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Dear Delegate

It is my pleasure to welcome you to the Economic and Social Council of this year's COEPMUN.

The agenda before the house is **Dealing with the Economics of Natural Disasters.**

The nature of the agenda is to study the economics of natural disasters, to understand the effects of such. The study guide has been divided into sections to briefly discuss each of these items. Keeping in mind the various solutions already being implemented by the United Nations, we would like to discuss the issues with these solutions and how to improve them.

Read widely and extensively. I wish you all the best and please don't hesitate to contact me if you have doubts.

Regards,

Chair

Navtej Gulati

Economic and Social Council(ECOSOC)

COEPMUN 2016

About ECOSOC and its Subsidiary Bodies

The Economic and Social Council (ECOSOC) is one of the 6 principal organs of the United Nations System established by the UN Charter in 1945. It consists of 54 Members of the United Nations elected by the General Assembly. ECOSOC coordinates economic, social, and related work of the fourteen United Nations specialized agencies, functional commissions and five regional commissions. It serves as the central forum for discussing international economic and social issues, and for formulating policy recommendations addressed to Member States and the United Nations system. It is responsible for:

- promoting higher standards of living, full employment, and economic and social progress;
- identifying solutions to international economic, social and health problems;
- facilitating international cultural and educational cooperation; and
- encouraging universal respect for human rights and fundamental freedoms.

In carrying out its mandate, ECOSOC consults with academics, business sector representatives and more than 3,200 registered non-governmental organizations. The work of the Council is conducted through several sessions and preparatory meetings, round tables and panel discussions with members of civil society throughout the year, to deal with the organization of its work. Once a year, it meets for a four-week substantive session in July, alternating between New York and Geneva. The annual session is organized in five segments which include:

- the High-level segment;
- the Coordination segment;
- the Operational Activities segment;
- the Humanitarian Affairs segment;

- the General Segment.

For example, during the High-level segment NGOs can participate in:

- Annual Ministerial Review

- Development Coordination Forum

The Annual Ministerial Review (AMR) is conducted by means of a cross-sectoral approach focusing on thematic issues common to the outcomes of the major United Nations conferences and summits in the economic, social and related fields, including the MDGs and other IADGs. The Annual Ministerial Review (AMR), is held during the high-level segment of the annual session of the Economic and Social Council.
It provided an opportunity to:

- Assess the state of implementation of the United Nations Development Agenda;

- Explore key challenges in achieving the international goals and commitments in the area of global issues;

- Consider recommendations and proposals for action, including new initiatives.

The Development Cooperation Forum (DCF) aims to position the United Nations Economic and Social Council as a principal forum for global dialogue and policy review on the effectiveness and coherence of international development cooperation. DCF works to enhance the implementation of the internationally agreed development goals, including the MD Gs, and to strengthen the normative and operational link in the work of the United Nations. The Development Cooperation Forum is held during the high-level segment of the annual session of the Economic and Social Council.

There are nine functional commissions of the ECOSOC:

Commission on the Status of Women

Commission on Sustainable Development

Commission for Social Development

United Nations Forum on Forests

Commission on Population and Development

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Statistical Commission

Commission on Narcotic Drugs

Commission on Crime Prevention and Criminal Justice

Commission on Science and Technology for Development

Introduction to the Economics of Natural Disasters:

Due to rising population, climate change, and environmental degradation, natural disasters are increasing in frequency. There is maybe a degree of human blame that we can attribute to many modern natural disasters. The major problem with natural disasters is the geopolitical ramifications they can have on a nation.
They are also becoming costlier and deadlier, according to Swiss Re, a reinsurance company. Major natural disasters can and do have severe negative short-run economic impacts. Disasters also appear to have adverse longer-term consequences for economic growth, development and poverty reduction. In 2009, natural disasters cost insurers about $110 billion. In 2010, the cost was double that, at $218 billion.
According to the World Bank, there are several factors that affect a country's vulnerability to natural disasters: its geographic size, the type of disaster, the strength and structure of its economy, and prevailing socioeconomic conditions. In a globalized economy, all these factors, as well as others, also play into how the world's finances will be affected.
But, negative impacts are not inevitable. Vulnerability is shifting quickly, especially in countries experiencing economic transformation - rapid growth, urbanization and related technical and social changes.

