

COMMITTEE : Environment (ILO 6)

ISSUE : How can States facing extreme weather events better protect rescue workers?

CHAIRS : Filip DROZD, Nolan Charles-Emmanuel GIUGNI and Léna QUEGUINER

INTRODUCTION



Hello everyone, my name is Lena Queguiner and I'm 16 years old. I'm French and American in the British section of the Lycée International de Ferney Voltaire. When I was 9, my family and I moved to Nigeria where we lived for 3 years. After those 3 years, we moved to Myanmar (Burma) where we stayed for only 1 year due to the military coup. In my spare time, I enjoy sports such as soccer and surfing, as well as artistic activities such as singing and sewing.

FerMUN 2025 will be my second FerMUN conference. Last year I was a delegate in the “Young people in the world of work” committee. This year I will be chair alongside Filip DROZD and Nolan Charles-Emmanuel GIUGNI in the committee talking about the environment. Needless to say, the environment is a crucial subject. A subject that is constantly evolving and for which it is essential to take action. Due to climate change, many people are facing extreme weather events. One of the two issues our committee will be addressing is how to better protect rescue workers during such events.

I look forward to meeting all of you and hope that this research report will serve as a good basis for your research.

KEY WORDS

Climate change: Climate change refers to fluctuating temperatures and the questioning of current weather patterns. Since 1800, humans have been at the origin of this problem. This is due to the burning of fossil fuels, which creates a diffusion of greenhouse gasses.

Global warming: Global warming is the increase in the Earth's temperature due to rising emissions of greenhouse gas.

Oceanic heat wave: An ocean heat wave is characterized by a short-term rise in ocean temperatures. It's like a heat wave on land, but in the water. The phenomenon has been observed since 1970, but according to the United Nations, most of it took place between 2006 and 2015, with a consequent impact on corals, which are gradually losing their color. According to the United Nations, the IPCC has found that humans are primarily responsible.

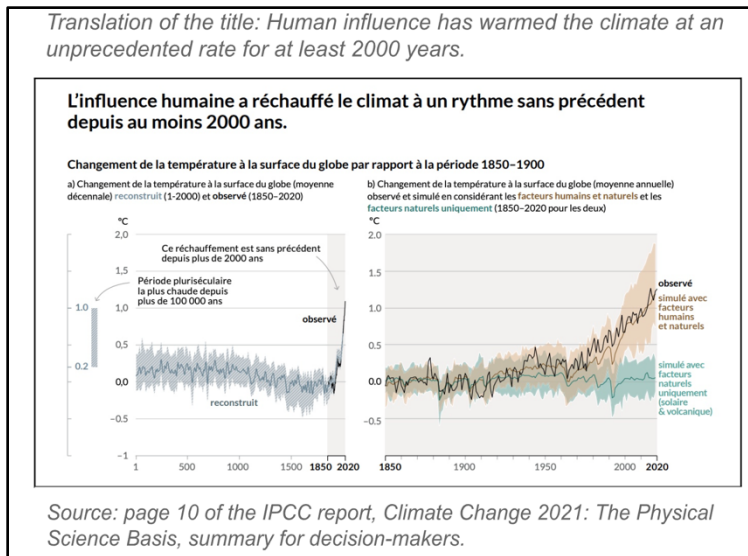
IPCC: *The World Meteorological Organization (WMO)* and the *United Nations Environment Program (UNEP)* founded the IPCC, which stands for Intergovernmental Panel on Climate Change.

OVERVIEW

1. Extreme weather events: explanation and example

There are many types of extreme weather events, each with its own particularities, but they all have one thing in common: their destructive nature. The duration of these events can be more or less long, more or less damaging to humans and the environment. These events include floods, forest fires, cyclones, hurricanes, heat waves, extreme precipitation and many more.

2. The triggering factor and the increase in these events.



Simply put, extreme weather events are linked to climate change. To understand this in more detail, you need a good understanding of global warming. Both the WMO and the IPCC have published reports on this. Firstly, the WMO published a report called, *state of the global climate 2023* which demonstrates that both land and water territories have warmed. In their report, they stated that of the various annual

