

Forum: Social, Cultural and Humanitarian Committee

Issue: Ameliorating the provision of emergency aid through the development of new technologies

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Position: Deputy-Chair



PERSONAL INTRODUCTION

Dear delegates,

My name is Maira Antonopoulou, I am 17 years old and I am a student of the 12th Grade in Costeas-Geitonas School. This would be my fourth-time chairing, and the second one as a chair in the Humanitarian Committee. I have to admit that it is my utmost honor to serve as one of the deputy chairs of the GA3 in the 7th session of the Champion School Model United Nations. Overall, I have participated in 15 MUN conferences, and from my experience, MUN is not just an academic conference, it is a whole society by itself.

The most important thing that MUN offers to younger people is the chance to get involved with crucial problems which our world currently faces. One of the committee's topics concerns the amelioration of the provision of emergency aid through the development of new technologies. Emergency cases where global action is essential, strike every day. The provision of those incidents and the confrontation of them, can only be possible by the use of new technologies rather than traditional techniques, which can be time-consuming and even dangerous in some cases.

Dear delegates, for any questions or concerns which may arise during the period of studying the study guide and general for the topic, feel free to contact me:

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INTRODUCTION

The world progresses every day with the development of new technologies and with the recognition of new techniques. With the discovery of new programs and tactics, some traditional ways of handling crises have changed.

One prime example is the excessive digitalization of the new era. Now, the replacement of old techniques with new ones, using in conjunction digital means and new technologies, leads to the confrontation of a variety of different things in our everyday life, in a much more fast and practical manner.

Taking that into consideration, it is only logical to benefit ourselves and the greater good, by proposing and adjusting these new technologies to our daily routine, so that problems, crisis and emergency situations, which may be hazardous for a lot of people, to be avoided.

There are lots of countries, mostly Less Economically Developed Countries, that face serious incidents of humanitarian crisis. According to the UN, approximately, more than 135 million people are in need and only 97 million of them receive aid, as the total requirements of funds overcome 25 billion dollars. So, it is only logical, that new technologies should be developed so they can take an active role in the amelioration of situations of emergency.



Figure 1

DEFINITION OF KEY TERMS

Humanitarian crisis

“A humanitarian crisis is defined as a singular event or a series of events that are threatening in terms of health safety or well-being of a community or large group of people. It may be an internal or external conflict and usually occurs throughout a large land area.”¹

Humanitarian Assistance

According to WHO: “Humanitarian assistance is aid to a stricken population that complies with the basic humanitarian principles of humanity, impartiality and neutrality.”²

Data preparedness

According to the European Union, this term describes the ability of organization to gather, deploy and manage information and analysis tools, as well as systems and strategies, so they can be prepared before an emergency situation, strikes.

Crises mapping with geospatial information

According to the European Union, it allows people to contribute to information, by providing data during a crisis. Interlinked with this, is also Geographic Information System (GIS), which is a computer system and is gathering any different types of information, that later visualizes, in 3D models or in visual maps to provide deeper insights.

Internet of things (IoT)

“The internet of things, or IoT, is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers (UIDs) and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction”.³

¹ Definitions for Humanitarian Crisis Hu·Man·i·Tar·i·an Cri·Sis.” *What Does Humanitarian Crisis Mean?* [www.definitions.net/definition/Humanitarian crisis.](http://www.definitions.net/definition/Humanitarian%20crisis))

² “Definitions: Emergencies.” *World Health Organization*, World Health Organization, 17 Nov. 2014, [www.who.int/hac/about/definitions/en/.](http://www.who.int/hac/about/definitions/en/))

³ What Is Internet of Things (IoT)? - Definition from WhatIs.com.” *IoT Agenda*, [internetofthingsagenda.techtarget.com/definition/Internet-of-Things-IoT.](http://internetofthingsagenda.techtarget.com/definition/Internet-of-Things-IoT)

BACKGROUND INFORMATION

In the last decades, we have been witnesses to multiple incidents of humanitarian crises around the world, either technological, environmental or humanitarian ones. In such cases, the safety, security and well-being of individuals is threatened.

According to researches conducted by the International Disaster Database, there have been an average of 430 disasters every year between 1994 and 1998. The amount of disasters quickly increased in 2005, where it was recorded that around 800 disasters occurred.

According to another research conducted by EM-DAT (Emergency Events Database) between 1994 and 2015, there were more than 6,873 natural disasters, a phenomenon which cost 1.35 million lives, affecting 218 million people on a worldwide scale. During, last decade the number of incidents of terrorism, has gradually grown. According to the Terrorism Knowledge Base, from 2001 to 2005 terrorist attacks averaged around 2300 incidents per year and by 2007 there were more than 3.500 attacks annually.



Figure 2 Trained worker from an NGO working in a laboratory to prevent a crisis, using specialized equipment.

Factors that can prevent a crisis:

The use of mobile technology

A recent study carried out by the UN, indicates that in 2016 more than 3.5 billion people were using the Internet, which is around half the global population. Given the scale and size of the industry , it is only logical to use all digital means for our benefit.

