



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

FEDERATION OF SAINT KITTS AND NEVIS

Land Degradation Neutrality High-Level Note



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INTRODUCTION

The Federation of Saint Kitts and Nevis (SKN) is a two-island country of the Lesser Antilles in the eastern Caribbean Sea, with a total land area of 269 km². It has a tropical marine climate that is generally influenced by steady northeast trade winds and tropical oceanic cyclonic movements. Both islands are volcanic in origin, with central mountain ranges that dominate the landscape and radiate downward to the coasts. Most flat land occurs near the coast, and as a result, most urban and agricultural developments and settlements are located there. The agricultural sector in Saint Kitts and Nevis has undergone a radical transformation in the course of the last two decades. Particularly, the Government officially closed the state-run sugar industry in 2005, leaving almost 75% of agricultural lands without active management¹. In addition, the country has faced a recent economic growth due to the expansion of the travel and tourism sector. These aforementioned recent developments are increasing the pressures on the country's environment and limiting its ability to achieve sustainability objectives.

In addition, SKN is facing serious ecosystem degradation issues. Land degradation in the country is fundamentally a result of the depletion, removal and loss of soil caused mainly by runoff water after heavy rainfall events. Evidence of this can be seen in the brown coloration of the near shore coastal waters around the islands. The loss of biodiversity from the impact of human activity and natural hazards such as hurricanes, fire, drought together with deforestation, improper road maintenance, bad crop farming and animal husbandry practices, unregulated quarrying and poorly planned human settlement patterns also contribute to land degradation in St. Kitts and Nevis.²

Moreover, the causes of land degradation are the result of different factors for both islands in the Federation of St. Kitts and Nevis. On the island of Nevis land degradation is mainly the result of unregulated quarrying activities that are later abandoned, leaving the landscape scarred and thus leading to soil erosion after heavy rainfall. Additionally, the increasing population of feral donkeys on the island contributes to overgrazing of lands, particularly in the dry season. These overgrazed areas are easily eroded during heavy rainfall

On the island of St. Kitts the closure of the 350 years old sugar industry in 2005, resulted in an increase in the incidence of soil erosion and land degradation on the island as the absence of the sugar cane plant resulted in the exposure of the soil to runoff water during heavy rainfall. The roots of the sugar cane plant also helped to bind the soil particles thus reducing erosion. Soils used for sugar cane cultivation quickly loss fertility as the decayed portions of the sugar cane plants after harvesting were no longer available to add nutrients to the soil.

Additionally, the soil conservation measures that were used during sugar cane cultivation and the maintenance of roads to link the fields for the transportation of the harvested sugar cane all ceased after the closure of the sugar industry on the island of St. Kitts.

Thus, the country is currently in a position where strategies must be developed and actions must be taken to address land degradation. Projects are being undertaken by various

¹ Figures from UNDP's 2014 technical report "Conserving Biodiversity and reducing habitat degradation in Protected Areas and their Areas of Influence"

² More information on causes of land degradation in Saint Kitts and Nevis' 2007 National Action Programme

government agencies and funded by national government and international development partners, which contributes to combating land degradation and the achievement of land degradation neutrality (LDN). The work of the United Nations Convention to Combat Desertification (UNCCD) supports any action and a way forward to achieve LDN, which will enhance economic development and the accomplishment of sustainable land management goals for the country.

On the island of St. Kitts, the Department of Physical Planning (DPP) in the Ministry of Sustainable Development (MSD), is the agency responsible for physical planning and development control. It is also the focal point for the UNCCD. The Department of Environment in the Ministry of Agriculture is responsible for environmental management. As lead agency for environment, the DOE functions as the focal point in SKN for the UNFCCC and UNCBD. Accordingly, it plays a pivotal role in the administration of sustainable development in SKN³. Likewise, the DPP and DOE reflect the endorsement of the Government's affirmative action towards LDN achievement and also, securing a sustainable environment for all the citizens of the Federation of St. Kitts and Nevis. Furthermore, the Ministry of Sustainable Development is also responsible for the national development agenda, planning, coordination of development cooperation programmes, development of the public sector investment programme, official statistics, the annual capital budget and environmental and land matters⁴.

