



TOPIC 1:

**DEVISING GUIDELINES FOR THE PREVENTION,
READINESS AND RESPONSE TO NATURAL DISASTERS**

Committee: **Economic and Social Council**

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INTRODUCTION

A natural disaster is a term tormenting humanity since time immemorial. Despite the rapid decrease throughout the previous century in annual deaths caused by such happenings, the significance should not be overlooked. With the current yearly number of losses of life due to natural disasters being, on average, 45 000, we are given a tremendous responsibility in the field of prevention and solution. We shall endeavour to lower such a number to the vastest extent with a functional action hierarchy.

DEFINITION OF KEY TERMS

Natural hazard

Natural hazards are occurrences possessing the ability to impact the environment, including the human sphere. They are the triggers for natural disasters. There are, in total, six types of such risk, ranging from floods to wildfires. The severity of such happenings is measured utmostly by the death toll of its consequences.

Foreign aid

The term foreign aid defines any kind of subsidy given voluntarily by one state to another. Even though the most common form is financial support, including loans, other supplies such as technologies, crops or humanitarian aid are commonly donated. A typical scenario is a developed country handing foreign aid over to a developing country in times of an ongoing crisis or conflict.

ISDR (International Strategy for Disaster Reduction)

The International Strategy for Disaster Reduction, otherwise known as ISDR, is a global framework established by the United Nations to unite the methods of member states while they tackle onsets of natural hazards in order to save both lives and assets. It deals with awareness, assessment and management of environmental risks in states prone to natural crises doing so by affecting their policies.

UNDRR (United Nations Office for Disaster Risk Reduction)

UNDRR, in full the United Nations Office for Disaster Risk Reduction, was created in the year 1999 in order to ensure the implementation of the International Strategy for Disaster Reduction, or ISDR.

UNDAC (United Nations Assessment and Coordination)

The United Nations Disaster Assessment and Coordination, or UNDAC, founded in the year 1993, is a fundamental part of the international emergency response system. It tackles difficulties and complications in countries with cases of sudden crises caused by natural hazards.

OCHA (United Nations Office for the Coordination of Humanitarian Affairs)

OCHA, otherwise known as the United Nations Office for the Coordination of Humanitarian Affairs, is a part of the United Nations Secretariat established in the year 1991

by the General Assembly. Its purpose is to develop effective global emergency responses to humanitarian crises, including natural disasters. It ensures coherent international reactions together with policy development and humanitarian advocacy.

USGS (United States Geological Survey)

USGS, in other words, the United States Geological Survey, is a science department evaluating potential risks and effects of natural hazards that currently threaten human society.

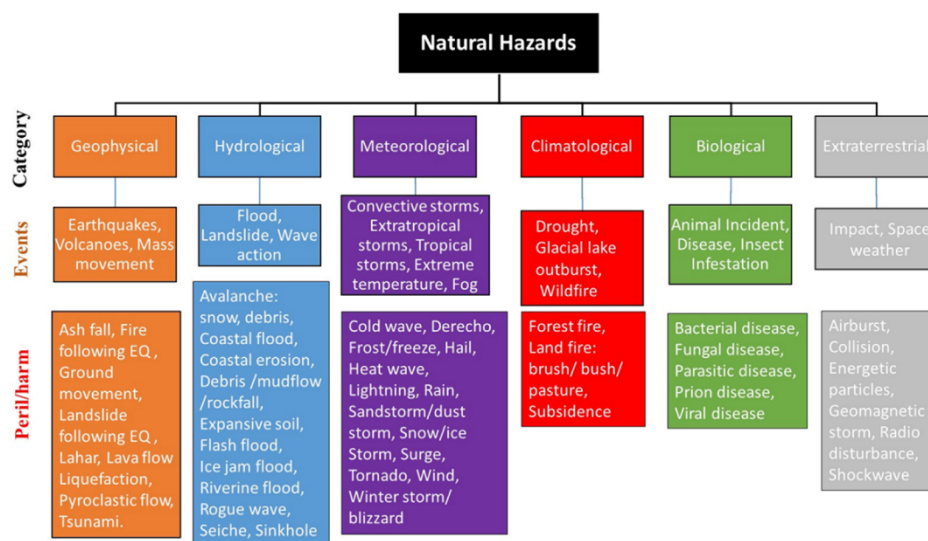
OVERVIEW OF THE ISSUE

Due to the everlasting presence of natural crises, humanity has been gradually finding the risk of unexpected emergencies more severe. Since many effects of nature have turned against civilization and persist until this day, we are not only trying to adapt to the quickly changing environment but also developing specific defensive patterns and implementing various preventive practices to minimize future casualties. Nevertheless, it is far more than crucial to mention the development of natural tragedies and collective human behaviour throughout history. This mutual effect undeniably impacts the appearance of upcoming natural crises, especially their severity, due to the scope of defensive exploitation of natural resources and progressing climate change. However, such an increase in extremity, together with randomness, could throw any prone state into defenselessness, which led to the implementation of various natural disaster strategies and precluding in the past decade. Nature's strength and power are immense and guaranteed to continue being so.