The world's costliest natural disasters

The economic losses caused by natural disasters can be immense – as seen by the costliest on record (in 2015 U.S. dollars, figures courtesy of Aon Benfield):

Rank	Economic Cost (billions)	Disaster	Year	Location
1	$221.6	Tohaku Earthquake / Tsunami	2011	Japan
2	$209.2	Atlantic Hurricane Season	2005	U.S., Mexico, Caribbean, Bahamas
3	$160.8	Kobe Earthquake	1995	Japan
4	$92.5	Sichuan Earthquake	2008	China
5	$81.5	Drought	1988	U.S.
6	$73.2	Hurricane Sandy	2012	U.S. Caribbean, Bahamas
7	$71	Northridge Earthquake	1994	U.S.
8	$60.6	Drought	1980	U.S.
9	$51	Irpina Earthquake	1980	Italy
10	$47	Floods	2011	Thailand

It can be hard to measure the indirect economic impact of such disasters, but the direct impact to businesses and individuals in the affected areas can be gaged by the value of uninsured versus insured losses (in 2015 U.S. dollars, figures from Aon Benfield):

Rank	Insured Loss (billions)	Uninsured Loss (billions)	Disaster	Year	Location
1	$36.9	$184.7	Tohaku Earthquake / Tsunami	2011	Japan
2	$4.8	$156	Kobe Earthquake	1995	Japan
3	$104. 9	$104.4	Atlantic Hurricane Season	2005	U.S., Mexico, Caribbean, Bahamas
4	$0.4	$92.1	Sichuan Earthquake	2008	China
5	$1.9	$79.6	Drought	1988	U.S.
6	$0.7	$59.9	Drought	1980	U.S.
7	$0.6	$50.4	Irpina Earthquake	1980	Italy
8	$24.7	$46.4	Northridge Earthquake	1994	U.S.
9	$30.8	$42.2	Hurricane Sandy	2012	U.S. Caribbean, Bahamas
10	$16.2	$30.8	Floods	2011	Thailand

Impacts:

- Infrastructure Destruction

Besides loss of life, infrastructure destruction is by far the most obvious type of damage that comes to mind when we think about natural disasters. After all, traditional television news has made images of damaged homes and businesses ubiquitous following nearly every earthquake or tornado that touches down.
But the economic consequences are rarely considered beyond what the cost will be to rebuild. That's a serious problem for the victims of natural disasters because it's the economic fallout that leaves some of the longest-lasting scars.

- The Unforeseen Problem

One of the biggest problems for areas affected by natural disasters is business disruption. With road, communication infrastructure, and building damage common after sizable disasters, it's not uncommon for local businesses to be shut down for some time after the aftershocks settle. On a grand scale, that's what happened after Hurricane Katrina ravaged the Gulf coast back in 2005 – as companies reeled from catastrophic losses, millions of workers in Louisiana, Texas and Mississippi were left jobless, compounding the

already staggering poverty problem in the region.
With this mass unemployment came a severe cutback in consumer spending (at the few places that were open for business) and – consequently – tax revenues needed to aid in the rebuilding efforts. Furthermore, the international impact was especially felt throughout the energy sector as oil prices escalated due to destroyed rigs and refineries. (Learn more in Using Consumer Spending As A Market Indicator.)
In places where significant portions of the country are decimated by disasters, governments are often left with little recourse; with a fraction of their former tax revenue coming in and deteriorated sovereign creditworthiness, foreign aid becomes an absolute necessity.

- The Commodity Effect and Scarcity

But those factors only touch on how much of an effect a natural disaster can have on investment portfolios around the world.
Through the popularity of ADRs, ETFs and other forms of international investment diversification, the ability of U.S. investors to own shares of companies based abroad has expanded considerably in the last decade. Because of that, owning shares of any given company's stock can give an investor an interest in a refinery in Louisiana or a gold mine in Africa – and it can expose investors to the risks associated with these locales.
Less obvious – but perhaps even more significant – are the effects that a natural disaster can have on commodity prices. In the case of Hurricane Katrina, the storm's entry point at the Gulf coast is significant because of the fact that nearly half of the gasoline consumed in the U.S. passes through refineries that were affected by the storm. As a result, oil and gas supplies were affected immediately after Katrina made landfall. With increased gas pump prices, extra effects included diminished margins for industries - from transportation to consumer goods.
Similar things happened in the copper market as earthquakes in Chile choked production and inflated copper prices worldwide.
These kinds of price increases aren't just limited to market-traded commodities. When natural disaster strikes, scarcity rules, and regular staples like food, merchandise and even housing can become commoditized as a result.

