



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

ANTIGUA & BARBUDA

Department of Environment
Ministry of Health, Wellness and the Environment

Land Degradation Neutrality High-Level Note

December 2020



This document has been prepared with the support of the Land Degradation Neutrality Target Setting Programme (LDN TSP), a partnership initiative implemented by the Secretariat and the Global Mechanism of the UNCCD, with support of the following partners: France, Germany, Luxembourg, Republic of Korea, Spain, Trinidad and Tobago, Turkey, Venezuela, the European Space Agency, Food and Agriculture Organization of the United Nations, Global Environment Facility, ISRIC – World Soil Information, International Union for Conservation of Nature, Joint Research Centre of the European Commission, Soil Leadership Academy, United Nations Development Programme, United Nations Environment Programme, World Resources Institute.

The views and content expressed in this document are solely those of the authors of this document and do not necessarily represent the views of the LDN TSP or any of its partners.



GOVERNMENT OF ANTIGUA AND BARBUDA

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December 7th, 2020

Mrs. Louise Baker
Managing Director
Global Mechanism
United Nations Convention to Combat Desertification

**Re: Submission of the Final Report and High-Level Note for the
Land Degradation Neutrality (LDN) Target Setting Programme (TSP) from
Antigua and Barbuda**

Dear Mrs Louise Baker,

The Department of Environment (DOE), on behalf of Antigua and Barbuda, is pleased to announce the conclusion of its Land Degradation Neutrality (LDN) Target Setting Programme (TSP) and the presentation of its national and sub-national targets and associated measures. Antigua and Barbuda pledges its commitment to achieving a land degradation neutral territory by the year 2030 and confirms that the LDN TSP is aligned to the global SDG 15. The Final Country Report and High-Level Note is hereby submitted to the United Nations Convention to Combat Desertification (UNCCD).

We acknowledge the support and contribution of the UNCCD Secretariat and the Global Mechanism (GM) in providing the necessary financial and technical resources to support this process. The DOE also commends the work of the National Working Group in guiding this process.

Antigua and Barbuda looks forward to a continued productive relationship with the UNCCD and the GM.

Thank you for the opportunity.

Respectfully,

Amb Diann Black-Layne
Antigua and Barbuda National Focal Point
United Nations Convention to Combat Desertification

INTRODUCTION

Antigua & Barbuda is a twin island state of the Leeward group in the Lesser Antilles measuring roughly 278 km² for Antigua and approximately 157 km² for Barbuda. Total population as at 2011 Census was 88,566, however current projections for 2019 show the population estimate at 96,651 (Statistics Division 2019). The other major island (Redonda) of the country lies roughly 25 miles to the south west of Antigua and is uninhabited. The country's main source of economy is tourism, with minimal contributions from agriculture. The nation finds its natural vegetation, i.e. grasslands and forestlands, being threatened due in part to urban expansion and bush fires brought about due to dry conditions.

The Department of Environment (DOE), the lead agency developing and implementing climate change mitigation and adaptation measures, is also the National Focal Point for the United Nations Convention to Combat Desertification (UNCCD). As the NFP, The DOE signed on to the Land Degradation Neutrality (LDN) Target Setting Programme (TSP) on behalf of the country. The UNCCD strongly urges Country Parties to strive to achieve a land degradation neutral world in keeping with Sustainable Development Goal (SDG) 15. In fulfilling this mandate, the DOE established a National Working Group that oversaw the LDN process leading to the final report being submitted along with this note.

The UNCCD Secretariat provided the relevant tools and methodologies to the countries that signed on to this initiative, and Antigua and Barbuda was no exception. Measuring LDN involves assessing the status of three indicators, namely: land cover (trends in vegetative land cover), land productivity dynamics (LPD) and carbon stocks (metric: soil organic carbon <SOC> stock). Degradation is assumed to occur if a negative land cover change occurs, or if the net primary productivity shows a significant negative trend or if the soil organic carbon shows a significant negative trend¹.

The findings of an analysis of the established baseline period of 2003-2015 were presented and approved in a December 2018 meeting of the NWG. Data from the Collect Earth tool, used specifically to capture Land Use and Land Cover changes, showed an increase of 3.6% and 3.4% in Forest and Settlements respectively during the time period. However, a reduction in grassland by 6.8% was also observed. The primary grassland subcategory noted to undergo changes was pasture/rough grazing turning into settlements. Another tool that was used to analyze global-derived satellite data was Trends.Earth. This tool detected roughly 24.2 sq.km (6.56% of the total coverage area) as having been degraded, 3 sq.km. (0.80% of the total coverage area) showing improvement and the remaining 92.6% detected as being stable.