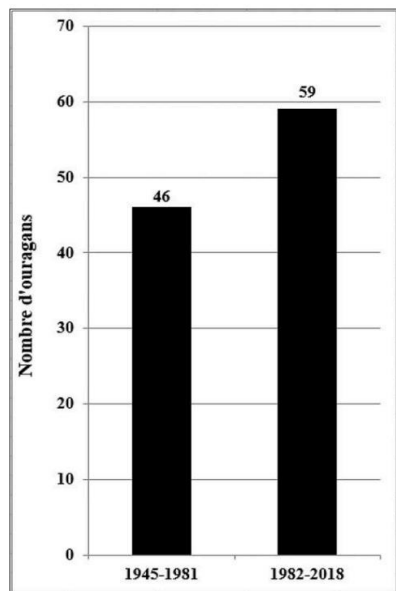
temperatures that have been recorded, the years 2015 to 2023 have been the warmest. In addition, the WMO has been recording ocean temperatures for 65 years, and 2023 was the year in which the oceans reached a record temperature. This subject has also been studied by Group 1 (the group that works on the scientific aspect of climate change) of the IPCC, which published a report in August 2021. The IPCC report is extremely interesting, as it highlights the fact that mankind is the main cause of global warming. They state that the temperature of the northern 700 meters of the world's oceans (in depth) has risen since 1970, with human activity playing a major role. It is highly likely that this is due to an increase in the emissions of greenhouse gasses.

As global warming continues to increase, more and more dangerous weather events are occurring. The IPCC Group 1 report shows that these events are gradually multiplying, such as marine heat

waves, which have doubled since 1980. Similarly, since 1950, the number and intensity of extreme precipitation events have increased, as have heat waves.

The correlation between global warming and extreme weather events can be clarified using the

Illustration 3 - Nombre d'ouragans extrêmes entre 1945-1981 et 1982-2018



Sources : à partir de la base Hurdatt et de la ré-analyse de l'intensité des ouragans faite par les auteurs.

example of hurricanes. For a hurricane to form, the temperature of the ocean must exceed 26.5°C. As explained above, as the ocean gradually warms, the risk of hurricane formation increases. The graph on the left shows the increase in the number of hurricanes. From 1945 to 1981 there were 46 hurricanes, and from 1982 to 2018 there were 59. This represents an increase of 28.26%.

Les Echos also wrote an article on the subject based on a study carried out by Europe's leading climate research institutes. It states that 23 of the 26 extreme weather events that took place in 2023 are due to climate change, the source of which is mankind.

In short, extreme weather events are the result of climate change caused by human activities. These events are gradually multiplying, and they will continue to increase if we don't act quickly.

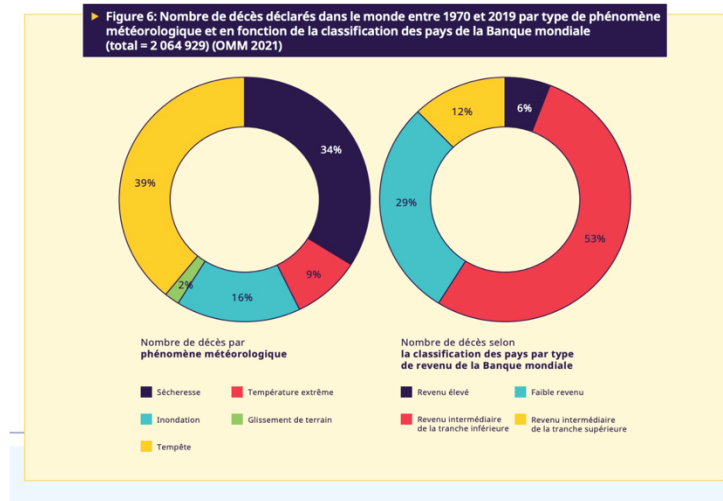
3. The danger for humans

These extreme weather events tend to be extremely deadly and dangerous for the people who fall victim to them. Take Cyclone Idai, for example, which hit Mozambique and Zimbabwe in 2019. According to Le Monde, this event resulted in almost 1,000 deaths and 2 million people affected. A second example is the flooding in the Philippines. According to an IOM article published on January 21 2014, flooding and landslides caused the deaths of 40 people. The graph below shows

that storms and droughts were the two deadliest weather phenomena during the period 1970-2019.