In addition to maintaining or enhancing the natural capital of the land and associated land-based ecosystems services, one of the key goals of LDN is avoiding further future loss of the land-based natural capital relative to a referenced state or baseline. The three indicators for calculating the baseline and tracking progress towards LDN targets have also been recommended as sub-indicators to compute the SDG indicator, "*Proportion of land that is degraded over total land area*". This indicator was adopted to measure progress towards the SDG target 15.3⁵. The indicators used for tracking progress towards LDN are: land cover or trends in vegetative land cover, land productivity dynamics (LPD) and carbon stocks or soil organic carbon (SOC) stock).

From the assessment of this national baseline, the results showed that the proportion of degraded land, which encompasses the results for the three indicators, the island of Saint Kitts showed degradation in 32.32% of the total land area while for the island of Nevis a total of 8.8% of all the island appeared to be land degraded areas. Additionally, the category of land cover category that changed the most in the island of St. Kitts was the "cropland" areas as it decreased 16.37 km² from 2000 to 2015. Similarly, the category of "tree-covered areas" also showed a decrease (2.05 km²) in the 15-year baseline period in the island of Nevis.

ACHIEVING LDN AS A NATIONAL PRIORITY

Saint Kitts and Nevis 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

³ More information on GOSKN legislative, regulatory, policy and institutional frameworks in UNDP's 2012 "United Nations Conference on Sustainable Development (Rio+20)"

⁴ More on GOSKN's mission statement on <http://www.gov.kn>

⁵ More information on UNCCD's 2016 "Land degradation neutrality target setting - A technical guide"

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 collaboration with 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 Saint Kitts and Nevis (GOSKN) is therefore 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 vision, GOSKN provides significant baseline investments in support of the management of protected areas, sustainable land and natural resource management activities.

Within the MSD, the DPP plays an instrumental role in land management, where its functions are mainly forward planning and development control. Additionally, the DOE in the Ministry of Agriculture is responsible for environmental conservation and protection. In addition, the DOE is responsible for the management of all protected areas in the country.

The DPPE in the MSD will also be in charge of the implementation and executing of the GEF funded project that is currently being developed: “Improving Environmental Management through Sustainable Land Management in St. Kitts and Nevis”. In addition, the DOE will be responsible for the implementation of the GEF funded project entitled “Conserving Biodiversity and reducing habitat degradation in Protected Areas (PAs) and their buffer zones”.

Implementation of a number of ongoing projects island-wide is helping to mitigate climatic shocks and to promote a more sustainable environment. One such project is the IWeco project which seeks to integrate water, land, and ecosystems management. The project is a regional initiative funded by the Global Environment Facility and is being implemented by the United Nations Environment Programme (UNEP).

The GOSKN, in partnership with bilateral and multilateral development partners, has provided substantial assistance to both farmers and agro-processors. For example, the Government of Taiwan has supported agro-processing to create more opportunities to sell to the local market and to expand exports to other islands. Moreover, there are currently two important projects⁶ from Taiwan’s International Cooperation and Development Fund (ICDF) under implementation, which seeks to enhance agricultural adaptive capacity to climate variability, and a Land Administration Information project.

Additionally, a collaborative project from the Organization of Eastern Caribbean States (OECS)/European Union (EU) that seeks to rehabilitate and reduce the effects of climate change and human induced degradation on the environment will be undertaken at the New River and Coconut Walk area on the island of Nevis. Moreover, this project specifically intends to reduce soil erosion through restoration of natural vegetation, use of stone contours and reduce overgrazing through animal control mechanisms, and also decrease coastal erosion through the strategic placement of boulders⁷.

⁶ See <http://www.icdf.org.tw/lp.asp?ctNode=30056&CtUnit=172&BaseDSD=100&mp=2>

⁷ More information <http://ilandresilience.org/thematic-areas>

On the island of St. Kitts, the Wash Ghaut Slope Stabilization Project in the Cayon area is demonstrating biotechnical slope stabilization measures using living plant materials to reduce erosion in this rural community, including simple erosion control with grass and legume seeding and more complex slope stabilization with live cuttings and other plants.

