



Forum:	Commission on Sustainable Development (CSD)
Issue:	Creating a framework responding to the increasing frequency and effect of natural disaster.
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General Information:

Natural events has been a part of Earth history since it was formed. These natural events are processes that made Earth a planet suitable for human life, a simple example of this could be illustrated by the volcanos. Volcanism has been responsible for producing much of the water on the Earth's surface and for producing the atmosphere. Nevertheless these events could have a negative impact on human life and in this case there are known as natural disaster.

Natural disaster risk is connected to processes of human development. The natural disaster puts the human development at risk. Nevertheless, the human development choices which are made by individuals, companies, organization and even nations could be the causes of a natural disaster. Furthermore, the human development could be seen as a way to minimize the risk of natural disasters.

The Natural disasters effects millions of people in more than 100 countries and causes up to 184 deaths per day in different parts of the world. Nevertheless, it is impossible to eliminate natural disaster since it is a part of the nature of Earth but it is possible to minimize its effects by understanding its causes and creating a framework in order to reduce it.

Description of the issue and background information:

The United Nations has addressed the issue of natural disasters before as this has a huge impact and causes a big damage to the countries that are vulnerable to natural disasters. Hazard mitigation is not an easy task but the most effective way is formulated through regional cooperation and through an international effort. Furthermore, natural disasters play an important role in achieving the Millennium Development Goals (MDGs). The MDGs touch upon some areas which are closely linked to vulnerability to natural hazards such as eradicating extreme poverty and hunger, achieving universal primary education, promoting gender equality, ensuring environmental stability and partnerships for development, which are goals one, two, three, seven and eight respectively. The MDGs are both directly and indirectly related to natural disasters an example to illustrate this is by considering MDG.7, the goal of this is to improve the lives of millions around the globe. People whom live on areas which are vulnerable to natural disasters. In order to achieve this goal poverty needs to be reduced in these areas, the people need to be educated and have a deeper understanding of natural disasters and both men and women should play a part to have a strong and educated work force who can play an important part in the process of Hazard mitigation.



Natural disasters is a contradictory topic, we all claim that we want to minimize disasters yet, we take actions that increases the probability of a natural disaster occurring, this is because we are convinced that natural disasters occur naturally and there is no effective way of stopping it. Although we don't have a high impact on natural disasters it is possible for humans to be the primary source of a natural disaster, a simple example of this can be a levee designed poorly which causes a flood.

Natural hazards can be divided into different categories as shown below:

- The geological hazards and these include but are not limited to:
 1. Earthquakes.
 2. Volcanos
 3. Landslides
 4. Floods

Countries that are vulnerable to geological hazards include Russia, Japan, United States of America, Iceland, Albania, Chile and China which faced a flood that is considered to be one of the deadliest floods in the history. The Yangtze river flood in 1931 is considered was perhaps the worst natural disaster in the 20th century is still a terrifying memory until today. The flood was a tragedy that caused the death of over 3.5 million people during and after the flood.

- The Atmospheric hazards and these include but are not limited to:
 1. Cyclones
 2. Tornadoes
 3. Droughts
 4. Lightening

Countries that are vulnerable to atmospheric hazards include United States of America, France, Belgium, Canada, Nepal, Bhutan, Burma, Afghanistan, Yemen, Cambodia, Somalia, Burundi, Niger, Ethiopia, Mali, Chad, and Bangladesh. According a report entitled A Global Report: Reducing Disaster Risk: A Challenge for Development, the United Nations development program (UNDP) identified Bangladesh as the country most vulnerable to cyclones.

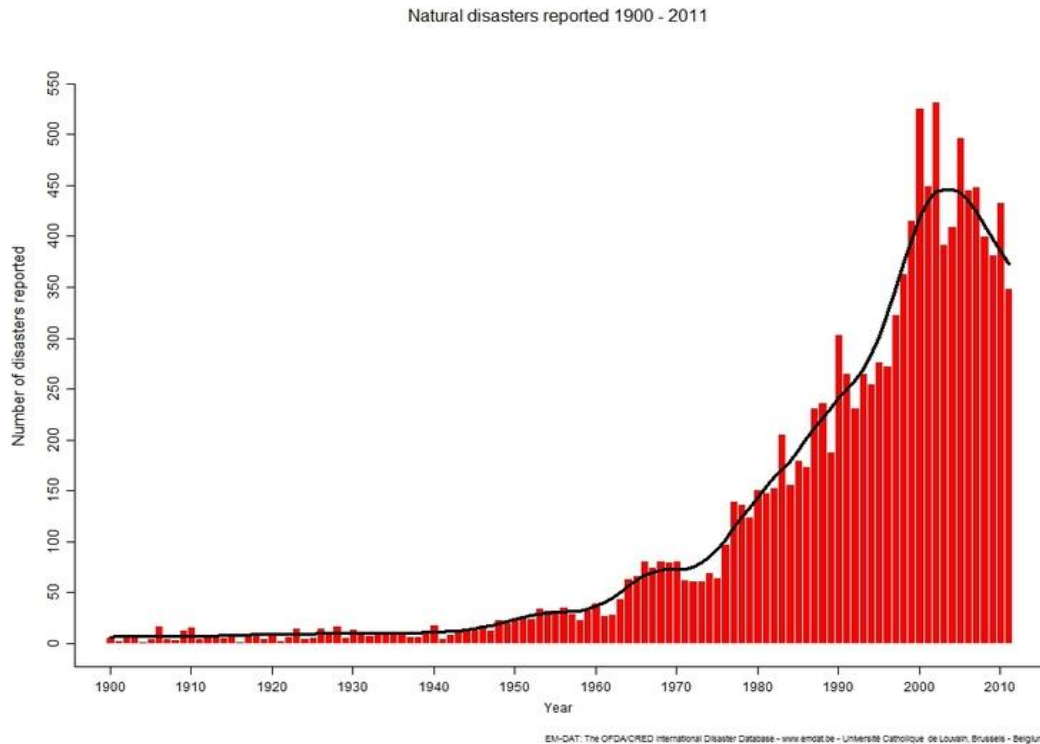
The two categories above are considered to be the main categories of natural hazards but there are other different types of hazards which occur less frequently such as insect infestations and wildfires.

