

**Submission by the secretariat of the
United Nations Convention to Combat Desertification in Countries
Experiencing Serious Drought and/or Desertification, Particularly in Africa
(UNCCD)¹
Containing ideas and proposals on Drought, Land Degradation and
Desertification to be included in the AWG-LCA outcomes of COP17**

I. Context and Scope

1. The objective of the UNCCD is to combat desertification and mitigate the effects of drought in countries experiencing serious drought and/or desertification, particularly in Africa, through effective action at all levels, supported by international cooperation and partnership arrangements, in the framework of an integrated approach which is consistent with Agenda 21, with a view to contributing to the achievement of sustainable development in affected areas (Article 2).

2. The interrelationship among drought, land degradation and desertification (DLDD) and climate change, reflected in the objectives of both the UNCCD and the United Nations Framework Convention on Climate Change (UNFCCC) provide the basis for mutual integration. Article 4, paragraph 2 (a) of the UNCCD and article 4 paragraph 1 (c) of the UNFCCC explicitly support common actions in dryland ecosystems.

3. At the ninth session of the UNCCD Conference of the Parties (COP), held in Buenos Aires in 2009, the Parties decided to adopt harmonized methods for tracking and reporting impacts resulting from stakeholders` efforts to combat desertification. The UNCCD has therefore begun work with the other Rio Conventions and their scientific processes to identify a baseline assessment of land condition, and to measure changes in it. This harmonized global approach to land assessment is of direct relevance to focused adaptation and mitigation efforts under the UNFCCC, which will also depend on the holistic sustainable land management framework. It is therefore highlighted to the attention of COP17.

4. For the first global reporting exercise on land through the UNCCD, anticipated in 2012, Parties in desertification-affected countries have made a commitment to provide national reports on landcover change and population above the poverty line, complemented by a series of other optional indicators capturing land management impacts in combating desertification. Additional indicators will be adopted through a step-wise, iterative learning process on land, as scientific consensus and national capacities develop. This is an ambitious undertaking for the global environmental community, requiring and enabling knotty land and water-related issues to be addressed collectively.

5. At the ninth session of the UNCCD Conference of the Parties (COP) held in Buenos Aires in 2009, the Parties to the UNCCD further decided to foster policy frameworks on

¹ The aim of UNCCD to address DLDD in the climate change negotiation and implementation processes, is based on Article 8, paragraph 1 of its Convention and on the 10-year strategic plan and framework to enhance the implementation of the Convention (2008-2018), specifically operational objective 1, outcome 1.1 and operational objective 2, outcome 2.5. The rationale for this support is also contained in several decisions on synergies, including Decision 8/COP.9 and the current work programme of the secretariat.

emerging thematic issues to facilitate information exchange with the secretariats of the UNFCCC and the Convention on Biological Diversity (CBD) on issues under the agenda of these conventions. Additionally, at the tenth COP session held in Changwon in 2011, parties to the UNCCD adopted an Advocacy Policy Framework on Climate Change.

6. In November-December 2011, the UNFCCC Parties will decide on pending negotiating issues on Shared Vision, Adaptation and Mitigation by developing countries and reducing emissions from deforestation and degradation (REDD). Therefore, the present submission endeavors to provide concrete options for using the momentum arising from UNFCCC COP 16 in Cancun in 2010 to improve coverage of DLDD in the outcomes of climate change in Durban's COP17.

II. Suggestions Where DLDD Issues May be included in the Climate Change Negotiations

7. The key policy requirement is the recognition that DLDD is a serious threat to human well-being and that actions that mitigate DLDD like soil carbon sequestration, increased forest cover, water and agriculture are a requirement within any holistic framework adopted by the UNFCCC.

8. *Agenda Item 3 of the AWG-LCA:* Important aspects of decision 1/CP.16 are to be completed during UNFCCC COP 17 and will be discussed under this agenda item, including shared vision for cooperative action, enhanced action on mitigation, enhanced action on adaptation, finance, technology transfer and capacity building. Issues related to soil and land are important aspects that need to be integrated into the negotiations on these agenda items. There is a need to raise awareness on integrating DLDD into climate change adaptation and mitigation, as appropriate. Some mitigation and adaptation measures for DLDD as listed below, if included in the appropriate decisions, can contribute to alleviating both climate change and DLDD pressures and contribute to long-term sustainability:

- *Agenda item 3.1:* The AWG-LCA will discuss a shared vision for long-term cooperative action under this agenda item. Increased operational linkages between the UNCCD and UNFCCC can be identified during these discussions, which would be mutually beneficial to Parties of both the Conventions. Steps by both Conventions could potentially be undertaken at different levels and with different modalities for ensuring deeper cuts in global emissions.
- *Agenda item 3.2.2:* During discussions on the agenda item on nationally appropriate mitigation actions, Parties may choose to add issues of land, land use and change, degradation, forest, water, agriculture and soil carbon sequestration in their discussion to develop guidelines and modalities for the *Nationally Appropriate Mitigation Actions* (NAMAs).
- *Agenda item 3.2.3:* There is relatively an increased opportunity for developing countries to engage in REDD and REDD-plus activities and the potential for drylands countries to benefit from this process. Parties may wish to identify actions for REDD at global, regional and national levels that could lead to development of national strategies or action plans and capacity building measures to implement REDD related policies and strategies.

