 *Biological Conservation* 115 at 115.

Article 2 requires parties to 'stabilise GHGs concentrations at levels that prevent interference with the climate system'.[27] The parties are also required to promulgate policies and measures to mitigate climate change, and these actions should be comprehensive and cover all GHG reservoirs, sources, and sinks.[28] Furthermore, the parties are required to protect the earth's climate system to reduce GHGs.[29] The instrument states that this should benefit present and future generations of species by reducing the effects of GHG emissions on the earth's systems.[30] Developed countries have the first duty to mitigate climate change and reduce its adverse effects. The instrument also requires parties to take serious precautionary measures to prevent and minimise GHG emissions.[31] In addition, these measures are also to account for socio-economic and environmental factors, including relevant sources, reservoirs, and sinks of GHGs and adaptation.

The parties are encouraged to promote sustainable development policies and projects that protect the climate system and reduce human-induced land changes.[32] The policies and measures that are being used to protect the climate system against human-induced changes must be the most appropriate according to the specific conditions of any party. They must also be integrated into their national development plans, recognising socio-economic development. The economic development of any party is important for reducing climate change because land-use changes cause carbon emissions to rise annually.

The parties are also encouraged to cooperate to promote supportive, integrated, and open international economic sectors that can lead to sustainable economic growth and development. Developing countries are also urged to cooperate and integrate plans, enabling them to address the effects of climate change. These efforts can be taken by several cooperative parties interested in working together or regionally. These measures should not discriminate against or restrict international trade in these regions. The instrument also requires parties to the UNFCCC to coordinate

27 Article 2 of the UNFCCC. See also R Maguire 'Foundations of international climate law: Objective, principles and methods' in JE Hollo, K Klovesi & M Mehling (eds) *Ius Gentium: Comparative perspectives on law and justice* Vol 21 (2013) 83-110 83-9.

28 Article 3(3) of the UNFCCC.

29 Article 3(1) of the UNFCCC.

30 Article 3(3) of the UNFCCC.

31 Article 3(3) of the UNFCCC.

32 Article 3(4) of the UNFCCC.

and integrate policies that reduce GHG emissions into their national development programmes and reduce the loss of all carbon sinks.[33]

Furthermore, the parties must create and establish inventories of GHG emissions sources and removals done by sinks.[34] They are also encouraged to form regional and transboundary programmes for climate change mitigation, addressing emissions, and enhancing the protection of sinks.[35] The parties are required to formulate, publish, and regularly update their plans, programmes, and measures to address anthropogenic emissions by enhancing carbon sinks and reservoirs. The parties are required to promote and cooperate in developing and transferring technologies that reduce or prevent GHG emissions, mainly in the energy, transport, agriculture, and forestry sectors.

They are also required to sustainably manage and promote the conservation of forest ecosystems. The parties must undertake an environmental impact assessment (EIA) on all relevant social, economic, and environmental policies and actions.[36] They are also encouraged to take appropriate measures and methods, formulate, and determine national projects that seek to mitigate climate change, minimising effects on the environment, economy, and public health. They must also be open to the exchange of relevant scientific, technological, and legal information related to climate change mitigation.

The parties are also encouraged to promote education, training, public awareness, and participation in the reduction of emissions. The parties are also encouraged to promote national and regional education and awareness, supported by national laws and regulations. They must do this within their respective capacities of implementing public awareness programs, public access to information, public participation, training of scientific personnel, cooperation at the international level with appropriate bodies, the development of educational training, and strengthening the national institutions that are involved in the mitigation of climate change.[37]

The UNFCCC requires states to reduce anthropogenic GHG emissions by developing clean energy policies that are sustainable for the environment.[38] This will mitigate climate change and the effects of

33 Article 3(3) of the UNFCCC.

34 Article 4(1)(a) of the UNFCCC.

35 Article 4(1)(b) of the UNFCCC.

36 Article 4(1)(f) of the UNFCCC.

37 Article 6 of the UNFCCC.

38 Article 4(2)(a) of the UNFCCC.

drought and desertification. The UNFCCC also stipulates that there must be cooperation among parties in the development and transfer of technology to reduce GHG emissions.[39] Furthermore, the instrument requires parties in Africa to integrate plans and cooperate with each other to protect, rehabilitate, and conserve forest lands, reducing desertification and droughts.[40] In addition, the Secretariat of the UNFCCC has been given the functions to compile reports, facilitate assistance primarily for developing countries, prepare reports, enter into administrative and contractual arrangements, and perform other duties specified by the Convention and any other protocols.

The Subsidiary Body for Scientific and Technological Advice (SBSTA) is in charge of advising the parties on how to mitigate climate change.[41] It also provides information on scientific and technological matters that can be applied to mitigating climate change. This body offers assessments and innovative, environmentally friendly technology. It also prepares scientific assessments of the measures taken by the parties, which the Convention informs. They also advise on ways to mitigate climate change and are involved in technology transfer. The SBSTA also encourages and participates in international cooperation in research and development that mitigates climate change. They are also involved in research and respond to scientific questions from parties and other subsidiary bodies.

Furthermore, in Cancun, during the COP-16 in December 2010, the Ad Hoc Working Group under the UNFCCC agreed on a Long-Term Co-operative Action.[42] This decision was to slow, reverse, prevent, and halt deforestation.[43] These programmes were meant to be consistent with sustainable forest management and ecosystem services that enhance socio-economic and ecological benefits.[44] The parties at this meeting were encouraged to reduce GHG emissions and protect their forests.[45] The

39 Article 4(2)(c) of the UNFCCC.

40 Article 4(1)(e) of the UNFCCC.

41 Article 9 of the UNFCCC.

42 Decision 1/CP16 'The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention' in Report of the Conference of the Parties on its 16th session held in Cancun 29 November-10 December 2010, FCCC/CP/2010/7/Add.1 (15 March 2011) 12.

43 A Savaresi 'The role REDD in the harmonisation of overlapping international obligations' in JE Hollo, K Kulovesi & M Mehling *Ius gentium: Comparative perspectives on law and Justice* Vol 21 (2013) 391 at 397.

44 Rep of the Conference of the Parties to the UNFCCC Decision 1/CP.16 Rep. of the Conference of the Parties 16th Sess. Nov 29- 10 December 2010, UN Doc FCCC/CP/2010/7/Add. 1 (15 March 2011).

45 Decision 1/CP16 (n 42) para 70 Part C.

Cancun Conference identified safeguards and provisional ways to support the development of national strategies and forest protection programmes that reduce emissions.[46]

In 2016, at Marrakesh (COP-22), the developed countries reconfirmed their responsibilities by contributing $100 million to the Green Forest Fund for projects that seek to reduce emissions and mitigate climate change. Furthermore, the Fund focused more on making activities that increase emissions recognise the concepts of sustainable development.