- Reduction in Tourism

Whenever a natural disaster hits a place, it has a lot of negative effects. One of the major negative effects is that there is a reduction of tourism in the area. People are more cautious to go and visit an area that’s recently become the victim of a natural disaster. This counteracts the recent surge in online travel and takes business away from the country. This is human nature.
It’s the self-preservation instinct many of us have kicking in. If a town, city or country has recently experienced an earthquake or severe flooding it might put people off wanting to visit. Tourists may worry about being caught up in the disaster if they travel there. This is bad for a lot of places that rely on tourism to boost their economy.

- Cost for Repair and Treatment

Any time a natural disaster hits there's damage to infrastructure and people in the immediate areas. The problem is that it's then a big job to repair all the damage, not to mention the costs. It's not always possible to rescue people, repair damage and restore the property on your own. Sometimes it's necessary to bring in a leader in disaster recovery and property restoration to help. There's a lot of work and cost to think about and sometimes people's lives are ruined, as a result.

- Financial Burden

The biggest issue with natural disasters is the financial effect they have on a nation's economy. Any time a natural disaster hits it can cause millions in damage and even more to repair the wreckage. Indeed, The Actuary detailed how economic losses from natural disasters cost $240 billion yearly.
This is a staggering cost and can't be good for the economy of the nations affected. The problem is that the fallout from this is so costly many countries fall into a spiral of debt having to get themselves back on track. This is especially true of many Third World countries that don't have the finances or infrastructure to deal with it.

- The Bottom Line

Ultimately, it's difficult to imagine the extent of the economic repercussions a major natural disaster can bring about. And although the majority of disasters impact the devastated area's economy adversely, they can have an impact on a larger scale. Although there's little we can do to avoid Mother Nature's next catastrophe, we can better prepare for it – both physically and financially. Understanding the economic implications of a disaster is the first step toward that.

Measures to reduce impact of natural disasters on the economy

One of the important concepts associated with the idea of minimizing the impact of natural disasters on the economy is the concept of mitigation. Actions taken to prevent or reduce the risk to life, property, social and economic activities, and natural resources from natural hazards is termed as mitigation with the core logical basis being that since there is no way to guarantee absolute protection from natural disasters, it is essential to maintain a certain basic level of preparation. Mitigation measures such as adoption of zoning, land-use practices, and building codes are needed, however, to prevent or reduce actual damage from hazards. Avoiding development in landslide- and flood-prone areas through planning and zoning ordinances, for example, may save money in construction and reduce the loss of life and damage to property and natural resources. Post-disaster studies continue to confirm the fundamental fact that community investment in mitigation pays direct dividends when a disaster occurs.
Mitigation of natural hazards will, in turn, lead to minimization of economic loss sustained as a result of said natural hazards as follows:

1) *Protection of schools and hospitals.* All new schools and hospitals should be located and constructed to ensure that high-hazard areas are avoided and that special provisions are made to reduce the potential for damage by natural hazards. In addition, existing school and hospital buildings should be surveyed to determine their levels of resistance to relevant hazards. Strenuous efforts should be made to strengthen facilities that would fail in a disaster. In some instances, legislation may be required to ensure that mitigation actions are taken. This will help to minimize the human cost of the natural disasters.

2) *Adoption of non-structural measures.* Businesses and homes should incorporate non-structural mitigation measures to minimize injuries and property damage from natural disasters. Furniture and equipment, for example, can be easily secured to reduce injuries and damage from earthquakes. Other non-structural measures are management of vegetation to reduce damage from wildfires and location of structures away from high-hazard areas. This will help to reduce infrastructure destruction, business disruptions and also, to some extent, the human cost.

3) *Incorporation of mitigation into new development.* Local jurisdictions should ensure that new development is located, designed, and constructed to withstand natural hazards. They should use information from hazard and risk assessments, land-use plans, and zoning regulations to limit development of hazard-prone areas. Compatible uses of floodplains and other hazardous areas should be incorporated into local planning and zoning so that losses are reduced. Such areas could have a high value for recreation, fish and wildlife reserves, open space, or other community use. This will reduce the infrastructure destruction.

