



Background Paper

Accelerating Action Around Land for Enhanced Climate Action

Background Paper in preparation for the Commonwealth Living Lands Charter

1. Introduction

With rapidly changing global climatic conditions continuing to pose severe multisectoral threats to the survival of ecosystems on the planet, land serves a dual role as a key resource and sink of greenhouse gases. Land resources, comprising soil, water and biodiversity are fundamental components for the survival of life on this planet. The sustainable use of land resources is essential for the attainment of growth and can contribute substantially to climate change mitigation, including through the promotion of sustainable forest and oceans management, and the protection of other terrestrial, coastal and marine ecosystems.

At the twelfth session of the United Nations Convention to Combat Desertification (UNCCD) Conference of Parties (COP 12) in 2015, Parties to the Convention endorsed SDG target 15.3. This SDG target promotes the concept of Land Degradation Neutrality (LDN), as a driver for implementation of plans toward meeting national targets. The multi-partner LDN Target Setting Programme was established by the Global Mechanism of UNCCD to assist countries in formulating voluntary targets to achieve LDN.

LDN aims to maintain and restore the land-based natural capital. It plays a vital role in tackling climate change, securing biodiversity and maintaining critical ecosystem services, while ensuring shared prosperity and wellbeing. The LDN target represents the common ground for effective global efforts to counter worrying trends and recognises the role of land as an engine of economic growth and a source of livelihood for many. A growing number of countries are translating this global target into national action by setting national LDN targets.

Currently, countries are still missing substantial opportunities to reduce greenhouse gas emissions and reduce climate vulnerability in cost-effective ways by not maximizing the potential of sustainable land management practices.

The Commonwealth Secretariat has therefore recognised the need to leverage synergies between biodiversity, climate and land, thereby bringing together the three Rio Conventions - Convention on Biological Diversity (CBD), United Nations Convention to Combat Desertification (UNCCD) and the United Nations Framework Convention on Climate Change (UNFCCC) to catalyse coordinated action on land. Adaptation of land systems to climate risks is a fundamental component of the National Adaptation Plans (NAPs) of countries and therefore accelerating action towards land degradation neutrality is crucial in ensuring countries can achieve their Nationally Determined Contributions (NDCs), reducing climate change associated impacts and contributing to overall ecosystem restoration supporting progress on these biodiversity targets.

In light of this, it is critical that such new pathways and partnerships are developed towards ambitious, coordinated and accelerated action, aimed at achieving a land degradation neutral planet. This paper therefore seeks to highlight the importance of land related interventions in the efforts of member countries to meet their climate change targets as outlined in their Nationally Determined Contributions (NDCs).

2. Land Degradation: A barrier to Sustainable Development

The Intergovernmental Panel on Climate Change (IPCC) Assessment 2014 Report, indicated that global greenhouse gas emissions must be cut by 41-72 percent below 2010 levels by 2050 and global emissions levels reduced to zero (a balance between sources and sinks) by 2070, in order to have a positive likelihood of limiting the increase in global mean temperature to 2°C. This requires significant changes in all the emission sectors, particularly in energy systems and improved land use management practices.

The land sector accounts for about a quarter of net anthropogenic GHG emissions, mainly from deforestation, forest degradation, agricultural emissions from soil management practices, and livestock. The main drivers of land degradation comprise of 35 percent overgrazing, 30 percent deforestation, 28 percent agricultural activities and 7 percent overexploitation for fuel¹. It is estimated that by 2050, 50 to 700 million people are projected to have migrated as a result of the combination of land degradation, climate change impacts and reduced crop yields².

Land degradation exacerbates the existing vulnerabilities of Small Island Developing States (SIDS) to environmental challenges, such as climate change, which severely undermine their economic potential. Moreover, the most vulnerable sections of the global population would be affected, thereby hindering progress in achieving other sustainable development objectives. It is estimated that in addition to the 1.3 billion people who depend on degraded land for their livelihood, 40 percent of this degraded land is situated in areas with high levels of poverty. Furthermore, global crop yields.

are also expected to reduce by an average of about 50 percent in some regions³.

