



ALTITUDE

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Altitude UNA-NCA Model United Nations

Background Guide

United Nations Development Programme



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Letter from the Under-Secretary-General

Esteemed delegates,

I would like to formally welcome you to Altitude Model UN! We are thrilled to be receiving you in the beautiful New York City. After almost three years since the beginning of the COVID-19 pandemic, we are excited to finally return to presential MUN activities. Altitude Model UN is a simulation program that exists thanks to an important team of college student organizers from across the globe engaged in a collective effort, all the while inviting the best young delegates of the world to test their diplomatic acumen in an academic environment next to none! Our educational methodology is unique in its form, allowing you to polish your strengths as well as identify areas of opportunity that only show up some years after you begin your MUN careers.

You will be arriving in a simulation, and dare I say, a city that has been changed as have we all due to COVID-19. The importance of principled diplomacy, dialogue, and multilateral solutions has been set too low by our current Heads of State, business leaders, and international organizations. Most urgently, empathy has become a buzzword for various figures calling for change, with widely differing results depending how honest this use was. I mention this because the 'Our Common Agenda' report wants you, the participants, to acquire skills that we believe are key to improving the world we live in. With some of our themes being "making peace with nature... healing geopolitical rifts [and] launching a reset for the 21st century". I do not feel I exaggerate when I say that we must regroup and touch ground to see what is next after the last three years.

This last point is crucial for your resolutions and the debate you will bring with you after extensive policy research to accurately display your assigned country's position. Our background guides have been written by professionals proud of their research capabilities, but I ask that you conduct much more regarding your own delegation's stances. The educational nature of Altitude MUN, even if prizes for delegate performance do exist, will reward you much more for your future simulations, education, and even your professional careers. I still remember the last country I represented as a delegate vividly, as well as its history, its voting record, and the profile that makes it act in a certain way. This enriches not only our MUN, but your paths, wherever they may lead. So learn. Do so avidly. And become your country's advocate with the same passion we have to become your Secretariat.

Yours sincerely,

Diego Zermeño Sánchez

Under-Secretary-General of Middle School Committee

The Committee

United Nations Development Programme

Committee Overview:



The United Nations Development Programme (UNDP) was formed in 1965 by the United Nations, to tackle issues in developing countries, including the empowerment of women, the accomplishment of global sustainability, and the prevention of climate change and pollution. The UNDP has grown to currently operate in over 170

countries to help implement policies within the three main pillars, which remain unchanged, which constitute sustainable development, democratic governance and peacebuilding, and climatic and disaster resilience. In this context, the UNDP helps countries eliminate poverty and achieve sustainable human development while conserving the environment and natural resources for the future generation.

Through its Strategic Plan 2014-2017, the UNDP prioritizes collaborations for Sustainable Development Pathways and Inclusive and Effective Democratic Governance Systems that can tackle the connected issues of poverty, disparity, and marginalization while evading the irrevocable exhaustion of social and natural capital. The UNDP works with states, civil

society, the private sector, and associates at all levels to enrich incorporated development planning through the inclusive green economy and green growth (IGE) policies that improve livelihoods while challenging unsustainable forms of production and consumption.

This committee's work is conclusively about transforming how policies alongside investments can be expended to eliminate poverty and progress environmentally sustainable progression through integrated 'whole-of-government' methods. This means assisting nations prioritize SD investments while directing trade-offs throughout sectors and groups, including for vulnerable and marginalized members of society.

As the largest UN development assistance program, the UNDP is headed by an administrator who oversees an Executive Board, consisting of 36 members, which represents developing and developed countries. This board is appointed by the Secretary-General and confirmed by the General Assembly for a four-year term. The Administrator is responsible for leading a large team in Regional Bureaus and provides support to other Bureaus – including the Bureau for External Relations and Advocacy and the Crisis Bureau – all to carry out the organization's missions.

Fundamentally, the Executive Board oversees all of the organization's projects, approves budget funds, and ensures that projects adapt to changing conditions and the distinct needs of every country while abiding by policy

recommendations offered by the General Assembly and the Economic and Social Council (ECOSOC). The program is overlooked by 36 members, on behalf of both developed and developing countries, but has deliberate funding from Member States of the UN, with a yearly budget of approximately 5 billion dollars. As the Vice-Chair of the United Nations Development Group (UNDG), the UNDP is constituted by country offices, in 134 countries, regional and research offices, and several departments such as the Bureau for Resources and Strategic Partnership (BRSP), the Bureau for Development Policy (BDP), and the Global Fund. Throughout the years, the UNDP has associated with numerous UN branches, including the UN Food and Agriculture Organization (UN FAO), and the United Nations Fund for Population Activities (UNFPA), alongside others, to achieve its goals.