4) *Mitigation training.* Training programs that focus on contemporary challenges associated with implementing mitigation should be developed and offered. A national training program, supported by the government and fully integrated with the preparedness training proposed here, should be developed for this purpose. Its curriculum would include land-use planning, zoning, building codes and regulations, tax incentives, and non-structural mitigation measures. Case studies from throughout the nation and around the world should be included.

5) *Hazard-specific research.* Recent disasters have demonstrated the benefits of mitigation efforts while pointing out the need for research to improve mitigation practice.

6) *Government leadership of mitigation implementation.* Government at all levels should set an example by requiring that new facilities that it funds, regulates, or leases be designed, built, and located in accordance with modern building codes.

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ROLE OF THE UN IN COUNTERING THE EFFECTS OF NATURAL DISASTERS FROM A SOCIO-ECONOMIC STANDPOINT.

The **Sendai Framework for Disaster Risk Reduction (2015-2030)** is an international Treaty which was approved by UN member states between 14th and 18th of March 2015 at the World Conference on Disaster Risk Reduction held in Sendai, Japan. It is the successor agreement to the Hyogo Framework for Action (2005–2015), which had been the most encompassing international accord to date on disaster risk reduction.
The Sendai Framework aims to

- Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030.
- Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030.
- Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020.

The United Nations Office for Disaster Risk Reduction (UNISDR) works with International Financial Institutions to promote investments in disaster risk reduction that include areas of disaster recovery, education, health, infrastructure, financial and private sector development, and environmental and natural resource management.

UNISDR partners in particular with the Global Facility for Disaster Reduction and Recovery (GFDRR - hosted in the World Bank) to support developing countries to reduce their risks.

UNISDR and GFDRR collaborates on several initiatives and partnerships to implement the Sendai Framework for Disaster Risk Reduction including the Global Assessment Reports; the implementation of the UN Plan of Action on Disaster Risk Reduction for Resilience; country risk profiles; resilient recovery and reconstruction (for example the International Recovery Platform – IRP); urban resilience; and the Worldwide Initiative for Safe Schools.

As of October 2016 a new public-private partnership between the leaders of the United Nations, the World Bank and the insurance sector has adopted a risk management strategy that seeks to harness insurance to promote economic recovery and resilience to climate hazards and disasters.

The Insurance Development Forum (IDF) said that it has decided to contribute to achieving the G7 **“InsuResilience”** target of providing 400 million of the most vulnerable people in developing countries with increased access to direct or indirect insurance

coverage against the impacts of climate change and related natural catastrophes by 2020.

The IDF focuses on members of the "Vulnerable Twenty Group", which was set up in 2015 and groups the finance ministers of countries highly vulnerable to a warming planet in dialogue and action to tackle global climate change.

UNISDR has worked with the private sector for over five years. In the fall of 2015, after the international community adopted the Sendai Framework, several UNISDR private sector initiatives, namely the Private Sector Advisory Group (PSAG), the Private Sector Partnership (PSP) and the R!SE Initiative, were merged to create the Private Sector Alliance for Disaster Resilient Societies (ARISE).

What is ARISE

The overall goal of ARISE is to create risk-resilient societies by energising the private sector in collaboration with the public sector and other stakeholders to deliver on the targets of the Sendai Framework.

With an initial membership of over 140 private sector entities and affiliates, ARISE aims to expand the number of private sector organizations and others involved in supporting the implementation of the Sendai Framework and allow the private sector to implement tangible projects and initiatives that deliver results critical to the achievement of the outcome and goal of the Sendai Framework.
ARISE facilitates exchange of experience and knowledge on how to implement tangible disaster risk reduction projects through seven work-streams: Disaster Risk Management strategies, investment metrics, benchmarking and standards, education and training, legal and regulatory, urban risk reduction & resilience, and insurance.

UNDP has supported dozens of countries to achieve the goals and ambitions of the Hyogo Framework for Action, investing, on average, $200 million across 60 countries annually.

