

**Forum:** United Nations Development Programme

**Issue:** Strengthening Preventions Methods for Natural Disasters and Relief Assistance

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## Introduction

There are no such things as natural disasters. Natural hazards such as hurricanes, tsunamis, and earthquakes are often misconceived to be natural disasters. However, they only become disasters if the international community allows it. Nature provides humans with food, water, and shelter; all things vital to their very existence. However, because it is so closely linked to such basic human needs, natural hazards also have tremendous instantaneous and lasting impacts on the people affected. The quality of the preventions made before such natural hazards and the aid received by those in need during the aftermath are equally as crucial in stopping these natural hazards from becoming natural disasters.

According to the WHO (World Health Organization), 90000 people are killed and 160 million people are affected by natural disasters each year. This shows that countries are not properly mitigating natural hazards correctly or efficiently. Although many studies have been made about disaster risk reduction and the mitigation of the impacts of natural hazards, the international community has yet to discover a way to properly prevent natural disasters from happening. Some countries have public plans that will be activated once disaster occurs, but once again, these plans have failed to protect all people affected by the hazard.

## Definition of Key Terms

### **Vulnerability**

Vulnerability is the evaluation of how prone a community or individual is exposed to hazards. When used to describe natural disasters, it is calculated through physical, social, economical, and environmental factors.

### **Disaster Risk**

Disaster risk is how likely it is for someone or a community to experience economical and physical damage over a set period of time.

### **Disaster Risk Reduction**

Disaster risk reduction is collection of preventative measures that can be taken to ensure that disaster risk can be reduced.

### **Preparedness**

Preparedness is a measure of how capable a country is in terms of response to disasters. With good preparedness, comes disaster risk reduction.

### **Hazards**

Hazards are physical events that could pose as a cause for social, economical, environmental damages.

### **Exposure**

Exposure is a measure of the how much civilization (such as public facilities and people) resides in disaster-prone areas. However, just because a country has a lot of exposure to natural hazards, it does not mean that they often experience natural disasters.

### **Disaster Relief**

Disaster relief is the broad term that includes all assistance and services that are offered to victims of disasters. This can include financial aid, shelter, and other goods.

### **Humanitarian Aid**

Humanitarian aid is a form of disaster relief that ensures the welfare of victims. Humanitarian aid can come in many forms such as education, shelter, and donation of foods.

## **Background Information**

### **Phases of Human Interaction with Natural Disasters**

There are four stages that countries go through when a natural hazard occurs. In order to prevent the hazard from becoming a disaster, it is best for the country to go through the last three

phases quickly. Emergency management is a crucial process that ensures that the country rebounds, and it also provides insight on the preparedness of the country.

## **Mitigation**

Mitigation is the first of the four phases of interaction, and it sets the stage for how fast the country can go through the rest of the three phases. Mitigation is the process where countries do damage control and attempt to prevent the natural hazard from becoming a disaster. The better the mitigation, the less work countries will have to do in the remaining stages. A huge part of having effective mitigation is planning beforehand on how the government would react to natural hazards. If a country were to consistently educate their citizens on emergency protocol and how to minimize damages in their community, the government would not have to spend as much time rebounding from the losses the hazard caused. While the other phases focus specifically on the type of hazard the government faces and how to tackle it, this phase governs how the country does long-term. Therefore, the mitigation stage also comes after the restoration phase. Mitigation aims to eradicate all natural disasters, so if enough resources are spent on this, countries would not have to repair themselves every time a hazard appears (especially countries in disaster-prone areas). Thus, having advances in mitigation is one of the most important and beneficial actions a country can take.

## **Preparation**

Preparation is the second phase of interaction. It is the activation of any previously laid out plans that the government thought of. Usually the plans involve the facilitation of communication, which ideally travels fast and is understood by the masses. Other plans a country might have includes having international or regional Non-governmental Organizations (NGOs) provide humanitarian aid. This phase is usually the quickest stage, seeing as this is simply the government starting to use plans that have already been designed and developed for general disaster protocol.