Brief history and classification of natural disasters

Natural disasters have profoundly shaped human history, and their footprints can be visible for centuries. While natural disaster is an undeniably broad topic, it is possible to precisely track and investigate their origin, called natural hazard, as a pursuit of overall understanding.

The events triggering existing natural disasters and their further perils are classified into the following categories. [1]



Classification of natural hazards (Chaudhary, M.T.; Piracha, A. Natural Disasters—Origins, Impacts, Management. Encyclopedia 2021, 1, 1101-1131. <https://doi.org/10.3390/encyclopedia1040084>)

Geophysical causes, interchangeable with the term geological, have their dominion stored in the tectonic mass movement, which could lead to further volcanic activity, earthquakes or landscape depressions. [1] A great example of a cataclysm originating from the mentioned hazards is the eruption of the Hunga Tonga-Hunga Ha'apai submarine volcano located in the island nation of Tonga in Tuvalu in January 2022 is one of the largest in decades. [2] Around 3 000 people were displaced in the immediate aftermath, with the death toll, fortunately, being only three people. [3] As of January 16th, according to the words of Secretary-General António Guterres, the United Nations instantly reached out to provide support to OCHA confirmed neighbouring countries affected by the tsunami and ash spray.

Hydrological causes include floods or further water actions as their key events. [1] The heavy rains in July 2021 that occurred in western parts of the Federal Republic of Germany is a recent instance of such happening. The states of North Rhine-Westphalia and Rhineland-Palatinate were particularly devastated by the heavy rain. The floods pushed the number of losses up to 220 in only two days, with the estimated damage around 30 billion euros. [4] Despite the urge of officials to renew things in the swiftest way possible, a year after the rains crisis continues, reparations stand, and the pressure of establishing effective prevention from possible future floods only worsens the situation. [5]

Meteorological causes are expressed primarily by drastic, sudden weather changes in a specific place at certain times. Such could include impactful tropical rains, convective storms or intense cold waves. [1] Another instance is the season of extreme wave strains in India and Pakistan from summer 2022. [6] The temperatures exceeded each time 40 degrees Celsius, which now laid a new record for the highest average maximum April temperature in the last 122 years. In addition, one of the world's most searing temperatures making 49 degrees Celsius in the Pakistani city of Jacobabad. [7]

Climatological causes are connected to the long-term change of our environment due to various factors, both natural and human-initiated. This shift is present in the form of extensive wildfire outbursts or the melting of glaciers. [1] One of the regions that have been recently exposed to a painful period of another climatological natural hazard, drought, is the Socialist Republic of Vietnam. Especially the dry season between the years 2019 and 2020 has been marked as undeniably the worst crisis in the country's history. Most affected was the Mekong Delta region, which is currently discussing further protective mechanisms. [8]

Natural hazards classified as biological and terrestrial have impacted our lives enormously in the last few years. Referring back to the covid pandemic, which has shifted the view on healthcare and transmission prevention, and an enlarged number of geomagnetic storms, there is plenty of possible dangers to be cautious about. [1]

Nature, society and climate change

Many may have noticed the recent growth in natural disasters or their severity. To be precise, the quantity of crises has multiplied by five during the previous fifty years and does not seem to be declining. It may be utmostly logical to notice that the vast wildfires in Australia and the additional 25 centimeters of sea level have something in common. [9] The climate change we are experiencing in the past decades is a fundamental moving power for these events and their increasing extremity. "Climate change is not a distant vision of a troubled future. It is a reality of today." states OCHA, or the Office for Coordination of Humanitarian Affairs [10], emphasizing the need to consider the global mean temperature of 1,2 degrees Celsius above the pre-industrial period. [11] Nevertheless, the routine presence of natural disasters can serve all states as a reminder of the environmental situation we are in nowadays.

