TEIMUN

THE EUROPEAN INTERNATIONAL MODEL UNITED NATIONS

GENERAL ASSEMBLY

DISASTER RESILIENT DEVELOPMENT

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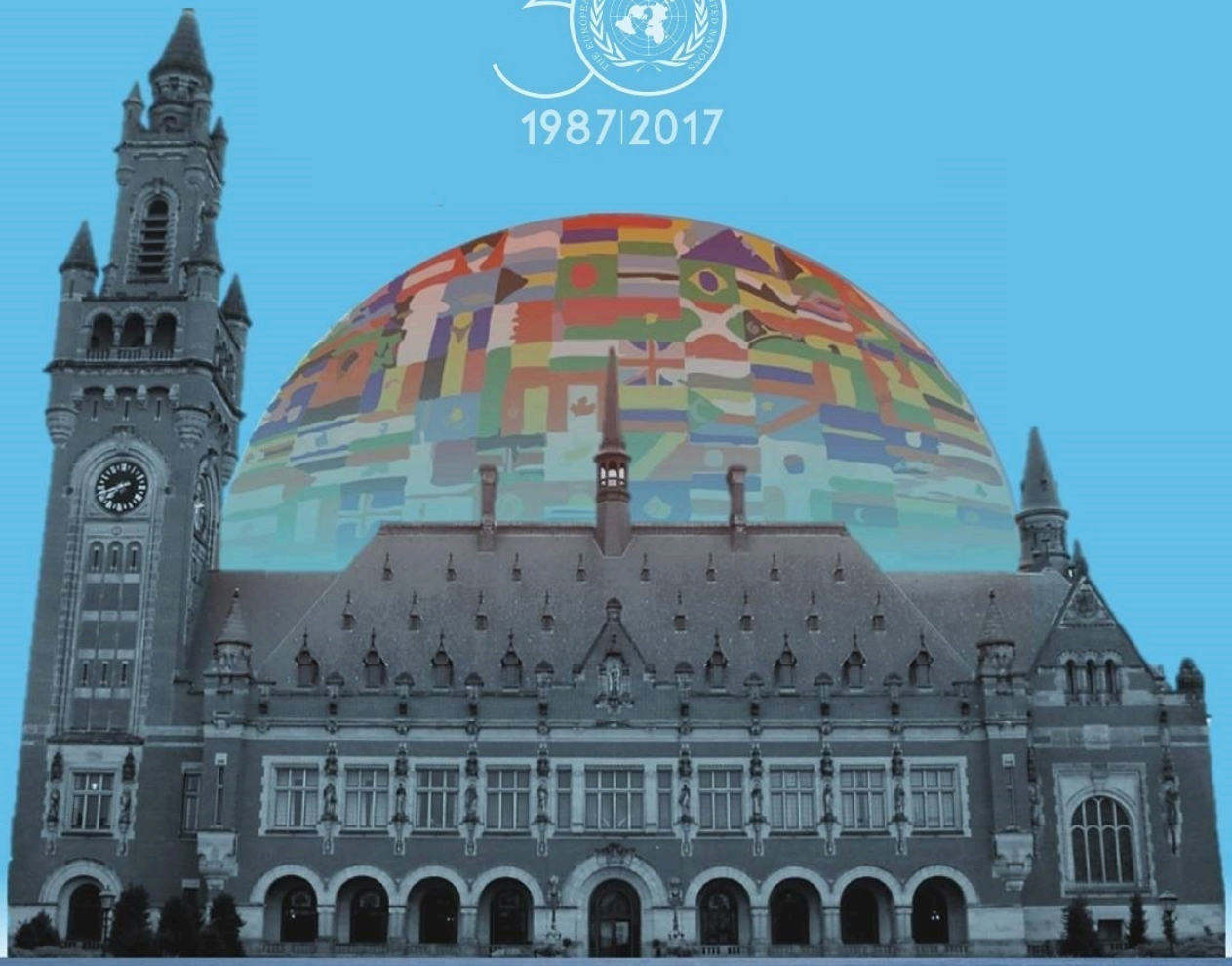

Welcome Letter

Distinguished Delegates,

Greetings from your dais. It is our privilege to welcome you to to the grand 30th session of The European International Model United Nations (TEIMUN) in The Hague, Netherlands. We hope that you will gain a new perspective from this conference as well as a greater understanding of the United Nations and international affairs. We believe that you will create fond memories of new friends and have an enriching, stimulating, and enjoyable week of debate and social events in The Hague.

