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The Commonwealth of Dominica

**The Commonwealth of Dominica's**  
**Second National Report**  
**on the Implementation of the**  
**United Nations Convention to Combat**  
**Desertification**

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## Executive Summary

In 1997 Dominica became a party to the 1996 United Nations Convention to Combat Desertification (UNCCD) - an international convention aimed at combating land degradation. The convention is of particular importance to the island given its fragile natural environment and unique physiographic features. Indeed Dominica's very youthful and fragile forest landscape makes it very susceptible to the effects of land degradation. However, historically Dominica has a strong tradition of conserving its land resource base dating back to pre-Columbian times when the forms of land use employed by the indigenous peoples had very little negative impact on Dominica's physical environment and the land in particular.

This situation quickly changed with the introduction of plantation agriculture during colonization and with commercial monocrop agriculture (bananas in particular), in the post 1940 period. These forms of agriculture have been recorded as bringing significant pressures to bear on the fragile resource base and increasing levels of land degradation and desertification. Presently the situation is exacerbated by impacts associated with the modernization of the economy through the construction and tourism sectors in particular.

This is evidenced by *inter alia*, rapid expansion of the non-indigenous *Citronella spp* (lemon grass) on abandoned agricultural land and the clearing of steep slopes without utilising the proper soil conservation measures.

An extensive legislative system has been developed for regulating land use in Dominica and the Government of Dominica is involved in the development of a number of key policy documents, which will positively enhance the overall framework for combating desertification at the national level. These include development of an **Integrated Development Plan (IDP)**, and a **National Environment Management Strategy (NEMS)**, which will both serve as the major policy documents guiding the management of the natural resource base and identify the key issues and concerns with regard to the present management of the scarce natural resources including land. In addition the MOAE is presently implementing a **Land Use Planning and Agricultural Zoning project** which should greatly enhance the management and use of agricultural land thereby reducing the negative impacts of land degradation. All these activities are taking place within the context of the **St. Georges Declaration of Principles for Environmental Sustainability in the OECS**, signed by the Government in April 2000.

Against this background a number of important local initiatives have been implemented in the fight against desertification. These include projects related to improved land management for example, funding of soil conservation works under the Rural Enterprise Project, the mounting of a Public Awareness Campaign on Watershed Management by the Forestry and Wildlife Division, the development of a programme for the irrigation of approximately 1,000 acres of farmland (mainly bananas and vegetables), by the MOAE and the Dominica Banana Marketing Corporation and the strengthening of the existing legislative framework by the passing of new, improved physical planning legislation.

The Ministry of Agriculture, and the Environment has primary institutional responsibility for environmental management and sustainable development matters in Dominica. The Environmental Coordinating Unit of the MOAE serves as Focal Point for the UNCCD and has direct responsibility for coordinating all activities related to the convention nationally. To date a formal broad based National Committee for the implementation of activities related to the UNCCD has not been established. Notwithstanding this undesirable situation, all national efforts at implementation of the convention are coordinated within the internal management and reporting system of the Ministry of Agriculture and the Environment.

Presently, the quantum of available funds available at the local level for effectively fighting land degradation and desertification are far from sufficient and will require innovative mechanisms and approaches to effect urgently required interventions in the fight against desertification.

In this regard, the government of Dominica will seek to mobilize resources from local, regional and international funding agencies and other friendly governments, as well as the UNCCD Secretariat to undertake projects and programmes geared at implementing the Convention.

## **1.0 INTRODUCTION AND BACKGROUND**

The Commonwealth of Dominica (Dominica), has a total land area of 751 square kilometers. It is situated in the Caribbean sea, at 15°12'-15°39' N Latitude and 61°14'-61°29' W Longitude between the French Departments of Guadeloupe, to the north and Martinique, to the south. It is 48km long, and 24km wide at its widest point and is the most northerly of the Windward Islands.

Geologically the entire island is considered young, and is one of the summits of a chain of submerged volcanic mountain- tops forming the eastern arc of the Caribbean tectonic plate. With a series of complex mountain ranges, Dominica is characterized by very rugged and steep terrain. This mountainous topography has made it difficult to clear the lush vegetation and has contributed greatly to the island's dramatic beauty and the conservation of its natural resources leading to it being called the "Nature Isle of the Caribbean".

Flat land is restricted to coastal areas in the northeast, in river valleys and in certain areas in the center of the island. The main river valleys are found in the center of the island and include the Layou and Roseau on the leeward side, as well as the Clyde, Pagua, Castle Bruce and Rosalie valleys on the windward side.

