

United Republic of Tanzania

Ministry of Transport of Works, Transport and Communication

Tanzania Meteorological Agency

Today the Meteorological Community all over the world commemorates the World Meteorological Day (WMD). On this day the world commemorate the entry into force of the Convention of the World Meteorological Organization (WMO) on 23rd March, 1950. Tanzania as a member of the WMO thus joins other 190 member States and the worldwide community to celebrate WMD. This day also highlights the huge contribution that National Meteorological and Hydrological Services (NMHSs) make to the wellbeing of our society; human safety and protection of properties through early warnings for possibilities and expectations of hazardous weather and climate conditions.

Tanzania Meteorological Agency (TMA) came to existence in December 1999 as the Government took deliberate steps to improve efficiency and effectiveness of public services delivery within the priority sectors (Executive Agencies Act No. 30, 1997). Before TMA, meteorological services in Tanzania were provided by the Directorate of Meteorology (DoM), which was established by an Act of Parliament No. 6 of 1978.

It has become a tradition for WMO to focus the annual celebration of WMD around a relevant theme. This year's theme is "**Hotter, Drier, Wetter - Face the future**" Such a theme is particularly appropriate at this time when communities in Tanzania and around the globe are facing extreme weather and climate events inform of increasing temperatures trends and changing rainfall patterns. This is evidence that our communities are already being affected by climate extremes which scientific research have associated with climate variability and climate change

In recent decades, changes in climate have impacted on natural and human systems in many countries. Changes in extreme weather and climate events are evident and are almost becoming the new normal in many countries, Tanzania inclusive. In recent years Tanzania has experienced devastating impacts of climate variability and change of various forms. Since last year's

commemoration to date, we have witnessed devastating events including floods (For instance over the central region where a number of people and animals perished), frequent floods in Mwanza, drought conditions in some areas and shifts in the timing of the rainfall season in some regions of our country.

Scientific research and observations show that climate change is increasingly becoming a challenge of global concern. Atmosphere and ocean temperatures continue to increase, ice caps and glaciers around the world are steadily declining, sea level is rising and a number of extreme weather and climate events are becoming more frequent and/or more intense.

The impacts of Climate Change are also evident in Tanzania where temperature is increasing in almost all the regions, rainfall variability is high, increase in frequency and magnitude of extreme weather events such as flash floods and severe droughts, submergence of some of the small islands, erosion of coastal areas and sea water intrusion into fresh water sources over coastal areas due to sea level rise, declining of glaciers on top of Mount Kilimanjaro and disappearance of some of animal and plant species, increasing number of climate related disease cases such as malaria and occurrence of these in areas where they were not common and the list goes on.

As Intergovernmental Panel on Climate Change (IPCC) Reports clearly show that, Human influence on the climate system is clear, and recent human related emissions of greenhouse gases are the highest in history. The global concentration of CO₂ and other greenhouse gases in the atmosphere keeps growing persistent and is reaching extraordinary levels in human history. Maintaining our current dependence on fossil fuels will lead us to a significantly warmer planet and hence by the end of the century the temperature could be up to 4 degrees Celsius higher than in pre-industrial times. Limiting the warming to less than 2 degrees Celsius can still be achieved, but it will require a rapid significant reduction in greenhouse gas emissions. Each of the past several decades has been significantly warmer than the previous one. According to temperature records, the period 2011 to 2015 was the hottest on record, and the year 2015 being the hottest since modern observation began in 1800s. Generally, increase in air temperature is attributed to increase in emission of greenhouse gases. In December 2015 during the Twenty First Conference of

Parties (COP 21) in Paris, the world's Governments unanimously adopted the Paris Agreement, providing for rapid and deep cuts of greenhouse gases emissions. This historic agreement commits all countries to undertake ambitious efforts to respond to the urgent threat of climate change on the basis of their "common but differentiated responsibilities".

As we prepare to face the future in the changing weather and climate, every one of us can play an active role in monitoring, understanding and responding to the weather and climate of today and of the future. Lets promote climate awareness, mitigation and adaptation, while formulating and implementing policies that affect us today and in future. In line with these actions the meteorological community through WMO are implementing programmes such as Global Framework for Climate Services (GFCS) whose vision is to enable society to better manage the risks and opportunities arising from climate variability and change especially for those who are most vulnerable to such risks.

The government continues to build the capacity to monitor and forecast weather and climate for decision making and adaptation strategies to climate variability and change. Information, products and services based on climate predictions will strengthen our ability to mitigate and adapt to climate change, as well as to pursue sustainable development — making us better prepared to face coming storms, floods and droughts; helping farmers to better organize planting and harvesting; and increasing the safety of ship and air navigation.

Taking note of these advancements, I therefore encourage everyone, to consider playing a role in the effort to curb the adverse impacts of climate change, and thus making a vital contribution to the safety and well-being of the people of this Nation.

Climate change makes us more uncertain about our future and yet, despite this uncertainty, one thing is clear: our society bears a responsibility not only to itself but also to future generations. The choices we are making in the present, we will have a major consequence in shaping the Earth's future. While the challenges facing us in the near future are enormous, the opportunities for addressing them have never been greater.

In celebrating this year's World Meteorological Day, I call upon all

stakeholders of weather and climate from all sectors, to engage in understanding and monitoring of weather and climate and take all necessary measures for mitigating climate change impacts by making the environment we are living in more natural and suitable for social and economic development to the current and the future generations.

I wish you joyous and fruitful celebrations in commemorating this year's World Meteorological Day.

“Hotter, Drier, Wetter. Face the Future”