The General Assembly plays a unique role within the United Nations as a primary entity tasked with overseeing a wide range of issues. In addressing the issues, the GA works to gain consensus through its universal membership and acts loosely with the other councils. This year, we will be discussing two topics, Disaster Resilient Development and Improvement of Education in Rural Areas. In order to help with your preparations for the conference, this study guide provides you with a brief outline of the topics debated while in committee. However, your research should not be solely dependent on this background paper as we suggest you explore your State's policies in order to have fruitful debates and create comprehensive resolutions.

Please do not hesitate to contact us with any questions, concerns, or suggestions regarding the General Assembly. We are truly excited to meet you all! We hope you enjoy reading the following study guide, and we look forward to hearing your ideas this July!

Your Chairs,

Alifa Starlika & Kevin Chen

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Introduction

In recent years, we have witnessed a rapid increase in challenges relating to environmental degradation, a changing climate, and other natural hazards. We define a disaster as "a sudden, calamitous event that seriously disrupts the functioning of a community or society and causes human, material, and economic or environmental losses that exceed the community's or society's ability to cope with it using its own resources."[1] Though disasters may be caused both by natural events or by human involvement, this background paper focuses on the disasters caused by natural hazards, which have cost the lives of more than a million people in the last 20 years.[2] Beyond that, developing countries face greater challenges when dealing with the fallout from these hazards. Poor development choices increase vulnerabilities and expose people and communities to further risks. Consequently, by 2030, there could be 325 million people trapped in poverty and vulnerable to weather-related events in sub-Saharan Africa and South Asia alone.[3] Worldwide, large coastal cities, many of which are located in developing middle-income nations, could face combined annual losses of 1 trillion US dollars from such events by the mid twenty-first century.[4]

Given the growing social and economic losses that have resulted from natural hazards around the world, the international community must aid vulnerable and overburdened states, regions, and cities to prepare for and adapt to current and future risks.[5] Otherwise, these states may see decades of developmental progress regress.[6] However, tackling the issue of disaster resilience in developing states is a massive challenge. Addressing it effectively requires a comprehensive framework operating at all stages, from prevention to post-disaster, increased international cooperation, and large amounts of funds and investments directed towards disaster resilient development.

This background paper seeks to provide an overview over disaster resilient

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[1] International Federation of Red Cross and Red Crescent Society. (n.d.)
[2] United Nations International Strategy for Disaster Reduction. (2015). *The human cost of natural disasters 2015: a global perspective*
[3] UNISDR. (October 2015). http://www.unisdr.org/files/46052_disasterriskreductioninthe2030agend.pdf
[4] Hallegatte, et al. (2013). Future Flood Losses in Major Coastal Cities. Nature Climate Change, doi: 10.1038
[5] Surminski, Swenja. And Nicola Ranger. (2013). *Disaster resilience and post-2015 development goals: the options for economics targets and indicators*. Centre for Climate Change Economics and Policy Grantham Research Institute on Climate Change and the Environment
[6] The World Bank. (2013). *Building Resilience: Integrating Climate and Disaster Risk Into Development*.

development and is divided into three sections. The first section will explain the socio-economic impacts of natural hazards. Subsequently, the second section focuses on Disaster Risk Management (DRM) as example for an inclusive approach to the problem. The third section then outlines the actions taken by the international community in this regard and is followed by a case study on Tajikistan.

Economic and Social Impact of Natural Hazards

Natural hazards affect numerous dimensions of life, including economic aspects, social conditions and human development. Firstly, in terms of economic considerations, the destruction caused by natural hazards may have an enormous impact in terms of monetary value and physical damages, threatening the roll back of decades of development progress and causing poverty to become entrenched. Despite estimations of the damages caused by natural hazards remaining extremely challenging, either due to poor reporting or non-available data, it is safe to state that the resulting decline in Gross Domestic Product (GDP) growth and cumulative, permanent GDP loss, significantly affects the long-term development prospects of affected countries. To name just a few examples, the 2008–2011 drought in Kenya caused an estimated $12.1 billion in damages and losses, depressing the country's GDP by an average of 2.8 percent per year.[7] In 2012, floods in Nigeria caused combined damages and losses of $16.9 billion, or 1.4 percent of its GDP.