The development of partnerships with International Development Associations (IDA), World Bank Group (WBG), regional and national financial agencies such as Caribbean Development Bank (CDB), and Development Bank of Saint Kitts and Nevis (DBSKN), work towards mitigation to climate change and also contribute to LDN.

Working in conjunction with the Caribbean Catastrophe Risk Insurance Facility (CCRIF), and through the financial services' regulatory authority, SKN makes provisions for individuals to access finance for climate risk management thereby promoting the reduction of the economy's exposure to risk. This is also creating an enabling environment where achieving LDN can also be appreciated at a local to national state.

SKN LDN TARGETS AND ASSOCIATED MEASURES

Saint Kitts and Nevis has agreed that “*LDN will be achieved by 2030 and an additional 5% of degraded lands of the national territory are improved.*”

LDN Sub-targets

- LDN is achieved in the Saint John Capisterre, Christ Church Nichola Town and Saint Mary Cayon areas in the island of Saint Kitts by 2030, compared to the 2015 baseline (no net loss). It corresponds to the areas with most degradation in St Kitts.
- LDN is achieved in the Saint James Windward area in the island of Nevis by 2030, compared to the 2015 baseline (no net loss). It corresponds to the areas with most degradation in Nevis.
- LDN is achieved in Saint George Basseterre parcel of the island of Saint Kitts by 2030, compared to the 2015 baseline plus an additional 5% has improved (net gain) [*Challenging approach: where the capital of the country is*]. It corresponds to the areas where there is not much degradation and the stable and improving conditions are one of the best on the island.
- LDN is achieved in Saint George Gingerland parcel of the island of Nevis by 2030, compared to the 2015 baseline plus an additional 5% has improved (net gain) [*Challenging approach: where the capital of the country is*]. It corresponds to the areas where there is not much degradation and the stable and improving conditions are one of the best on the island.
- Improve productivity and Soil Organic Carbon (SOC) stocks in cropland and grasslands for the entire country by 2030, compared to the 2015 baseline.

LDN Measures

- Improve productivity of the land by restoring 15% of degraded areas with 665 hectares of cropland on the island of Saint Kitts through sustainable land management practices (based on the results of LPD degraded areas over land cover transitions)

- Improve productivity of the land by restoring 1.5% of degraded areas with 13 hectares of forest on the island of Nevis through the reforestation of native and endemic species as proposed in the 2007's NAP part four of the Implementation Plan theme 5 (results based on the results of LPD degraded areas over land cover transitions)
- Reduce the conversion of forest by 15% with the restoration and rehabilitation of 234 hectares to other land use classes on the island of Saint Kitts through improved land use planning best practices, enforcement of existing land management legislation, update of formulation of land use policy and inter-agency cooperation (percentage and figure based on the land cover transitions results).
- Reduce the conversion of forest by 2% with the restoration and rehabilitation of 185 hectares to other land use classes on the island of Nevis through improved land use planning best practices, enforcement of existing land management legislation, update of formulation of land use policy and inter-agency cooperation (percentage and figure based on the land cover transitions results).
- Reduce the rate of soil erosion by 15% by 2030 through sustainable land management practices and soil erosion prevention methods. Achievable through the environmental conservation activities proposed by the Land Management Unit from the NAP's Implementation Plan main policy interventions theme 4.
- Reserve lands between the 500 – 1000 ft. contour as priority areas for agricultural diversification activities⁸.
- Incorporate LDN as an innovative land use planning principle in Saint Kitts and Nevis (i.e. through a possible amendment of the National Physical Development Plan and/or its incorporation in the planning activities of the Department of Physical Planning, DPP and the Department of Environment DOE.
- Strengthen the monitoring and enforcement regime of the Development Control and Planning Act through increased financial and human resources.

LEVERAGING LND TARGETS THROUGH THE NATIONAL SUSTAINABLE DEVELOPMENT AGENDA

The agenda for sustainable development on St. Kitts and Nevis is managed primarily by the Ministry of Sustainable Development. Generally, sustainable development initiatives have been supported by financing provided by the Global Environment Facility (GEF) through the implementation of multilateral environmental agreements (MEAs). Specially, under the UNFCCC, UNCCD and the UNCBD, the GOSKN has sought to improve the management of the environment by strengthening national capacities for sustainable development, including facilitating the increased involvement of the private and civil society sectors⁹. Such proactive actions place the country in a position of achieving its national goals in addressing sustainable development through ecosystems-based approaches and land degradation neutrality. In this case, the most relevant initiatives are the establishment of policies by the government like the National Physical Development Plan (NPDP) from 2005 that targets sustainable development in the context of land use planning, along with the National Action Plan (NAP) which identifies the factors that have contributed to land degradation and physical measures required to combat land degradation and mitigate the effects of drought.

