



Ministry for Natural Resources, Energy and Mining

Department of Forestry

Republic of Malawi

Republic of Malawi
National Commitment to Achieve
Land Degradation Neutrality

Lilongwe, Malawi

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**THE GLOBAL
MECHANISM**
United Nations Convention
to Combat Desertification



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22nd December, 2017

The Managing Director
The Global Mechanism of the UNCCD
UN Campus Platz de Vereinten Nationen 1, 53113
Bonn, Germany

Dear Mr. Repinik,

**SUBMISSION OF NATIONAL LAND DEGRADATION NEUTRALITY TARGETS
AND HIGH LEVEL NOTE FOR MALAWI**

I am pleased to submit Malawi's Land Degradation Neutrality Targets arrived at after almost a year of a consultative process that received commendable technical and financial support from Global Mechanism (GM). I wish first to express my sincere and profound appreciation to the GM for this timely support towards addressing land degradation problems in Malawi and ensuring sustained productivity of our land resource base.

At national scale, Malawi has set a target of achieving land degradation neutrality by 2030 as compared to the baseline of 2015 (no net loss) and an additional 2% of the land territory of 9.4 million hectares improvement. This translates to 188,000 hectares with net gain as compared to 2015. We realize that this is a very ambitious target taking into consideration the LDN indicators, land cover change, net land productivity and soil organic carbon. We have in addition taken on board to combat the rampant soil erosion as one of LDN indicators considering its seriousness and impact on land productivity.

Sub-national LDN targets have been set basing on broad agro-ecological zones allowing Malawi to concentrate on areas identified as land degradation hotspots and/or taken to be high priority in achieving LDN. The Shire River basin is very high potential area in terms of production but is also important for the generation of 95% of hydro-electric power. Achieving land degradation neutrality in this area will go a long way towards addressing power generation problems caused by siltation and aquatic weed infestation in the Shire River.

As a contribution to the Bonn Challenge, Malawi has ambitiously set a target of restoring 4.5 million hectares of degraded land and this is a clear manifestation of how Government rates highly the problem of land degradation considering that the total land area of the country is only 9.4 million hectares. This was arrived at following a detailed National Land Restoration Assessment that led to the development of National Land Restoration Strategy. Land degradation neutrality targets set under the LDN TSP will contribute towards this national commitment and also to other commitments such as the Nationally Determined Commitment under the Paris Climate Agreement, among others.

Malawi has on-going afforestation and soil and water conservation programmes implemented by relevant government institutions, civil society organizations and the private sector with the support of international cooperating partners. Malawi's flagship afforestation programme is the Annual National Tree Planting Season that every year the country's Head of State launches at the beginning of the rainy season to kick start mass participation of afforestation activities throughout the wet season. This just goes to emphasize the commitment of the Government at the highest level to afforestation activities in general. With the expected support under the LDN Fund, Malawi plans to develop transformative projects which will contribute to achieving the set targets.

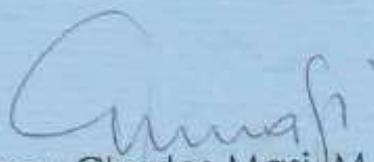
Let me once again thank the GM for the support through LDN TSP and all the other cooperating partners that have assisted us in our efforts in combating land degradation through promotion of sustainable land management. We will count on their continued

collaboration and support to achieve land degradation neutrality which we consider as being critical to the attainment of sustainable Socio - economic development of our country.

We look forward to our continued collaboration.

With highest consideration.

Yours sincerely,



Aggrey Charles Masi, M.P.

**MINISTER OF NATURAL RESOURCES, ENERGY
AND MINING**

1. Introduction

Malawi land area estimated at 9.4 million hectares with an estimated human population of 17.3 million and growing at the rate of 2.9%, causing intense pressure arising from various and often competing land uses. The importance of land based resources to Malawi cannot be overemphasized as the country depends on agriculture for its social and economic development yet land degradation poses very serious threat to its ability to produce or provide goods and/or services in a sustainable manner. In strictly economic terms, land degradation costed Malawi an estimated \$244 million between 2001 and 2009 (Nkonya et al. 2016). The Government of Malawi has estimated that 29 metric tons of top soil per hectare is lost each year and it is estimated that soil loss is costing the country an estimated 8% of its annual gross domestic product (GDP) (GOM 2001).

Deforestation is happening at an alarming rate, this is due to expansion of agriculture into previously forested areas, high dependency on biomass for energy (lack of alternative renewable energy sources) and cutting down of trees and poles for tobacco growing and curing among other causes. This reduction in forest cover has exposed the land to rain drop impacts causing massive soil erosion. Agriculture has also encroached into environmentally fragile areas and often without adequate conservation measures causing also serious soil erosion. The low input traditional unimproved agricultural practices, including use of unimproved seed varieties, low use of both inorganic and organic fertilizers and other bad cultural practices have led to loss of soil fertility that has caused declining crop yields and low production.

The dominant smallholder cropping system in the whole country is based on maize. Hybrid maize, which requires fertilizer treatments (supported by the Government's input subsidy scheme), has resulted in increasing yields but the impact could have been much better if this is complimented with sustainable land management practices that ensure sustainable land productivity. Increasing human population density and declining land availability have made the traditional shifting cultivation fallow cycle obsolete, and maize is now continuously cropped in most parts of the country. Previously, the fallows would have provided cover for soil, reduced the build-up of pests and disease, the recharging of the soil with organic matter and the indigenous leguminous (nitrogen-fixing) plants would have facilitated the restoration of nitrogen.

Malawi seriously needs to embrace and implement the principles of land degradation neutrality (LDN) in order to sustain its development gains ensure sustained productivity of its land resource base upon which its social economic development mainly depends on.

