



PERMANENT MISSION OF GRENADA TO THE UNITED NATIONS

820 SECOND AVENUE, 9TH FLOOR, NEW YORK, N.Y. 10017

TELEPHONE: (212) 599-0301

Statement delivered

by

**H. E. Dr. Lamuel A. Stanislaus**

**Permanent Representative of Grenada  
to the United Nations**

at the

**Small States Conference on Sea Level Rise**

Male', Republic of Maldives

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Mr. Chairman and Distinguished Delegates

My delegation delights in joining the many expressions of congratulation, and assurances of confidence in your great diplomatic and interpersonal skills, to preside successfully and constructively over the timely and momentous deliberations, taking place here in the beautiful, peaceful, dynamic and idyllic archipelago of the Republic of Maldives.

Let me here thank the conveners of the conference and all those responsible for making our stay here so rewarding and enjoyable because of their many courtesies and splendid arrangements.

The warm thanks of the prime Minister of Grenada are hereby conveyed to distinguished President Gayoom of the Maldives for this invitation, and for vision to bring together this international gathering, to discuss a phenomenon critical to the survival of Small States, and indeed to the world at large.

Mr. Chairman,

Much has been spoken and written, some speculatively, about the relationship between global warming of the atmosphere (the air) and rise in sea-level.

This much talked about phenomenon, global warming or greenhouse effect, is caused in large measure by an increase of greenhouse gases in the atmosphere, viz carbon dioxide, methane, nitrous oxide, chlorofluorocarbons and water vapour.

The term greenhouse is used because the accumulation of the villains, the uncontrolled gases in the atmosphere, act in a similar way to the trapping of heat from the sun, within the glass walls and the roof of a greenhouse in botanical gardens and laboratories.

Mr. Chairman,

This having been said, it is not my intention to give the impression that the indicted greenhouse gases were not intended to play an important and useful role in Nature. In balance, they promote and sustain plant and animal life. The danger arises with the indiscriminate increase, brought about by activities of man, thereby upsetting the delicate balance intended by Nature.

Sir,

And here, let me introduce this philosophical perception of Nature, which has relevance and truth in the scheme of Things. First, Nature in its benign wisdom never bestows its blessing without exacting a price. Secondly, we cannot tamper with and insult Nature without paying the price.

Who then is responsible, by their inordinate activity, for causing this dangerous build-up of gases which otherwise in correct proportion and volume were intended by Nature to promote and sustain life?

On the one hand, we are told that the industrialized and developed countries are the culprits, because of their great energy needs for industrial expansion, technology, agriculture, comfort, etc.

On the other hand, we are told that the developing countries, because of their survival needs, are indiscriminately cutting down massive areas of tropical and temperate rain forests, to plant food crops, and to develop new centres for their population growth. The result is that carbon dioxide will continue to build up with the loss of trees, which are great consumers of this gas.

Mr. Chairman,

Nature is indeed wonderful in designing a most fascinating interconnection between plants and animals. The connecting element is carbon dioxide, in a process known as the carbon dioxide cycle.

The carbon dioxide in the atmosphere is an essential ingredient in plant physiology, through the chemical process known as photosynthesis, the combination of sunlight and carbon dioxide to produce the greenness in plants. In that process oxygen is given off by the plant. This oxygen is necessary to sustain human and animal life. It is taken into the lungs, where it is absorbed by the blood, and carried to all the cells of the body to nourish and sustain them. In this metabolic process, carbon dioxide is given off to commence cycle between plant physiology and animal physiology.

Mr. Chairman and Distinguished Delegates! What a beautiful example we have of the wondrous works of Nature, manifested in

mysterious but balanced ways! What the plants give off is what is beneficial to animals, and vice versa.

Additionally, massive emissions of carbon dioxide result from the burning of fossil fuels such as coal, oil, gas, etc. In this connection, industrialized and developed countries are greater contributors to carbon dioxide build-up in the atmosphere, than developing countries.

Sir,

The above notwithstanding, there is no good reason to prolong a contentious, academic disputation. What is needed is international cooperative and sustained effort, carried out by means of shared scientific research and study, and made available to all - small states, large states, developing countries, developed countries, poor nations, rich nations.

Mr. Chairman,

The scientific evidence on the relationship between global warming and sea-level rise, though not entirely conclusive, is nevertheless of great statistical significance, and appears to be pointing in the right direction. Millions of meteorological observations, made since the late 19th century, indicate that the global mean temperature has risen by about 0.5 C. This warming is compatible with the increase in carbon dioxide and other greenhouse gases in the atmosphere by 0.4 to 1.1 C.

At the same time, sea-level has been rising; and over the past century has risen by 10-15 cm. According to Meier's study in 1984, one-third to one-half of this past rise, could be accounted for by the shrinking and melting of mountain glaciers, while according to Wigley and Raper 1987, ocean expansion due to warming, could account for 2 to 5 cm, the remainder could have been caused by the melting of polar ice.

There is general consensus that global warming will be accompanied by a rise in global mean sea level estimated to be between 17 to 26 cm by the year 2030. The reason for this will be, an increase in the ocean water volume caused by melting of mountain glaciers and the expansion of warming seas, plus changes in the Greenland and Antarctic ice sheets.

Some of the dangers of sea level-rise are contained in a recent study prepared by the Commonwealth Secretariat which was discussed at the Commonwealth Heads conference in Kuala Lumpur.

Briefly stated they are as follows:

- (i) rapid loss of land to the sea,
- (ii) disappearance of coastal cities and towns
- (iii) destruction of sea defenses,
- (iv) intrusion of salt water into surface and ground water with the resulting loss of agricultural capacity and the need to replace, modify or expand domestic water supply systems.
- (v) washing away of the natural protection of coral reefs and mangroves so important to low lying coastal towns especially in my own country, the tri-island State of Grenada Carriacou and Petite Martinique.

A rising level, therefore, poses two threats in that connection (a) it would tend to narrow the band of mangrove able to exist at the margin of sea water and fresh water and (b) it might outstrip the growth capacity of some coral reefs.

The socio-economic impact of sea-level rise can be devastating to small island states and even coastal lowlands of large countries such as the Carolinas, Florida, Texas in the USA, Holland, Eastern France, Spain, England, East Africa, Indonesia, West Malaysia.

Sea-level rise will be traumatic cataclysmic and entirely disastrous to many of our Commonwealth sister countries such as Guyana, where 90% of the population occupy 3% of the coastal land, Papua New Guinea, Maldives, Belize, Barbados, Antigua and my own country Grenada which although mountainous has most of the population occupying low lying coastal areas.

The economic effect of sea-level rise will be felt in a host of different areas: agriculture, fishing, manufacturing, agro-industries trade, commerce, tourism, etc. and this in turn will impact heavily on social infrastructure such as employment and wages, health, education, welfare security.

Mr. Chairman,

Let me conclude by stating that the global warming - sea-level rise phenomenon is only part (important as it is) of the wider environmental challenge which confronts us globally to-day.

The international community, developed and developing, must bring to bear upon this global challenge a global agenda whose philosophy must encompass the new thinking which has become part of the geopolitical lexicon, and whose plan of action must

consist of public awareness, scholarly and scientific research which must be made available to developing and developed countries.

To do less is to invite Damocles to come and hang a new sword over humankind \_ the threat of nuclear annihilation having been supplanted by threat of environmental degradation.

Let us remember the divine and philosophical admonition. Treat not the earth with contempt, for from it you came and to it you shall return.