The COP-22 also emphasised tracking the progress of parties that had started emission reduction projects. Decision 3/COP-20 (Lima-2014) also decided that many ecosystems (including forests) must be conserved to reduce deforestation and forest degradation emissions. The meeting also required the parties to include a commitment to reduce emissions and conserve sinks, reservoirs, and sinks in their National Development Plans (NDPs). Decision 8/CP 20 recognised the Global Environment Facility (GEF)[47] and continued to guide and invest in the Parties' emission reduction projects. At COP-19 (Warsaw, 2015), the breakthrough decision was that of REDD's rule book.[48] There was also agreement on measures to bolster forest preservation and a payment system based on results for forest protection.

The UNFCCC has several programmes aimed at reducing forest degradation and deforestation. The Convention persuades its parties to conserve forests and reduce GHGs. The Convention's Parties have also signed the Kyoto Protocol and the REDD+ programmes to reduce emissions from deforestation and forest degradation. The UNFCCC attempts to reduce deforestation by using a mono-function analysis of forests' functions as carbon sinks, reservoirs, and storage. The sections that follow show how the UNFCCC developed these programmes under the Kyoto Protocol and REDD+.

46 Decision 1/CP16 (n 42). The Cancun Agreements Appendix I.

47 See A Kiss & D Shelton *Manual of European environmental law* 2nd ed (1997) 594.

48 UNFCCC 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 (REDD-plus) http://unfccc.int/land_use_and_climate_change/redd/items/7377.php (accessed 28 September 2017).

4.2 Reduce emissions from deforestation and forest degradation (REDD)

In 2005, at the UNFCCC Conference, parties were successful in Montreal during COP-11 in developing REDD, a programme designed to reduce deforestation and forest degradation emissions. It provides financial incentives for reducing GHGs from deforestation.[49] REDD is a strategy that enables countries to reduce GHG emissions while receiving a reward or compensation.[50]

The mechanism in 2005 provided a novel way of reducing deforestation while also providing co-benefits, for example, intra-generational equity, increased finance in biodiversity conservation, the prevention of desertification, and financial incentives for indigenous communities that live near or use forest ecosystems, services, and products.[51] This was a novel way because this was the first time forests were seen as valuable assets while standing rather than merely as wood or furniture, and forest land was standing in the way of agriculture or other developmental projects.[52] This strategy came under the climate change regime (UNFCCC); its auspice is financially rewarding for parties that reduce deforestation and forest degradation emissions.

The UNFCCC's SBSTA held REDD workshops in 2006. They also added improving Sustainable Forest Management (SFM) to the list of REDD activities and published a paper on how to improve forest carbon stocks in August 2006. By this time, the UNFCCC COPs recognised that indigenous communities must benefit from goods and services from forest ecosystems and products known as REDD+. The Parties to the UNFCCC (Ad Hoc Working Group on Long-term Cooperative Action (AWG-LCA-13)) encouraged developing countries to reduce emissions. At the COP-13 of the UNFCCC in Bali in 2007,[53] the parties adopted

49 Eleventh Session of the Conference of Parties to the UNFCCC Montreal 28 November to 9 December, FCCC/CP/2005/MISC.1, 11 November 2005 at 7.

50 AP Minang & M van Noordwijk 'Design challenges for achieving reduced emissions from deforestation and forest degradation through conservation: Leveraging multiple paradigms at the tropical forest margins' (2013) 31 *Land Use Policy* 61 at 63.

51 MK Lang 'Making standing forests fungible: Overcoming the definitional problems in developing a REDD+ mechanism' (2013) 30 *Wisconsin International Law Journal* 855 at 857.

52 As above.

53 UNFCCC Bali Climate Change Conference – December 2007 http://unfccc.int/meetings/bali_dec_2007/meeting/6319.php (accessed 16 October 2017).

Decision 1/CP.13[54] of the Bali Action Plan and Decision 2/CP13[55]. The Bali Action Plan, Article 1(b)(ii),[56] called for increasing REDD approaches and positive incentives, which resulted in REDD+. The new concepts that prompted REDD+ were enhancing forests' carbon stocks, reducing deforestation emissions, reducing forest degradation emissions, conserving forest carbon stocks, sustainable management of forests, improving forest carbon stocks, and increasing forest cover and conservation.

This paved the way for the COPs' decision in 2007 and the Bali Action Plan, which opened the door for more discussions on REDD activities. At COP-16, developing countries were encouraged to reduce GHG emissions by introducing actions to reduce forest degradation and deforestation. Another important decision was taken to reduce emissions at the COP-16 (2010) conference in Cancun[57]. The parties agreed to create, develop, and implement action plans and transparent national forest laws with monitoring systems and reporting activities that reduce deforestation and forest degradation.

The Bali Action in 2007 under Decision 1/CP.13:1 (B)[58] and Decision 2/CP.13[59] required nations to enhance their action plans to mitigate climate change and stimulate approaches that reduce emissions from deforestation in developing countries. In Copenhagen (2009), Decision 4/CP 15[60] methodologies and guidance were formed to reduce deforestation and forest degradation. In Cancun (2010), Decision 1/CP 16 Section

54 Report of the Conference of the Parties (n 54).

55 UNFCCC Conference of the Parties Report of the Conference of the Parties on its thirteenth session held in Bali from 3 to 15 December 2007, Decision 2/CP.13: Reducing emissions from deforestation in developing countries: approaches to stimulate action http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf#page=8 (accessed 16 October 2017).

56 Bali Action Plan https://unfccc.int/files/meetings/cop_13/application/pdf/cp_bali_action.pdf. (accessed 16 October 2017). Bali Action Plan art 1(b)(ii) states that: 'Nationally appropriate mitigation actions by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner'.

57 UNFCCC http://unfccc.int/meetings/cancun_nov_2010/session/6254/php/view/documents.php#c (accessed 17 October 2017).

58 UNFCCC Conference of the Parties, Report of the Conference of the Parties on its thirteenth session held in Bali from 3 to 15 December 2007, Part Two: Action taken by the Conference of the Parties at its thirteenth session Decisions adopted by the Conference of the Parties http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf (accessed 17 October 2017).

59 As above.

60 As above.

C[61] introduced policy approaches and positive incentives for reducing emissions and forest degradation.

During the UNFCCC's COP-15[62] meeting in Copenhagen in 2009, policymakers added new activities known as the Copenhagen Accord.[63] The COP-15 agreed on the need to provide positive incentives to reduce emissions from deforestation and forest degradation. The establishment of the REDD+ mechanism allowed the mobilisation of more financial resources from industrialised countries.