According to the United Nations Development Program (UNDP), the use of mobile technology is essential, in order to prevent a crisis. Phones, tablets, computers in conjunction with the aid of social media applications, can lead to a global response towards the emergency situation, either in a governmental level or an individual one.

Monitoring

Governments and organizations need to monitor closely issues that cause social, political or environmental disorganization and try to prevent them before turning into a crisis. The use of social media platforms and the need for trained staff, is highly important in such kinds of situations.

According to a document written by the government of France, regarding crisis prevention techniques, the above measures have been highlighted:

1. Adopting a preventive approach aimed at improving international security through diplomatic means and development assistance,
2. Containing, when necessary, crises through military means,
3. Supporting post-conflict stabilisation through economic, diplomatic and other means of cooperation.⁴

Training

The existence of trained staff is very important, when it comes dealing with an emergency situation. Each government, in conjunction with the aid of NGOs or organizations linked to Ministers and in general the government, should monitor

⁴ *“Crisis And Conflict Prevention Strategies An International Comparison”*. Brune, Sophie-Charlotte et al. RAND Corporation, 2015, https://www.rand.org/content/dam/rand/pubs/research_reports/RR900/RR959/RAND_RR959.pdf. Accessed 24 July 2019

issues, in order to be able to identify a potential crisis and take action before it occurs, it can be either prevented or strolled, in order more time for preparation to exist. A crucial situation like this, needs trained employees who can help by finding effective solutions.

Adoption of technological innovations in humanitarian emergencies

Data preparedness

Taking into consideration that the need for quality data during an emergency situation is deemed to be essential during the humanitarian response phases, the decisions which will be made the first hours after an incident occurs are critical. This is why humanitarian actors should make sure that all the data concerning a crisis, have been already gathered and analyzed.

Crises mapping with geospatial information

As it has been used for three decades now, the GIS has helped tremendously in multiple situations where a crisis has arisen. There are a lot of incidents where through this system, people from all around the world has offered information, knowledge and personal skill to confront an emergency situation.

Data visualization

This technique describes the process of visualization of information via different digital means, such as photos, videos, graphics.

Citizen reporting with mobile phones

A more traditional manner to confront a crisis, is by the use of mobile phones. New innovative communication technologies, as well as mobile device ownership, enables citizens to report any incidents or any useful information, but also on their situation and/or any needs they may have, during a crisis.

Based on researches, the victims or affected citizens of an emergency situation, are usually the ones that are involved in the reporting process that help raise public awareness. Citizens reporting can be achieved through either mobile data collection or crowdsourcing (The situation where a large amount of people

reports constantly and actively about a crisis, using their mobiles or open source software platforms).

Internet of things (IoT)

It is basically a technique, that refers to a system of connected devices. Such sources may be any kind of electronic machines, from phones and computers to thermostats and cars or health trackers. These devices, enables us to learn information concerning the temperature of the area of the crisis, location etc.

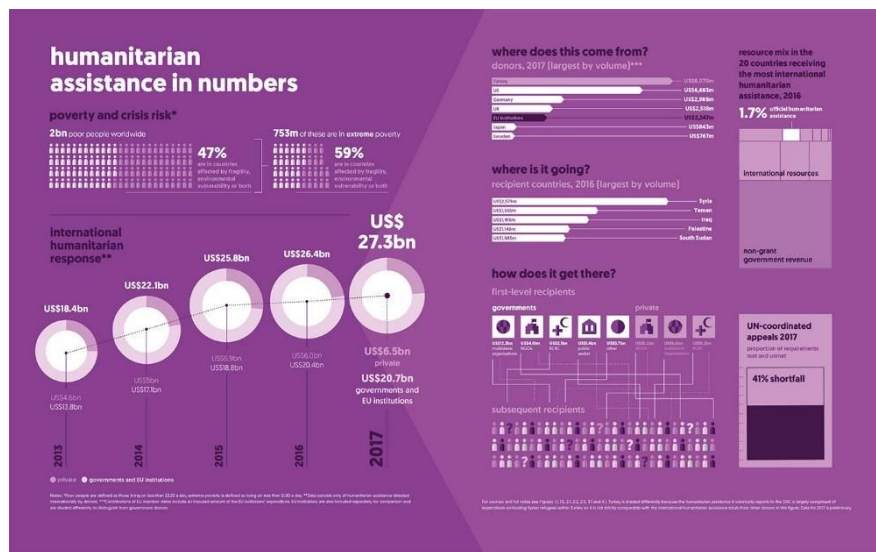


Figure 3

MAJOR COUNTRIES AND ORGANIZATION INVOLVED

United States of America and United Kingdom

Both countries have taken the lead with the proposal of new technologies, systems and techniques. The two countries have joined forces by creating a program called “The Challenge Fund”, which aims to introduce and include innovations in the aid sector. Over the years, the countries have managed to raise more than \$4 billion dollars. Their goal is to discover the next technological breakthrough, so it can be easier to prevent the creation of a new conflict zone, as well as to face and save the lives of the victims, that currently live in a conflict zone.