3. Commonwealth Call to Action on Living Lands

The adoption of the Paris Agreement at the 21st Conference of the Parties (COP 21) to the United Nations Framework Convention on Climate Change (UNFCC) was a key milestone in bringing together developed and developing countries towards

¹ Land Degradation Neutrality Transformative Action, Tapping Opportunities: UNCCD, 2017

² Combatting land degradation, securing a sustainable future; UNDP, 2019

³ Combatting land degradation, securing a sustainable future; UNDP, 2019

addressing the consequences of climate change. A fundamental component of this agreement is the NDCs, which serve as an indication of pledged efforts by each country geared towards combatting climate change.

A wide range of land use, land-use change, and forestry (LULUCF) mitigation options are being put forward by Parties to reduce emissions and increase carbon removals from this sector. Such NDCs stated options include, reducing deforestation, increasing afforestation, improving sustainable forest management and enhancing forest carbon stock.

In response to the Inter-Governmental Panel on Climate Change (IPCC) Special Report on Climate Change and Land in 2019, highlighting the key role land plays in many of the NDCs of parties to the Agreement, and the request for support in this area by Commonwealth member countries, the Commonwealth Secretariat in a Call to Action on Living Lands seeks to mandate a Commonwealth Living Lands Charter implementation plan following a Five by Five (5x5) approach. The thematic areas chosen around land and climate change are 1) Climate Resilient Agriculture for Food Security 2) Soil and Water Conservation and Management 3) Sustainable Green Cover and Biodiversity 4) Carbon Neutral and Climate Resilient Livestock Rearing and Animal Husbandry 5) Indigenous People and Climate Resilient Development. The endorsement and implementation of this charter will help to protect and manage a quarter of the world's landmass.

These five land and climate change thematic areas will be designated as action areas for the charter, forming action groups unlocking the power of 54 nations and guiding the rolling out of 5 implementation actions. The Five by Five (5x5) approach aimed at enhanced action in the five land and climate change thematic areas, encompasses five levels of implementation namely 1) Evidence based analysis and policy influence 2) Financing for Implementation 3) Technical Assistance and Capacity Building 4) Institutional Structure and Governance and 5) Knowledge Sharing and Management.

Figure 1 displays the regional distribution of the five land related mitigation strategies across the 54 Commonwealth countries. It is evident that biodiversity, climate resilient agriculture as well as soil and water are common mitigation strategies included in the NDCS of Commonwealth member countries. Moreover, it is clear that there is a need for greater consideration for the inclusion of Indigenous people and livestock in updating NDCs.

Figure 1: No. of Commonwealth countries that have included the five (5) land related mitigation strategies in their NDCs (by regional distribution)

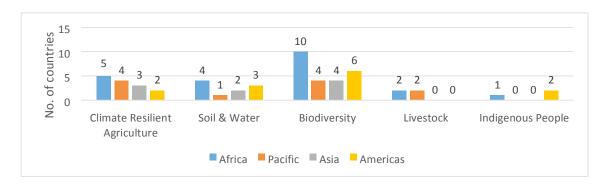
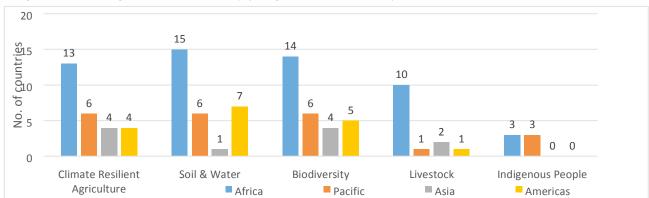


Figure 2 also indicates that biodiversity, soil and water and climate resilient agriculture were the top three adaptation strategies across the Commonwealth. Indigenous people were included in adaptation strategies in Africa and Pacific countries but not explicitly mentioned in Asia, the Caribbean and Canada.