Currently applied and ensured preventions

Not only is help in the form of foreign aid needed for the stability of international relationships, but it is as well, in a sense, compulsory. In fact, the United Nations requires advanced countries to use a minimum of 0,7% of their gross national income as foreign aid. [12] However, most countries are not able to reach such a standard. Nevertheless, according to the Organisation for Economic Co-operation and Development, shortly OECD, countries

present in the United Nations contributed \$161.2 billion as international aid in the year 2020. [13] Nevertheless, putting aside all financial aspects, both developed and developing countries are vulnerable in terms of natural hazards. The severity and frequency of natural disasters are quickly rising, and thus, the creation of organizations aiming for needed prevention is growing. One of these is the set of rules for tackling natural disasters and their prevention called the International Strategy for Disaster Reduction, or shortly ISDR, established among the United Nations member states. Implementation of such a scheme is currently under the rule of UNDRR, in other words, the United Nations Office for Disaster Risk Reduction, while working together with UNDAC, the United Nations Disaster Assessment and Coordination responsible for aid in sudden crises, or OCHA, the United Nations Office for the Coordination of Humanitarian Affairs ensuring a coherent response.

Such complex systems would be weakened if no factual research on environmental crises were done. However, countless more organizations are observing the current natural happenings. For example, USGS, the United States Geological Survey, can be named one of the most prominent actors in the empirical field. Their research covers areas from earth monitoring, explaining climate processes, to spreading general awareness about the risks of natural hazards.

MAJOR PARTIES AND THEIR VIEW

Tuvalu

As a nation recently struck by the consequences of a submarine volcanic eruption and many other prolonged natural hazards, including tropical cyclones, it strives for protection from such instances. Discussion about renewing Tonga communication lines and overall environment state is needed.

The Federal Republic of Germany

Although the Federal Republic of Germany possesses financial stability and access to modern technologies, a year after the floods in July 2021, the damage continues to linger in extreme measures. Even though the government urged to help rebuild what has been destroyed, many homes remain without stable access to water and electricity.

The Socialist Republic of Vietnam

As a country dependent on intensive agriculture, changes in climate regarding water accessibility are highly alarming to the Socialistic Republic of Vietnam. The more frequent periods of drought in the farming-oriented Mekong Delta region pose a threat to the country's economy. "Changing the production axis, restructuring agricultural production towards sustainability and adaptation is the ultimate goal.", said in the year 2021 Minister Nguyen Xuan Cuong. If he succeeds in promoting such an idea, there is hope for change.

TIMELINE OF KEY EVENTS [14]

1931 Yangtze River Floods (The People's Republic of China)

1948 Ashgabat Earthquake (Islamic Republic of Iran)

1970 Bhola Cyclone (The People's Republic of Bangladesh)

1990 Manjil-Rudbal earthquake (The Islamic Republic of Iran)

2004 Indian Ocean Earthquake and Tsunami (Sumatra)

2005 Kashmir Earthquake (The Islamic Republic of Pakistan)

2010 Earthquake (The Republic of Haiti)

2017 Hurricane Maria (The Commonwealth of Puerto Rico)

2019 Bushfire season (The Commonwealth of Australia)

QUESTIONS A RESOLUTION SHOULD ANSWER

- Is each natural hazard category cared for adequately?
- Should caution about one branch of natural hazards be emphasized more?
- Are there any lingering effects of recent environmental crises which should be inevitably resolved?
- Is the current assurance of providing foreign aid sufficient?
- How could more states contribute effectively despite not reaching the minimum given by the United Nations?
- Should an additional United Nations body be founded to help coordinate foreign aid differences between developed and developing countries?
- Is the research regarding natural disasters exhaustive enough?

APPENDIX

Tonga volcanic eruption -

<https://eos.org/science-updates/new-volcanic-island-unveils-explosive-past>;

<https://www.science.org/doi/10.1126/sciadv.1701121>;

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Western Germany floods -

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[097; https://www.bbc.com/news/world-europe-58992093](https://www.bbc.com/news/world-europe-58992093);

<https://www.thelocal.de/20220714/how-flash-floods-left-a-trail-of-destruction-in-western-germany/>.

Pakistan heat waves -

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Vietnam drought season -

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Climate change -

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Ensured preventions -

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<https://publichealth.tulane.edu/blog/what-is-disaster-management/>

Tremendous emphasis is on following the daily happenings in the natural sphere due to their high unpredictability. Be updated and alarmed.

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