- *Agenda 3.3:* It is anticipated that the AWG-LCA will discuss modalities and guidelines for new *National Action Plans for Adaptation* (NAPAs). Parties could agree to launch and support a new round of Least Developing Countries (LDCs) NAPAs. Non-LDC developing countries may also choose to develop NAPAs using the same modalities and guidelines as the LDC NAPAs. Parties may wish to consider integrating adaptation to drylands in their medium and long-term in their strategies and programmes. The NAPA guidelines could call for synergies the integration of the UNCCD National Action Plans (NAPs) with the NAPAs; this would create further coordination between the two processes and increase chances for implementation of both plans. Parties may also wish to consider including measures related to sustainable land management, adapting agricultural practices and access to freshwater in the NAPA guidelines.
- *Agenda 3.4:* The agenda item on finance will discuss the modalities for fast-track and long-term financing provisions for providing more resources to climate change. DLDD measures and actions that are integrated into adaptation and mitigation agenda items would benefit dryland countries immensely by allowing them increased access to funding issues that are a major threat to their countries.
- *Agenda 3.5:* The agenda item for technology transfer includes the establishment of a Technology Mechanism. Countries will develop technology needs assessment and could potentially include sustainable land management (SLM) technologies their national plans to support both adaptation and mitigation.

a. **Global issue of adaptation**

9. *Sustainable land management (SLM):* Under agenda item 3.3 of the AWG-LCA, Parties are expected to decide on strengthening, establishing or designating national-level institutional arrangements to enhance the full range of adaptation actions from planning to implementation. Adaptation actions could include SLM practices, lessons and experiences when developing adaptation projects and programmes supported both nationally and internationally. Regional and national centers to strengthen and enhance regional and national adaptation actions that may be established as a consequence of the decisions made by the UNFCCC Parties could include DLDD issues within their mandate. Knowledge, capacities and tools could be enhanced to address both DLDD and adaptation actions for designing, planning and implementing programmes. Planning for adaptation to climate change should not only take into account the increased vulnerability of drylands caused by climate change but also furthermore recognize the potential of drylands coping mechanisms. In this context sustainable land management has to be understood as both a measure to adapt to climate change and a measure to address DLDD.

b. **Loss and Damage Associated with Adverse Effects of Climate Change**

10. The Bali Action Plan requires Parties to address enhanced action on adaptation, including, inter alia, consideration of: Risk management and risk reduction strategies, including risk sharing and transfer mechanisms such as insurance (1(c)(ii)); and Disaster risk reduction and strategies and means to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change (1(c)(iii)). On agenda item 8 of the Subsidiary Body for Implementation (SBI) at its thirty-fifth session in November 2011, Parties will be discussing

a range of approaches to address loss and damage associated with the adverse effects of climate change, including impacts related to extreme weather events and slow onset events, taking into consideration experience at all levels.

11. UNFCCC Decision 1/CP 16 recognizes “the need to strengthen international cooperation and expertise in order to understand and reduce loss and damage associated with the adverse effects of climate change, including impacts related to extreme weather events and slow onset events”, including sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation, loss of biodiversity and desertification. Insurance Rehabilitation/Compensatory and Risk Management Components will be discussed under agenda item 8 of the SBI, and could include the concerns of Small Island Developing states (SIDS) prone to hurricanes, LDCs and vulnerable African nations prone to drought, floods and desertification.

c. Mitigation

12. *Nationally Appropriate Mitigation Actions (NAMAs)*: It is anticipated that the UNFCCC Parties may decide, as included in agenda 3.2.2 of the AWG-LCA, to undertake NAMAs with an aim of achieving a deviation in emissions relative to business as usual emissions in 2020. Pending decisions include the recording of developing country Party NAMAs in a registry in line with MRVs, submission of biannual updates on GHG inventories, the recognition of soil carbon sequestration and forest conservation as mitigation actions and these actions benefit drylands.