Figure 2: No. of Commonwealth countries that have included the five (5) land related adaptation strategies in their INDCs (by regional distribution)



The European member states of the Commonwealth, Cyprus, Malta and the United Kingdom, within the joint first NDC submission by the European Commission does encompass the LULUCF sector as a priority area inclusive of these land and climate change thematic areas, with the exception of indigenous people.

Most recently, Jamaica in their submission of updated NDCs in June 2020, have doubled their ambitions toward economy-wide target, included land-use and forestry in their NDCs. Actions highlighted in Jamaica's NDC comprise initiatives on community-based climate resilience in fisheries and integrated watershed management.

The 2019 IPCC report on Climate change and Land noted that indigenous and local knowledge can indeed contribute to overcoming the combined challenges of climate change, food security, biodiversity conservation, and combating desertification and land degradation. Indigenous knowledge, whether it relates to

agriculture, resource use, biodiversity, or weather prediction, provides the basis for many successful climate adaptation measures. It offers best practices and serve as learning for the provision of climate-sensitive humanitarian assistance including for refugees living in climate vulnerable areas.

In Bangladesh for instance, the restoration of degraded lands around Rohingya settlements is a key objective of the humanitarian response. Environmental rehabilitation combined with alternative energy sources have brought real improvements to life in the settlements. The introduction of liquefied petroleum gas has led to 80 percent reduction in demand for firewood. Together with intensive reforestation, this has resulted in "re-greening" of the area and enhanced the capacity to mitigate the risk of landslides during the monsoon and cyclone seasons.

4. Achieving Land Degradation Neutrality and Regeneration through Sustainable Land Management

The UNCCD 2018-2030 Strategic Framework which was adopted during COP-13 held in Ordos, China, in September 2017, aims to contribute to achieving the objectives of the Convention as well as the Sustainable Development Goals by 2030, in particular SDG 15 (15.3) - 'Combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world by 2030'.

Adopting LDN as the means to stimulate integrated land use planning, shifting towards greener economic initiatives and restoring degraded landscapes, can further build resilience of communities to the impacts of climate change and reduce disaster risks, while simultaneously accelerating implementation of the SAMOA Pathway.⁴ Mainstreaming LDN into the annual and medium-term plans of governments and their environmental strategies is crucial.

Responses to land degradation must promote interventions that prevent, reduce and reverse degradation, while at the same time meet growing demands for food production and economic growth. These approaches and practices include, among others, agroecology, conservation measures, agroforestry and integrated animal and crop production systems that promote soil organic matter accumulation and nutrient cycling, restoration of degraded forests, rangelands and wetlands, and measures that enhance soil carbon storage in managed landscapes.

Agriculture and LULUCF sectors are ideally placed to deliver climate change mitigation and adaptation goals for countries. Adaptation in agriculture and land

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⁴ Small Island Developing States Accelerated Modalities of Action (Samoa Pathway) an official document formally adopted by UN Member States in Samoa in 2014 as the outcome of the third International Conference on Small Island Developing States, in which countries recognize the need to support and invest in these actions so they can achieve sustainable development.

use can reduce vulnerability to climate change and lead to greater resilience to nearly 80 percent of the world's extreme poor and protect natural resources 5 . Furthermore, reductions in the intensity of agricultural production and enhancing sequestration in biomass and soils, can significantly contribute to mitigating annual CO_2 emissions. For example, many land-based mitigation efforts which aim to enhance soil carbon, will also increase the ability of soils to retain moisture and prevent erosion, which in turn enriches biodiversity and productivity of cropping systems, thereby enhancing resilience to increasing frequency and severity of droughts and floods brought about by climate change.