There are several REDD+ opportunities to consider, starting with reducing emissions from deforestation. This is also meant by 'reducing deforestation' or 'reversing human actions in forest land conversion'. Second, REDD+ activities seek to reduce emissions caused by forest degradation. Third, there is an urgent need to protect forest carbon stocks. Because forests serve as carbon pools and reservoirs, they must be preserved to continue to perform these functions. This is ideal for balancing carbon levels and carbon stocks in the atmosphere. Fourth, forests must be managed in a sustainable manner to reduce deforestation and degradation. The fifth REDD+ activity is increasing forest carbon stocks. This includes forest management, which refers to the afforestation and reforestation of forests.

The REDD+ implementation is divided into three phases: (1) the development of strategies and national action plans, policies, capacity-building, and measures; (2) the national implementation of these policies and measures; and (3) action taken with results measured and verified based on the results. The first phase is called the 'readiness phase' and is well supported by the Forest Carbon Partnership Facility (FCPC) of the World Bank. Governments control REDD+ activities, with sub-national activities developed in collaboration with other government agencies. These can also be promoted by the local private and public sectors or by combining both. Furthermore, the REDD+ incentives resulting from

61 As above.

62 UNFCCC Copenhagen Climate Change Conference – December 2009 http://unfccc.int/meetings/copenhagen_dec_2009/meeting/6295.php. See also Conference of the Parties 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 (accessed 16 October 2017).

63 UNFCCC Conference of the Parties 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(accessed on 16 October 2017). See also PC Carlarne *Climate change law and policy (EU and US Approaches)* (2010) 352.

successful implementation would be issued exclusively to governments by the UNFCCC.

The core system of REDD+ is an example of a Payment for Environmental Services (PES). The notion is that the environment provides ecosystem services to humans. Carbon sequestration by forests is another ecosystem service that has been expressed and advanced by the Multi-lateral Environmental Agreements (MEA). REDD+ represents an international PES scheme with the theme that developing countries will receive financial incentives for reducing deforestation and degradation, thus mitigating climate change through emission reduction programmes. It is a financial incentive based on climate change mitigation. It was proposed by the United Nations Environmental Programme (UNEP), the World Bank, the Global Environmental Facility (GEF), and several NGOs. It seeks to integrate natural forests into the scheme of carbon sequestration. Thus, it is an adaptive strategy that has been put forward to counter the effects of climate change. The GEF helps fund developing countries and projects that seek to protect the global environment. They also provide new and additional funding incentives to meet the cost of measures to achieve any agreed-upon environmental benefits.

The REDD+ mechanism provides incentives from developed UNFCCC parties to developing parties for reducing emissions and GHG sinks and reservoirs. Many developing countries can also use these incentives to provide communities with environmentally friendly alternatives. They can also offer social amenities that will improve the lives of indigenous people who use forest products and services. The financial incentives could also improve spatial planning and land-use governance. This can also achieve reforestation, afforestation, and sustainable forest management (SFM) projects, which are the main co-benefits of REDD+. The financial transfer will compensate developing countries that lose developmental projects, investments, and opportunities by protecting forest lands. Thus, when used properly, the REDD+ incentives provide national governments and local communities with a range of sustainable alternatives.

In Warsaw (2013), Decision 11/CP.19[64] and Decision 14/CP.19[65] introduced the much-needed modalities for national forest monitoring

64 UNFCCC Conference of the Parties Report of the Conference of the Parties on its nineteenth session held in Warsaw from 11 to 23 November 2013, Part two: Action taken by the Conference of the Parties at its nineteenth session http://unfccc.int/resource/docs/2013/cop19/eng/10a01.pdf (accessed 17 October 2017).

65 As above.

systems and applications for measuring, reporting, and verifying. Paragraph 2 of Decision 11/CP.19[66] states that the parties' national forest monitoring systems must consider the most recent Intergovernmental Panel on Climate Change (IPCC) guidance and guidelines to estimate forest-related activity emissions by their sources and sinks. Importantly, paragraph 3 states that the monitoring system should provide robust data and information that is always consistent and suitable for measuring the transparency of emissions from forests, removals of carbon sinks, forest carbon stock, and forest land changes. In Decision 14/CP.19, paragraph 5 states that parties are required to improve on data and methodologies that are consistent or appropriate and contain appropriately updated forest reference emission levels.

Furthermore, REDD+ emphasised the use of protected areas for the protection of forests. This is meant to reduce deforestation and conserve biodiversity, especially native plants and wildlife. The protected areas also play a critical role in maintaining forest ecosystem services and products. The management of buffer zones in land use is also of vital importance for socio-economic development goals. Consequently, management of protected areas also tries to conserve and protect participation, revenue sharing, and eco-tourism.[67]

The REDD+ initiative also aims to alleviate poverty. Many poverty-stricken communities rely on wood fuel and wood as house-building materials. Poverty contributes to deforestation, forest degradation, and increased carbon emissions. Through land tenure rights, REDD+ sought to provide for and support forest communities. This would enable them to continue harvesting and gathering fruits and vegetables in forests, as well as gathering firewood. As a result, a social safety net is provided to reduce poverty and climate vulnerability. By increasing incentives for developing countries, forest protection and a reduction of carbon emissions are achieved. Thus, incentives will introduce other forms of fuel, such as renewable energy sources (i.e., solar energy and agrivoltaics), better innovative modes of food production, and allow communities to use environmentally friendly technology, enabling them to re-use their agricultural lands rather than cut down more forest lands.

Furthermore, developing countries were urged to address gender equality and land tenure in their national strategies and development plans. They were also required to recognise the effective participation of

66 As above.

67 B Dickson & V Kapos 'Biodiversity monitoring for REDD+' (2012) 4 *Current Opinion in Environmental Sustainability* 717 at 717.

stakeholders relevant to reducing deforestation and supporting indigenous communities. This was a step forward from REDD to REDD+, as previously, these activities were not included. In addition, these policies and approaches to REDD+ activities are consistent with those of the Convention on Biological Diversity[68] (CBD) to conserve biodiversity and sustainable natural resources.

The COP-19 in 2013 (in Warsaw) produced seven decisions on REDD+, known as the Warsaw Framework on REDD-plus.[69] The decisions were based mainly on work programmes based on results: finance, coordination, implementation, monitoring systems, information safeguards, technical assessment, reporting, and verifying data on drivers to reduce deforestation and forest degradation.

Importantly, progress has been made outside the UNFCCC to elaborate more on environmental standards, safeguards for the organisations that advise parties, and funding for the framework and development of REDD+. These have included the Forest Carbon Partnership Facility's Strategic Environmental and Social Assessment Framework, the REDD+ Social and Environmental Standards of the Climate, Community, and Biodiversity Alliance (CCBA), CARE International, other independent research institutions, and guidance documents for REDD+ programmes. This has been a positive incentive and has improved forest governance with additional co-benefits.

