

**World Meteorological Day, 23<sup>rd</sup> of March 2022**  
**Early Warning and Early Action: Hydrometeorological and  
Climate information for Disaster Risk Reduction**

Greetings from the World Meteorological Organization secretariat in Geneva.

The top priority of WMO is to protect lives and livelihoods from weather, climate and water extremes.

Every minute of every day of the year.

I am therefore very happy that the theme of World Meteorological Day 2022 is “Early Warning and Early Action.”

It celebrates the great achievements of national meteorological and hydrological services in improved early warning systems. It also highlights the vital work of the disaster risk reduction community in making sure that these early warnings lead to early action.

But we cannot be complacent. We face many challenges, especially in making sure that early warnings reach the last mile to the most vulnerable who need them most.

Climate change is already very visible through more extreme weather in all parts of the world. We are seeing more intense heatwaves and drought and forest fires. We have more water vapor in the atmosphere, which leads to extreme rainfall and deadly flooding. The warming of the ocean fuels more powerful tropical storms and rising sea levels increase the impacts.

We expect this negative trend to continue. Greenhouse gas concentrations are at record levels, locking in climate change to continue for decades to come, melting of glaciers and sea level rise up to centuries.

In addition to climate change mitigation, climate change adaptation is a top priority. Early warning systems are a powerful way to adapt.

Last year WMO published a report on disaster statistics for the past 50 years. It showed that there were more than 11 000 disasters linked to weather, climate and water-related hazards, almost equal to one disaster per day. There were 2 million deaths – or 115 per day.

The number of disasters has increased five-fold in the past 50 years. And the economic cost has soared.

But the good news is that the number of casualties has fallen dramatically. We are better than ever before at saving lives.

Supercomputers, satellites and advances in science have greatly increased the accuracy of our forecasts. Mobile phone alerts and weather apps can reach even remote areas.

WMO is promoting impact-based forecasting, of what the weather will be and what it will do. That is needed to enhance the preparedness and early action of various user and customer groups, who are dependent on weather.

But much more remains to be done. Only half of the 193 Members of WMO have multi-hazard early warning systems in place. There is also a major need to enhance the impact based forecasting skills of a large fraction of Members.

There are severe gaps in weather and hydrological observing networks in Africa, some parts of Latin America and in Pacific and Caribbean island. This undermines forecasts local and globally.

WMO has therefore created a financing mechanism known as SOFF (The Systematic Observation Financing Facility) to drive investment in the basic observing system and fill data gaps.

WMO is an implementing partner in the Climate Risk and Early Warning Systems Initiative (CREWS), which builds resilience among vulnerable countries and communities.

WMO is spearheading a new water and climate coalition to focus more attention on water-related hazards and shortages. We have highly successful programmes and projects on tropical cyclones, coastal inundation, floods and drought.

In Geneva we have joined forces with the UN Office for Disaster Risk Reduction to form a centre of excellence on climate change and disasters.

WMO has been developing a support mechanism to provide reliable and authoritative information to the UN humanitarian agencies to be able to optimize the humanitarian aid before and after a weather related disaster. We are working together with financing institutions like the World Bank, European Union, UNDP, Green Climate Fund, to allocate more funding to early warning services and to ensure sustainability of the investments.

And of course, WMO is committed to the 2030 international agenda on climate action, sustainable development and disaster risk reduction.

WMO's vision is that "by 2030, we see a world where all nations, especially the most vulnerable, are more resilient to the socioeconomic consequences of extreme weather, climate, water and other environmental events.

Early warnings work. They must work for everyone. They must lead to early action.

I wish you all a happy World Meteorological Day.