Global Alliance for humanitarian innovation (GAHI)

GAHI is an organization which aims to adopt innovation in various fields and means in the humanitarian system. It is a people centered organization, which respect that “people are the best arbiters of their own futures”⁵

It works so that new innovative ideas to be added to the ordinary methods of preventing and solving a humanitarian crisis and empower all groups of people to be prepared to lead, solve and shape any collective response towards an emergency situation. Many NGOs (Non-Governmental Organizations), a lot of governments businesses etc. are members of this program.

According to the GAHI: *“While a great deal has been achieved with narrowly defined innovation practices and programs, this is no longer enough. Innovation 3.0 calls for a broad new ecosystem of system innovation capabilities.”*

European Union

The EU has funded for humanitarian innovation with the program called “EU Research and Innovative Program”, restricted by the Horizon 2020 program. In November 2017, the EU launched the “First European Innovative Council Horizon Prize”, which promotes the concept of application of technology and the development of up to date and state of the art solutions, for the prevention of a situation of emergency aid.

Furthermore, this program along with the European Innovation Council (EIC), provide funding, advice and network opportunities to companies and scientists, so that the idea of using innovative solutions for the confrontation of an emergency situation, to be transmitted internationally.

⁵“Global Alliance for Humanitarian Innovation.” GAHI, [www.thegahi.org/.](http://www.thegahi.org/))

UN INVOLVEMENT: RELATIVE RESOLUTIONS, TREATIES AND EVENTS

The office for the coordination of humanitarian affects (OCHA)

The UN has embraced the concept of the application of new technologies for the detection and prevention of cases of humanitarian crisis. Thus, by this entity the UN aims to strengthen the global response to humanitarian emergencies and natural disasters.

More specifically, the OCHA's Policy Development and Studies Branch's Humanitarian Research and Innovation Grant Program, provides grants, to motivate and support the conduction of researches and the writing of essays, regarding the recognition of state-of-the-art innovations and measures, which can confront or prevent a crisis before or after it strikes.

UN Central Emergency Response Fund (CERF)

CERF is a humanitarian fund, that promotes action and response to emergency situations but also strengthen core issues in underfunded humanitarian crises.

CERF provides humanitarian assistance to those who are affected either by conflict zones or by natural disasters, with the aid of innovative means, such as the use of IoT, mobile technology etc.

UNICEF Innovative Fund

This is a program, made by UNICEF to promote technology into everyday life and especially when it comes to crucial matters, such as a crisis. Its aim is to promote and encourage innovation across the world. This is why UNICEF in accordance with the UN, donates funds, so that innovative programs to be inaugurated, from all member states.

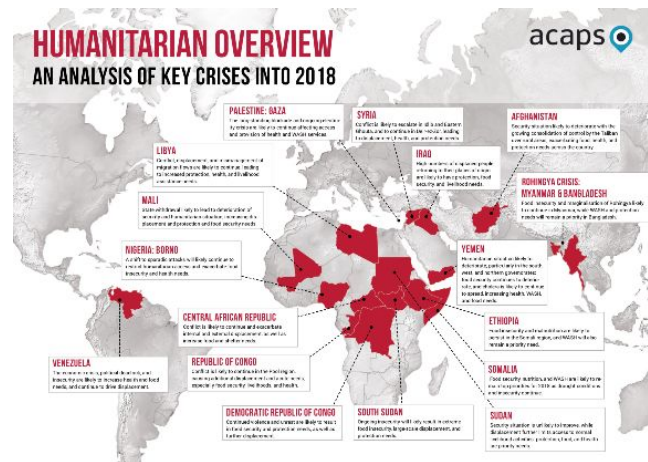


Figure 4 Top countries throughout the world, that have faced the most fatal crisis in 2018.

POSSIBLE SOLUTIONS

Humanitarian crisis is an intertemporal phenomenon, which has appeared in the past, and continuing to accelerate nowadays. The confrontation of this phenomenon was, and still is demanding, as it requires the development of policies, techniques and measures which will have as a focal point the humanitarian dignity, the protection of human lives. To implement these policies, it is very important that the developed countries and the international recognized organizations such as NATO, UN and European Union, who have the ability to influence other member-states, to collaborate and impose rules and regulations that are feasible in order to create standardized process towards any humanitarian emergency. Secondly, the creation of an International law regarding humanitarian aid is also extremely important.

The need for bilateral agreements and the formation of relative policies, between the states involved in an emergency case, are also important, in order to engage effective collaboration to try and solve any incidents. To structure the above policies and form the necessary legislations, it is important to work from the existing techniques in order to achieve the goal in the best possible manner. Furthermore, it is fundamental to create an international monitoring system, which will inform governments and organizations before any humanitarian issues turn into a crises.

Moreover, it is very important to raise funds, in order to create proper infrastructure, such as databases, which will be able store data, which could be used for future crisis, in both developed and developing countries.

Finally, raising public awareness in such a phenomenon is of high importance, as it is vital to inform the citizens about the benefits of using technological innovation tactics during a crisis, as well as ways to protect themselves from a potential crisis. Some ways to inform citizens could through the use of pamphlets and leaflets, public campaigns and advertisements.

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