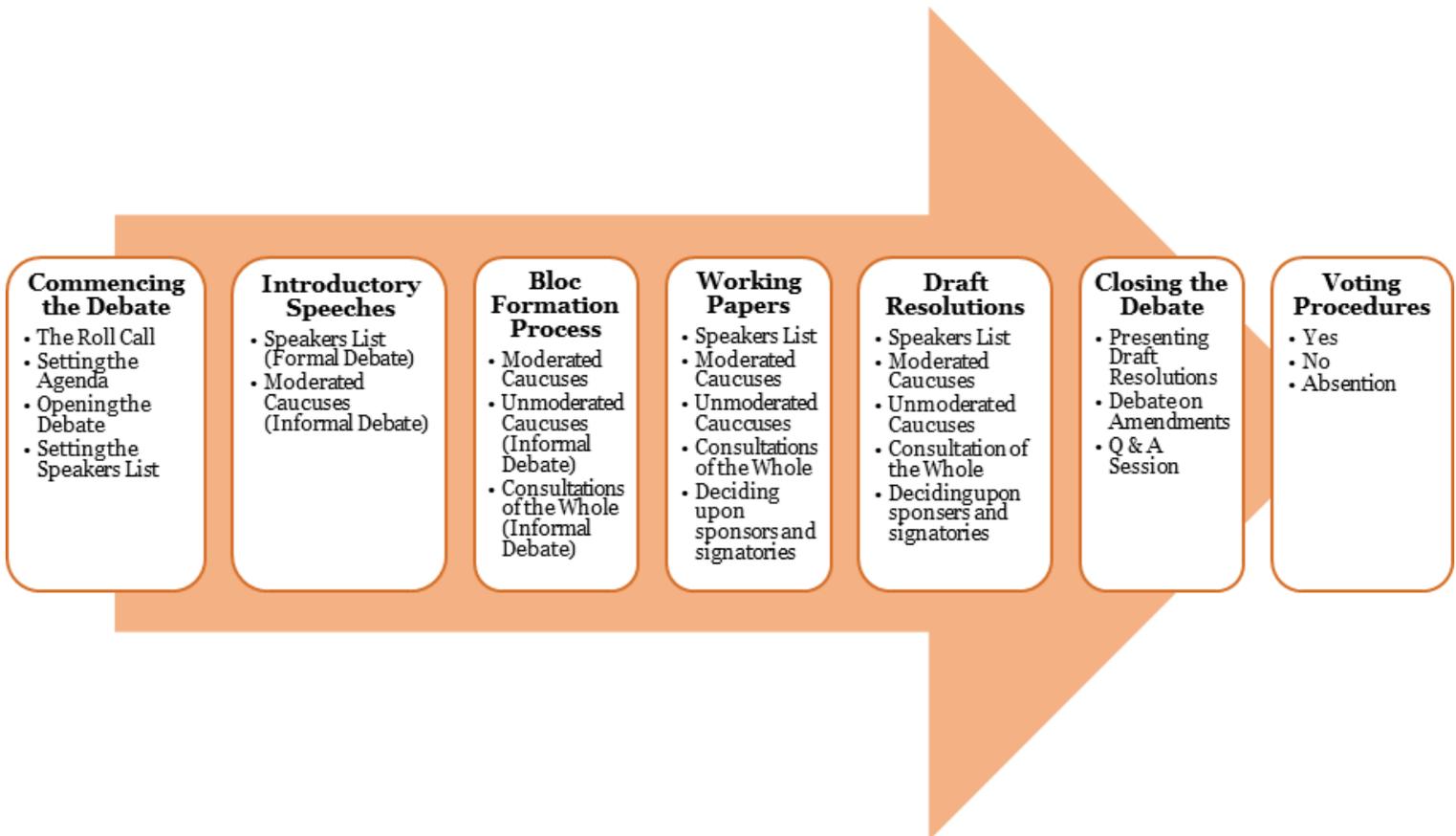


With the association and assistance of these various bodies, the UNDP succeeds in providing foundations for international partnerships to

fight world poverty, support politically expressive environments, and avert auxiliary destruction to our planet and its resources. Additionally, to provide data about the assistance that was provided, and as a measure of accountability, the UNDP issues yearly the “Human Development Report”, which also comprises means to promote progression in all areas, breakdown of the current status of the SDGs and suggestions to assist states to achieve their goals. To accomplish this, the UNDP is the main allocator of the funds of the UN, occupying over 170 countries as a manager for development efforts, primarily in anti-poverty programs. Despite being the main supervisor of the UN funds, the UNDP does not provide financial aid for individuals, corporations, or other private groups, the economic collaboration is merely based upon its association with the state's government. Conversely, it does work with vendors who contact the UNDP through its Procurement website.

At a Glance: The Conference

The Flow of Debate



Key Terms and Concepts

- **Absolute Majority:** Also known as a two-thirds majority, an absolute majority is $\frac{2}{3}$ of the quorum (or 66.7% of the quorum). Assuming a committee quorum is 60, the absolute majority would be two-thirds of 60, which is 40.
- **Decorum:** The consistent order and respect expected from all members of the committee throughout the Conference.
- **Draft Resolution:** Once delegates have compiled their ideas through the working paper, delegates must transform them into an official resolution format. This formal document is known as a Draft Resolution. The reason behind it incorporating the word 'draft' is because the resolution is yet to

be adopted by the Committee. Moreover, a Committee may have more than one Draft Resolution but it can only have one official resolution at the end.

- **Friendly Amendment:** Amendments are considered **friendly** if all of the sponsors of the original Draft Resolution agree to it.
- **Interruptive Points:** Interruptive points are those that can be put forth at any time during the debate process. However, at Altitude MUN, the interruptive points cannot be used to interrupt a delegate giving a speech.
- **Motion:** Delegates will use motions to move from one part of the debate to another. As such, motions will be the outlet used to decide upon the next course of action throughout the conference.
- **Non-Interruptive Points:** Unlike interruptive points, non-interruptive points can only be used when a Chairperson explicitly asks if there are any points or motions on the floor.
- **Point:** Contrary to motions, which delegates put forth to decide upon the next course of the debate, points are used for the sole purpose of facilitating the conference's procedure.
- **Present:** Delegates can vote on a resolution with 'yes', 'no', or 'abstention'.
- **Present and Voting:** Delegates have to vote on a resolution with either a 'yes' or 'no'.
- **Roll Call:** The first part of the Conference is known as the roll call. During the roll call, the name of each participating nation will be called aloud in alphabetical order by the Dais. Delegates can either respond with 'present' or 'present and voting'. A roll call will be taken everytime delegates reconvene at the conference setting after postponement of the debate.
- **Sponsors:** The nations that have contributed the most in terms of developing a particular document, particularly the Draft Resolution.
- **Signatories:** Signatories are nations that wish to see a certain document debated. Signatories do not have to be members of the bloc writing the document.
- **Simple Majority:** A simple majority is 50% of the quorum plus '1'. For instance, let us assume that the quorum for a committee is 60. Therefore, the simple majority for this committee would be 31.
- **Quorum:** The total number of nations present at the committee.
- **Unfriendly Amendment:** Amendments are considered **unfriendly** if at least one of the sponsors of the original Draft Resolution disagrees with it.
- **Working Paper:** The first step in the resolution formation process, the working paper is an **informal document** where delegates can begin gathering ideas and forming solutions in point format. It essentially a 'rough draft' of the Draft Resolution that will follow.

- **Yields:** If a delegate finishes their Speakers List speech and still has some speaking time to spare, they must yield their time. Delegates can either yield their time to the Chairperson, to questions, or to another delegate. Delegates should note that they only have the option to yield their time during the formal debate (the Speakers List).
-

Rules of Debate

Written Motions

Instead of voicing them aloud, these motions are written on formal notes and delivered to the Chairperson by way of an Usher.

Format:

From: Delegates should insert the full names of their nations here.

To: Chairperson

Purpose:

- **Appeal to the Chairperson's Decision:** If the delegate wishes to motion for an appeal to the Chairperson's decision, the purpose should look similar to the following:

“The delegate of (insert full name of nation) motions for an appeal to the Chairperson's decision because (insert reasoning behind the appeal).”

- **Right of Reply:** If the delegate wishes to motion for a right of reply, the purpose should look similar to the following:

“The delegate of (insert full name of nation) motions for a right of reply to (insert full name of target nation) because (insert reasoning behind the right of reply).”

Verbal Motions

These motions can be verbalized aloud when the Committee Chairperson opens the floor for any points or motions. One significant aspect to take into account is that verbal motions need to be seconded.

The Debate

“The delegate of (insert full name of nation) motions to open the debate to discuss (input the Committee topic).”

- **The Speakers List**

“The delegate of (insert full name of nation) motions to set the Speakers List for a speaker's time of (insert the suggested length of speaking time per delegate).”