Natural hazards also have adverse effects on human development and social conditions. On the one hand, human development factors, such as education, health and employment opportunities, can be vulnerable to long term setbacks. Education systems become unorganized, as schools and infrastructure are destroyed, infectious diseases spread over the affected areas in post-disaster periods, and employment opportunities are obstructed, as employees are unable to work due to the prolonged impacts of the disasters. On the other hand, social conditions also deteriorate due to fatalities, injuries, diseases and homelessness, as well as secondary effects, such as psychological impacts, or the loss of social cohesion in a society.[8] Consequences related to human development and deteriorating social conditions should also be included in economic considerations, as the resulting economic costs can be as important as those arising from more easily quantifiable factors. Research conducted in Australia, for instance, has shown that the annual cost of natural hazards in Australia would be expected to increase

[7] Global Facility for Disaster Reduction and Recovery (GFDRR) and The World Bank Group. (2016). *Striving Toward Disaster Resilient Development in Sub-Saharan Africa*
[8] http://www.ga.gov.au/webtemp/image_cache/GA10819.pdf

from $9 billion to $33 billion if social costs were included.[9]

Developing countries are disproportionately affected by natural hazards due to two major reasons. Firstly, in a developed economy, the initial impact of a natural hazards tends to be less grave, mostly because of previous investments in risk reduction and preparedness (shown by the green line in the graph below). Secondly, developed economies recover more quickly than developing ones, as financial reserves, social safety nets and mechanisms such as insurances positively impact the post-disaster recovery of the economy.[10] As a matter of fact, the temporary expansion of the construction sector in some cases can even result in a productivity gain.[11] In contrast, in developing countries (shown by the blue line in the graph below) the initial impact is prone to be relatively larger and the recovery slower, as the aforementioned characteristics tend to be largely missing and the cost of rehabilitation diverts resources away from more productive investments.[12]

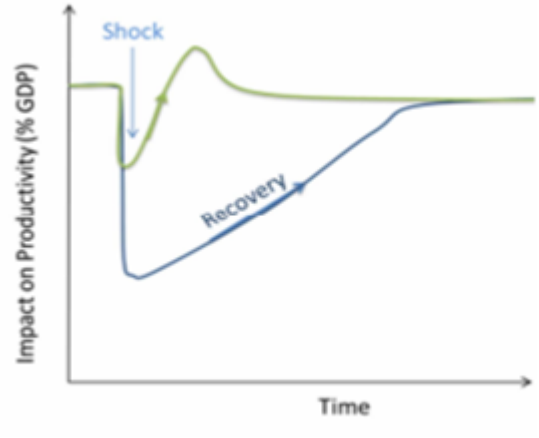

Figure 1: *Schematic diagram illustrating the impact of a disaster on a developed economy (green) and a developing economy (blue), Centre for Climate Change Economics and Policy (CCCEP).*

Disaster Risk Reduction and Management

[9] Red Cross Australia. (2016). *Natural disasters to cost Australia $33 billion per year by 2050*

[10] Hoeppe and Gurenko. (2006). Scientific and Economic Rationales for Innovative Climate Insurance Solutions, in Climate Policy, Special Issue on Insurance and Climate Change [E. Gurenko, Ed.].

[11] Surminski, Swenja. And Nicola Ranger. (2013). *Disaster resilience and post-2015 development goals: the options for economics targets and indicators*. Centre for Climate Change Economics and Policy Grantham Research Institute on Climate Change and the Environment

[12] Hallegatte et al., (2007). Why Economic Dynamics Matter in Assessing Climate Change Damages: Illustration on Extreme Events, Ecological Economics 62, 330–340

Policies related to disaster management often focus on the aftermath of natural hazards, as this is when discussions on the topic commonly take place. However, this approach fails to incorporate a preemptive strategy to dealing with the impact of natural hazards. Many of the losses caused by natural hazards are avoidable if appropriate policies and programs are organized to address the root causes. Setting in place mitigation, preparedness and response mechanisms that are effectively integrated into development planning can further reduce the impact. Thus, this section will provide an overview of general approaches available to reduce and manage the risk, to build institutions that are better prepared for, resilient to, and able to cope with natural hazards.

The foremost inclusive disaster risk approach is the concept of Disaster Risk Management (DRM). This comprehensive approach combines prevention, mitigation and preparedness with a variety of response mechanisms that have been applied in disaster management scenarios throughout the world. Stephen Baas defines DRM as legal, institutional and policy frameworks, and administrative mechanisms and procedures related to the management of both risk and disasters, therefore including also the emergency management elements.[13] The DRM framework functions as a continuum, an ongoing process of interrelated actions, which are initiated before, during or after disaster situations.

