## Perspectives on Global Climate Change and the Nigeria Response

## By Abubakar Sadiq, Ministry of Tourism, Culture and National Orientation, Federal Republic of Nigeria

The theme of conference, "Meeting the Challenges of Climate Change to Tourism in African and the Developing World," couldn't have come at a better time then now, when viewed against the backdrop of the fragile ecosystems of the world that have come under heavy threat by the forces of climate change occasioned by both natural and anthropogenic (human-induced) factors.

Climate change, a concept that describes the alteration or modification of the natural state of the climate, is a universal challenge to sustainable development. It is a long-term change in the distribution of weather conditions or in the distribution of weather events, and may be limited to a specific region or occur across the whole earth. The United Nations Framework Convention on Climate Change defines it as a "change that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed within a comparable time period." In the latter sense, climate change is synonymous with global warming.

Some factors have been identified to predispose the climate to change. These factors are natural and anthropogenic (human-induced). The natural elements that can shape climate include variation in solar radiation, deviation in the earth's obit, mountain building and continental drift and change in greenhouse gas concentrations. These factors create an imbalance in the earth's crust as a result of compression and tension in the system, such as the ocean and ice caps respond slowly in reaction to these climate forces because of their large mass. In this respect, the climate system can take centuries or longer to fully respond to the imbalances.

On the other hand, the anthropogenic factors are human activities that can change the environment. In some cases, the chain of causality of human influence on the climate is direct and unambiguous (for example, the effects of irrigation on local humidity), while in other instances it is less clear. Various hypotheses for human-induced climate change have been argued for many years. Presently, the scientific consensus on climate change is that human activity is very likely the cause for the rapid increase in global average temperature.

Of most concern in these anthropogenic factors is the increase in carbon-dioxide levels due to emissions from fossil-fuel combustion, followed by aerosols (particulate matter in the atmosphere) and cement manufacture. Other factors, including land use, ozone depletion, grazing and deforestation, are also of concern in the roles they play – both

separately and in conjunction with other factors affecting climate, microclimate and measures of climate variables.

The frequency and intensity of extreme weather events are on the increase. In Nigeria, for example, the desert is encroaching from the northern part of the country, with the attending effects of Lake Chad, gullies are widening and floods destroy lives and properties in the coastal areas. In other countries, coastal areas are under threat due to sea-level rise, hurricanes, earthquakes, tsunamis, increase in ultraviolet radiation, biodiversity loss and other meteorological hazards.

Tourism and the environment are symbiotic. Thus, sustainable growth in the tourism industry cannot take place in an environment with a polluted and fragmented ecology. Tourism is multi-dimensional in nature hence, a holistic and multi-sectoral approach is required to tackle the menace posed by climate change. This informs the decision of the Commission for Sustainable Development, a UN agency responsible for the environment, to give adequate interest to eco-tourism development worldwide. It has become clear that all sectors have to address the climate-change challenge, without abandoning their responsibilities toward socio-economic issues. For tourism, the transformation toward the green economy is also a major task to be addressed. Hence, in 2007, the United Nations World Tourism Organization (UNWTO) was actively involved in helping the tourism sector to:

Assess the inter-relationship of climate change and tourism through a science-based report on the economic, operational and market impacts as well as the challenges and opportunities.

**Consider meaningful response patterns** based on multi-stakeholder evaluation and recommendations contained in the Davos Declaration framework. The Declaration (augmented by ministerial decisions in London and Cartagena) sets out directions for change for the tourism sector and calls on stakeholders to establish a long-range low-carbon emission road map with immediate concrete action plans supporting global response, and coherent with commitments to the Millennium Development Goals.

**Participate in the global response framework** to include tourism input alongside other economic sectors in the recent UN Climate Summit in Bali, Indonesia, as well as within UN Secretary General Ban Ki-moon's system-wide road map to support adaptation, mitigation, technology and finance.

The motive for international tourists to leave their country of origin depends, amongst other factors, on the condition of climate. Changing climate and weather patterns at tourist destinations and tourist-generating countries can significantly affect the tourists in a number of ways:

(a) Tourists' comfort and their travel decision.

(b) Tourism business, mostly in the host communities that could suffer setbacks.

(c) Reduction in tourist flow that in turn can affect employment and generate further poverty.

(d) Attractiveness of tourist destinations that could be negative.

(e) Adverse climate conditions would cause medical problems that affect the comfort and movement of tourists.

The prosperity of the tourism industry largely depends on favorable weather conditions. In instances where there have been vagaries of weather, such as volcanoes, earthquakes, etc., tourism has had to pay dearly as safety is crucial to the tourist who is in search of fun and relaxation but not at the expense of his or her life. Thus, responsible tourism through the establishment of the World Committee on Tourism Ethics was included in the program of the UNWTO. The reason for this is to encourage responsible tourism, safeguard the environment and protect the mutual interest of all stakeholders in the industry, including the local community.

It is of utmost importance that the environment be preserved for sustainable tourism to flourish. In this connection, governments and the private sector, as well as all stakeholders in the tourism sector, must work hand-in-hand to preserve the environment.

The frequency and intensity of extreme and unusual weather events, with the attendant destruction of lives and property, are increasing globally. Their impact on the environment can however be minimized if they are predicted in time and early-warning information on the impending disaster provided. This will no doubt assist stakeholders in the tourism, aviation, agricultural and environmental sectors to plan better and offer solutions to the envisaged problems.

In Nigeria, the government is taking seriously the challenges of climate change and the associated negative impact on the environment and eco-tourism. It is for this reason that the government, through the Ministry of Aviation, has continued to support the Nigerian Meteorological Agency (NIMET) in its concerted effort to improve services through capacity building and modernization of equipment and infrastructure.

To further strengthen the preservation of the environment and combat the problems of climate change, the following are recommended:

(i) The private sector should collaborate more strongly with the government on all aspects of environmental preservation.

(ii) There should be synergy among all agencies of government responsible for handling national disasters and they should be well equipped.

(iii) Capacity building to improve skills in tackling natural disasters, such as fire outbreak, erosion menace, etc., should be priority agenda items in the program of all tiers of government.

(iv) Emissions of carbon dioxide and other gases into the atmosphere should be reduced to the barest minimum. Also, appropriate infrastructure facilities and legal frameworks should be put in place to promote a healthier atmosphere.