Source: page 49 of the ILO report, *Assurer la sécurité et la santé au travail à l'heure du changement climatique*

Translation of the title: number of deaths reported worldwide between 1970 and 2019 by type of weather event and World Bank country classification (total= 2,064,929) (WMO 2021)



4. The danger for rescue workers

As we have seen above, extreme weather events tend to be extremely dangerous for the people who experience them. It is precisely for these reasons that rescue workers are indispensable. There are many different types of rescue workers, such as firefighters, lifeguards, emergency medical personnel, piste rescue workers and many more. In carrying out their duties, these people risk their lives. Take forest fires, for example. According to the ILO, during a forest fire, firefighters are exposed to smoke and a large number of other particles, with varying degrees of impact on their health. These consequences include risks to lung function and cardiovascular disease. Also according to the ILO, firefighters run health risks due to the equipment they use, such as fire-fighting foam, which contains harmful chemicals. One example is the death of a 24-year-old firefighter in Canada who, according to *Le Parisien*, was fighting flames during a raging forest fire when a tree fell on him. The risk of death for rescue workers also applies to other extreme weather events, such as flooding, where a 42-year-old firefighter died in Germany. According to *Swissinfo*, he was trying to rescue trapped people when their boat overturned and one of the 4 firefighters was unable to save himself. A final example is that of the ski rescuers who put their lives at risk every day by taking the risk of being swept away by an avalanche.

States have a fundamental obligation to protect and ensure the safety of rescue workers.

RELEVANT UN TREATIES AND EVENTS

08/12

December 8 is World Climate Day. Its aim is very simple: to remind everyone that it is essential to fight against the dangers of global warming.

04/11/2016

[The Paris Agreement](#) was adopted on December 12, 2015 and came into force on November 4, 2016. It is a treaty that has been signed by 196 countries. By signing this treaty countries commit to working together to limit temperature rises ideally below 2°C and to be in a state of carbon neutrality. This means finding a perfect balance so that their emissions are non-existent.

2005

[The Kyoto Protocol](#) came into force in 2005 and has been ratified by 55 countries. The aim of this agreement is to reduce GHG (greenhouse gas) emissions.

POSSIBLE SOLUTIONS

As explained in the global overview, extreme weather events have their origins in man-made global warming. To prevent these events from occurring, all countries need to work together to reduce greenhouse gas emissions. With global warming on the decline, there will be a significant reduction in the number of such events, which in turn means a significant reduction in the workload of rescue workers.

In addition, we need to continue developing early warning systems that warn people before extreme weather events occur, so that they can prepare and protect themselves. This will save many lives and reduce the workload of relief workers.

At the same time, we need to provide greater protection for rescue workers, with better-developed and more protective equipment. For example, we need to change the foam used in fire-fighting foam, which is harmful to firefighters' health.

Lastly, we need to provide better training in life-saving techniques, so as to limit our dependence on rescue workers and enable them to reduce their travel during extreme weather events such as heat waves or floods.

A solidarity fund is essential, as some countries are more affected by such events and all countries have different financial states.

Reflection track:

- 1) How is your country affected by climate change?
- 2) What is your country doing to limit its greenhouse gas emissions?
- 3) Is your country affected by extreme weather events?
- 4) What is your government doing to protect the population during such an event?
- 5) How many rescue workers die in the country you represent every year?

- 6) What is your country doing to protect rescue workers?

- 7) Does your country have the financial means to further protect these workers? If not, do you have any allies who could help?

BIBLIOGRAPHY

Definition:

- Definition of [climate change](#) and global warming.
- Definition of [ocean heat waves](#).
- [IPCC](#) definition.

NGO:

- Oxfam France has written a web page called, “[les événements climatiques extrêmes: quand la planète s’emballe](#).”The web page provides a global understanding of extreme weather events.
- The French Red Cross has written a web page called,“[événements climatiques extrêmes: sommes-nous prêts à l’inévitable? 10 propositions pour renforcer notre anticipation collective et notre préparation individuelle aux effets du changement climatique](#)”. The website offers a wide range of solutions to help people be better prepared for extreme weather events.

Reports:

- WMO report named,“[state of the global climate 2023](#)”. The report explains the warming of land and water.
- ILO report named,“[assurer la sécurité et la santé au travail à l'heure du changement climatique](#)”.This report provides a clear picture of the dangers faced by workers and rescue workers (p.50) during extreme weather events.
- The IPCC Group 1 report named,“[changement climatique 2021, les bases scientifiques physiques, résumé à l'intention des décideurs](#).” The report explains that humans have greatly influenced climate change, global warming and the increase in extreme weather events.

Videos:

- Video from *Le Monde* named, "[understanding global warming in 4 minutes.](#)" The video explains the greenhouse effect, man's impact on it, and the 4 consequences of this human influence.
- Lumni video entitled, "[changement climatique: quelles conséquences?](#)" This video explains the impact of climate change.

Press article:

- Press article from Les Echos entitled: "[inondations, ouragans... : le réchauffement climatique amplifie les phénomènes météorologiques extrêmes.](#)" In this article, they explain the link between climate change and extreme weather events, and how they know that these events are due to, or have been accentuated by climate change.