

Foreword and Welcome

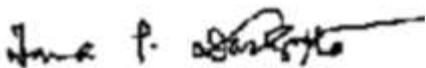
Climate change is likely to cause drought and desertification in some countries, while rising sea level, hurricanes, storm surge and floods will affect others, and there will be an extensive loss of biodiversity. There will be changes in rainfall, which has serious implications for water supplies, food production and industrial development.

In 2007, the Intergovernmental Panel on Climate Change (IPCC) stated that sea-levels would rise by 18-59 cm by the year 2100. These estimates included rises caused by the expansion of sea water in a warmer climate, but did not include the water contributed by the disintegration of Greenland and Antarctica ice sheets. Once the contribution from melting ice is taken into account, sea levels could rise by 0.8 to 2 metres by 2100. Some scientists believe that the rise could be far more. If the West Antarctic ice sheet melts, the sea level would rise by 5 metres by 2100. A 5-metre rise would inundate large parts of many Caribbean countries would be under water. a significant part of the housing stock and economic and transport infrastructure is in areas that are likely to become increasingly vulnerable to sea level rise, increased incidence of severe weather, flooding and storm surge. Over time, zoning and planning can gradually move people and the infrastructure into safer areas, but this will take decades.

Some Caribbean countries have already suffered a number of serious natural disasters. Hurricane Gilbert struck the southern coast of Jamaica in 1988 and badly damaged the electricity infrastructure, the agricultural sector and a significant portion of the housing stock. Hurricane Ivan in 2004 did significant damage, especially on the south coast. There are also areas that suffer from periodic flooding. Recent heavy rain significantly damaged the whole economic structure of the country.

Against this background, the Caribbean Academy of Sciences is holding the 17th biennial conference entitled "Climate Change – Implications for Caribbean Health, Agriculture, Ecology, Industries and Building Codes" at the Royal Antigua Beach and Resort, Antigua. This will certainly give an opportunity to engage in discussion with all stakeholders including public and private sectors of small island nations in the Caribbean to develop strategy in the region to meet the challenges arising out of predictable calamities due to climate change.

I wish to express my appreciation to the organizing committee of the conference, especially the Chairman, Dr. Trevor Alleyne, who tirelessly worked to organize this conference in Antigua. I would also like to extend my gratitude to the Government of Antigua to host this conference. My special thanks, as usual, go to the members of the conference committee for producing this proceeding in a timely manner.



Professor Tara Dasgupta
President, CAS