



WORLD METEOROLOGICAL DAY

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GENEVA

Opening Remarks

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Salutations

Your Excellency, Secretary-General, Petteri Taalas

Ambassadors, Distinguished delegates, ladies and gentlemen,

Thank you for the opportunity to address you here today at this important gathering to mark World Meteorological Day.

We are probably still at a stage in human development when poverty and exposure to disaster risk are the main factors in deciding whether someone survives an event such as Typhoon Haiyan which claimed over 6,000 lives in the Philippines in November 2013.

Despite the fact that such events are usually well-announced beforehand, poverty and an exposed location can mean the difference between life and death more so than the nature of the hazard itself.

The Sendai Framework for Disaster Risk Reduction, adopted a year ago at the Third UN World Conference on Disaster Risk Reduction, recognizes with a clarity unusual in international agreements how important it is not only to continue to improve disaster management but to go beyond that to address the underlying drivers of risk which include poverty, exposure, land use, unplanned urbanization, poor risk governance and, of course, climate change.

It's a well-known fact that the poor die and the rich pay in disasters. There are considerable data gaps but as a general rule, mortality rates are highest in low-income countries and absolute economic losses are highest in high-income countries. Of course, when countries are ranked in terms of percentage of GDP lost in a disaster event, least developed countries top the list.

In general, after ten years implementing the Hyogo Framework for Action, the Sendai Framework's predecessor, we can readily deduce that a culture of disaster risk reduction is spreading across the world.

I was very struck by the fact that last year the Centre for Research on the Epidemiology of Disasters recorded fewer than 1,000 deaths from some 90 major storms. It was a below average year for the Atlantic Hurricane Season but the Pacific made up for that with some very unusual and very intense storms including Hurricane Patricia which was the strongest cyclone ever to make landfall in the western hemisphere.

Much of this success in reducing mortality – the number 1 target of the Sendai Framework and the central theme of this year's International Day for Disaster Reduction – has been due to the work of the members of the World Meteorological Organization which we celebrate and acknowledge today.

There are several occasions we can point to in recent years where many lives were saved because of the efficient dissemination of weather forecasts which were acted on promptly by national disaster management agencies which have ushered millions of people to safety as a result of storm and floods warnings.

Three years ago, on October 13, International Day for Disaster Reduction, about one million people were evacuated to safety in advance of Cyclone Phailin which recalled a similar storm which killed over 10,000 people in 1999 when it hit the same stretch of coastline along the Bay of Bengal.

The Indian government, the Indian Meteorological Department, the State governments of Odisha, Andhra Pradesh and West Bengal, their local governments and disaster management authorities tracked the cyclone and took the necessary measures to evacuate as many as a million people out of harm's way.

Loss of life on this occasion was minimal despite one reasonable estimate that 15,000 villages and 10 million people were exposed to risk.

It was no fluke because exactly a year later, Cyclone Hudhud hit Odisha and Andhra Pradesh forcing the evacuation of half a million people which reduced the death toll to 17 from a storm which was accompanied by a two metre tidal surge.

Poverty and exposure were overcome once more to reduce mortality despite the poor quality of housing and the lack of coastal protection for the 500,000 square kilometres of farmland which were flooded in the event.

In light of the advances which have been made in the use of satellite imagery, the science of meteorology and communications, it is to be sincerely hoped that we will never again see a death toll like that which resulted from Cyclone Nargis in 2008.

An estimated 138,000 people died in that event making it one of the worst-ever weather-related disasters in an age when we have 24 hour weather channels and minute-by-minute tracking capability for cyclones.

On that occasion, knowledge and understanding of what was about to happen was insufficient to save lives in an isolated and economically under developed part of Myanmar.

No doubt this was at least partly the result of the fact that the storm track was unlike anything Myanmar had experienced in modern memory, just as recent floods in the UK were overwhelming in scale. This highlights another key element in planning that is also a core contribution of WMO: With Climate Change, the past is no longer a reliable indicator of the future hazard.

The Nargis tragedy was compounded by the prior loss of about 75% of the original mangrove cover in the Irawaddy Delta which removed vital protection from the winds and the tidal surge.

As in many other parts of our overcrowded planet, the deterioration of the natural resource base undermined people's resilience to the natural hazard when it came. The disaster resulted in further environmental damage and compounded existing poverty levels.

Warnings were channeled fairly effectively to people whose homes lay in the path of Typhoon Haiyan when it struck the Philippines in November 2013 but again we saw how exposed the coastline was to such a storm whose intensity was increased by warming seas and more moisture in the atmosphere.

In the case of Tacloban where the bulk of fatalities occurred, we know from talking to residents and officials that there was a poor understanding of what the phrase "tidal surge" actually implied in terms of the devastating impact that the storm would have on a densely populated low-lying coastal belt.

This endorses the good sense of WMO's strategic shift from telling the public what the weather will be to giving us a better sense of what the weather will actually do. It also highlights that early warning to limit loss of life is fundamentally not only a technical challenge, but a social challenge as well.

The WMO Guidelines of Impact Forecast and Warning Services can play a very significant role in achieving key targets set out in the Sendai Framework including reducing mortality, the numbers of people affected, economic losses and damage to critical infrastructure.

National Meteorological and Hydrological Services can play an even greater part than they do already in improving preparedness and encouraging governments, the private sector and civil society groups, to address underlying risks which compound the impact of severe weather events.

The goal is to move away from simple weather bulletins to focus on the threat to lives, livelihoods and assets. Combined with the growing number of national disaster loss data bases, risk and impact-based early warning systems could enable us to get ahead of the curve of disaster response to make real progress on mitigation and reducing both numbers of people affected and economic losses, by encouraging investment in measures which build disaster resilience.

