



Prof Pavel Kabat, Chief Scientist World Meteorological Organization, briefing to the UN Security Council ministerial debate on: addressing the impacts of climate related disasters on International Peace and Security, New York, 25 January 2019.

Your Excellency Foreign Minister of the Dominican Republic Mr Miguel Vargas, honorable ministers, excellencies. I have the honor to brief you today on behalf of the Secretary General of the World Meteorological Organization, the U.N. system's authoritative voice on weather, climate and water. WMO has 192 Member States and Territories, with representatives from National Meteorological and Hydrological services around the world.

The World Economic Forum taking place in Davos this week has just published its annual Global Risks Report 2019. It indicates that extreme weather, natural disasters, climate change and water crises are the top four on the list of existential threats of the global risk landscape. These show significant interconnections with other shocks and impacts to peace and security and sustainable development.

This survey highlights – yet again – the critical importance of WMO's core business. And early warnings are at the heart of that business. Early warnings to prevent natural hazards becoming disasters. And early warnings about our changing climate, which were issued a full 40 years ago, at the First World Climate Conference, organized by WMO in 1979.

Global average greenhouse gas concentrations of CO₂ reached 405.5 parts per million (ppm) in 2017 and continue to rise to record levels in 2018-2019. The last time the Earth experienced a comparable concentration of CO₂ was 3-5 million years ago, when the temperature was 2-3°C warmer and sea level was 10-20 meters higher than now. WMO's provisional Statement on the State of the Climate in 2018 showed that the past four years have been the warmest on record, with many high impact weather events which bear the hallmarks of climate change. The 20 warmest years on record have been in the past 22 years. The global average temperature is nearly 1°C above the pre-industrial era.

The Special Report on 1.5°C of global warming by the Intergovernmental Panel on Climate Change, which is co-sponsored by WMO and UNEP, showed very clearly the threats from increases in global temperatures

On extreme weather threats 2017 was the most impactful and costliest Atlantic Hurricane season in observable history with losses exceeding 282 Billion US dollars with significant social economic and GDP impacts to Small Island Developing States in the Caribbean from major Hurricanes such as Maria, Irma and Harvey. The World Bank estimates Dominica's Islands total damages and losses from the hurricane Maria at US\$ 1.3 billion or 224% of its Gross Domestic Product (GDP), About 99.7% of the season's damage was

due to three of the season's major hurricanes – Harvey, Irma, and Maria. Another notable hurricane, Nate, was the worst natural disaster in Costa Rican history. This season was also one of only six years on record to feature multiple Category 5 hurricanes

In August 2018, the southwest Indian state of Kerala suffered the worst flooding since the 1920s, displacing more than 1.4 million people from their homes and affecting more than 5.4 million. Large parts of western Japan experienced destructive flooding in late June and early July, killing at least 230 people and destroying thousands of homes. Flooding affected many parts of east Africa in March and April. This included Kenya and Somalia, which had previously been suffering from severe drought, as well as Ethiopia and northern and central Tanzania. Out of the 17.7 million Internally Displaced Persons tracked by the IOM, 2.3 million people were displaced due to disasters linked to weather and climate events as of September 2018. In Somalia, some 642 000 new internal displacements were recorded between January and July 2018 by UNHCR, with flooding the primary reason for displacement (43%), followed by drought (29%), and conflict (26%).

Research by WMO and its partners and network of scientists shows that sea level rise is accelerating, as is the melting of polar ice sheets, posing an increasing existential threat to small island developing states. The shrinking of Arctic sea ice affects not just the local environment and indigenous peoples, but also influences weather patterns in the world's populated regions. Glacier melt continues unchecked, with short-term impacts including increased flooding and a long-term threat to water supplies for many millions of people. Ocean heat content is also at record levels, with far reaching, lasting consequences for marine life, coral reefs and food security.

Climate change has a multitude of security impacts – rolling back the gains in nutrition and access to food; heightening the risk of wildfires and exacerbating air quality challenges; increasing the potential for water conflict; leading to more internal displacement and migration. It is increasingly regarded as a national security threat

Excellencies:

Today is the first time in history that WMO as UN Agency has officially briefed the UN Security Council in the Chamber on climate and extreme weather issues. We hope that this will foster closer collaboration and establishes mechanisms for future briefings between Security Council members and the UN system agencies including WMO. To provide authoritative information for decision making and support the diplomatic business of the council in areas appropriate to the understanding and analysis of peace and security threats

WMO is stepping up its support to the UN Operations and Crisis Center through a dedicated coordination officer at UN Headquarters to provide expert information and to assist UN leadership to make informed strategic decisions. This is vital given that extreme weather and climate, such as floods, drought and tropical cyclones are undercutting

progress in the sustainable development goals as we repeatedly see with tragic consequences.

WMO is committed to providing cutting-edge science to the UN Secretary General's Climate Summit in September and to supporting Member States in evidence-based climate action. In order to meet the challenges and promote the international agenda, there is a need for a new political and investment paradigm to build a new generation of hydro-climate forecasting and early warning services. This should become an component of basic country-Infrastructure, comparable to roads and bridges.

WMO is honored to support Member States and the Security Council in the provision of top quality information on weather, climate, water and environmental-related threats to peace and security. We thank the Dominican Republic Presidency of the Security Council for organizing this debate and for the opportunity to address you in the chamber this morning.