Dominica's climate is classified as "humid tropical marine", which is characterized by little seasonal or diurnal variation with strong and steady trade winds. Temperatures average 26-27 degrees centigrade in coastal areas, decreasing to around 19-21 degrees in the higher altitudes. Rainfall shows important inter-annual, seasonal and spatial differences. For example, annual rainfall along the west coast is less than 2,000 mm (80inches) but can reach over 10,000mm(400inches) in the mountainous interior. A dry season is experienced from January to May.

The economy is small, open and primarily agricultural-based. The agricultural sector is the main determinant of economic growth, source of food and income for the majority of the estimated 70,000 population. The population centers are dispersed throughout the island particularly in coastal villages and towns. However, it is estimated that 11 percent of the population resides in three major settlements of Roseau, Portsmouth and Marigot.

Concerning its governance the island has retained a Parliamentary system of Government with a President as the Head of State. The Government is run by an elected Prime Minister and House of Assembly, both of whom are elected to office on five-year terms. In addition to a central administration, there is a system of local government made up of a City Council, 35 village councils and 39 local authorities.

## **2.0 Strategies and Priorities for Combating Desertification and Drought Within the Framework of Sustainable Development.**

The island is characterized by a very youthful and fragile forest landscape, which makes it very susceptible to the effects of land degradation. However, historically Dominica has a strong tradition of conserving its land resource base. These traditions date back to pre-Columbian times when the forms of land use employed by the indigenous peoples had very little negative impact on Dominica's physical environment and the land in particular. However, the introduction of plantations and the associated large-scale land clearings by Europeans caused an increased level of soil erosion, especially along the west coast. In the post World War II period, the banana industry developed. This led to the introduction of heavy machinery for building of infrastructure, e.g. roads; together with increased housing needs related to the expanding economy. Thus, significant pressures were brought to bear on the fragile resource base with increasing levels of land degradation and desertification.

In response, by the 1950's the first Forest Ordinance was enacted which authorised the establishment of forest reserves on crown lands and protected forests on private land for purposes of soil and water conservation. Since then a series of acts have been enacted to regulate the use of the fragile land resources. These include *inter alia*: the Town and Country Planning Act; the Land Management Authority Act; the Forest Reserve Rules; the Forestry and Wildlife Act; the National Parks and Protected Areas Acts (over 20% of the island's land mass is under legislated protection); the Beach Control Act; the Water and Sewerage Act and the Pesticide Control Act.

Notwithstanding the existence of this extensive legislative framework for regulating land use continued economic growth and development (some unregulated), has changed the traditional land use patterns of the island. In particular agriculture has had and continues to have a strong influence on land degradation in Dominica. This is evidenced by:

- Rapid expansion of the non-indigenous *Citronella spp* (lemon grass) on abandoned agricultural land
- The clearing of steep slopes without utilising the proper soil conservation measures
- Change from shifting cultivation by small land holders to settled farms often on steep lands
- Change from multi-cropping and use of ground cover to clean cultivated monocrops for example bananas.

Expansion in the other economic sectors particularly tourism and manufacturing has also negatively impacted on the quality and integrity of the land resource base and is of much concern presently.

The Government of Dominica is involved in the development of a number of key policy documents, which will positively enhance the overall framework for combating desertification at the national level. These include an **Integrated Development Plan**

(IDP), which seeks to directly engage people of all sectors in among other things identifying the key issues affecting their communities/sector and indeed the country; and proposing measures (institutional, operational, legal, constitutional) for addressing these issues and proposing measures for formalising and institutionalising a participatory approach to planning for national development. Similarly the country has started the process of developing a **National Environment Management Strategy (NEMS)**, which will serve as the major policy document guiding the management of the natural resource base and will similarly identify the key issues and concerns with regard to the present management of the scarce natural resources including land. In addition the MOAE is presently implementing a **Land Use Planning and Agricultural Zoning project funded by the FAO**, which should greatly enhance the management and use of agricultural land thereby reducing the negative impacts of land degradation. All these activities are taking place within the context of the **St. Georges Declaration of Principles for Environmental Sustainability in the OECS**, signed by the Government in April 2000. The Declaration consists of 21 principles and in effect constitutes a regional policy for achieving enhanced management of the environment in pursuit of sustainable development objectives in the OECS region.