To pass, this motion requires a simple majority.

- Moderated Caucus

“The delegate of (insert full name of nation) motions to suspend the debate and move into a moderated caucus with a total time of (insert total duration of the caucus) and a speaker’s time of (insert the suggested length of speaking time per delegate) to discuss (insert desired topic).”

To pass, this motion requires a simple majority.

- Unmoderated Caucus

“The delegate of (insert full name of nation) motions to suspend the debate and move into an unmoderated caucus for a total time of (insert total duration of the caucus) to (insert desired purpose of unmoderated caucus).”

To pass, this motion requires a simple majority.

- Consultation of the Whole

“The delegate of (insert full name of nation) motions to suspend the debate and move into a consultation of the whole for a total time of (insert total duration of the caucus) to discuss (insert desired topic of discussion).”

To pass, this motion requires a simple majority.

- Adjournment and Resumption of Debate

“The delegate of (insert full name of nation) motions to adjourn the meeting for the purpose of (insert the purpose of adjournment).”

“The delegate of (insert full name of nation) motions to resume the debate.”

To pass, this motion requires a simple majority.

- Closure of Debate

“The delegate of (insert full name of nation) motions to close the debate and move into the introduction of draft resolutions.”

To pass, this motion requires an absolute majority.

- Debate on Amendments

“The delegate of (insert full name of nation) motions to close the introduction of draft resolutions and commence the debate on amendments.”

To pass, this motion requires an absolute majority.

To pass, each amendment requires a simple majority.

- **Voting on Resolutions**

“The delegate of (insert full name of nation) motions to close the debate on amendments and commence the Resolution voting procedure.”

To pass, this motion requires an absolute majority.

In order to pass and become the Committee’s official Resolution, the Draft should garner at least a simple majority.

Points

Interruptive Points

- **Point of Personal Privilege:**

This point can be utilized by a delegate whenever they experience a certain personal discomfort that hinders their ability to fully participate in the conference at hand.

- **Point of Order:**

A point of order is brought up when a delegate feels as though the rules of procedure have been broken.

Non-Interruptive Points

- **Point of Parliamentary Inquiry:**

This point can be used whenever a delegate would like to ask the Dais members a question regarding the overall rules of procedure.

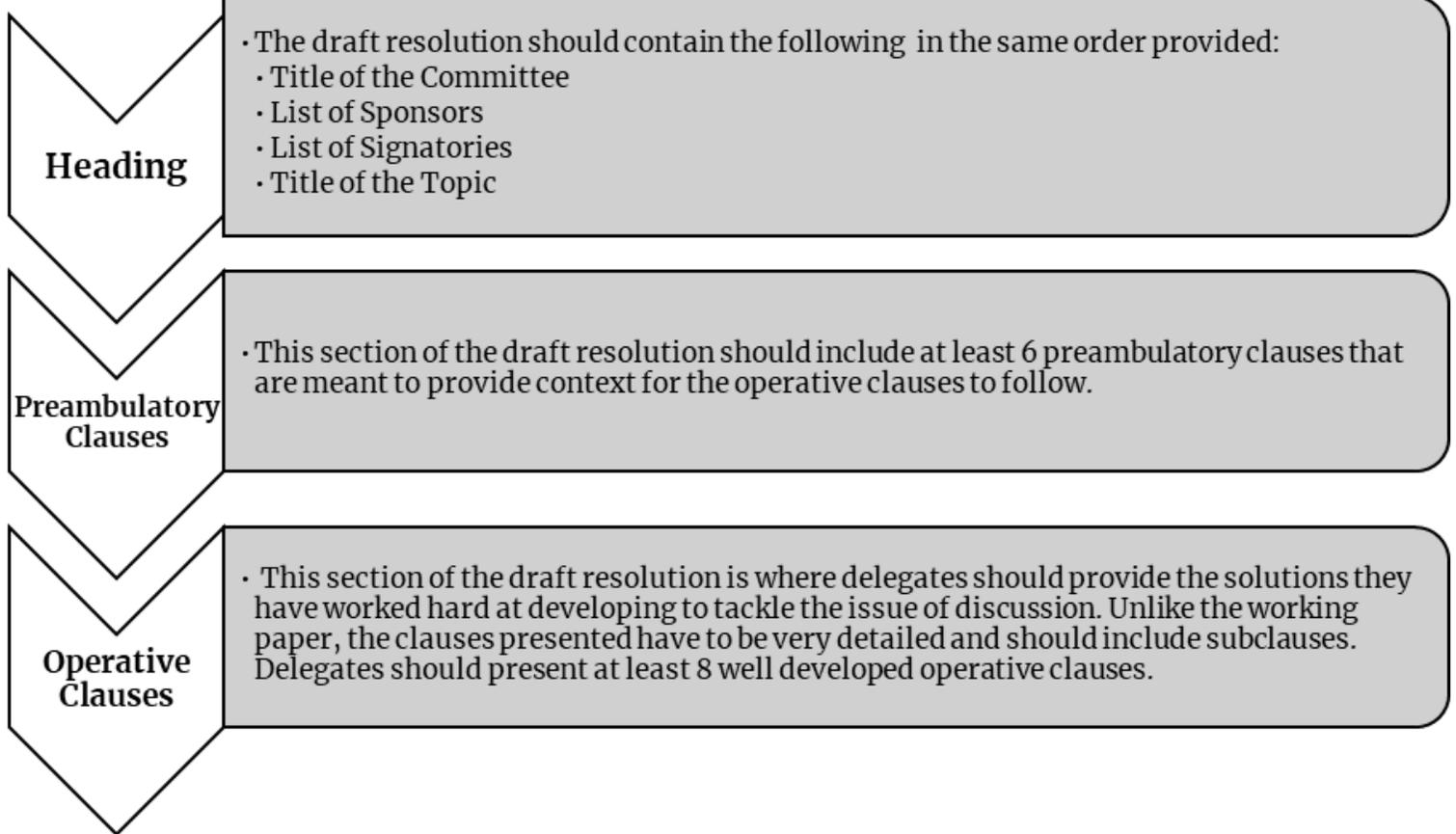
- **Point of Information:**

A point of information, also known as a point of inquiry, can be exercised by delegates whenever they would like to ask a question regarding something they do not understand about the issue at hand.