The world have faced a lot of catastrophic hazards which caused the death of a lot of people throughout history some which were rapid onset hazards such as the earthquake that struck Wenchuan in China in 2008 causing the death of an estimate of 62,000 people. Other are slow onset hazards such as the Horn of Africa in 2011 which affected the food supply of around 12 million people in Africa.

Natural disasters can have different effects on people's lives, some could be immediate and some could be in the long-term. These effects are divided into three different parts which are primary effects, secondary effects and tertiary effects respectively.



The frequency of naturally occurring disasters has been increasing since the 1900s this is due to the climate change and the human interference with environment the graph below illustrates the increase in natural disasters from 1900 until 2011.



As shown in the graph the number of natural disasters increased from the 1900 especially from the 1960s the increase in the number is very clear and very high. As of today the number of natural disasters is increasing and this is an issue that must be considered in order for us to achieve the MDGs.

The way that is used to minimize the natural disasters is by understanding its causes and then we have two general ways of accessing these disasters. The first being hazard assessment and the second being risk assessment. The two ways are based on history and scientific hypothesizes respectively. Risk is a familiar term when dealing with natural disasters but this does not mean that human lives are based on probabilities but it is simply a way of prioritizing some expected disasters than others which may occur in a long time.

Definition of Key terms:

Hazard Mitigation – Any sustained action taken to reduce or eliminate the long-term risk to life and property from hazard events.

Catastrophic hazards – These are hazards that have a huge impact on peoples life, they have a low chance of occurring but are deadly if they occur.



Rapid onset hazards – Disaster that develop fast with a very short warning and strike rapidly such as volcanoes, thunderstorms and wildfires.

Slow onset hazards – These are the disasters that take years to develop such as droughts and insect infestations.

Primary effect – Occur as a result of the process itself. For example water damage during a flood or collapse of buildings during an earthquake, landslide, or hurricane.

Secondary effect – Occur only because a primary effect has caused them. For example, fires ignited as a result of earthquakes, disruption of electrical power and water service as a result of an earthquake, flood, or hurricane, or flooding caused by a landslide into a lake or river.

Tertiary effect – Long-term effects that are set off as a result of a primary event. These include things like loss of habitat caused by a flood, permanent changes in the position of river channel caused by flood, crop failure caused by a volcanic eruption etc.

Countries and Organizations involved:

UNDP: The United Nations Development Programme plays a very important role in disaster management, it is very involved in helping countries at risk and countries that have already been hit rapidly by a disaster. The organizations is active in more than countries to help prevent a natural disaster and to achieve the MDGs.

UNISDR: The United Nations Office for Disaster Risk Reduction is another organizations of the UN that is very active in reducing the risk of disasters. They help countries cooperate to reach their common goal of reducing disasters. The UNISDR also encourages member states to improve the coherent with the climate change adaptation (CCA).

DRR: The Disaster Risk Reduction plays the biggest and the most important part in hazard mitigation. The organization consists of 191 members and it has the scientific and technological resources to research disasters and predict them.

Republic of Vanuatu: The country is involved by being the world's most vulnerable country to natural disaster.

Republic of the Philippines: The country is the second most vulnerable place to natural disasters in the world.

People's Republic of Bangladesh: As mentioned earlier in the report Bangladesh is considered the world's most vulnerable country to cyclones.

People's Republic of China: The country is considered one of the major countries that is vulnerable to natural disasters considering the fact that it had seven floods only in 2015.



Republic of India: The 2004 Indian Ocean Tsunami was the deadliest tsunami ever recorded causing the death of 280,000 people approximately and affecting neighbor countries such as Maldives, Thailand and Somalia.

There are also a lot of other countries involved such as but not limited to:

The United States of America

Republic of Peru

Republic of Indonesia

State of Japan

Republic of Chile

Republic of Albania

Islamic Republic of Afghanistan

Russian Federation

Useful Questions:

- Is your country vulnerable to natural disasters if so what type of disasters are present in your country?
- What actions have your country already taken to reduce natural disasters?
- Does your nation have a big population?
- Is poverty an issue in your nation?
- When did the last natural disaster occur that affected your nation?
- How will cooperating with other countries help reduce natural disasters?

Links and sources for delegates to dig deeper into the topic:

<http://www.wmo.int/pages/prog/drr/> --- Disaster Risk Reduction (DRR)

<http://www.unisdr.org/> --- The United Nations Office for Disaster Risk Reduction

<http://www.undp.org/> --- The United Nations Development Programme

http://www.tulane.edu/~sanelson/Natural_Disasters/introduction.htm --- Basic information about natural disasters.

<http://www.emdat.be/database> --- The international disaster database

<http://www.un.org/en/mdg/summit2010/pdf/List%20of%20MDGs%20English.pdf> --- The millennium development goals.