For example, this could further incentivize efforts to restore mangroves in cyclone belts, the construction of cyclone shelters, wind-resistant housing , the relocation of endangered informal settlements, and the use of dams and dykes in flood zones where relocation is not an option.

This evolution towards risk-based early warning systems is a sensible step and one that is in line with growing concern about the impact that climate change is having on the intensity of severe weather events including floods, storms, heatwaves and droughts.

We have just come through the hottest year on record. It was noteworthy particularly for one of the strongest El Ninos experienced in modern times, which contributed to a steep rise in droughts, floods and food insecurity worldwide, a problem which is only growing worse in 2016.

Reducing the size of drought-vulnerable populations should be a global priority over the next 15 years of implementing the Sendai Framework and the Paris Agreement if we are to eradicate poverty and to achieve the Sustainable Development Goals of the 2030 Development Agenda.

Droughts take a high human toll in terms of hunger, malnutrition, poverty and the perpetuation of under-development. They bring food and water shortages, loss of livestock, outbreaks of epidemic diseases and have long term economic impacts.

The introduction of better accounting systems for drought impacts, including mortality are required, in order to improve the effectiveness of early warning systems.

As the world struggles to adjust to hotter, drier and weather. The best tool we have to face the future is the Paris Agreement on climate change. It is a strong statement of intent to reduce disaster risk and, in particular, the future impact of climate-related disaster events which have affected over four billion people since the first climate conference, COP1 in Berlin in 1995.

Mitigation is the ultimate form of disaster risk reduction as it prevents the creation of new risk while also trying to reduce the stock of existing levels of risk.

If we succeed in holding the increase in the average global temperature to well below 2°C above pre-industrial levels while pursuing efforts to limit it to 1.5°C, this will make an enormous contribution to reducing disaster losses in the future.

However, in a world which has already warmed by 1°C on average, where sea-levels are rising, and Arctic Sea ice and glaciers are disappearing,--given the inertia in the climate system--climate change is something we are going to have to live with for the foreseeable future. And climate change adaptation is something that we are going to have to continue developing no matter how successful we are in reducing greenhouse gas emissions.

One notes with alarm that the figures on CO2 emissions last month from the NOAA monitoring station at Mauna Lao in Hawaii set new highs and we are now firmly across the threshold of 400 parts per million. Global average surface temperatures broke all previous records by a wide margin in 2015. Both January and February 2016 have set more new monthly records.

Once the Paris Agreement is ratified next month, there will be an opportunity to ensure that work on climate change adaptation is coherent with the ongoing efforts around the world to reduce disaster losses from

the consequences of other risk drivers which it would be foolish to view separately from climate change.

Indeed, the interlocking nature of all risk drivers is made very clear in the Sendai Framework for Disaster Risk Reduction which was the first pillar of the post-2015 development agenda to be put in place when it was adopted in March at the Third UN World Conference on Disaster Risk Reduction, held in Sendai, Japan.

It calls for more dedicated action to tackle underlying disaster risk drivers such as the consequences of poverty and inequality, climate change and variability, unplanned and rapid urbanization, poor land management and compounding factors such as demographic change, weak institutional arrangements, and non-risk informed policies.

And the Sendai Framework and DRR are explicitly integrated in both the Paris Agreement (in the preamble and the focus in Articles 7 and 8 on strengthening resilience and reducing vulnerability to climate change) as well as in the SDGs (2030 Agenda).

Specifically, the Sendai Framework seeks to reduce mortality, the numbers of people affected, economic losses, and damage to critical infrastructure such as schools and hospitals; efforts which will be reflected in the sought for substantial increase in the number of countries with national and local disaster risk reduction strategies by 2020.

The Sendai Framework also calls for a substantial increase in the availability of, and access to, multi-hazard early warning systems and disaster risk information by 2030, an activity mentioned in Article 8 of the Paris Agreement which also references the resilience of communities, livelihoods and ecosystems.

One example of the synergies which we should expect from the complementary natures of the risk reduction and adaptation agendas emerged at the COP21 in the shape of a French proposal on Climate Risk Early Warning Systems (CREWS) which is backed by the UN Office for Disaster Risk Reduction, the World Meteorological Organization and the World Bank's Global Facility for Disaster Reduction and Recovery (GFDRR).

The governments of Australia, Canada, France, Germany, Luxembourg and The Netherlands have already agreed to give more than US\$80 million to equip up to 80 countries with better climate risk early warning systems. Considering that some 90% of all major recorded disasters are weather related, this is a very practical measure towards saving lives and reducing disaster losses.

Hopefully the CREWS Steering Committee and Secretariat will be established soon. It is a very exciting development and one which UNISDR looks forward to supporting fully as a major contribution to achieving the targets of the Sendai Framework.

Climate change also has a bearing on rapid urbanisation and planning which fails to take account of the environment and the need to live in harmony with nature, and to avoid placing people and critical infrastructure in locations which are inherently unsafe for living and working.

The impacts of climate change will be felt for many years to come and, in the meantime, adaptation must include making cities greener and more habitable through a judicious blend of engineered solutions and natural infrastructure including forest and wetlands.

Some 60% of the area expected to be urbanized by 2030 remains to be built. The challenge and opportunity is great. The creation of new risk must be avoided and every effort must be made to reduce existing levels of risk whether that risk is environmental, technological or biological in nature.

I have no doubt that the world's hydrological and meteorological services with the support and leadership of WMO will make an important contribution to that effort.

Thank you WMO for the great service and leadership you provide to our global community! And my sincere thanks and congratulations on this occasion of World Meteorological Day 2016.