Resolution Formation Process



Flow and Structure of a Draft Resolution



The Topic

‘Fostering Resilience in the Face of an Increasing Incidence of Natural Disasters’

Topic Overview



Natural disasters pose an uncontrollable threat to humanity combined. According to the United Nations Office for Outer Space Affairs (UNOOSA), a natural disaster is an instinctively occurring and severe disruption to the economic, infrastructural, and environmental systems, beyond a community’s capacity to decrease the impact of those disasters. Natural disasters, otherwise known as geophysical and hydrological hazard events, are caused by several conceivable processes. Some of these progressions are rather long-term, such as the radioactive decay in the Earth’s core, which drives convection currents leading to the occurrence of volcanoes, while others are short-term, such as earthquakes, though their aftermaths pose long-term systematic damages. Some are exceptionally powerful, such as the “supervolcano”, while others are of lesser impact, such as soil creep and solifluction (forms of mass movements). Human activities were witnessed to be aggregating the regularity of

many geophysical hazards, especially landslides and earthquakes.

Frequency and Force of Natural Disasters

Recent trends display the increase in the frequency and force of natural disasters. This leads to severe consequences, one of which includes displacement and damage to infrastructure. Despite the probability of natural disaster occurrence globally, there is no denying that some regions are more susceptible to the occurrence of geophysical hazard events due to the movement of tectonic plates. Four countries that are vulnerable to more natural calamities than everywhere else in the world are the Philippines, China, Japan, and Bangladesh.

Hydrological disasters, despite their high frequency of occurrence, remain to be of less damage than geophysical disasters. This is due to the predictability of their occurrence. To clarify, hydrological events such as tornadoes and typhoons can be monitored via satellites, and flooding can be predicted due to upcoming weather changes. However, geophysical hazard events are regularly sudden and very short term (such as tornadoes, expanding across vast areas, sometimes reaching other countries, and spreading across a region, all in a matter of seconds) while others are very long term (such as volcanoes), yet they continue building up for huge periods, leading to extreme damages. On the grounds of hydrological disasters, according to the Natural Disaster Statistics (2021), flooding is the most occurring natural disaster worldwide. This is also aligned with the study conducted by

the Centre for Research on Epidemiology of Disasters (CRED), located in Brussels, which displayed that the frequency of geophysical hazards remained broadly constant throughout 1994 and 2013 while there was a constant rise in climate-related disasters, especially floods and storms.

To develop an improved apprehension of the topic, the topic could be divided into four dimensions that directly impact the levels of vulnerability to a natural hazard: economic, social, demographic, and political. Through the combination of those factors, the United Nations General Assembly developed the below formula as part of the global attempt to develop assessment indicators for the Sendai Framework for Disaster Risk Reduction:

Disaster Risk = f (Hazard, Exposure, Vulnerability, Capacity)

Disaster Risk could be defined as “the potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society, or a community in a specific period, determined probabilistically as a function of hazard, exposure, vulnerability, and capacity.”

Sociodemographic Dimensions of Vulnerability to Natural Disasters

The notion of vulnerability is usually applied to four areas of concern, supplementary to disasters: poverty, food security, asset vulnerability, and sustainable development, all under economic conditions. Typically, vulnerability is examined in the analysis of the dynamics of poverty, concentrating on the probability of becoming poverty-stricken or the capacity of poverty to prolong. Similarly, resilience is applied in three research aspects: economic shocks, sustainability, and institutions.



Living conditions due to an individual’s economic background heavily impact their level of vulnerability to natural disasters, especially as many of the world’s underprivileged live in slums or shanty towns, affecting the quality of housing they live in. Buildings in developed areas hold better infrastructure as they are designed professionally by architects and engineers who follow needed construction styles and building codes that can withstand natural disasters, and residents of such areas are regularly more economically well-off as they can afford insurance. Insurance cover is particularly important in post-disaster contexts as it holds residents unaccountable and permits them to relocate into their house safely upon reconstruction. The poor are incapable of affording insurance as it is pricey, and most of the time unneeded as their house quality is bad. Buildings in less developed areas are usually built by those who reside there or by inexperienced builders who have no previous design experience, making them lack the proper strength and foundations to withstand natural disasters. One example that highlights the correlation between economic status and damage from natural disasters is the 1976 Guatemala City earthquake, whereby 20,000 people were killed. Most of the fatalities were in the rifts and valleys where improper houses were positioned. This earthquake was extensively documented as having a noticeable class impact,

especially as most of the middle and upper class survived.

In the event of a disaster, the special needs of vulnerable people need to be considered. However, it is difficult to define a vulnerability. Vulnerability is not a fixed characteristic of an individual or group. Rather, it is a fluid state defined by timing, associated risks, circumstances, and access to different types of capital. People whose mobility is impaired, such as those with broken legs, can get stuck when a flood approaches, but they may be well equipped to find stable housing. The financial security of time is awake. In this case, the vulnerability is associated with a temporary shortage of physical capital, and its resilience is associated with access to economic capital. Some individuals and groups are permanently exposed to many dangers and consequences. These include the elderly, people living with chronic sensory-, mobile-, or cognitive impairment, and those who rely on assistive devices and treatments to survive.



Population growth and distribution, especially population density and urbanization, increase vulnerability to disasters. Approximately 80% of the US population lives in urban areas, with the population becoming more concentrated in

coastal areas and flood-prone areas. Congestion, limited escape routes, dense infrastructure, and poverty are all sources of vulnerability. Cities and countries in other parts of the world face similar problems. For example, in a country like China, researchers claim that urban earthquakes are more dangerous due to the high density of infrastructure. For example, increasing the coastal population raises significant concerns about increasing human vulnerability to coastal floods, hurricanes, and tsunamis. The organization of work and leisure in the coastal areas of India was one of the factors that caused numerous injuries and deaths after the 2004 Indian Ocean tsunami.

Population growth and distribution are important factors in creating vulnerability, but disaster-affected people are just as important. The social and economic characteristics of a group can limit a member's ability to protect themselves from harm, but the culture of a social group also plays an important role. An important factor in why American Latinos may be more vulnerable to disasters may be related to their language skills. Spanish-speaking people may misunderstand or not understand the disaster alerts commonly issued in English. In addition, the Latin American population in the United States has lower income levels and higher poverty levels than the general population, making it more difficult for Latin Americans to prepare for, respond to, and recover from disasters.

Cultural factors are essentially important, but poverty is a major factor influencing how individuals perceive risks and how they understand and respond to warnings. Widespread poverty has played an important role in making people more vulnerable to many recent disasters, including Hurricane Katrina, the Indian Ocean Tsunami, and the 2009 Haiti

earthquake. Hurricane Katrina is a prime example of how the negative effects of a disaster can harmfully impact the poor and people of color. Women also face unique challenges when faced with a disaster. Despite studies suggesting that women are more likely to identify and respond to risk, women tend to be poorer than men and may not have the resources to respond and recover from a disaster. This problem is especially noticeable for single mothers whose poverty rate exceeds that of single and married women and who need to save the lives of their children as well as themselves in the event of a threat. In the 2004 Indian Ocean tsunami, women and children suffered more injuries and deaths than men and boys. Women's vulnerability to disasters is also shaped by traditional gender roles, power and privileges, low wages, and secondary duties such as childcare.

