

PRESENTATION BY CLIFFORD MAHLUNG AT OPENING OF CLIMATE MODELING WORKSHOP ON MONDAY 20 AUGUST 2012

A pleasant Ladies and Gentlemen

Salutations

The topic of my presentation is related to the significance of having information on the **Science of Climate Change** for the Caribbean Region, for climate change negotiations, hence its importance to me as one of the region's Climate Negotiators and so the importance of this workshop.

The Intergovernmental Panel on Climate Change was created in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Program (UNEP). It was established as an effort by the United Nations to provide the governments of the world with a clear scientific view of what is happening to the world's climate.

The UN General Assembly Resolution 43/53 adopted on 6 December 1988 outlined the initial task for the IPCC as to prepare a comprehensive review of the state of knowledge of the science of climate change; social and economic impact of climate change, possible response strategies and to recommend possible elements that could be included in a future international convention on climate.

The current role of the IPCC can be found in its Principles Governing its Work and defines its role as and I quoted, "...to assess on a comprehensive, objective, open and transparent basis the scientific, technical and socio-economic information relevant to understanding the scientific basis of the risk of human-induced climate change, its potential impacts and options for adaptation and mitigation. It also states that IPCC reports should be neutral with respect to policy, although they may need to deal objectively with scientific, technical and socio-economic factors relevant to the application of particular policies."

The first IPCC Assessment Report was released in 1990 and the scientific evidence presented revealed the importance of climate change as a topic that in order to tackle its consequences would require a political stage among countries. This influenced the formation of the Inter Negotiating Committee (INC) that led to the creation of the United Nations Framework Convention on Climate Change (UNFCCC), the key international treaty to reduce greenhouse gas emissions as

well as addressing the related consequences of climate change.

The IPCC delivers on a regular basis the most comprehensive scientific reports about climate change. It also responds to the need of the UNFCCC for information on scientific and technical matters through Special Reports, Technical Papers and Methodology Reports. Parties to the UNFCCC are provided with methodologies and guidelines for preparing their national greenhouse gas inventories.

In Second Assessment Report produced in 1995 was instrumental in the adoption of the Kyoto Protocol as it provided key inputs with respect to possible mitigation targets. The Third Assessment Report of 2001 presented strong evidence of the role played by human activity in causing global warming while the Fourth in 2007 clearly brought to the attention of the world the scientific understanding of the present changes in our climate. This important work was honored with the Nobel Prize for Peace in 2007.

The IPCC is a scientific body that reviews and assesses the most recent scientific, technical and socio-economic information produced worldwide relevant to the understanding of climate change. It does not conduct any research nor does it monitor climate related data or parameters.

Thousands of scientists from all over the world contribute to the work of the IPCC on a voluntary basis. Review is an essential part of the IPCC process, to ensure an objective and complete assessment of current information. IPCC aim is to reflect a range of views and expertise. The Secretariat coordinates all the work and liaises with Governments. It is supported by WMO and UNEP and hosted at WMO headquarters in Geneva.

As an intergovernmental body it is open to all member countries of the United Nations (UN) and WMO. Currently there are 195 countries that are members that participate in the review process and the plenary Sessions, where main decisions are taken and reports are accepted, adopted and approved. The Bureau Members, including the Chair, are elected during plenary Sessions.

Because of its scientific and intergovernmental nature, the IPCC embodies a unique opportunity to provide rigorous and balanced scientific information to decision makers. By endorsing the IPCC reports, governments acknowledge the authority of their scientific content.

The work is shared among three Working Groups, a Task Force and a Task Group. The activities of each Working Group and of the Task Force are coordinated and administrated by a Technical Support Unit.

The IPCC Working Group I (WG I) assesses the physical scientific aspects of the climate system and climate change. The main topics assessed by WG I include: changes in greenhouse gases and aerosols in the atmosphere; observed changes in air, land and ocean temperatures, rainfall, glaciers and ice sheets, oceans and sea level; historical and paleo-climatic perspective on climate change; biogeochemistry, carbon cycle, gases and aerosols; satellite data and other data; climate models; climate projections, causes and attribution of climate change.

The IPCC Working Group II (WG II) assesses the vulnerability of socio-economic and natural systems to climate change, negative and positive consequences of climate change, and options for adapting to it. It also takes into consideration the inter-relationship between vulnerability, adaptation and sustainable development. The assessed information is considered by sectors (water resources; ecosystems; food & forests; coastal systems; industry; human health) and regions (Africa; Asia; Australia & New Zealand; Europe; Latin America; North America; Polar Regions; Small Islands).

The IPCC Working Group III (WG III) assesses options for mitigating climate change through limiting or preventing greenhouse gas emissions and enhancing activities that remove them from the atmosphere. The main economic sectors are taken into account, both in a near-term and in a long-term perspective. The sectors include energy, transport, buildings, industry, agriculture, forestry, waste management. The WG analyses the costs and benefits of the different approaches to mitigation, considering also the available instruments and policy measures. The approach is more and more solution-oriented.

The Task Force on National Greenhouse Gas Inventories (TFI) was established to oversee the IPCC National Greenhouse Gas Inventories Programme (IPCC-NGGIP). The core activity is to develop and refine the internationally-agreed methodology and software for the calculation and reporting of national GHG emissions by sources and removals by sinks from countries that are Parties of the United Nations Framework Convention on Climate Change (UNFCCC). The NGGIP also established and maintains an Emission Factor Database.

The Task Group on Data and Scenario Support for Impacts and Climate Analysis (TGICA) facilitates co-operation between the communities involved in climate

modeling and climate impacts assessment. Its main focus is to make available a wide range of climate change related data and scenarios that are required for climate analysis and research on impacts, adaptation, vulnerability, and mitigation. One of its main activities is the coordination and oversight of the IPCC Data Distribution Centre (DDC), which provides timely information and data to the international climate research community, in particular consistent data sets and guidance material.

The TGICA does not develop itself any emission, climate, or other types of scenarios, not does it make any decision regarding the choice of scenarios in the preparation of the IPCC reports.

This further underscores the importance of the work that we do in the region and if this work is documented and peer-reviewed then it becomes a part of the assessments reports.

Decisions made today will determine the extent of future efforts at mitigation or vulnerability to climate change. Development Planners for example must now take account of the effects of climate change in formulating policies, developing strategies, implementing projects and planning in fields such as agriculture, forestry, urban and infrastructure developments. As we strive toward the integration of climate change considerations into our national development planning it is important that we are well aware of the kinds of tools that are at our disposal. This workshop will present to you one such tool the climate model. It will be presented by a group that is one of the most competent in the world in this particular field and so you will be exposed to information that is of the highest caliber.

I know that the end of the workshop all of you will have a better understanding and appreciation of climate modeling, please remember that to become as capable as your tutors you will need to enroll in the graduate program.

Thanks enjoy the rest of the day and all the best over the next two weeks.