## **Reaction**

Reaction is the third phase, and it is the development of any specialized plans or solutions towards the specific natural disaster that the country is facing. These plans are specific to the natural disaster only, thus the quality of the plans vary from disaster to disaster. However, previously used plans could also be used as models for similar disasters. Usually, these plans will include the mobilization of resources and labor to best suit the countries' interests. For example, if the natural disaster disrupted food production in the state, the government might decide to place a higher tariff on non-food related businesses' tariffs in order to keep the economy going. However, the first reaction of each country should be to rescue any victims of the natural disaster. This means that

doctors, the police, and firefighters would be in high demand, and advertisement for volunteers would be actively posted.

## **Restoration**

The restoration phase is the fourth and final step of the cycle, and it is arguably the most important stage. Depending on the speed and quality of the recovery, the country's ability to rebound from a disaster will be reflected. This phase sets the country up and braces the country for the next disaster to occur. This phase mostly consists of the reconstruction of infrastructure, restoration of economy, and reimbursement to the victims of the disaster(whether it is through government welfare programs or the sponsorship of NGOs). The restoration phase easily morphs into the mitigation stage, because once the restorations of any old structures are done, governments will often try to prevent natural hazards of the same type from becoming a disaster again. Thus, they will try to implement new measures to mitigate the negative impacts of natural hazards. As such, the four stages keep on cycling back to each other as natural hazards strike again and again.

## **International cooperation towards relief assistance and preventions**

There were many past conferences and projects that aimed to focus the international community's attention on the severity of damages done by natural disasters. Some of the more prevalent congregations are outlined below.

### **The First United Nations World Conference on Disaster Risk Reduction**

The United Nations World Conference on Disaster Risk Reduction (WCDRR) is a conference launched by the UNISDR(United Nations Office for Disaster Risk Reduction). The resulting document from it is the Yokohama Strategy and Plan of Action for a Safer World. The document outlines the measures that should be taken from 1994-2005(which was was the date of the second WCDRR). The document also talks about goals that countries should try to achieve, such as preserving the environment and development of preventative methods of various scopes. Active participation from member communities is also highly promoted in the strategy, which shows the lack of interest the international community had in the subject before. The document mainly focused on the recovery and mitigation phases of the previously mentioned cycle.

### **The Second United Nations World Conference on Disaster Risk Reduction**

The Second (WCDRR) resulted in the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters(HFA). As the title claims, this document aims to focus on the advancement of recovery (similar to the Yokohama Strategy and Plan of Action).

This is basically a continuation of the Yokohama document, with the difference being that this document also focuses on preventing natural hazards from becoming natural disasters, with measures outlined such as integrating DRR(disaster risk reduction) into other governmental projects.

### **The Third United Nations World Conference on Disaster Risk Reduction**

The Third (WCDRR) resulted in the Sendai Framework for Disaster Risk Reduction 2015-2030. The Sendai Framework was basically a document that combined the lessons learned in the HFA, combined with some new concepts. This framework focused more on the understanding and the increase of governmental management in disaster risk reduction.

### **Global Platform for Disaster Risk Reduction (Global Platform)**

The Global Platform for Disaster Risk Reduction is a forum used to facilitate communication between nations or organizations in issues regarding natural disasters. It has been validated by the United Nations General Assembly, and has biennial sessions (starting from 2007, but the meeting in 2015 was skipped because it was the Third UN WCDRR).

### **World Risk Analysis**

World Risk Analysis is basically the analysis of most countries in the world, taking into account factors such as exposure and coping capacity.

### **World Risk Report**

The World Risk Report is a compilation of all the countries that have been analyzed, and it also includes detailed analysis of countries with abnormal statistics or any abnormal patterns that have been found. This is an excellent example of how research is the key aspect in resolving any issue seeing as this brings more awareness to the countries that need to take extra precautions or more aid.

## **Major Countries and Organizations Involved**

### **UNISDR**

The UNISDR(United Nations International Strategy for Disaster Reduction) is a UN organization that is in charge of most of the DRR work the UN does. They publish GARs(Global Assessment Records) yearly, and they are basically summarizations of the year in terms of natural disasters. These reports include the

amount of contribution from each nations, the progress the international community has made on DRR, and how far along the frameworks that have been published (for example, the 2019 GAR would include how much of the Sendai Framework has been implemented).