Other factors that affect vulnerability are age and disability. In elderly people trapped in long-term care facilities during Hurricane Katrina, the impact of age and disability on disaster vulnerability was observed. In addition, it is estimated that people over the age of 65 accounted for more than 70% of Hurricane Katrina's deaths.

Topic in Depth

Yokohama Strategy and Plan of Action for a Safer World

The Yokohama Strategy for a Safer World: "Guidelines for Natural Disaster Prevention, Preparedness and Mitigation and its Plan of Action" was developed by the First World Conference on Natural Disasters, held May 23-27, 1994, in Yokohama, Japan. The plan was adopted and approved by the United Nations General Assembly in 1994. This is the main

outcome of the International Decade for Natural Disaster Mitigation (IDNDR) interim review, as it founded 10 principles for its strategy, action plan, and follow-up. In addition, it contains recommendations for the prevention, preparation, and mitigation of natural disasters.



The 10 Principles of the Yokohama Strategy for a Safer World:

1. Risk assessment is a necessary step in adopting appropriate and successful disaster risk reduction strategies and measures.
2. Disaster prevention and preparation are paramount to reducing the need for disaster relief.
3. Disaster risk reduction and readiness should be seen as an integral part of development strategy and planning at the national and international scales.
4. Developing and strengthening the ability to prevent, mitigate and mitigate disasters is a top priority area to be addressed during the 10 years to provide a solid foundation for 10 years of follow-up.
5. Speedy warning of forthcoming disasters and their effective

broadcasting through telecommunications, including broadcast services, are key to successful disaster prevention and readiness.

6. Precautionary measures are most effective when all levels are involved, from the community to the national government, regional and international levels.
7. Vulnerability can be reduced by applying appropriate design and development patterns to target groups through appropriate education and training throughout the community.
8. The international community recognizes the need to share the technologies needed to prevent, mitigate, and mitigate disasters. These need to be made available quickly and freely as an integral part of technical cooperation.
9. Environmental protection as part of sustainable development in line with poverty reduction is essential to the prevention and reduction of natural disasters.
10. All countries have a primary responsibility to protect the property of their people, infrastructure, and other countries from the effects of natural disasters. The international community mobilizes the appropriate and efficient use of existing resources, including financial, scientific, and technological means, in the area of natural disaster mitigation, while meeting the needs of developing countries.

Environmental and Climatic Weights



Geography is an important factor and an essential aspect of risk. Every point on earth has a particular geological, ecological, and climatic environment that defines exposure to potential hazards in that particular area and thus contributes to the level of vulnerability. Earthquakes occur along surface fault lines, droughts are a common life experience in the Sahel, and the coastline between Bordeaux and Schleswig-Holstein is prone to flooding. This is called biophysical vulnerability. All parts of the world suffer from at least one, and in some cases, even more, biophysical vulnerability.

For example, the 1930s Dust Bowl in the Great Plains of the United States can only be understood by considering the dual biophysical vulnerabilities of the region: drought and aeolian soil. In the Great Plains, drought has long been a threat, as the unofficial name Great American Desert suggests. Simulations show that the Great Plains experienced at least four drought periods between 1900 and 1950, as in the 1930s. Droughts in the 1930s were probably exceptional, but they occurred once in the first century and twice in the last 400 years in the Great Plains. The causes of these droughts can be traced back to changes in sea surface temperature, and there is a strong correlation

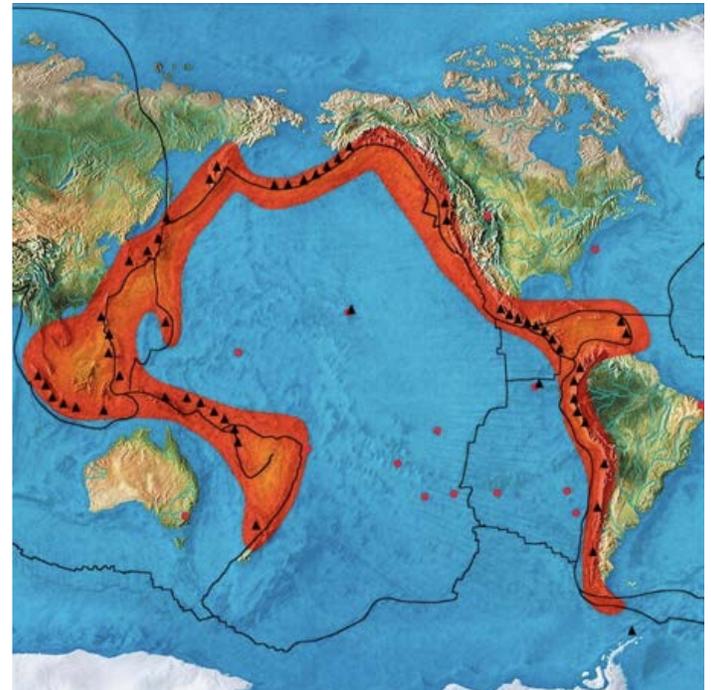
between the various surface temperatures of the Pacific Ocean and the low rainfall periods of the Great Plains of the United States.

However, drought does not cause major erosion or sand drift unless combined with the fine-grained soil of wind-blown sediments characteristic of the Great Plains. These aeolian soils deposit throughout the Holocene and are susceptible to sand drift and erosion unless covered by solid vegetation. The area has long been considered unsuitable for agriculture and was covered with grassland vegetation. However, in the late 19th and early 20th centuries, the search for productive and commercial land transformed ranches and subsequent farmlands into dominant lands. The soil was cultivated and exposed, increasing its biophysical vulnerability by exposing the inherently erodible soil to the winds across the American plains. Therefore, the Great Plains of the United States can be regarded as an example of a "risk area." The term was coined by Kenneth Hewitt and defines a geographic area characterized by certain types of recurring natural disasters.

Environmental Vulnerability

Environmental vulnerabilities are an important feature of policies and risk assessment reports. As Bankoff pointed out, "disasters are simply unavoidable extreme physical events that require purely technocratic solutions and remain the dominant paradigm within the UN and multilateral funding agencies such as the World Bank. "There has been no progress on mapping these risks and vulnerabilities. For example, the UK Government has created and shared an interactive map showing flood risk across the UK. Similar projects and risk assessments exist for all types of biophysical and chemical risks. In Northwestern Europe, floods are a common life experience on the North Sea coast, and coastal

areas are exposed to this constant biophysical vulnerability. In the fight against floods from the Middle Ages to the present, risk analysis shows the potential dangers of winter storms and floods. However, certain areas are considered to be far more dangerous than others. Western nations have helped establish a discourse that differentiates them as safer regions from other parts of the world that are considered inherently riskier or more volatile. For example, the Pacific edge, which extends from Australia through East Asia to the west coast of the United States, is often referred to as the "Ring of Fire" due to the subduction of tectonic plates, resulting in the high frequency of earthquakes and volcanoes. Similarly, tropical areas are always marked as dangerous, warning of infectious diseases and health risks. Societies living in this type of danger zone are often considered very vulnerable, regardless of the precautions and mitigation strategies implemented to address these dangers.