ACHIEVING LDN AS A NATIONAL PRIORITY

Antigua & Barbuda has been impacted by several hazards (i.e. hurricanes, drought events and forest fires) which have affected livelihoods in many communities and exacerbated the effects of land degradation. Strengthening the resilience of vulnerable communities that have been impacted by recent hazards through the assurance and advancement of vital

¹ The Global Mechanism of the UNCCD (2016). 'Achieving Land Degradation Neutrality at the country level' https://knowledge.unccd.int/sites/default/files/inline-files/Building%20blocks%20for%20LDN%20target%20setting_0.pdf

ecosystem services will help to achieve LDN on a national scale, as it will generate communal environmental and social benefits that are key in addressing poverty, food security, availability of resource and income equality. The availability of both human and financial resources, in addition to institutional strengthening and capacity building, will contribute to sustainable land management and the achievement of LDN on a national scale and as a national priority. The Government of Antigua & Barbuda is committed to LDN as it underpins the value and magnitude of natural land-based resources for sustainable socio-economic development.

In order to achieve this goal, the government establishes mechanisms to support the management of protected areas, sustainable land and natural resource management policies and activities, such as:

- The Morocco Soil Fertility Project, which focuses on soil fertility and funded by the European Union (EU), is effectively promoting a more sustainable way of using fertilizer by farmers. The capacity to collect spatial data showing the fertility and nutrient status of soils island-wide also contributes to improvements in national databases and therefore advances the analysis of the baseline indicators.
- Environment Protection & Management Act (EPMA), passed in 2015 and revised in 2019, provides a mandate for the establishment of a national environment policy framework with which places emphasis on watershed management, developing a biodiversity strategy and action plan along with relevant protected area management plans.
- Sustainable Island Resource Framework (SIRF) Fund, is a special fund as provided for under the Finance Administration Act of 2006, Section 42 (1)(a), and established as a legal entity for the specific purposes of implementing the Environmental Protection and Management Act (EPMA) of 2015. The Fund aims to provide the financial framework mechanism to implement the EPMA and will serve as the primary means for achieving Antigua and Barbuda's ambitious climate action.
- Partnership between key land management interest, such as the Ministry of Agriculture, Ministry of Housing, Lands & Urban Renewal and the Department of Environment to promote sustainable land management.

TARGETS AND ASSOCIATED MEASURES

LDN target at National Level:

- LDN is achieved by 2030 as compared to 2015 to include the existing 9% degraded lands within our land mass becoming neutral or improved.
- The LDN TSP is aligned to the global SDG15 to achieve by 2030.

LDN sub-targets:

- 1) Reporting on the land use/land cover indicator reflects a 5% change towards the improvement of the land by 2030 compared to the 2015 baseline (net increase) and achieved through strengthened development control and other appropriate measures.

- 2) LDN is achieved in St Mary's (priority), and St. John's Parish by 2030, compared to the 2015 baseline through sustainable land management practices (Indicators: stable Productivity and stable Soil Organic Carbon).

LDN measures:

- 1) Incorporate LDN as an innovative land use planning tool in Antigua & Barbuda (i.e., through amendment of the Physical Planning Act and/or its incorporation in the planning activities of the Development Control Authority with consultation among associations such as; Architectural, contractors, IICA, CARDI, Antigua Hotels and Tourist association (AHTA), other relevant private and public associations and the general public).
- 2) Stabilize settlement expansion by exploring urban density or any other innovative building and planning practices executed by Lands Division, National Parks Authority, National Housing Development and Urban Renewal Co Ltd., and Central Housing and Planning Authority (CHAPA) guided by the use of Local Area Plans.
- 3) Strengthen the monitoring and enforcement regime of the Development Control Authority through increased financial and human resources.
- 4) Encourage the DCA Board and Ministry of Agriculture to improve productivity by implementing agricultural production systems, per agricultural district, using best available and affordable technologies.
- 5) Increase soil organic carbon in St. Mary's and St. John's Parish through sustainable land management practices specifically targeting erosion, soil fertility and geology percolation rate. Other areas may include, but not limited to;
 - ❖ Dredged materials be properly disposed of etc.
 - ❖ Improving tree cover in urban settlements.
 - ❖ Educational campaign on composting.
- 6) Replace invasive species in Body Pond watershed, through ecological restoration projects promoting growth and water infiltration.
- 7) Strengthening of existing framework at the DCA that governs decision making on the LDN prescriptions, policies and land allocation and involve relevant agencies (Survey & Mapping Division, Forestry, DOE, Lands Division, National Parks Authority, National Housing Development and Urban Renewal Co Ltd., CHAPA, Barbuda Council)