However, local communities are being marginalised under these forest frontiers, especially in authoritarian and several developing countries.[70] Communities are being moved from their lands for the sake of forest protection and conservation programmes and for the government to collect REDD+ grants and funds. Authoritarian regimes seem to be thwarting justice for the sake of environmental protectionism. There is a lack of inclusiveness in the government's plans to protect their lands, and even at the donor level, the local communities that apply traditional knowledge to protect their forests seem to have been pushed aside. The profits from the REDD+ funds are not distributed to the local communities to improve their social lives.

68 Convention on Biological Diversity, Rio de Janeiro, Brazil (1992).

69 UNFCCC Warsaw Framework for REDD-plus http://unfccc.int/land_use_and_climate_change/redd/items/8180.php (accessed 17 October 2017).

70 Sabaheta Ramcilovic-Suominen et al 'Environmental justice and REDD+ safeguards in Laos: Lessons from an authoritarian political regime' (2021) 50 *Global Forest Environmental Frontiers: Ambio* 2256 at 2256.

In the global South, indigenous people who live in forests face threats to their traditional way of life from outside commercial interests. Large-scale industrial agriculture, mining, or cattle ranching projects force people who have lived in harmony with their natural environment for millennia to leave their homes. More and more, the eviction of forest dwellers occurs under the guise of government-approved conservation initiatives, such as the lack of proper implementation of protected areas. The people who have been the authentic stewards of the forest for many centuries are now presented as a danger to the ecology that provides them with food, health, contentment, and the ability to preserve their cultural and spiritual heritage.

5 Forest governance

There are realistic potential possibilities that can drive the global forest regime in a positive, transformative direction. Pursuing a single global forest instrument as a means of fostering better forest management is worthwhile. However, there is enough history and little commitment to achieve such a recommendable ambition.

Forest governance remains an important tool for forest protection, although not the best. The state has an important goal: to facilitate an effective public-private partnership. It is important to recognise that legality and sustainability mechanisms are important for addressing the extra-sectoral pressures on forests.

The New York Declaration on Forests provides a better platform for supporting national and subnational governance. This, from a landscape perspective, empowers and can support local communities that can sustain forests. It is also important to recognise multilateral action, as it joins actions and recognises the essence of global goals.

Forest certification was designed by environmental NGOs, scientists, and forest-based industries with the aim of reducing deforestation and forest degradation. The important tools include pressure to invoke choice for the third party, which audits against a private law, and eco-labelling of the economic operators.

The Forest Stewardship Council (FSC) was launched by a coalition of NGOs and business actors to advance responsible forest management globally. There are many country-level initiatives that have started to consolidate global alternatives to the FSC. Forest certification is more compatible with the well-known General Agreement on Tariffs and Trade (GATT) and World Trade Organisation (WTO) rules on free trade.

Further development in this field has been led by the European Union with geographical labelling initiatives.

Forest certification can achieve positive results on an international scale. It is important that states adopt forest certification, not only for economic reasons but for environmental ones as well. There is also the forest-risk food commodity certification, which recognises that there should be sustainable food commodities that affect forest protection.

Consumers can help protect the environment by engaging with companies to reduce environmental degradation and prevent them from selling goods linked to such activities. As a result, consumers must take the initiative to pressure businesses and marketplaces to adopt more sustainable practices. An increase in the number of companies that support deforestation-free initiatives would then limit the number of firms that sell illegally logged forest products, thereby phasing them out through economic means of reducing their profits.

The New York Declaration on Forests has had a significant and positive impact on corporate responsibility. Approximately 53 international companies and 54 civil society organisations joined this call. Of importance, private companies were urged to use three policy and management tools: certified commodity procurement, procurement from low-risk jurisdictions, and direct forest area observation and monitoring systems.

The issue of forest protection will need to include pluralistic efforts from the corporate industries to make it a global goal. All these goals have been focused on the sustainable management and protection of natural forests. Although the international forest governance regime has been ambitious, the arrangement has been a low common denominator among countries. Indigenous people and forest communities have just lately come to be acknowledged for their critical role in protecting forests through the use of their traditional knowledge and skills, which support measures for mitigating and adapting to climate change.

The global community is relying more on voluntary initiatives that lack sanction enforcement. In the next decade, three approaches are likely to be the focus: regulations, markets, and local empowerment. Regulation approaches will be led by government approaches; markets will be based on the leadership of the private sector.

Forest profits are supposed to trickle down to the low-income forest communities that play an important role in forest protection. This position

is affected by actors and must recognise diversity and local forest managers. It also promotes self-determination and property rights to achieve forest protection, equitable societies, and sustainable livelihoods.

For example, the National Forest Act[71]71 of South Africa and the Department of Environment, Forestry, and Fisheries (DEFF) now recognise Community Forest Agreements, which transfer forests to communities. After that, the communities harvest fruits and wood while using their traditions and practices to preserve these forests. This has helped to reduce poverty in rural areas and empower more women because they are the only ones in rural South Africa who do the chores of gathering firewood and cooking. The government department now regards achieving improved sustainable stewardship of forest lands as a high priority.

At the policy level, international instruments develop national forest programmes and other affiliated activities such as land-use management (zoning) and the spatial planning of protected area networks. Due to conflicting and complementing social values, complicated ecosystem management issues, and the relationships between social values and timber production returns, spatial forest planning might be helpful in mapping out forest protection. The importance of biological and environmental factors for society as well as for specific forest owners or decision-makers has made it necessary to examine how forests have developed spatially and to devise strategies for explicitly incorporating these goals into forest planning. These measures play a part in building cooperation among the key agents, such as the private sector and local communities.

The legal recognition of customary rights to lands and resources plays an important part in forest protection. The demarcation of customary land and community areas is important too. Protected areas should also contribute to and provide for traditional livelihoods. These actions should be guided by the UN Sustainable Development Goals (SDGs).

A collective effort between governments, the private sector, and local communities can help protect forests. Efforts for forest protection in developing countries must be understood in the broader context of poverty, a growing population, improved well-being, and power imbalances in the economic and political realms. Therefore, decentralised systems that improve communities' quality of life and guarantee their participation in the planning and decision-making processes that impact their lives must also be acknowledged by forest governance.

71 Section 29 of the National Forests Act 84 of 1998.

There is agreement that inter-sectoral and integrative approaches would play a huge part in forest protection. Honest reflection, capacity building, and public awareness of the multiple links between societal challenges and environmental degradation are always required in developing countries. Forests must be included in an expanded network and agenda for all actors and sectors at the political level.

There is an opportunity under the Paris Agreement and the SDGs to put forest protection at the centre of international agendas. More intergovernmental coordination and cross-ministerial engagement are required at the national and lower levels, particularly in the areas of economic, financial, trade, building infrastructure development, agriculture, and environmental issues.

Any successful approach to forest protection needs the active involvement of communities living around forests. Local forest users are underrepresented in forums internationally and regionally, lacking legitimacy, and dominated by their conveners. The recognition of these communities will strengthen global forest governance at the local level of implementation.