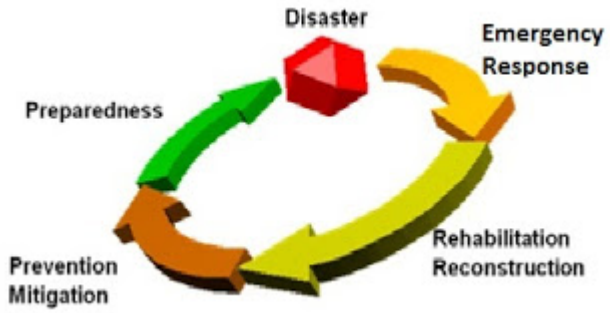

Figure 2: *The Phases of Disaster Risk Management.*
<http://ikramsalleh.blogspot.nl/2012/08/total-disaster-risk-management.html>

The aim of DRM is to strengthen the capacities and resilience of households and communities to protect their lives through hazard prevention and mitigation measures. The DRM includes three stages of management:

- Prevention Mitigation Preparedness is the first stage prior to a disaster which includes risk & vulnerability assessment, prevention, warning, and preparedness.
- Responses is the next stage and occurs when disaster strikes. During

[13] Baas, Stephen, Selvaraju Ramasamy, Jennie Dey De Pryck, and Federica Battista. "Disaster Risk Management Systems Analysis." *Environment and Natural Resources Management Series* (2011): 1-90. 2008. Web. 3 June 2017. <http://www.fao.org/3/a-i0304e.pdf>.

emergency response, communities and relief agencies focus on saving lives and property.

- Rehabilitation and transition are post-disaster stages which focus mostly on recovery and rehabilitation.

DRM is thus a broad strategy including all stages of disaster management. The implementation of these strategies can come in many forms and is usually most effective when including a wide range of actors, both at the local and international level. The World Bank has been involved in financing and assisting in a number of projects worldwide and serves as an example of top-down disaster risk management.[14] Financing is only one example of a top-down approach, with the development of disaster loss databases, scientific research initiatives, risk assessment maps, and international collaboration all serving as important factors for reducing the impact of disasters.

However, effective disaster management also requires a bottom up approach. Tackling the institutional causes of increased impact is often something that requires changes at the local level. Whether these causes are infrastructural, legal, or cultural, local communities must cooperate to create the conditions in which change is possible. Local actors' participation in decision-making about strategies and the selection of the priorities to be pursued should also help to adapt strategies to the needs of the communities themselves.[15] Examples of bottom-up approaches are integrating local stakeholders, raising awareness in society, disseminating information and educating local communities. A mix between the top-down and bottom-up approaches within disaster risk management is often most effective at creating sustainable solutions that can lessen the impact of natural disasters.

Past Actions Taken

The international community has long recognised the importance of promoting disaster resilient development, which is most aptly illustrated by the establishment of the United Nations Office for Disaster Risk Reduction (UNISDR) in 1999. UNISDR forms part of the UN Secretariat and is headed by the Special Representative of the Secretary-General for Disaster Risk Reduction. It mainly serves a coordinative function between the various UN agencies involved, as well as regional

[14] "Disaster Risk Management Projects & Programs." *The World Bank Working for a World Free of Poverty*. N.p., n.d. Web. 03 June 2017. <http://www.worldbank.org/en/topic/disasterriskmanagement/projects>.

[15] European Leader Association for Rural Development. (n.d.). http://www.elard.eu/en_GB/the-bottom-up-approach

organisations and national governments, but also the private sector and civil society.[16]

The work of UNISDR is centered around the implementation and review of the Sendai Framework for Risk Reduction, which was adopted in 2015 at the Third UN World Conference on Disaster Risk Reduction as successor to the Hyogo Framework for Action in place between 2005 and 2015.[17] While the Sendai framework recognises states as being the principal actors to bring about disaster resilient development, it provides a multi-layered approach that integrates all actors from the private sector to civil society, and includes measures relating to all relevant aspects, ranging from the legal, to the the educational and technological sphere.[18] NGOs and civil society organisations all over the world have played a vital role in implementing the Sendai Framework and its predecessor, thereby advancing disaster risk reduction. While their efforts cannot exhaustively be enumerated here, these organisations have been actively involved, amongst others, in disseminating early warning messages to the communities and creating awareness.

Disaster risk management has also gained importance outside of the UN system and, for instance, increasingly lies at the core of the World Bank's activities.[19] Amongst others, it founded the Global Facility for Disaster Reduction and Recovery (GFDRR) together with the UN and bilateral donors, which contributes to the implementation of the Sendai Framework. GFDRR finances projects all over the world, aside from providing analytical work and technical assistance in matters related to disaster risk management.[20] Focusing on all of the aforementioned stages of management, the World Bank's efforts have not only been vital due to the support and financing of a wide variety of projects per se, but also because they have contributed to putting the matter on the political agenda; a development mirrored by the fact that the issue's importance is increasingly recognized by donors.[21]

