

## **EXECUTIVE SUMMARY**

Due to its location within the tropical region of the western hemisphere, no one in Belize considered the issue of desertification to be relevant to Belize. In fact, the almost unanimous reaction, when first made acquainted with the term, is “Certainly not in Belize!” However, in interpreting Desertification to mean “degradation of land ” and “development of drought situations”, there is general agreement that there are examples and instances of both problems in this country.

In order to determine the status of desertification in Belize, land degradation and drought situations were analyzed within certain non-exclusive development sectors. There were major groupings as follows: - Agriculture/Industrial, Economic, and Social (including Cultural). Such an approach opportunities to analyze the situation at local and regional levels while incorporating multidisciplinary input. The results have not been presented in any order of priority or critical impact / risk. No exercise designed specifically to determine the locality, extent, and severity of land degradation patterns has been conducted for Belize. No human or financial resources were made available to carry out such surveys, primarily because there was no awareness about this issue in Belize. The survey could not be carried out because there were no financial resources allocated to such an exercise. The National Meteorological Service and the Department of Agriculture have both noted instances of water shortages, but again no statistical records have been maintained for analysis. The NMS has maintained rainfall data for about thirty years for some parts of the country, so some data do exist to initiate the development of baseline data. No framework had been established to institutionalize the monitoring and recording of the occurrences of drought. A methodological approach utilizing collaboration and coordination between government, civil society, and community-based organizations needs to be established to observe, record and analyze all relevant information.

This process should evolve into the formulation of the National Action Plan to Combat Desertification.

Once the range and extent of land degradation and drought cases are evaluated, priorities can be placed on developing policies and action plans aimed at mitigating the impacts of desertification and droughts.

Land Degradation in Belize has resulted from a number of developmental activities within certain sectors. The most significant changes appear to be in the Agricultural/Industrial sector. The significance of changes in land quality is due to the area affected, or due to the actual and potential environmental damage which results or can result from the activity. Within the agricultural sector, the signs of land degradation is evident in the large scale operations and in the small farming and milpa systems. Belize’s economic development depends mainly on agricultural products. Sugar, citrus, and bananas are the three major crops that are cultivated. All of these are at risk of damage or unsustainability due to degradation of the land or drought. No survey has yet been conducted in order to determine the actual acreages of land that has been affected by the practices employed to obtain marketable products. Degradation in the agricultural sector can result from the repeated cultivation of one crop which depletes the nutrients, or from intensifying

the use of the land beyond its productive capacity. The first is the case with large scale cultivation of crops like citrus and sugar-cane. The latter case occurs in the milpa or slash-and-burn farming systems.

There are some cases where forestry activities have also resulted in land degradation, but again this has not been quantified and recorded, and similarly is not monitored on a continuous basis. Timber harvesting activities are known to result in soil compaction and erosion, both of which equate with land degradation. Although not considered a forestry activity, but can be a consequence of such, prescribed and wildfires contribute to land degradation. Nutrients are released too rapidly during combustion of the vegetation and are lost to the atmosphere or easily leached out of the soil before being recycled into the emergent vegetation.

Mining in Belize is primarily surface removal of gravel and other material used in the construction industry or for road construction. The methodology applied is either to first scrape off the topsoil, then dig out the gravels and sands for use in house, buildings, streets and road construction and landfills. There are no efforts to rehabilitate the extraction sites or pits by replacement of the topsoil or planting trees to replenish the nutrients that have been lost. The end result is land degradation.

Droughts and water shortages are increasingly common occurrences in Belize. The cases are not epidemic as yet, but increasing demands for potable water supplies will cause concurrent increases in these situations. The growing populations and continuing agricultural expansion place higher demands on surface and underground water supplies.

Although Belize signed the Convention to Combat Desertification almost three years ago, the public is mostly unaware of the phenomenon. Development of the country has been guided by the five-year plans that the various governments have proposed upon entering office. The lack of cohesiveness among the various policies has resulted in a similar situation with most of the laws and regulations utilized for the management of the natural resources. During the last ten years, Belize has benefitted from a number of bi-laterally and internationally funded projects. All have produced huge quantities of information suitable for development planning. Less than fifty percent of such information is put to use. Similarly most of the recommendations offered are ignored.

Fortunately improving technology in the media and communications is making the public increasingly aware of the issues affecting their future and even survival. Members of the public are organizing themselves into non-government and community based organizations, and making their wishes known by participation in the development and implementation of projects. These groups are able to influence policy and decision making at every level. There is increasing demand for government agencies to improve performance and to make more efficient use of the available resources. Government's activities prior to and after the launch of UNCCD is not much different. Considerable amounts of technical and financial assistance has been pumped into various sectors, but change is slow and difficult to achieve. The human resources base is also limited, so the same group of technicians and professionals tend to become involved repeatedly. This same

group will again be called upon to help to develop the National Action Plan required for Belize to meet its obligations under the convention. This process will have to continue after the submission of the Belize status report. Many recommendations have been offered to address a wide range of issues, but the main constraint is finance. Belize is a consumer and developing country, so does not generate great amounts of surplus revenue which could be channeled into the human development sector. It is only within the last two years that this sector has been given some priority. The alleviation or elimination of poverty is now of high priority for government's attention. Poverty has been determined to be the main cause of a number of the problems facing the population, including land degradation and drought. Improvements in this sector will symbiotically create improvements in other sectors. Once the basic needs are addressed, attention could be given to improving policies, laws, regulations, to reduce the duplication, and sometimes contradictory issues arising because of the interpretation of the laws.