Increasing the number of women empowerment groups, women and youth entrepreneurs will result in positive changes, strong political action and participation, and increased pressure on national governments. There should be measures that support the social organisation and empowerment of local communities. The private sector plays a role in deforestation and forest degradation, as well as generating economic activity and income.

There is a need for appropriate regulatory frameworks to be developed in collaboration with the private sector and other economic organisations such as the World Trade Organisation (WTO) and the International Monetary Fund (IMF). Standards and certification are important to foster accountability and link consumer demand to corporate practice. These are most effective in conjunction with strong enforcement mechanisms and sanctions by the government.

States can make policies demanding a claim from business and trade for the development of sustainable finance, corporate social responsibility, and due diligence. A corporate-chartered approach can be developed as an important instrument for supporting environmental welfare. Local resource users and actors in value chains must harness cooperative and coordinated efforts.

Regulatory approaches must be more coordinated, cooperative, and integrated to work effectively. Governments should assist traditional forest users. Individuals and institutions that work to protect forests must be given space, training, technology, protection, and financial support. It is important to recognise and protect the property rights of local communities and the human rights of indigenous people.

There is still confusion and a lack of integration with other instruments in the forest regime. The use and recognition of environmental principles have been important in defining concepts. Although these principles have greatly influenced the development of environmental legislation, more work has to be done to recognise shared goals and encourage collaboration and coordination across the many instruments.

No international instrument obligates states to arrest or remediate forest areas, as such actions are not legally binding. This has been witnessed by the definition of 'environment', which intentionally omitted forests as one main habitat for species at the regional level. There is certainly help needed to promote consistency, persistence, uniformity, coordination, and commitment to effective forest protection.

There are many loopholes and unsettled areas that need to be addressed, and states need to develop an agreement and set out definitive solutions at the regional and national level, recognising local communities in their countries. However, further research and observation of the lack of possibilities in the existing rules will undoubtedly move us a step further in protecting forests.

The significance of environmental justice in REDD+ is discussed in the following section, along with strategies for empowering local communities to safeguard their property and human rights. Nonetheless, this section has identified a number of problems with the REDD+ policies and initiatives.

6 The importance of environmental justice in REDD+

Government-designated conservation zones are extending more and deeper into the lands and forests of indigenous people. Their ancestral lands are occasionally, even completely, taken. Governments assert that this strategy is required to safeguard wildlife and the environment. They exploit the accusations of deforestation against indigenous people as justification to drive entire communities off their native grounds and force them to relocate. There are numerous detrimental effects of this policy.

First, the relocation process leads to several social injustices, and the evictions directly result in the loss of lands, livelihoods, and culture. Second, there is a greater chance of unwelcome human-wildlife interaction when forest areas shrink. Thirdly, requests to engage in government-run conservation programmes are seldom made to the locals, who possess extensive knowledge of the forest ecosystems. Because of this, a lot of programmes fall short of meeting the unique requirements of their natural environment.

In addition to these detrimental effects, we are seeing more and more evidence that sometimes purported 'conservation programs' have ulterior motives. Governments can sell or lease the designated conservation zones for profit quite simply, provided that no one remains to complain after everyone has been forced off their land. At that point, the government intentionally weakend the forest protection regulations that 'justified' the expulsion of forest communities in order to permit nonforestry industry.

Put another way, animal protection rapidly becomes less important when financial benefits are in the near future.

Local communities' evictions regularly breach both national and international human rights protections, such as those outlined in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). Affected communities frequently lack procedures for free, prior, and informed consent (FPIC), public participation, the right to decision-making, and a forum where complaints can be heard.

As stated above, REDD+ is nationally driven, with performance-based mitigation and finance mechanisms being negotiated under the UNFCCC.[72] The logic of REDD+ is to enhance and leverage international public and private sector finance that can compensate REDD+ programmes in developing countries for reducing deforestation and forest degradation. Funding comes from different corners of the world, and REDD+ is 'national driven', meaning that the national governments in REDD+ programmes have sovereign authority to choose whether they want to participate in REDD+, determining their priority under REDD+ actions, and the funds are distributed within their borders. The governments to receive funds have engaged in a range of donor-supported 'readiness' activities that are aligned with the development of national REDD+ strategies and their forest protection policies and laws in support of REDD+ objectives. While it is voluntary, some of the strategies include land-use and forest planning, reporting and verification,

72 Sabaheta Ramcilovic-Suominen et al (n 70) 2257-8.

tenure and ownership reform, the development of carbon measurement, and other measures that are set to benefit local forest communities.[73]

This focus on REDD+ payments for forest carbon (since forests are mostly state-owned) combined with national sovereignty has raised concerns over environmental justice.[74] Transforming forest carbon into a community that can be sold internationally has driven land grabbing in the global south. This has resulted in various forms of land dispossession for local communities, the loss of local livelihoods, and the loss of biodiversity. Furthermore, REDD+ could lead to a drive for the centralisation of state control to control forests and reduce deforestation, particularly in the global south.[75]

However, the UNFCCC has produced seven REDD+ safeguards that must speak to social justice, such as (i) respecting the traditional knowledge and rights of indigenous peoples and local communities; (ii) full and effective participation of indigenous people and local communities; and (iii) engendering environmental and social benefits and local livelihoods.[76] These safeguards have been aimed at strengthening the participation of non-governmental actors and local communities, enhancing cultural recognition, ensuring socioeconomic outcomes, and improving the distribution of benefits. Delivering these outcomes has been difficult because of the national sovereignty of states.

REDD+ efforts in the global South, especially in Africa, have been much criticised for a whole range of shortcomings and negative effects on local communities. REDD+ lacks, especially in terms of performance on social, environmental, and climate goals.[77] It also has some sentiments about the continuation of neo-colonial policies that centre on controlling countries with huge tracks of forests along their borders. REDD+ can lead to depoliticisation and the perpetuation of conflicts between governments

73 A Angelsen, A. (ed) *Moving ahead with REDD: Issues, options, and implications* (2008).

74 E Corbera 'Problematizing REDD+ as an experiment in payments for ecosystem services' (2012) 4 *Current Opinion in Environmental Sustainability* 612 https://doi.org/10.1016/j.cosust.2012.09.010 (accessed 17 October 2017).

75 C Hoang, P Satyal & E Corbera '"This is my garden": Justice claims and struggles over forests in Vietnam's REDD+' (2019) 19 *Climate Policy* 23.

76 UNFCC REDD + Web Platform 'Fact sheet of safeguards' https://redd.unfccc.int/fact-sheets/safeguards.html (accessed 18 November 2022).