13. *Soil Carbon Sequestration*: Parties may wish to consider, during agenda item 3.2 of the AWG-LCA, including SLM practices that address DLDD as effective mitigation measures. Drylands have the potential to increase soil carbon sequestration and can be an important part of the mitigation portfolios of countries. Availability of knowledge, enhancement of capabilities and tools for designing, planning, obtaining support and implementing soil carbon NAMAs in drylands, through developing appropriate methodologies to allow feasible and reliable MRV of sequestered carbon, sound monitoring of carbon stocks and appropriate consideration to environmental and social consequences.

d. Reducing Emissions from Deforestation and Degradation (REDD)

14. During COP 17 Parties will continue negotiations on REDD. Forest conservation is considered a mitigation action through conservation of forest carbon stocks, sustainable management of forests and enhancement of forest carbon stocks. The REDD-plus decision allows countries a flexible definition of “forest” in the context of national circumstances. Following relevant guidance and safeguards, implementation of forest activities could also allow REDD activities to simultaneously address DLDD too. Therefore, countries may decide on the type of forest to include in the regime, on the basis of established country-driven character (for example, low cover and tropical dryland forests, including their soil pool). This issue will be discussed during agenda item 3.2,3 of the AWG-LCA.

15. Drylands land/rainfall regimes that could include soil conservation (arid, semi-arid and sub-humid), agro-forestry (semi-arid and sub-humid) and plantations (sub-humid) could all be considered REDD actions if Parties consider them to be appropriate. This could be tabled especially during the discussions on agenda item 4 of the thirty-fifth meeting of the Subsidiary Body for Scientific and Technological Advice (SBSTA). Parties

could consider, in their REDD-plus actions, including developing, through science and advocacy, REDD activities in drylands, in order to confer on them the appropriate priority according to national circumstances and forest status.

III. Conclusion

16. UNFCCC decision 1/CP.16 recognizes that climate change is one of the greatest challenges of our time. It calls for scaled-up overall mitigation efforts that allow for the achievement of desired stabilization levels and affirms that adaptation must be addressed with the same priority as mitigation.

17. Therefore, it is of paramount importance that developing countries affected by DLDD are able to confer the required priority to DLDD in their adaptation and mitigation actions at national and regional levels. Parties may wish to consider the following DLDD issues during the AWG-LCA negotiations in Durban:

- a. A broad range of SLM practices and technologies have the potential to either reduce greenhouse gas emissions or increase resilience / adaptation to the adverse impacts of climate change. To the extent that carbon is sequestered in soil or greenhouse gas emissions are limited, soil carbon sequestration could be used as nationally undertaken NAMAs. SLM actions can be used by themselves or as part of other broader-ranging actions on mitigation / adaptation projects or programmes to be supported nationally or internationally.
- b. Drylands have the potential to increase soil carbon stocks: for countries affected by DLDD such actions could become an important part of their mitigation portfolios. Effective mitigation action in soil would require that the carbon sequestered can be measured, reported and verified (MRV) and sufficient technical capacity would be needed to enhance carbon storage and/or maintain land resource / carbon sequestration practices as well as the ability to monitor carbon stocks. This could be relevant for NAMAs and for soil carbon sequestration financing.
- c. There is a possibility to develop appropriate methodologies to allow for feasible and reliable MRV of sequestered carbon in drylands, sound monitoring of related carbon stocks and appropriate consideration of the environmental and social consequences of implementing soil-related mitigation actions.
- d. As the REDD-plus agreement allows countries a flexible definition of "forest" in the context of national circumstances, countries may decide on the type of forests to include in the regime, on the basis of established country-driven character (for example, low cover and tropical dryland forests, including their soil pool).
- e. Forests and tree cover combat land degradation and desertification by stabilizing soils, reducing water and wind erosion and maintaining nutrient cycling in soils. Sustainable use of goods and services from forest ecosystems and the development of agroforestry systems can, therefore, contribute to poverty reduction, making the rural poor less vulnerable to the impacts of land degradation. Desertification and the associated loss of

vegetation, causes biodiversity loss and contributes to climate change through reducing carbon sequestration.

- f. Parties may wish to urge countries to include in their NAPAs, measures that respond to the challenges of DLDD and climate change by addressing a broad array of laws, regulations and programmes that are intended to support, fund and regulate water resources availability for human and animal consumption, industrial, agricultural and environmental purposes among others
18. It is necessary to raise awareness on the existence of missing information for decision-making. UNCCD supports the efforts of the AWG-LCA and proposes that joint actions that support both the objectives of UNFCCC and UNCCD are mainstreamed within framework adopted.