The carbon in soil is three times greater than in the atmosphere, though the unsustainable approach to cultivation, has led to the loss of huge quantities of carbon from the soil. It is therefore essential for a fundamental shift in the way the world's soils are cultivated to revitalize their carbon content. Importantly, regenerative agriculture practices help us fight the climate crisis by pulling carbon from the atmosphere and sequestering it in the ground. Regenerative agriculture is an approach which leads to better, more resilient crops grown using sustainable methods that at the same time fight a crisis that presents a threat to all agriculture. There is also the potential to open up new revenue streams for farmers through regenerative agriculture. Under the Australian government's Emissions Reduction Fund for instance, farmers are presented with carbon credits for adopting emission reduction methods which they can then sell to generate additional income.

Technology can play a significant role in this regenerative process with the rise of digital farming technologies opening up a wealth of new data for farmers. Remote sensors, satellites and drones can provide full time monitoring of plant health, soil conditions, temperature and nitrogen utilization. Artificial Intelligence-based tools can analyse this overwhelming amount of data at high speeds and funnel it back to farmers in the form of useful insights, helping them make critical, timely, and infield decisions. Investment in digital agriculture will enhance capacity to fulfil the three dimensions of Climate Smart Agriculture including adaption, mitigation, and productivity.

Climate Finance also plays a vital role in supporting countries to meet their land sector goals outlined in their NDCs, which would assist in shifting unsustainable land use patterns towards more climate-friendly outcomes. LDN implementation can catalyse climate actions and disaster risk reduction, thereby offering access to multilateral and bilateral climate finance while keeping in mind important regional similarities and differences in capacity needs among countries.

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⁵ FAO Strategy on Climate Change. Rome. 2017

5. Conclusion

The Commonwealth Secretariat has to continue calling on member countries to consider the impact of agriculture, forestry and land use on climate change as they update their climate targets.

Climate-smart land management practices would result in adaptation co-benefits. In order for effective NDC implementation, there is a need for synergies in addressing climate change driven environmental degradation and biodiversity loss. Sustainable food and agriculture systems have significant potential for generating these synergies across climate change mitigation and adaptation efforts in addition to significant socioeconomic and environmental co-benefits.

A lack of action to address land degradation would lead to increase in emissions whilst also reducing carbon sinks. Such results would be inconsistent with the emissions reductions required to limit global warming to 1.5°C or 2°C. Full implementation of all INDCs (including conditional) would significantly decrease Land Use, Land Use Change and Forestry (LULUCF) net emissions in 2030 compared to historical levels.

An increased focus on the mitigation potential of the land use sector would allow many developing countries to act promptly for reducing and reversing land degradation, thus contributing to meeting nationally determined goals, poverty reduction and achieving sustainable development.

The Secretariat's efforts towards implementation and mainstreaming of regenerative models of development are also opening up new pathways towards reversing the impacts of land degradation and desertification. Community driven regenerative development models have the potential to facilitate the reversal at scale of land degradation, providing small states and vulnerable developing countries with appealing opportunities for meeting NDC commitments and SDG targets.

The Secretariat must continue to leverage partnerships and build on synergies in a continued thrust to enhance programmes of support in response to the needs of member countries.

The existing innovative Commonsensing project ⁶ for instance, based on a partnership between Fiji, Solomon Islands and Vanuatu as well as a consortium of international partners, helps build climate resilience and enhance decision-making through the use of satellite remote sensing technology. Enhancing food security is a key component of this project.

The Commonwealth Climate Finance Access Hub (CCFAH), which assists small and vulnerable countries to access international sources of climate finance, is already

 $^{^6\} https://the common we alth.org/sites/default/files/inline/Common sensing-brochure-2020.pdf$

boosting the capacity of several member states to address climate change, and has immense potential to add to the resources and capabilities on which Commonwealth countries can draw to address the causes and impacts of land degradation and desertification. Through the Commonsensing project and CCFAH, the Commonwealth Secretariat collectively adds to the ability of individual member countries to deliver on their climate change policies and Nationally Determined Contributions (NDCs).