Notwithstanding the several efforts outlined here in Dominica's fight against desertification it has long been realized that optimization of these individual efforts requires a suitable national institutional and legislative framework that encompasses the ideals of stakeholder participatory approaches and methodologies at all levels.

## **2.1 The Participatory Process and Relevant Stakeholders**

This report has been prepared as a result of wide consultation undertaken by the Environmental Coordinating Unit of the Ministry of Agriculture and the Environment with several key stakeholders in the private sector, the wider civil society, the NGO sector and central government. The report also draws heavily on the findings of recent national consultations (held between 2001 and 2002), for the preparation of Dominica's Initial National Communication to the UNFCCC, its National Biodiversity Strategy and Action Plan, the National Adaptation to Climate Change Policy, the country's first ever National Environment Management Strategy (NEMS) and a historic Integrated Development Plan (IDP).

Interestingly, the desertification issue was highlighted at all these consultations and the need for urgent action to mitigate its negative impacts a recurring recommendation. A specific recommendation concerns the development of the National Action Plan (NAP) and the formal establishment of a broad based national committee to provide oversight for the implementation of the NAP at the soonest.

## **2.2 Local Initiatives**

Dominica is prone to extremely damaging natural disasters, primarily in the form of cyclones, storms surges, landslides, droughts and floods, earthquakes and volcanoes. Sixty six percent (66%) of the land area (51,752 ha) is covered by vegetation ranging

from dry scrub woodland on the coast to lush, tropical forest in the interior and the wide variety of fauna and flora. Sixty (60%) of this area (31,062 ha) is privately owned, while 40% (20,708 ha) is state owned. The forest cover is slowly degrading from a sivicultural perspective due to the combination of regeneration of high value species and unsustainable logging practices related to clearing of land for agriculture, charcoal production, firewood and posts.

Approximately 70 percent of the land resource is classified as being unsuitable for agricultural production, however, a significant portion of this acreage is cultivated, as a result of historical and land tenure arrangements. Only an estimated 1 percent of Dominica's **52,256** acres is irrigated, with the balance being rain-fed. This situation has served to exacerbate the problem of land degradation and desertification.

Against this background a number of important local initiatives have been implemented in the fight against desertification. These include projects related to improved land management for example funding of soil conservation works under the Rural Enterprise Project, the mounting of a Public Awareness Campaign on Watershed Management by the Forestry and Wildlife Division, the development of a programme for the irrigation of approximately 1,000 acres of farmland (mainly bananas and vegetables), by the MOAE and the Dominica Banana Marketing Corporation and the strengthening of the existing legislative framework by the passing of new, improved physical planning legislation.

In addition, the Community Management of Protected Area Conservation Project (COMPACT), is being implemented with GEF funding and aims to get local communities through a participatory process to sustainably manage their natural resources including land. The Ministry of Agriculture and the Environment is also considering the development of a Land Bank scheme to help alleviate the pressures on cultivated land by bringing abandoned lands especially estates under sustainable production.

### **2.3 Regional Initiatives**

The Government of Dominica has come to realize that watershed management must be at the core of the national efforts to combat land degradation. Thus the GOCD has supported two sub-regional initiatives in support of improved watershed management. The first involved participation in the development of a PDFB project "Integrating Management of Watersheds and Coastal Areas in Small Developing States of the Caribbean" submitted to the GEF for possible funding. The second involves the development of a Watershed Management Policy for the OECS, being spearheaded by the OECS-NRMU.

Additionally the GOCD has been involved in a regional FAO project looking at the Development of Land Use Planning and Agricultural Zoning in the OECS. This particular project has the potential to positively impact on land degradation through the institutionalization of land zoning for the first time within the agricultural sector.



## **2.4 International Initiatives**

Major International Environmental Agreements are closely linked to actions pertaining to the fight against desertification. For example, under the UNFCCC, Dominica has submitted its First National Communication to the CoP. The communication highlights the country's vulnerability and the threats to posed to water resources as a result of increased global temperatures negatively impacting on agriculture and forest resources. Programmes designed to halt these losses in surface water and indigenous plant species will undoubtedly support efforts mounted under the UNCCD. And the National Biodiversity Strategy and Action Plan highlights the degradation of ecosystems and associated loss of habitats and identifies several projects for possible donor funding to mitigate these impacts.