LEVERAGING LDN TARGETS THROUGH THE NATIONAL SUSTAINABLE DEVELOPMENT AGENDA

The Ministry of Finance and Corporate Governance in 2015, approved a Medium-Term Development Strategy (MTDS) focusing on the period 2016-2020; to be updated at the end of the term. There is an opportunity to leverage the targets outlined in the previous section through this mechanism. The current MTDS presents Sustainable Development Dimensions (SDD) with the third one seeking to improve natural environment, sustained historical and

cultural assets through a host of projects or programs. A brief breakdown of leverage opportunities are provided below (an alignment with the Necessary Conditions presented in the MTDS).

Sustainable Environment Management: The road to achieving LDN is mapped using guiding principles, policies and partnership. This Necessary Condition (NC) as presented in the MTDS, features the Sustainable Island Resource Management (SIRM) approach, which focuses on multi-agency collaboration and policy development and can directly support the LDN agenda. Through capacity building and strengthened institutional arrangements, this will simultaneously enhance sustainable economic development and planning.

Ecosystems Management: There is a great concern to preserve and restore coastal areas given the possibility that degradation could occur during development activities that are geared towards contributing to the main economic activity in the country, i.e Tourism. Through this NC, the MTDS underscored the importance to develop and implement a National Action Plan to Combat Land Degradation to be led by the relevant ministry responsible for the environment.

Water Resource Management: The present climatic condition, which tends to favor prolonged drought periods, creates a strain on residential and agricultural water supply. Additionally, the limited natural water sources are constantly under threat due to deforestation, fires, etc. leading to decreased aquifer recharge. This NC calls for the development of strategies and actions to improve water harvesting, quality and storage in an effort to address this shortcoming.

Urban and Rural Planning: In fulfillment of the approved National Physical Development Plan (NPDP) of 2012, the focus is now on the development of local area plans (LAPs). The NPDP is guided by institutional arrangements while establishing various development models to control development. A key area under this NC subsection, is to evaluate and better plan the establishment of human settlements and their economic activities. The incorporation of LDN through this medium is definitely a great consideration to ensure the linkage.

COLLABORATIVE ACTION TO ACHIEVE LDN IN ANTIGUA & BARBUDA

Through this process, Antigua & Barbuda has demonstrated that there is a shared interest in ensuring that the country addresses land degradation on a national level. The NWG has worked collaboratively to guide the LDN TSP and their contribution has been commendable. Financial support was provided by the Global Mechanism who has been a significant partner to Antigua and Barbuda. It must also be noted that opportunities exist for the country to access funding from international donors to develop and implement the transformative projects and programmes that have been conceptualized.

One collaborative effort that needs special mention is between the Ministry of Agriculture, Fisheries and Barbuda Affairs, the Ministry of Housing, Lands and Urban Renewal and the Department of Environment. These three entities have been the driving force for the LDN TSP. Together, they were able to share ideas and resources to ensure that land degradation is being addressed and the benefits from LDN can be realized. One way how this is being done is through the development of Local Area Plans (LAPS) on a community level (Cashew

Hill LAP) and also the Parish level (St. Mary's Parish). The LAPs are developed to ensure sustainable development by following zoning policies that takes into account the livelihoods of communities. This will inevitably allow for the proper use and management of land and soil resources thereby further promoting LDN.

On the regional front, Antigua and Barbuda is participating in the development of the “*Caribbean Small Island Developing States (SIDS) Multi-Country Soil Management Initiative for Integrated Landscape Restoration and Sustainable Food Systems: Phase 1 (CSIDS-SOILCARE Phase 1)*” project. The focus of this project is to strengthen Caribbean SIDS with the necessary tools for adopting policies, measures and reforming legal and institutional frameworks to achieve LDN and Climate Resilience. The expected start date is 2021.

The Food and Agriculture Organization said it best when they highlighted that soil protection will enable people to grow nutritious food and at the same time prevent ecosystem degradation². The Department of Environment, together with national agencies and stakeholders, is committed to continuing the efforts to ensure that the country achieves LDN as is elaborated in Goal 15 of the SDGs

² <http://www.fao.org/fao-stories/article/en/c/1192794/>