Biophysical Vulnerability

Biophysical vulnerability is often regarded as the static background of personnel and views the geological and ecological features of a particular region as a situation that continues to affect society over time. However, increasing knowledge of changes in past and present climatic conditions is fundamentally changing this notion. In the fields of historical climatology and paleoclimatology, mapping of changing biophysical conditions in the past is advancing. For example, the Sahel was unaffected by the same drought conditions throughout the Holocene. Climate change has changed the risk of biophysical drought several times in this particular risk area. The transition from the Medieval Warm Period to the Little Ice Age increased the humidity in the region, with a clear impact on drought vulnerability.

Nevertheless, even "global" climate change, such as the Little Ice Age, is mapped to specific regions in different ways. Especially through changes in precipitation that can be associated with lower temperatures. Sam White convincingly showed that the Little Ice Age in the Middle East did not bring about the same type of meteorological patterns that Western Europe encountered. The North Atlantic Oscillation, which affects both Northwestern Europe and the Middle East, has had opposite effects in both regions. Northwestern Europe faced a damp condition, while the Middle East experienced increased drought and more frequent frigid waves. Similarly, during most of the Little Ice Age, Southeast African societies generally experienced a dry state, while West African societies faced a damper state.

Therefore, biophysical vulnerability can change throughout history. This insight is even more important given current climate change, as extreme weather events and long-term changes

are at least partially related to human behavior and responsibility. Mapping these temporal and geographic patterns is important for a complete understanding of risk areas and their inherent biophysical vulnerabilities.

Economic Pressures and Crises

The view that existing levels of economic development determine the impact of hazards is perhaps most pronounced in the discourse on disaster vulnerability, comparing the world of "developing countries" with the world of "developed countries." From the 19th century, especially since 1945, catastrophes have become an increasingly visible sign of the Global North and Global South, characterized by poverty, illiteracy, and backwardness. Western countries, on the other hand, were largely protected from disasters due to their high economic and technological developments. In some areas, this assumption was supported by the relative rarity of serious natural disasters over a long time. For example, Switzerland experienced in the last quarter of the 19th.



There are several logics in the notion that economic conditions, especially poverty and "underdevelopment", affect the prevention, reduction, and improvement of hazards. In wealthy countries, a high standard of living

usually means insurance that covers the cost of better housing, evacuation and housing options, and post-disaster recovery costs. All of this is much more difficult due to the prevalence of poverty. In the 1970s, key geographers such as Phil O'Keefe and Ben Wisner described third-world disasters such as the 1976 Guatemala earthquake as "class earthquakes" caused by underdeveloped and marginalized earthquakes. Poverty was also cited as the main reason leading producers to abandon traditional restrictions on the use of fragile ecosystems. Meanwhile, other scholars have put poverty into resource overexploitation and natural disasters, as the poor may develop their coping strategies to minimize risk and mitigate the effects of natural disasters. It warns against simply associating with exposure to. In addition to living standards, public resources also play a role. Through taxation, developed economies can better generate large sums of money to invest in infrastructure construction, warning systems, or other high-tech solutions aimed at preventing or mitigating danger. But they are always willing to do so. Multiple motivations (ideal, political, social, economic) can prevent nations from prioritizing security over other goals.

Pertinent Features

Economic Diversification as a Risk Mitigation Strategy

Economic development is not the only way economic conditions can influence the effects of a disaster. Economic characteristics and structures at the local, regional, or national level also need to be considered. In doing so, we focus on three interrelated aspects:

- Enhancement
- Diversification

- Commercialization

Even before the Industrial Revolution, intensification can often be associated with increased exposure to natural disasters. For example, in the 18th century, Europe was repeatedly plagued by rinderpest. The epidemic was directly related to the intensification of long-distance rinderpest in the last century. Every year, thousands of animals move from breeding grounds in Northern and Eastern Europe to urban consumption areas in Western Europe. The crowd of animals provided the condition of plague, the outbreak of which was supported by the vulnerabilities of animals that were often on the verge of starvation after a long journey to the west.



Diversification can be seen as a risk mitigation strategy used by medieval farmers. By growing multiple crops, managing many small plots scattered over large areas, and combining agriculture with non-agricultural activities such as nut and berry collection and the creation of private industries, bad weather, and subsequent crop failures The risk has been reduced. Studies on late famine suggest that regions with diversified economies worked better. During the

great famine in northern Italy in the early 1590s, the decline in fertility in the mountains was not as rapid as in the lowlands, as the mountain population was able to maintain a grain-based diet of local dairy products. Fruits, vegetables, and chestnuts were gathered for the forest, but the extreme dependence of Ireland's population on potatoes contributed to the dramatic impact of potato spoilage in Ireland in the 1840s.

The relationship between commercialization and vulnerability is more complex. On the other hand, in a commercialized economy, the existence of markets for capital, labor, and commodities can facilitate large investments in securities if they benefit investors. This is the situation in the Netherlands in the 17th and 18th centuries, where entrepreneurs investing in land reclamation were willing to fund embankments and drainage systems in the hope of significant long-term gains. However, rural, and urban entrepreneurs are not always interested in making large investments in protection and mitigation. It depended on the entrepreneur's time frame and financial interests. In the Netherlands, commercialization did not involve environmental pollution, as farmers owned the land and sought long-term benefits.

Related issues relate to the integration of the business into international or interregional market networks. An open economy, at least in theory, helps facilitate access to goods and services in other regions, overcome adversity, and accelerate recovery. There is a long-standing debate about avoiding relatively early famines in England and the northern part of the Netherlands. However, when integrated into the market network, the missing resources may be relocated elsewhere. After all, the market responds to purchasing power, not needs. The Irish famine of the mid-19th century is a good example. In the spring of 184, food was imported

from the United States to Ireland, saving lives. However, in the winter before the arrival of corn, grain exports from Ireland to the United Kingdom were much the same as before the crisis.

Role of Institutions in Resilience and Development



Institutions are highly relevant to the topic of vulnerability and resilience. Organizations loosely defined as organizations and networks associated with formal and informal rules can be specially designed and implemented for dangerous situations. For example, aid organizations, emergency law, insurance, or rescue system forms. These particular functional risk-oriented systems are of central importance to the study of historic catastrophes. However, it is becoming increasingly clear that the ability of communities and societies to respond to threats depends not only on these particular institutions but also on the infrastructure of the overall "normal" institution. These include institutions that organize the exchange, allocation and use of common resources. Mediation of institutions that make up intellectual property rights or market exchanges. Sometimes indirectly, but often directly, they affect the ability of society to prevent hazards from turning into disasters and

to recover quickly. Institutions usually do not work alone. They are incorporated into one of the larger coordinating systems that regulate the allocation of resources in all societies, including families, states, markets, and various forms of collective action.