## **3.0 Mechanisms for Coordination and Implementation of the Convention.**

The Ministry of Agriculture, and the Environment has primary institutional responsibility for environmental management and sustainable development matters in Dominica. The Environmental Coordinating Unit of the MOAE serves as Focal Point for the UNCCD and has direct responsibility for coordinating all activities related to the convention nationally. To date a formal broad based National Committee for the implementation of activities related to the UNCCD has not been established.

Notwithstanding this undesirable situation, the national efforts are coordinated within the internal management and reporting system of the MOAE. This is so since the MOAE through its divisions of Agriculture, Forestry, Lands and Surveys has a profound influence and jurisdiction over agriculture, and forestry as well as important influences over the administration and management of land and land use.

With regard to the associated legal and regulatory framework a recent FAO sponsored Technical Assistance Report on Land Use Planning and Agricultural Zoning in Dominica notes "much of the salient qualities of the legislative scheme (for proper land management), has been lost due to historical bad practices, in the administration, use, enforcement and monitoring of the law." The result has been continuing degradation of the land resource base and an erosion of its productive capacities.

Against this background increased public awareness activities by the Forestry and wildlife Division, the ECU and the NGO Community Participation in the COMPACT project have all been welcome activities to attempt to halt the negative impacts of land degradation. However, all these institutions lack the human, financial, institutional and legal capacity to adequately deal with the problems at the national level.

### 3.1 Other Institutional Measures Required

An important imperative must be the establishment of a National Institutional Framework for effective coordination among institutions with environmental management responsibilities as well as other key stakeholders. In addition the legislative framework needs to be reviewed to provide an adequate regulatory system to facilitate implementation of activities at the national level.

### 4.0 Scientific and Traditional Support

Dominica has little inherent capacity or resources for conducting research into desertification issues. As such much emphasis is placed on the utilization of traditional knowledge in the conservation of land resources. In this regard there is still widespread use and encouragement in the use of terracing, live grass barriers, stone barriers and agro-forestry systems for soil conservation. However, there is a need for a great deal of adaptive research to assist in the fight against desertification.

The decentralised and participatory decision-making processes need to be strengthened through access to information and data-banks that reflect local / ecological differences and through the systematic incorporation of the opinions of a broad range of local stakeholders into the strategy formulation process.

### 5.0 Financing UNCCD Implementation

The government of Dominica will seek to mobilize resources from local, regional and international funding agencies and other friendly governments, as well as the UNCCD Secretariat to undertake projects and programmes geared at implementing the Convention.

At the local level, central government funds will continue to be utilized to fund the operations and activities of such institutions as the Forestry and wildlife Division, which are key players in the fight against desertification. At the sub-regional level real possibilities exist for accessing funds under the **Small Project Facility (SPF) of the OECS Natural Resources Management Unit**. The SPF funds sustainable livelihood and poverty alleviation projects in the Member States and historically projects related to land conservation and watershed management have received positive consideration. Funds provided for implementation of projects under such **Multi-lateral Environmental Agreements as the UNFCCC, and the UNCBD**, will also have positive synergistic effects on the desertification problem, due to the well established linkages between climate change, land degradation and habitat and biodiversity loss.

However, clearly presently the quantum of available funds for effectively fighting land degradation and desertification are far from sufficient and will require innovative mechanisms and approaches to secure the requisite funding and allow a serious attempt at

tackling the persisting desertification problem. In this regard, it is regrettable that initiatives pursued by the region to source European Union funding to assist in implementation of the convention under the Cotonou agreement have been largely unsuccessful to date.

## **6.0 Conclusion**

Dominica's efforts at implementation of the UNCCD from the time it became a signatory in 1997 to the present, have been carried out outside of the framework of a formal National Desertification Action Plan (NAP). Arguably, this situation has negatively impacted the pace of national efforts to combat desertification. The development of the NAP is now identified as a national priority.

Notwithstanding, this however, some progress continues to be made. In this regard, organizations such as the Forestry and Wildlife Division and Division of Agriculture of the Ministry of Agriculture and the Environment continue through their national work programmes and public awareness programmes to seriously address desertification issues. Evidence of continuing and persisting land degradation is however frequently presented and is readily observable.

The major constraints to hastening the pace of combating the land degradation problem remain the absence of suitable institutional and legislative frameworks at the national level; lack of human and institutional capacity and inadequate funding for national level activities.

The Government of the Commonwealth of Dominica remains committed to the objectives of the convention and is actively seeking additional funds from regional and international sources to help combat the scourge of desertification.