HAITI-The debris management programme is a partnership between the Government of Haiti, United Nations agencies—coordinated by the UN Development Programme (UNDP)— with local partners, especially the Haitian people. More than 90 percent of workers are Haitian and 40 percent are women. Across the country, UNDP, the UN Programme for Human Settlements, the International Labour Organization and the UN Office of Project Services have trained more than 7,000 Haitians in the fields of manual and mechanical rubble removal, recycling, house repair skills, as well as electric wiring, carpentry and masonry.

BANGLADESH-Beginning in October 2012, representatives of UNDP’s Early Recovery Facility (ERF) worked with local administrators and government officials to identify families

in the cyclone-affected area of Dakkhin Bedkashi who were eligible to receive what is called a 'core family shelter. A core family shelter is a permanent structure that incorporates risk reduction features into its design. It can withstand cyclones up to Category 4 strength, and is big enough, in the event of disaster, to offer a safe place for beneficiaries, their immediate relatives and neighbours. Shelters are 1.5 stories high and constructed with locally available, environmentally friendly materials. The indoor space has a mezzanine floor that provides privacy and functional flexibilities, includes water-harvesting facilities, and is built so as to accommodate additions.

UGANDA-With financing from the Global Environment Facility's Least Developed Countries Fund, and support from the UNDP and the Ministry of Water and Environment, *the Strengthening Climate Information and Early Warning Systems (SCIEWS) project in Uganda* is building local capacity, fostering new partnerships and acquiring new technologies that will result in "one of the most complete weather monitoring systems in East Africa,

FOCUS TOPICS

1. *Improve hazard awareness*

2. *Improve understanding of mitigation*

3. *Analyse costs of mitigation against benefits derived from implementation*

4. *Making Disaster Risk Management an Integral part of the Development Planning Process*

QUESTIONS TO BE ANSWERED?
1. How can the Sendai Framework be implemented and reviewed in the best possible manner?
2. Lawsuits for technological disasters (e.g. chemical plant accidents, pollution and oil spills) are commonplace, and legislation has been developed for bringing polluters/hazard producers to justice and preventing citizens from being exposed to future risk. How do governments and their citizens need to identify a level of "socially acceptable risk" and define the responsibilities (or compensation level) of each stakeholder before a disaster occurs?
3. How to implement Disaster risk Reduction in trade and foreign investment policy?
4. To identify the role of financial sectors especially banks to strengthen resilience when disasters strike?
5. How to address the Exclusion of Sustainable Development from Humanitarian Aid Delivery Systems?
6. How to ensure risk introduced by the possibility of damage or disruption from a natural

disaster is not overlooked?

POINTERS TO KEEP IN MIND

- "We find robust evidence that national incomes decline, relative to their pre-disaster trend, and do not recover within twenty years… a 90th percentile event reduces per capita incomes by 7.4 percent two decades later, effectively undoing 3.7 years of average development" – The Causal Effect of Environmental Catastrophe on Long-Run Economic Growth, U.C. Berkeley, 2014
- "We have seen a staggering escalation in economic losses from disasters, which act as a serious brake on sustainable development, job creation and the availability of funds for poverty reduction programmes, health and education" – Margareta Wahlström, UN Special Representative of the Secretary-General for Disaster Risk Reduction, March 12, 2015
- "Natural disasters… do more than wipe out homes; they can wipe out businesses and decimate local economies." – United States Department of Commerce, April 2, 2015
- "If there is any plausible upside to major catastrophes, is that they often begin a conversation regarding infrastructure improvements and seeking ways to mitigate future risks and losses. These events can challenge the status quo and reveal the importance of minimizing the future risk of vulnerable populations and exposures." – Steve Bowen, Associate Director & Meteorologist, Aon Impact Forecasting

FURTHER READING

- The Indirect Cost of Natural Disasters – The World Bank, July 2015
- The Cost of Natural Disasters – The New York Times, August 5, 2015
- Climate Changing Costs for Insurers – Sydney Morning Herald, June 24, 2015
- The Effect of Natural and Man-made Disasters on Countries' Production Efficiency – Journal of Economic Studies, July 2015
- The Really Big One – The New Yorker, July 20, 2015
- 10 Years After the Storm: Has New Orleans Learned the Lessons of Hurricane Katrina? – The Guardian, July 27, 2015
- Catastrophe Insight – Aon's archive of natural disaster research and latest monthly reports
- https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/6149.pdf
- https://www.weforum.org/agenda/2015/02/how-do-natural-disasters-affect-the-economy/