

## TRAFFIC, TRANSPORT & URBAN PLANNING SECTOR TRAFFIC AND TRANSPORT Meteorological Department

## PRESS RELEASE

## Message from M. Jarraud, Secretary-General of the World Meteorological Organization on the occasion of "World Meteorological Day 2015 – Climate knowledge for climate action"

The World Meteorological Organization, as the successor of the International Meteorological Organization, created in 1873, has its fundamental mission to support the countries of the world in providing meteorological and hydrological services to protect life and property from natural disasters related to weather, climate and water, to safeguard the environment, and to contribute to sustainable development. This cannot happen without the necessary observations, research and operations that develop the understanding and knowledge of weather and climate.

Since 1961, World Meteorological Day has commemorated the coming into force on 23 March 1950 of the Convention establishing the World Meteorological Organization and the essential contribution that National Meteorological and Hydrological Services make to the safety and wellbeing of society. Each year, the celebrations focus on a theme of topical interest. The theme of this year, "Climate knowledge for climate action", could not be timelier, as the international community moves towards ambitious decisions and action to address climate change. The cost of inaction is high and will become even higher if we do not act immediately and resolutely.

Information on weather and climate, and its variability and change, is so embedded in our daily life – from daily weather forecasts to seasonal climate predictions – that at times it is easy to forget the amount of observations, research, computing and analysis that lies behind weather and climate information products. Today, the average weather forecast of five days in advance is as skillful as the two-day forecast twenty-five years ago and seasonal climate forecasts have become increasingly skillful. This has been made possible thanks to advances in remote sensing, including satellites, major improvements in science and dramatic increases in computer power. Scientific progress in meteorology and climatology in the last fifty years is indeed one of the most significant ones in all scientific disciplines.

The climate knowledge that has been built in the last decades is an invaluable resource and a prerequisite for decision-making and for climate action. Science also gives us high confidence that we can still change course and mitigate climate change to a manageable level. Today, few people contest the evidence of climate change and the responsibilities we bear towards future generations. Climate knowledge can and must support this process, helping decision makers at all levels to make the best decisions.

The Global Framework for Climate Services, an initiative of the United Nations System led by WMO, was conceived with precisely this purpose: to enable the provision of climate services in a way that decisions can be made based on the best possible information. This is a crucial challenge for both developing and developed countries and there is a great potential benefit in learning from each other. Experiences and advances in the development and application of climate services can be shared as examples of good practices and assist other countries in accelerating their path towards climate adaption.

At national level the Meteorological Department of Curaçao (MDC) is also working on enhancing its knowledge on the local climate and its foreseen changes, says the director Dr. Albert Martis. Recent research on climatic data spanning a period of 100 years shows changes by looking at the change in both the average and the extremes of temperature and rainfall. The results show that Curaçao is no exception, when it comes to climate change.

When we looked at the temperatures in Curação over the decades, we observed that both the maximum and the minimum temperatures are increasing at approximately the same rate in Curação. Even though we saw a decrease in the number of days with rainfall, we have

experienced more intense rainfall events in the past few years, as well as more extreme rainfall events.

These results led to the review of the MDC's disaster mitigation and prevention plan. In a project funded by USONA and the Government of Curaçao, as part of the early warning system, MDC installed eight automatic weather stations, two marine stations and one seismic station on the island, quadrupling its real time monitoring capability. Furthermore it developed, under this same project, a flood warning system application, making it possible to better forecast flooding events in several communities on the island and hence produce a tailored warning product for the community. This same tool can also be used to give recommendations for the urban planning sector and aid in disaster management. In June of this year a new weather radar will be installed to further enhance the monitoring capabilities of the MDC.

Notwithstanding these progresses, there is still more to be done and achieved in this domain. MDC will continue to enhance its forecasting, warning and climate services to contribute to the minimization of climate risk and foster sustainable development.