2. Achieving LDN as a national priority

The importance of Malawi's land based natural resources to its social economic development cannot be over emphasized. The ability of land to provide or produce goods and/or services is the basis for Malawi's development and this needs to be protected at all cost. The motivation for committing to LDN is the high level of degradation and the importance of the land sector to its national development. In line with the high levels of rurality, agriculture remains the backbone of the Malawian economy and is vital for the livelihoods of most Malawians. This is the reason that Malawi committed to set voluntary LDN targets.

3. National LDN baseline

The Malawi national LDN baseline has considered four LDN indicators: land cover, land productivity, soil organic carbon and top soil loss (soil erosion).

The default data, provided by the UNCCD Secretariat in the context of the LDN Target Setting Programme, estimated the forest cover at 18,740 km² and 18,515 km² in 2000 and 2010 respectively representing a net decline of 225 km² within that ten year period. The cropland area was estimated at 64,931 km² in 2000 and at 65,114 km² in 2010 representing a net increase of area under agriculture of 183 km² during that period. There was an increase of 42 km² of area under shrubs, grasslands and sparsely vegetated area during the same period and no changes were detected in areas under wetlands and water bodies, artificial or built up areas and bare lands and other areas.

According to the global data sets, 71% of the land that remained unchanged in terms of land cover, was 'stable and not stressed' in terms of land productivity, 16% was classified as 'declining', 'early signs of decline' and 'stable but stressed' and 10% showed 'increasing' land productivity.

Soil organic carbon (SOC) values for areas that did not change land use during the period 2000 to 2010 were estimated at 54 ton/ha under forests, 53 ton/ha under shrubs/grasslands, 45 ton/ha under cropland and 41 ton/ha for wetlands, giving an average of 47.1 ton/ha for the four land cover categories.

Malawi has included an additional indicator of top soil loss, which in 2015 was estimated at 29 ton/ha/year¹ up from previous estimate of 20 ton per hectare per year in 1992². This indicator is significant for Malawi as soil erosion was identified in the Malawi's National Environmental Action Plan as the most serious environmental challenge facing the country.

4. Malawi's LDN targets and associated measures

At national scale Malawi has set a target of achieving land degradation neutrality by 2030 as compared to the baseline of 2015 (no net loss) and an additional 2% of the land territory of 9.4 million hectares improvement. This translates to 188,000 hectares with net gain as compared to 2015.

At sub-regional level the following are the targets:

- LDN is achieved in the **High Lands of Nyika, Viphya and Mulanje, Dedza and Zomba** mountains by 2030 as compared to 2015 (no net loss)
- LDN is achieved in the land degradation Hotspots along **the Rift Valley Escarpment Area** of Malawi by 2030 as compared to 2015
- Attain land degradation neutrality on the **Plateaux ecological zone** by 2030 as compared to 2015
- Attain land degradation neutrality in the **Shire River basin catchment** by 2030 compared to 2015 and an additional 2% of the basin has improved (Net gain)

¹ FAO, UNEP and UNDP, 2016. Soil Loss assessment in Malawi, Rome, Italy

² World Bank, 1992. Malawi Economic Report on Environmental Policy, World Bank, Lilongwe

Specific targets for avoiding, minimizing and reversing land degradation

- i. Improve productivity of **754320 hectares** cropland by 2030
- ii. Improve Soil Organic Carbon (SOC) stocks on cropland **to 55 ton/ha by 2025** as compared to **44.7 ton/ha** estimated in 2015
- iii. Rehabilitate **one million** hectares of degraded land for crop production by 2030³
- iv. Halt the conversion of forests and wetlands to other land cover classes by 2020
- v. Improve forest (plantation & indigenous) cover **by 33750 hectares** by 2030 as compared to 2015
- vi. Reduce the rate of top soil loss (soil erosion) **to 20 tons per hectare per year** by 2030 from the 2015 estimated rate of 29 tons/ha/year
- vii. Increase forest cover by **2% from 2015** baseline by 2022³
- viii. Restore **820,000 hectares** of degraded indigenous forest by 2030³
- ix. Sustainably manage **138,000 hectares** of plantation forest by 2025³
- x. Restore **36000 hectares** of degraded stream banks by 2030³
- xi. Protect 2.4 million hectares of natural forest by 2035⁴

5. Leveraging LDN targets through the national sustainable development agenda

Malawi's existing policy and legal frameworks are consistent with the values of LDN. However, there is need for deliberate additional efforts to integrate LDN into some national and sectoral policies towards ensuring effective delivery of the aspirations of sustainable Goal 15 and in particular target 15.3. The national planning framework, i.e. the Malawi Growth and Development Strategy III, which is under elaboration, should integrate the principles of LDN to provide entry point for all sectors to include LDN in their policies and strategies. Other policies requiring alignment to LDN principles include the National Agriculture Policy, the National Forestry Policy, the Draft National Energy Policy, the National Irrigation Policy, the National Land Management Policy and Strategy, the National Environmental Management Policy and the National Land Policy. Most importantly Malawi will develop LDN transformative projects to directly address issues of land degradation.

6. Joint bold action to achieve LDN in Malawi

The seriousness and magnitude of land degradation problems in Malawi requires that all stakeholders must leverage their efforts and resources to contribute to the achievement of LDN. The Government of Malawi therefore calls upon all stakeholders, including all relevant public institutions, the private sector, the Civil Society Organizations and international cooperating partners, to contribute towards the country's efforts in achieving LDN.

³ Part of Malawi's AFR100 commitment to restore 4.5 million hectares by 2030

⁴ Target appearing in the Malawi Growth and Development Strategy III