## United Kingdom

The United Kingdom has helped aid numerous countries that were the victims of natural disasters. In 2016 alone, they spent 1284 billion euros for international disaster relief. They also provided immense help to Indonesia when they faced a giant earthquake and subsequent tsunamis. They brought in solar lanterns, hygiene kits, and shelter kits out of their own budget and provided humanitarian experts to help the country navigate through this crisis.

## United States of America

The United State of America has consistently held Disaster Recovery Institute International Annual Conference, and have published frameworks for specific natural disasters such as droughts as recent as 2018. Having these frameworks will not only let future leaders know how to deal with crises, they will also know what mistakes to avoid whilst drafting these frameworks. This will help the mitigation phase of the cycle mentioned above, and overall help the country take a step in becoming a disaster-proof nation.

## World Bank

The World Bank started the Global Facility for Disaster Reduction and Recovery and World Reconstruction Conferences. The aim of the Global Facility is to “help developing countries better understand and reduce their vulnerability to natural hazards and climate change.”. They do this through funding grants and providing technical assistance and knowledge in the department for projects that just started. So far, there has been three world reconstruction conferences, with the most recent one being in 2017. As the name suggested, these conferences mostly focus on the recovery/reconstruction portion of the cycle mentioned above.

## Timeline of Events

<b>Date</b>	<b>Description of event</b>
July–November 1931	The Central China Floods of 1931

1990–2000	International Decade for Natural Disaster Reduction
May 23 - 27, 1994	The First United Nations World Conference on Disaster Risk Reduction
December 26, 2004	2004 Indian Ocean earthquake and tsunami
January 18 - 22, 2005	The Second United Nations World Conference on Disaster Risk Reduction
January 12, 2010	2010 Haiti Quake
March 14 -18, 2015	The Third United Nations World Conference on Disaster Risk Reduction

## Relevant UN Resolutions and Treaties

- Yokohama Strategy and Plan of Action for a Safer World, 27 May 1994
- Hyogo Framework for Action, 22 January 2005
- Sendai Framework for Disaster Risk Reduction: 18 March 2015 **(A/RES/69/283)**
- Global Assessment Records, various versions at various times
- International cooperation on humanitarian assistance in the field of natural disasters from relief to development, 25 Feb 2000 **(A/RES/54/233)**
- International cooperation on humanitarian assistance in the field of natural disasters, from relief to development : report of the Secretary-General, 6 September 2011 **(A/66/339)**
- Disaster Risk Reduction, 20 December 2017 **(A/RES/72/218)**
- International Strategy for Disaster Reduction, 22 December 2015 **(A/RES/70/204)**

## Possible Solutions

**Ask More Economically Developed Countries(MEDCs) to separate into groups to help assist countries listed as high risk or above in the World Risk Index (WRI).** One benefit of this solution is that

the equation that was used to determine the ranking of each country in the WRI took in a number of factors including but not limited to public infrastructure, governmental corruption, medical services, economical coverages, and the limitations to education and research conducted by the said country, which provides legitimacy for the index. The index also includes 171 out of 195 countries, so this solution would benefit the majority of the world. Seeing as more than one country would help the country in need, the economic burden is distributed among the MEDCs, and not one country would have to pay a lot. However, there are no incentives for MEDCs to agree to this other than a better reputation.

**Request the international community to deposit money into a fund that is to be overlooked by the UN that can only be used with for immediate reaction towards natural hazards and the approval of at least 50% of the P5 in an emergency meeting that will supercede all other UN meetings.** This way, the world can react fast to the disaster at hand. Countries will have incentive to partake in this because if their country faces a natural hazard, they will also receive funding. However, the approval of at least 50% of the P5 might not be enough for some countries, and they might oppose this solution because of it.

**Install a mechanism of sorts into objects that most people have, such as cell phones, that will notify the government of a natural hazard occurring.** This will increase efficiency because everyone can report a natural hazard that is about to happen so that these hazards can not become disasters easily. However, in less developed countries, it would be hard to use electronics since not everyone has them. Also, if less developed countries were to create a system to do what this solution describes, it would take a long time and a lot of money.

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