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[16] "Who we are," *UNISDR.* Accessed 21st May 2017, https://www.unisdr.org/who-we-are
[17] "Sendai Framework for Disaster Risk Reduction," *UNISDR.* Accessed 21st May 2017, http://www.unisdr.org/we/coordinate/sendai-framework
[18] "Chart of Sendai Framework for Disaster Risk Reduction," *UNISDR.* Accessed 21st May 2017, http://www.preventionweb.net/files/44983_sendaiframeworksimplifiedchart.pdf
[19] "Managing Disaster Risks for Resilient Development," *The World Bank,* 10th April 2014. Accessed 21st May 2017, http://www.worldbank.org/en/results/2013/04/12/managing-disaster-risks-resilient-development
[20] "Who we are," *The Global Facility for Disaster Reduction and Recovery*, 2017. Accessed 21st May 2017, https://www.gfdrr.org/who-we-are
[21] "Managing Disaster Risks."

Case Study: Tajikistan

The work of the UNISDR in Tajikistan is a valuable example of how disaster management strategies can be implemented both through a top-down and a bottom-up approach.

In this example, the UNISDR worked together with locals to develop risk maps through participatory community consultations, and utilised geologists and engineers.[22] By including the local community, priorities as well as local knowledge was added to that provided by the geographical surveys. The risks posed by earthquakes, avalanches, and flooding could be mitigated by presenting the community with information on the areas most and least likely to be affected. In this way, the community was able to take this into account in future planning and could rely on this information in the event of a natural hazard.[23] Hence, this project shows how a primarily bottom-up solution can be implemented to reduce the impact of natural hazards.

A more top-down approach can also be found in Tajikistan. Since the turn of the millennia, the UNISDR has worked together with international partners and the national government to update its analogue system of seismic monitors.[24] As part of this process, new digital seismic monitors have been and will continue to be installed. These efforts form part of an initiative that seeks to keep track of seismic activity more effectively and to provide the basis for a quick response in the event of a major earthquake. The belief is that this system will cut down the response time and as a result help to minimize the impact of the earthquake.[25]

In combination, the seismic monitors and the risk analysis as well as a number of other initiatives in Tajikistan help provide and infrastructural system that should reduce the impact of natural hazards in the country. Similar examples of initiatives exist worldwide, each adapted to the specific conditions present. However, these initiatives are often responses to occurred disasters and an increased focus on how the impact of natural hazards can be reduced before they occur is crucial to future disaster management.

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[22] "Disaster Risk Reduction." *UNISDR* (2017): 1-44. Web. 3 June 2017. <http://www.unisdr.org/files/2300_20GoodExamplesofGoodPractice.pdf>.
[23] Ibid.
[24] Ibid.
[25] Ibid.

Conclusion

Natural hazards are part of the human experience all around the world. Most areas around the world are susceptible to these hazards in one form or another yet it is the level of preparedness that often influences the impact that these natural events have. Disaster management is therefore a key aspect of development planning and it is the role of this council to prepare a resolution that helps to promote disaster risk reduction through strategies that are both appropriate to the specific conditions of each geographical area, as well as to cultural and societal factors. As delegates begin independently researching about resilient development policies of their respective countries, it is encouraged that delegates refer to the Sendai Framework for Disaster Reduction to formulate appropriate approaches to increase disaster preparedness and decrease disaster risk substantially.

Finally, delegates should consider the role of the international community with respect to local efforts of disaster risk management and provide a framework that can guide future projects. Economic and social factors can become issues at all levels and a resolution should consider what the role of external actors should be. Within this it is also important to take into account the various stages of disaster risk management and evaluate the best balance of preparedness and response.

Questions a Resolution Must Answer (QARMAs)

1. Has the existing framework proved to be sufficient to address disaster risks in developing countries? If no, what aspects need to be improved and how?
2. How can the General Assembly contribute to attract investments towards Disaster Risk Management and to increase sources of funding?
3. How can the General Assembly contribute to promoting disaster resilient programs in developing countries while taking into account local and cultural peculiarities?
4. What steps can the General Assembly take to better coordinate and streamline the countless efforts by UN agencies, regional and sub-regional organisations, national and local authorities, the private sector and civil society?
5. How can the General Assembly assist states in incorporating disaster risk reduction strategies into their development plans?
6. What role does civil society play in disaster risk reduction and how can local capacities be strengthened to implement disaster risk management?

Additional Readings

1. International Strategy for Disaster Reduction. (2007). *Building Disaster Resilient Communities: Good Practices and Lessons Learned*. A Publication of the "Global Network of NGOs" for Disaster Risk Reduction
2. The World Bank. (2013). *Building Resilience: Integrating Climate and Disaster Risk Into Development*.

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