Annex: Relationship of DLDD and CC

1. DLDD is a global problem currently affecting more than 2 billion people who depend on the world's arid and semi-arid lands, 90% of whom live in developing countries in more than 100 countries and costing the world economies more than 40 billion dollars a year. Drylands cover approximately 40% of the world's land area. Unsustainable land and water use and the impacts of climate change are driving the degradation of drylands to such an extent that approximately 6 million km² (about 10%) is now degraded.²
2. The Global Drylands: A United Nations system-wide response report launched at the tenth session of the UNCCD COP in 2011 emphasizes that human well-being is at risk from dryland degradation. It further adds that dryland degradation costs developing countries an estimated 4–8% of their national gross domestic product (GDP) each year. Land degradation is an ecological problem that manifests itself at national and local levels by affecting the economic and social well-being of people, and also at a global level by undermining the integrity, functions and services of various ecosystems. The report states that increased investments can help in fulfilling food security commitments (at least US\$20 billion), in part, through the rehabilitation of the drylands resource base.
3. The UNEP GEO-4 Report from 2007 states that “Land degradation in the form of soil erosion, nutrient depletion, water scarcity, salinity and disruption of biological cycles is a fundamental and persistent problem. The damage can be arrested, even reversed, but this requires concerted, long-term investment across sectors, by all levels of government and by individual land users, research to provide reliable data, and adaptation of technologies appropriate to local circumstances. Such a package of measures has rarely been attempted.” It further states, “Unsustainable land use is driving land degradation. Land degradation ranks with climate change and loss of biodiversity as a threat to habitat, economy and society, but society has different perspectives on various aspects of land degradation, according to political visibility. Inaction means a cumulative addition to a long historical legacy of degradation, from which recovery is difficult or impossible.”
4. The United Nations University Institute for Water, Environment and Health (UNU-INWEH) also affirms that desertification, exacerbated by climate change, represents one of the greatest environmental challenges of our times. The threat of climate change and desertification affects millions of lives, particularly in marginalized dryland areas. DLDD and climate change affect food security, water, forests and contribute to a host of other problems. While climate change affects the whole world, the poorest suffer the most. According to the Millennium Ecosystem Assessment (2005), populations in drylands live under the worst economic conditions. Drylands have the lowest GDP per capita and the highest infant mortality rates. Soil degradation in drylands exacerbates the problem even more.

² Global Drylands: A United Nations system-wide response

The decline in the fertility of land reduces crop production and additional income sources. Land degradation can also trigger a cycle of environmental degradation, impoverishment, migration and conflicts, often also putting the political stability of affected countries and regions at risk.

5. Desertification, land degradation and drought are exacerbating the global water crisis and the world supply of freshwater cannot be increased. Falling water tables are widespread, resulting in serious water shortages and salt intrusion in coastal areas. Contamination of drinking water and nitrate and heavy metal pollution of rivers, lakes and reservoirs are common problems throughout the world. More and more people are becoming dependent on limited supplies of freshwater that are becoming more polluted. Water security, like food security, is becoming a major national and regional priority in many areas of the world.
6. Removing atmospheric carbon dioxide and sequestering it in soil can mitigate the effects of climate change. The result of carbon sequestration is enrichment of the soil that benefits food production. Increased greenhouse gases in the atmosphere have a direct impact on land degradation, which in turn leads to further degradation of the atmosphere. Atmospheric greenhouse gas concentrations have been increasing for some two centuries, mostly as a result of human activities, spearheaded primarily by the rapid rise of industrialization. The degradation of land, however, through unviable agricultural practices has also resulted in emissions of greenhouse gases.
7. Soil carbon sequestration is an important and immediate sink for removing atmospheric carbon dioxide and mitigating global warming and climate change. Organically managed soils can convert carbon dioxide from a greenhouse gas into a food-producing asset. Combined with sequestration in non-agricultural soil, the potential for land to hold carbon and act as a sink for greenhouse gases is unparalleled.
8. Policies that increase attention to the linkage of land and soil to climate change would ultimately benefit mitigation efforts. According to the IPCC, conservation and restoration of forests considerably reduces emissions at a low cost and with potential co benefits for adaptation and sustainable development. Further co-benefits can be achieved when steps to combat land degradation and conserve biodiversity are included in forest conservation and restoration.
9. Forests cover approximately 30% of the Earth's land surface and provide critical ecosystem goods and services, including food, fodder, water, shelter, nutrient cycling, and cultural and recreational value. Forests also store carbon, provide habitat for a wide range of species and help alleviate land degradation and desertification. Forests also have a potentially significant role to play in climate change adaptation planning through maintaining ecosystem services and providing livelihood options. Additionally, they also present a significant global carbon stock. Global forest vegetation stores 283 Gt of carbon in its biomass, 38 Gt in dead wood and 317 Gt in soils (top 30 cm) and litter. The total carbon content of forest ecosystems has been estimated at 638 Gt for 2005, which is more than the amount of carbon in the entire atmosphere. This standing carbon is combined with a gross terrestrial uptake of carbon, which was estimated at 2.4 Gt a year, a good deal of which is sequestration by forests.