77 S Milne et al 'Learning from "actually existing" REDD+ a synthesis of ethnographic findings' (2019) 17 *Conservation and Society* 84.

and local communities.[78] It has also further omitted non-carbon and social benefits in the implementation of its various stages.[79] These challenges are often faced by local communities and indigenous people who have no recourse to justice and have no voice in these neo-colonial systems. Furthermore, many of these communities, once these programmes are implemented, will fall under heavy militarisation and government control.[80]

In addition, REDD+ programmes can lead to various local communities who use traditional methods of farming being heavily punished, leaving the commercial farmers who cut much bigger forest lands. An increasing body of literature has focused on how REDD+ can lead to injustice and inequality in the eyes of the justice system.[81]

In Ethiopia, this has been seen with the centralisation of state control over forest resources.[82] Thus, REDD+ has created a paradigm and new opportunities for norm contestation, which will have negative effects on justice in the long term. REDD+ is a voluntary mechanism without a human rights component to concentrate on enforcement or respect for local people; it lacks safeguards to deal with and protect vulnerable players, which exacerbates the environmental justice issue.

Furthermore, some of the issues with public participation that result in procedural injustice stem from the REDD+ design itself, which includes the scientific and technical basis of the instrument, and the high demand for trained staff, which is not found among local communities. By design, the REDD+ initiatives make it difficult for local communities to participate in these international scientific discussions, which results in 'face-saving or sham' strategies that are coated as public participation strategies. This means that by design, REDD+ has led to participation fatigue; its main actors are the national governments, NGOs, and other

78 R Myers et al 'Messiness of forest governance: How technical approaches suppress politics in REDD+ and conservation projects' (2018) 50 *Global Environmental Change* 314.

79 S Ramcilovic-Suominen 'REDD+ as a tool for state territorialization: Managing forests and people in Laos' (2019) 26 *Journal of Political Ecology* 264.

80 O Bruun 'Lost in authoritarian development: Have global climate deals and the aid community sacrificed the Vietnamese highland population?' (2020) 38 *Development Policy Review* 501.

81 K Suiseeya 'Contesting justice in global forest governance: The promises and pitfalls of REDD+' (2017) 15 *Conservation and Society* 189.

82 D Brown & M MacLellan 'A multiscalar and justice-led analysis of REDD+: A case study of the Norwegian-Ethiopian partnership' (2020) 20 *Global Environmental Politics* 11.

consultancies, which has resulted in communities playing a smaller and less familiar role in the REDD+ initiatives. The results of these REDD+ initiatives are usually pages of reports that are never explained or reach the communities. Thus, due to the lack of procedural justice in the REDD+ processes, there is a certain lack of representation and recognition of local communities as equal stakeholders in this process.

That said, communities from the starting point are left out or not accepted by governments as landowners under REDD+. This compounds the second problem, which is the distribution of carbon benefits. Distributive justice in the global South is simply lacking in REDD+ initiatives and benefits. Once the government receives any funds, these are distributed amongst the government departments and academic consultancies, leaving the communities that are playing a huge part in forest protection. In other parts of the global south, money can be received or delivered to the chief of the area, and the communities will simply not get any benefits. When it comes to distributing carbon titles for forests, communities must be acknowledged as landowners of both carbon and forests. Local communities can use their practices, customs, and traditional knowledge to help protect forests. Thus, REDD+ should have clearly inclusively defined carbon rights and ownership and recognised communities. In addition to the absence of enough transparency about the benefits to be shared and contract information, there is also a lack of distributive fairness.

REDD+ results in the limitation of access to forest-based livelihood activities. These projects result in their rights in terms of shifting cultivation, tree felling for domestic uses (firewood and house construction), fishing, bushmeat hunting, and collecting Non-Timber Forest Products (NTFPs). Communities will then seek their local authorities for authorisation, which may lead to more discrimination. The analysis of the international forest protection instruments is covered in the next section.

7 Analysis

The UNFCCC has been criticised for failing to reduce land-use changes in forest areas. Land-use practices affect the daily lives of other species; the supply of raw materials has overtaken the need to protect forest ecosystems and services, resulting in the need for more land. Land-use change has easily affected forest lands without concrete alternatives to minimise deforestation and forest degradation. Reforestation and afforestation are clear opportunities to maintain carbon sinks and reservoirs. However, the UNFCCC mandate is to reduce greenhouse gas emissions from

the atmosphere, not to achieve these goals.[83] The countries ratifying the UNFCCC are given a voluntary option to be part of the reduction requirements through afforestation and reforestation that generate carbon credits; they can choose whether they want to be a part of the global goal to reduce climate change or not.

Consequently, REDD was agreed upon under the UNFCCC, but no treaty or formal agreement was ever made or negotiated. REDD decisions and discussions are not legally binding and have a lower international status; in fact, they are considered 'soft law'. The international community agreed, but there was no consensus proposal on the design of the REDD system. REDD remains a country-driven pilot project rather than a collective, unified international plan. Another issue that has contributed to the slow pace of implementing the objectives of REDD is the lack of unanimity in the definition of forests given by projects undertaken under REDD. Also, the method of financing the scale of implementation differs from project to project. This has caused scholarly confusion and a lack of clarity on the main objectives of REDD. For the negotiators, it was important to have consistency on the main issues and the critical unanswered questions. REDD remains monofunctional, with a more in-depth analysis of deforestation drivers both lacking and required.

REDD+ is a significant policy approach that provides a critical framework for mitigating climate change and recognising forests. However, no formal agreement was ever reached to turn REDD+ into an instrument. REDD+ lacks the international standardisation and support needed to become a legally binding instrument. It also faces methodological challenges because of REDD's broader scope. This makes meeting climate change safeguards and mitigation projects difficult. These initiatives lack international oversight and have complex reporting issues. The most difficult aspect is that REDD was initially portrayed as an 'international hard law' to address climate change, biodiversity conservation, and forest protection. It has not evolved to that point; instead, it has evolved into something entirely different and is now a country-driven voluntary approach.

Since REDD projects have become more of a national approach, indigenous communities have protested the projects. This is because national projects usually lack funds and are infiltrated by corrupt officials. In developing countries, the governments do not respect constitutional rights, which could lead to these people being removed from their lands

83 C Streck & MS Scholz 'The role of forests in global climate change: whence we come and where we go' (2006) 82 *International Affairs* 861 at 861.

in favour of conservation projects to gain REDD funds and incentives. It is also likely that communities will never have a say in the design and implementation of REDD policies. Participating NGOs have assessed these policies as highly unequal because they do not recognise indigenous people's rights. This is because the mechanisms in the international arena are failing to connect with the stakeholders who work on the ground at the national level.

With multi-purpose, multi-level, multi-project, and multi-initiative programmes, REDD+ is becoming disorganised. There are now many spheres of decision-making and various organisations. This has created contested interests and claims, which have also become multi-implemented actions run by many people with different vested interests. Consequently, it has cascaded down and ahead of policy processes and other state-driven decisions in different regions, locations, and forest ecosystems. In addition, the forest legal regime is based mainly on soft law. It has approximately 40 international organisations and over 20 cross-sector international agreements that address forest protection, making the international forest regime very complex. The main consensus is that this regime has been largely ineffective.