The research discusses the extent, if not necessarily systematic, the institution affects the ability of society to cope with the shock. The position in the debate is often loosely related to different views on the formation of general institutions. Sometimes the system is perceived as a result of rational decisions by individuals to maximize profits. From this perspective, competition guarantees optimal results: the best and most efficient institutions survive. However, given the sustainability of a large number of institutions that increase rather than reduce vulnerability, this position is largely unsustainable. Institutions often have the opposite effect. For example, financial institutions can help improve profitability and clarify and secure property rights, but they can also negatively impact sustainability and increase vulnerability. In addition, it is highly profitable that it can hinder others' attempts to adapt agencies to reduce vulnerability or increase resilience. Therefore, this issue, which is related to the multiple impacts of the system, points to a more fundamental issue. Institutions are often the result of social negotiations or even conflicts. They are so closely related to the influence and position of various social actors that they can be formed and determined by the interests and preferences of a particular individual or social group.

Embedding institutions into social, political, and economic structures is why vacations do not change immediately why many institutions. Once established, they tend to be strengthened by groups that benefit from them. In such cases,

the change only occurs under high pressure. Sometimes the disaster itself can create such pressure. Recent flood studies in the Netherlands and Poland show that dangers and disasters can provide a great opportunity for institutional changes. As "focused events", they can show risks and emphasize the urgency of action-which, which in turn, leads to institutional changes. That is, it has its logic. Therefore, the ability of society to deal with danger through its system cannot be considered given, as it is not directed to dealing automatically, but to the interests of a particular stakeholder. Weakened. Institutions designed to address challenges can also cause side effects in other areas, which are often rarely expected.

Role of ICTs in Hazard Risk Management and Prevention

Innovative technologies such as robotics, drone technology, and GIS, as well as new technologies such as artificial intelligence (AI), Internet of Things (IoT), cloud computing, and big data, are changing the complex process of disaster management.

Geographic Information System (GIS)

Digital geospatial information has revolutionized the way we see the world and its places within it. Geospatial data for development planning, policymaking, and decision-making in all countries and sectors, from urban mobility to education, telecommunications services, disaster management, agriculture, urban planning, water management, and humanitarian activities.

Geographical information such as longitude and latitude, or simply information that describes a location on or above the surface, is called geospatial information. It plays an important role in emergency response and natural disaster

preparedness such as floods, landslides, and storms.

To recognize and maximize the value of geospatial data, the United Nations Global Geospatial Data Management Expert Committee (UNGGIM) is a member of the United Nations, a wide range of experts to improve access to high-quality geospatial information. Country, World Bank. The geospatial data provides an unprecedented opportunity for disaster management and resilience development.

Drone Technology

The Unmanned Aerial Vehicle (UAV) was originally developed for military purposes but is now widely used due to its time and cost-efficiency, providing real-time data and high-resolution images. According to ITU documents, the use of the first documented drone occurred after Hurricane Katrina struck the United States in 2005 (Meier, 2015). The UAV is increasingly recognized for its potential effectiveness in disaster relief efforts by major humanitarian organizations such as the World Food Program (WFP) and the United Nations International Children's Fund (UNICEF).

Big Data

Accumulation of very large datasets in real-time is a way to define big data. All major new technologies such as blockchain, artificial intelligence, augmented reality, and the Internet of Things use big data to improve and improve solutions. Government agencies and other humanitarian agencies involved in the disaster management process can use big data to improve disaster resilience. You can collect data from mobile phones, social networks, robots, and drones in the event of a disaster to identify the affected population and develop rescue plans. For example, the United Nations flagship Global Pulse Initiative is leveraging big data

innovation for sustainable development and humanitarian action. This initiative is working with UN agencies, government, academia, and private sector experts to research development and mainstream approaches to applying real-time digital data to 21st-century development challenges.

Artificial Intelligence (AI)



AI and machine learning can play a key role in all stages of disaster management (prevention, protection, mitigation, response, recovery), from predicting tsunami and earthquake potential to accelerating recovery. For example, the Qatar Computing Institute (QIDR) has developed free open-source software that automatically collects and categorizes tweets posted during humanitarian crises. Disaster Response Artificial Intelligence (AIDR) combines human and machine intelligence to automatically flag up to thousands of messages per minute. This solution can be used for rapid decision-making in large-scale emergencies. Another example of a digital tool is the Nexus Environmental Assessment Tool (NEAT +). This helps humanitarians understand their sensitivities and implement mitigation measures in the event of a crisis. Additionally, the NEAT + Rating Tool runs on Kobo Toolbox, a free open-source mobile data acquisition tool

developed by the Harvard Humanitarian Initiative. When the data is collected, the program will automatically create a report in Excel. This report categorizes risk into high, medium, and low, and provides information to help mitigate risk. This tool was piloted in December 2018 with the United Nations High Commissioner for Refugees (UNHCR) in the Manta para refugee settlement in Zambia.

Global Efforts

The FAO Strategic Framework



FAO's strategic framework includes strategic corporate goals to improve food and agriculture emergency preparedness and effective response. FAO's medium-term plan (2010–2013) provides outcomes related to disaster preparedness, prevention, and mitigation, emergency response, and rehabilitation, transition to development and collaboration, as well as outcomes and interdisciplinary action over the next four years. It is specifically specified as the focus. Since 2005, disaster risk management (DRM) work at FAO has been led by inter-departmental working groups. This working group consists of technical and operational experts aimed at integrating risk reduction into FAO emergencies, rehabilitation, and development projects.

The relief and rehabilitation programs are managed by the FAO Emergency Operations and Rehabilitation Department. Emergency coordination units are often set up to temporarily manage an organization's response at the local level. FAO's emergency surgery and rehabilitation and technical departments also

work closely together during all emergency and recovery stages, especially during the implementation of medium-term rehabilitation programs.

Disaster Risk Mitigation as a Political Priority

The FAO focuses on mitigating disaster risk as an integral part of sustainable development, using a food and agricultural perspective as a gateway, with particular emphasis on the role of local institutions. FAO assists countries in planning long-term strategies for disaster preparedness and preparedness in the areas of food and agriculture. These strategies focus on how to address the root causes of local stakeholder vulnerabilities to natural disasters in a needs-based and sustainable manner.