⁸ Based on proposed actions to strengthen the agricultural sector from SKN's 2007 National Action Programme

⁹ More on GOSKN's sustainable development agenda on UNDP's 2014 technical report "Conserving Biodiversity and reducing habitat degradation in Protected Areas and their Areas of Influence"

At the sub-regional level, the St. George's Declaration of Principles on Environmental Sustainability and the Barbados Programme of Action have placed priority on sustainable the management of land resources. Strategies for implementation of these agreements at the national level such as the National Environmental Management Strategy and Action Plan (NEMS) have provided the opportunity to capitalize on synergies for mainstreaming sustainable development⁹. Other significant plans or reports under relevant conventions are the National Biodiversity Strategy and Action Plan (NBSAP), which seeks to promote the conservation and management of the country's biodiversity, prepared under the umbrella of the United Nations Convention on Biological Diversity (UNCBD); and the National Adaption Strategy (NAS) along with the National Poverty Reduction Strategy constitute country's efforts to address extreme poverty and seek to ensure environmental stability towards meeting the Sustainable Development Goals (SDGs).

COLLABORATIVE ACTION TO ACHIEVE LDN IN SKN

In 2005 a Ministry of Sustainable Development (MSD) was created to spearhead the design and implementation of the country's development agenda and to better equip SKN to meet its international obligations to various bi-lateral and multilateral economic and environmental agreements⁹. Moreover, the MSD plays a crucial role in the social, physical, economic and environmental advancement of St. Kitts and Nevis. The fact that the LDN National Focal Point (NFP) function resides in the MSD is an opportunity to deliver the collaborative work required to achieve LDN with the co-operation of its departments: Department of Physical Planning DPP, Department of Lands and Surveys (DOLS), Department of Economic Affairs Public Sector Investment Programme (DEA/PSIP), Development Control and Planning Board (DCPB), the Department of Physical Natural Resources and the Environment (DPPNRE) on the island of Nevis. Through these agencies, relevant information on SLM and LDN can be gathered and disseminated to all relevant stakeholder groups.

Furthermore, the direct link between land degradation and development practices fosters synergies between the physical development and the infrastructures sector to become partners in the efforts to achieving LDN as a major contribution to the sustainable development agenda of SKN. The support provided by international development associations/donor agencies in conjunction with all policies and frameworks serve as a solid base for improving the leveraging of relevant resources and achieving a greater impact in a synergistic manner.

For this purpose, it is important to foster collaborative action among national, regional and international partners to achieve LDN. The GOSKN is implementing a number of projects geared towards mitigating land degradation issues and the achievement of LDN. Such projects have received financial assistance from both bilateral and multilateral funding agencies which include, UNCCD, United Nations Development Programme (UNDP), Global Environment Facility (GEF), Food and Agriculture Organization (FAO), European Union (EU), World Bank Group (WGB), Development Bank OF Saint Kitts and Nevis (DBSKN) and Caribbean Development Bank (CDB) amongst others. Likewise, the Global Environment Facility Small Grants Programme (GEF SGP), continues to fund a number of projects on a national and community-based to enhance sustainable management goals and livelihoods. In addition, as it was mentioned before, Taiwan's ICDF is an important collaborator which seeks to strengthen links to partner countries, to bring out the best in local talent, and to

accelerate development by transferring the right combination of technology and technical expertise.

SKN's engagement with all stakeholder agencies including public and private sectors strengthens collaborative effort towards mitigating future land degradation and support the achievement of LDN and sustainable development goals. Further efforts must be placed on public outreach and broader awareness of the LDN amongst educational institutions, voluntary groups and non-governmental organizations (NGOs) to promote wider participation and co-operation.



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