Furthermore, the REDD+ initiatives can only function within an already functional and effective national environmental legal system. REDD+ is an essential element in realising the value of forests and forest ecosystems. It also promotes the sustainable and economically efficient use of forests. Over-regulation and a lack of transparency, on the other hand, will always impede this because governments will always fight with small communities that own land. Different government levels may also hinder the implementation of the REDD+ initiatives.

The REDD+ mechanism has become a country-driven, voluntary mechanism with limited UNFCCC oversight. REDD+ has limited obligations except for national policy approaches that countries might need to implement. It is not an instrument; rather, it could be argued that these are high-level officials' ideas and strategies scripted on a nice letterhead. These decisions are not binding and have no status under international environmental law. Some scholars pointed out that they are an ingredient in a recipe book that might add nothing to the meal since they are voluntary. Parties to the UNFCCC are encouraged to conserve sinks, but no incentives are provided to explain how this can be accomplished. Instead, it has pointed to some unclear programmes that parties might want to add to their national policies.

As shown in this section, the international legal climate regime contains numerous instruments, projects, programmes, and initiatives related to forest conservation and management. However, none has referred to forest protection or attempted to do so. This has been done through general commitments, which are non-binding and non-compulsory.

Furthermore, REDD+ emphasised the critical importance of technology compliance. However, measuring or quantifying carbon emissions from deforestation and forest degradation is difficult. The causes of forest degradation and deforestation are complex, and they need permanent monitoring and solutions that will effectively change the course of land-use management. Unfortunately, the REDD+ scheme is not structured to reflect the complexity of the causes of forest degradation and deforestation, which undermines the integrity of the policy approaches to reduce deforestation.

The global atmospheric cycle is unaffected by a country's or continent's location; everyone should focus on doing their part to protect forests and reduce emissions in order to collectively mitigate climate change. Furthermore, the REDD+ incentives appear to have created a moral hazard by allowing developed countries to avoid reducing their carbon emissions and purchasing target offset points from developing countries.

The REDD+ offsets are a way to pollute the environment more than the developing country from which the offsets are purchased.

As stated above, the introduction of forest projects results in natural forest land being deforested for forest plantations. The climate change regime never adequately addressed this issue. The UNFCCC parties decided to account for leakage before calculating the expected issuance of their credits. Prior assessment is usually ineffective when it comes to accounting for GHGs. This is because leakage is not always predictable before issuing those credits.

Furthermore, prior accounting cannot prevent effects from occurring after the credits have been granted. If the flaws in the international legal climate change regime are not addressed, the consequences can be disastrous. There are synergies between biodiversity and climate change that require collaboration to protect forests. However, with these flaws, there is a need for a forest protection regime to fill the gaps left by the climate change regime. REDD+ is not intended to safeguard other forest ecosystem services. It is a positive strategy with minimal rewards that must be acknowledged and appreciated. Because there is no current

agreement on REDD+, it should not be expected to do a job that it has not yet fulfilled.

It is uncertain in the Marrakesh Accords what the relevant ecological functions of forests are because they are not listed or recognised; this is not adequate at the international level as this information could have been used to develop national or regional forest protection laws. Moreover, the reference to the economic processes of forests being equal to socio-ecological functions weakens the Accord. As stated in many instruments, economic functions lead to the overuse and exploitation of natural resources. Therefore, there is no comparison to socio-ecological functions mainly related to forest protection and the realisation of environmental rights. It might be because economic processes are more susceptible to direct human influences than socio-economic functions. The definition of 'sustainability' is difficult to analyse or assess. This is because the definition of 'forest management' does not appear to hold the same parameter or pivotal stem as 'sustainability' because it does not go further in balancing the three fields of sustainable development (socio-economic and ecological) or offer any explanation as to how sustainable development can be achieved in the forest sector. The integration principle, which has the potential to reconcile socioeconomic and environmental objectives, is not acknowledged in many international treaties pertaining to forest protection. Therefore, it becomes challenging to recognize forest conservation at the national level when seen through the lens of sustainable development.

The parties are also encouraged to undertake an EIA if any project in their state will cause adverse environmental impacts.[84] They are 'required to design a document' in their countries on the analysis of the environmental impacts of various project activities. However, a closer look at the decisions taken by the COPs so far suggests that the international instruments emphasise that an environmental impact assessment (EIA) should only be carried out when there is a reasonable suspicion of adverse environmental effects, rather than each and every time a project starts. Firstly, this goes against the prevention and protection principles of environmental law. Secondly, how would a decision be made as to whether specific projects would not affect the environment? At first sight, such projects might seem environmentally friendly, but certain things might lead to environmental degradation, thus adversely affecting the environment. The international instruments should strongly emphasise that every project or development that was about to begin ought to have required this.

84 See S Bell, D McGillivray & WO Pedersen *Environmental Law* 8th ed (2013) 453.

The COPs give so much power to the parties to decide whether to have EIA in national legislation. Some states may decide they do not want to, and no interventions can be made to reduce parties' sovereignty. Most developing countries are usually too weak, both economically and politically, to take on this responsibility. Therefore, they might take the easier and cheaper option of not having EIA-recognised instruments.

The Accords also require Annex-I parties to report on the contributions that they have made to administrative procedures and national laws in recognising articles 3.3 and 3.4 of the Kyoto Protocol. This scope is only limited to listing the national legislation that a party enacts. The party is not obliged to give information on the impacts and effects of Land Use, Land-Use Change, and Forestry (LULUCF) activities. No assessment mechanisms have been established to prove if a party has stated the truth in their reports or the reliability of this national reporting of LULUCF activities.

In addition, the Accords recognise the use of afforestation and reforestation projects, and Decision 19/CP.9 of the COP-9[85] attempts to reduce the use of genetically modified organisms (GMOs) in afforestation and afforestation projects.[86] It states that host countries and Annex I countries must assess the potential risks of GMOs in accordance with national laws. The responsibility is placed on the host countries and Annex-I countries. The Annex-I countries are only concerned with financial interests in credits and may not agree on forest or biodiversity protection. In any event, there is no legal safeguard to assess whether Annex-I countries carry out their discretion in a sustainable and environmentally reasonable manner.