The results include the design of a country-specific planning framework for DRM (Disaster Risk Management) in the agricultural sector. Development of guidelines for analyzing DRM systems to support the identification of DRM institutional and technical capacity needs at the national, district, and local levels. Share DRM lessons and best practices in the agricultural sector through the Technology for Agriculture (TECA) database, where knowledge of best practices is maintained, accessed, and shared by a network of agricultural technology sources.

Risk Evaluation and Warning Systems

FAO administers numerous global information and early warning systems, including:

- Global Information and Early Warning System (GIEWS) on Food and Agriculture uninterruptedly monitors current food security and produces dedicated reports and alerts on food shortages. A mission to assess crops and food supply in disaster-stricken countries. Evaluation of emergency assistance requests.
- The Food Chain Crisis Management Center (CMC) continuously analyzes global risks along the food chain in the short and long term. Promote the

containment and control of the most serious cross-border animal and migratory plant pests under the Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases (EMPRES); and respond quickly to animal health, plant health, and food safety emergencies and threats.

The Global Mainstreaming Initiative

The UNDP launched a Global Mainstreaming Initiative in 2005 to integrate disaster risk mitigation and other key development priorities such as human rights, good governance, climate risk management, and food security into national development plans and programs. Strengthened the capacity of the government. A complex interface between disasters and conflicts and political instability is also an important consideration.

The main activities are as follows:

- Integrating disaster risk reduction with other UNDP priorities (energy and environment, poverty reduction, democratic governance) and other important cross-cutting issues including climate change and gender.
- Capacity development to integrate disaster risk mitigation at the national level through the development of tools such as customized training packages and hands-on case studies.
- Facilitating harmonization of disaster risk reduction approaches with key partners such as the World Bank, ISDR, and ProVention Consortium.

The UNDP is responsible for designing and developing training courses on the integration of disaster risk mitigation in development for government colleagues, UNCT members, and UNDP staff. The organization is currently working on a series of basic analytical tasks aimed at gaining a better understanding of DRR governance and mainstreaming. The UNDP also played a key role in the UNDGISDR task team in

integrating disaster risk mitigation into the CCA-UNDAF process. Additionally, the organization emphasizes disaster risk mitigation in cities as a key area of effort to integrate DRR into the urban development process through global advocacy, regional partnerships, and regional implementation, along with ECHO, Earthquake and Megacity Initiative, and UNISDR.



The Disaster Management Program

The Habitat Agenda (Istanbul 1996), detailing its mission, requires the Agency to assist the Member States in disaster prevention, mitigation and preparation, and post-disaster rehabilitation capabilities in human settlements. In 2007, based on UNHABITAT's Sustainable Relief and Reconstruction Framework, strategic guidelines for crisis resolution incorporating the Hyogo Prefecture Action Framework were adopted. The purpose is to:

- Reduce and enhance vulnerabilities in human residence and improve disaster management capabilities at all levels.
- Responding to the pressing needs of interconnected post-crisis government intervention to support a sustainable human populace.

The Disaster Management Program (DMP) is mandated to fulfill this obligation by helping national governments, local governments, and communities strengthen their disaster management capabilities. This applies to both disaster prevention and containment, and restoration of human settlements. DMP also raises awareness among decision-makers and communities about mitigation methods and appropriate rehabilitation in human settlements. It bridges the gap between relief and development by combining technical expertise, normative understanding, and experience from UN-HABITAT's fieldwork. Through ongoing partnerships with UN-HABITAT's internal and external emergency facilities, DMP provides a combination of long-term technical and normative support, enabling immediate support in the emergency phase. This combination allows DMP to impact all stages of the post-conflict and disaster management cycle and promote the sustainable development of human settlements in the most impactful crises.

Learning Outcomes

- Delegates will garner an understanding of the geophysical structure of natural hazards and how the various structures pose dissimilar threats accordingly.
- Delegates will learn to recognize how natural disasters come to be and how understanding the past patterns of disasters helps in their future prevention.
- Delegates will be updated on the newest technological and scientific discoveries as well as the means of keeping up to date with hazard events and how the fourth industrial revolution (AI, IoT, etc.) incorporates strategies to promote human safety in changing environments.

Recommendations

- Delegates must understand their country's geographic and geophysical properties as a function of hazard risk.
- Delegates should tackle less regarded topics such as tourists and refugees under harm of hazards and their positioning.
- Delegates are to cover their country's environmental advances to protect biomes from human-caused natural disasters.
- Delegates are to come up with strategies for advanced economic development and diversification to enhance standards of living.
- Delegates are required to analyze pre-existing telecommunication routes and their country's positioning within the field of ICTs.
- Delegates are to consider the marginalized and vulnerable members of society as they conduct their research.

Questions to Consider

- Does the country have a specific set of building codes to be followed for disaster prevention?
- What does infrastructure look like on a national scale in terms of safety?
- How does the government make use of its telecommunications systems?
- Do social media platforms undergo any forms of censorship?
- How diversified is the economy?

- | | |
|---|---|
| <ul style="list-style-type: none"> • Are there any strategies being implemented for socioeconomic advancement? • How can the government guarantee the safety of vulnerable and marginalized members of society? | <ul style="list-style-type: none"> • How does human development contribute to resilience to natural disasters? • What are strategies that member states can cooperatively work on to ensure the application of plausible solutions? |
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Annexes

Relevant Institutions

- Habitat for Humanity
- The United Nations Children’s Fund (UNICEF)
- The International Red Cross (IRC)
- Salvation Army
- The United Nations Office for Outer Space Affairs (UNOOSA)
- The National Organization for Victim Assistance (NOVA)
- REACT International
- International Relief Teams (IRT)
- Mennonite Central Committee (MCC)
- Direct Relief International
- The United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA)
- Emergency Response Fund (CERF)
- The United Nations (UN) Economic and Social Council (ECOSOC) established the Economic Social Commission for Asia and the Pacific (ESCAP)

Relevant Legal Treaties, Frameworks, and Conventions

- Hague Convention
- Four Geneva Conventions (GCs)
- International Covenants on Civil and Political Rights (ICCPR)
- Economic, Social and Cultural Rights (ICESCR)
- International Strategy for Disaster Reduction
- The Hyogo Framework
- Sendai Framework for Disaster Risk Reduction
- Conference of the Parties (COP)
- United Nations Framework Convention on Climate Change (UNFCCC)
- International Law Commission’s Draft Articles on the Protection of Persons in the Event of Disasters

Relevant Conferences

- The World Summit on the Information Society (WSIS)
 - UN World Conference on Disaster Risk Reduction
 - International Conference on Geographic Technology and Natural Disaster Management (ICGETNDM)
 - International Conference on Sustainable Forests and Natural Disasters (ICSFND)
 - National Disaster Resilience Conference
 - International Conference on Disaster Management and Human Health
 - International Conference on Natural Hazards and Infrastructure, Hazards as Earthquake, Floods and Harsh Weather
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