However, the climate change regime negotiated under the UNFCCC carries more weight in international environmental law than forest protection or biodiversity regimes. This protocol and REDD+ incentives have generated the much-needed bureaucracy and framework to implement and monitor the ecosystem service market. This functioning market has

85 UNFCCC Decision 19/CP.9 of the COP-9 http://unfccc.int/documentation/decisions/items/3597.php?such=j&volltext=19/CP.9 (accessed 16 November 2017). Conference of the Parties report of the Conference of the Parties on its ninth session held at Milan from 1 to 12 December (2003). See also FCCC Decision 19/CP.9 'Modalities and procedures for afforestation and reforestation project activities under the clean development mechanism in the first commitment period of the Kyoto Protocol' FCCC/CP/2003/6/Add.2 http://unfccc.int/resource/docs/cop9/06a02.pdf#page=13 (accessed 16 November 2017).

86 See D Woolley et al *Environmental law* 2nd ed (2009) 349.

carried its own momentum in climate change mitigation regimes and raised funds for co-benefits.

There are legitimate effectiveness concerns with the Kyoto Protocol's commitments, compliance, and mechanisms. Significantly, forest protection proponents have applauded the recent efforts in the climate change regime, especially in the REDD+ incentives and Paris Agreement,[87] to invoke co-benefits that can result in the successful implementation of forest protection laws, programmes and projects. However, REDD+ now functions in its governance form; which constitutes a framing problem in the climate change regime since the UNFCCC has already done that. As a result, there has been overlapping, confusion, and inconsistency in the climate change and forest protection regimes.

As discussed above, it is still too early to pass judgement on whether the Paris Agreement will pave the way for a forest protection instrument or whether its articles will be sufficient for forest protection. In short, the agreement is still vested in the interests of the climate change regime.

The Brundtland Commission's principle of integration, which gave rise to the idea of sustainable development, must be considered the largest failure for the international community. The principle of integration acknowledges that to achieve sustainable development, social, economic, and environmental requirements must all be balanced. This meant that to significantly minimise environmental harm, social, economic, and environmental demands would need to be balanced and linked. However, this idea has not been considered by the international instruments that have been adopted, which has led to the prioritisation of economic requirements above the latter two. This has led to countries buying and exporting more than they need, which harms the environment in other nations. This has been demonstrated in relation to forests by the demand for pine oil in Asia, the rise in beef consumption, and Amazonian deforestation. This can also be seen in the extractive sector, which is seriously harming Africa.

However, there is a greater need to widen the circle of actors and provide room for the voices of marginalised and vulnerable communities in policy-making initiatives. This improves the recognition of the needs, identities, and concerns of indigenous people and women. The recognition of communities would strengthen their self-determination and rights and,

87 United Nations Climate Change Paris Agreement 2015 https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf (accessed 26 October 2017).

in turn, the distributive and procedural justice of these REDD+ strategies and initiatives, bringing us closer to climate justice and governance.

Policies for conservation must support inclusive development and uphold human rights. The effects of their conservation efforts on human rights must be assumed by donors and involved national and international (conservation) organisations. The preservation of nature cannot serve as a justification for egregious human rights abuses. In all projects, FPIC and other pertinent human rights instruments must be correctly implemented.

It is essential to protect community rights to land and natural resources and to rectify historical and contemporary social injustices. Equity strategies that emphasise 'benefit sharing' or 'compensation' are frequently employed to sever ties between the local population and their property. It makes it possible for individuals who are only interested in making quick money to govern over those who care about the long-term preservation of their ancestral lands.

In addition, another problem with the REDD+ initiatives seems to be that they communicate predefined policy problems and solutions to local communities rather than involving and allowing for participation and commitment in the crucial stages to co-define policy, problems, and solutions together with those who are directly involved and affected by the initiatives. There is a significant need for a change in practice in terms of power relations, recognition, and cooperation with the local communities in the domestic, international, and governance arenas.

It is also important to recognise that climate change is entangled with intersectoral issues and power dynamics like race, class, gender, social and demographic factors, and geographic location. Thus, these will have to be strengthened for climate justice and fairness in global climate governance and policy. There is a greater need for climate policies that recognise communities and justice and are locally tailored for full consideration of intersectional factors, socio-cultural diversity, and political complexity. In REDD+, much still needs to be done, as it is a techno-managerial approach to climate change that lacks socio-cultural and political local community dimensions.

As for REDD+ and environmental justice concerns, carbon payments are the main initiative for participating in the REDD+ initiatives and respecting the social safeguards in the processes. These payments are detached from the local meanings of local justice in those REDD+ countries and particularly in the global South (mostly socio-ethnic conflicts under authoritarian rule). That said, beyond participation and

distribution, justice as recognition and FPIC as an associated REDD+ safeguard need to recognise local community rights to cultural self-determination. Furthermore, REDD+ should also recognise the political rights, empowerment, political self-determination, and self-governing authority of local communities; these are crucial preconditions for a durable justice outcome.

So far, the nationally driven nature of REDD+ has been problematic because of its enabling preconditions, especially in developing countries. To attain environmental justice, REDD+ initiatives need to provide a space for cultural and political self-determination and recognise customary governing structures. This should include procedural, distribution, and justice in their holistic and locally defined conditions. This will enable safeguarding against violence and injustice inflicted on culturally and politically marginalised groups by the state. The international community should help by adjusting the REDD+ initiatives away from costly and technically complex procedures to more decentralised, locally driven ones for carbon measurements and reference levels. REDD+ must be focused on supporting locally driven strategies for identifying and addressing drivers of deforestation and social injustices. This would mean a shift in international REDD+ financing away from carbon payments and towards supporting local capacities and driving the efforts required for positive change in the country in question.

8 Conclusion

The climate change regime brought important structures, institutions, incentives, conservation programmes, and ways of raising much-needed resources to fight deforestation and forest degradation. However, these instruments have become highly divisive (with overlapping institutions and programmes), leading to fragmentation and treaty fatigue.

The international instruments have been produced without any clear focus on the issue of forest protection; again, this is understandable since they are not specifically for the issue at hand. The field of forest protection has become entangled with overlapping institutions, programmes, projects, and working bodies that are pulling in one direction or another but failing to protect forests. The efforts that had been put in place in the early 1990s have since settled down to nothing.

The different ways in which forests are being lost through land-use changes must be regulated, and this integration approach must aim to achieve SFM to satisfy the goals for forest protection. There is a need to incorporate strategic integrated land-use approaches that look at holistic

ways to reduce deforestation and forest degradation. Furthermore, zoning and land regulations can also be included to reduce forest loss.[88] Notably, a long-term solution is to develop a specific forest-binding instrument. This approach will integrate the climate change mitigation regime with spatial planning, biodiversity conservation, and reducing desertification.

As previously stated, forests are multifunctional, and there is a need to protect them as they continue to disappear, as other species that live in forests cannot survive without these forest ecosystems. The mission to recognise forest conservation on the climate change agenda has been fruitful and has created helpful institutions. However, the time for developing forest principles for the climate agenda has since ended. The time has come for sustainable forest protection and smart incentives in the green sector. There is a need for a holistic approach that tears down sectorial boundaries that continue to blind us to finding more precise forest protection solutions.

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