

DIALOGUE SNAPSHOT

Disaster Management & Recovery

Creating Cooperative Opportunities

December 2024



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Whether it is floods, major storms, earthquakes, droughts, epidemics, or other local or global disasters, the failure to properly plan, mitigate and recover from disasters can have profound impact on other ongoing economic or human security crises. The COVID-19 pandemic has particularly underscored the deficiencies in the global response to disasters. Yet, these disasters highlight a unique opportunity for international cooperation and diplomacy, even when global geopolitical trends have tended to make cooperation on other issues less feasible.

In this spirit, the Hollings Center for International Dialogue and the Global Perspectives and International Initiatives Office at the University of Central Florida convened experts from across the globe to have a dialogue on challenges faced in disaster management, and opportunities for collaboration. The dialogue took place in Istanbul in March 2024 and explored disaster management and response practices from various perspectives, incorporating policy and governance issues, the water-energy-food (WEF) nexus angle, and private sector engagement. Participants discussed the role of innovation, technology, international frameworks, and most importantly, local awareness and mobilization for more effective management of disasters.

From Global Frameworks to National Policy

The dialogue began with an overview of the global frameworks that provide benchmarks for effective disaster management and response. Participants acknowledged the Sendai Framework for Disaster Risk Reduction (SFDRR) for its role in shaping priorities and funding in disaster management. SFDRR is an international non-binding document adopted by UN member states in 2015 to reduce disaster risk and losses in lives, livelihoods, and health, as well as economic, physical, social, cultural, and environmental assets. Its holistic approach focuses on prevention, preparedness, and strengthening resilience across all sectors and levels of society. The framework also acknowledges the complex and multifaceted nature of disaster risk, encouraging a cooperative and integrated approach to disaster risk management. It has notably influenced risk communication, prompting more effective messaging through interdisciplinary approaches. However, some participants noted a gap between the framework's theoretical contributions and its practical application on the ground. Challenges persist, particularly in integrating the framework's quidelines into real-world scenarios and ensuring that

national and local responses are adequately empowered and resourced. Some participants voiced a critical view of the framework's applicability and adaptability across different contexts, particularly in conflict zones or fragile states where assumptions of functional governance may not hold. The importance of flexible, context-specific approaches was stressed.

Another milestone in the global approach to disaster management and response, especially from a humanitarian aid angle, is The Grand Bargain initiative, launched in 2016 at the World Humanitarian Summit. It aims to enhance the responsiveness and efficiency of humanitarian aid by focusing on improving collaboration, reducing inefficiencies, improving the quality of aid provided to those affected by crises, promoting cash-based assistance, increasing transparency, and encouraging multi-year funding. Despite these advancements, there is criticism regarding the empowerment of local institutions and the need for more systematic approaches to "building back better."

The conversation then moved to enhancing disaster management policies by integrating national and international frameworks to improve effectiveness in mitigation and risk reduction. Participants presented a variety of examples from Indonesia, Bangladesh, Türkiye, Syria, and the United States to share lessons learned and best practices. They also examined the advantages and disadvantages of centralized versus decentralized structures and responses.

The integration of national and international policies is critical, as demonstrated by Bangladesh's efforts to develop comprehensive disaster management frameworks and contingency planning. The experience in Türkiye and Syria underscores the differences in response effectiveness, highlighting the need for flexible, responsive systems at both local and national levels. Historically, disaster management in Türkiye shifted from a top-down approach to a bottom-up strategy with the establishment of AFAD¹, which was designed to empower local governments and their strategic plans. Challenges remain in implementation, data collection and utilization, but civil society is encouraging AFAD to consider the benefits and interests of all stakeholders in their data sharing protocols to encourage broader participation and enhance overall disaster management.

¹ The Disaster and Emergency Management Authority (AFAD) of Türkiye is an institution working to prevent disasters and minimize disaster-related damages, plan and coordinate post-disaster response, and promote cooperation among various government agencies.



Recovery efforts in Antakya conducted following the February 2023 earthquakes in Türkiye. Source: Jasminko Ibrakovic.

In the United States, disaster management is characterized by a decentralized approach that can lead to fragmentation and coordination difficulties. While a nationalized approach offers better resource coordination, local systems provide faster access and responses. The challenge lies in balancing these approaches, particularly in integrating data and addressing emerging threats such as cyber-attacks and financial crises. The need for better data sharing and capacity building at the local level is critical to improving disaster outcomes. Participants noted a growing focus on equity and addressing vulnerabilities, although measuring these aspects remains challenging. Transparency of federal funding is another area that participants wanted to see improvement on.

The conversation also highlighted concerns about high turnover rates in disaster management roles, which can lead to a loss of valuable training and institutional knowledge. This problem is exacerbated by bureaucratic inefficiencies and funding constraints. The need for a balance between top-down and bottom-up approaches was emphasized, with examples from Indonesia showing how national coordination can support local efforts. In Indonesia, local governments have the authority and funding to

respond if disaster-affected areas are fewer than two provinces. If the affected area is larger, the national government intervenes. National-level organizations help out their local counterparts through capacity-building and training. Participants also touched on the importance of leadership training and maintaining institutional memory through various methods, including modular training and creating resources.

Implementing disaster risk reduction (DRR) strategies is challenging, particularly in contexts with fragmented governance or complex socio-political dynamics. In Malaysia, for instance, the risk from high-risk dams and the challenge of communicating these risks highlight the need for better policy integration and community involvement. The issue of managing disaster response amidst various levels of government and stakeholder interests remains a significant concern.

In sum, the effective use of data, balanced policy approaches that address both immediate needs and long-term resilience, and robust training and compliance mechanisms are essential components of a cohesive disaster management strategy.

The Water-Energy-Food (WEF) Nexus Approach to Resilience

The WEF nexus approach involves integrating water, energy, and food systems into disaster management strategies to improve resilience. This perspective needs to be transdisciplinary, incorporating public administration, political science, and other fields to address complex disaster scenarios. Another nexus approach is connecting and aligning the key sectors of humanitarian, development, and peacebuilding efforts, and mainstreaming sustainable development into local and global agendas. Effective disaster management requires systemic thinking and the ability to adapt to dynamic conditions, but a development specialist at the dialogue observed that nexus approaches are not easy to translate to policymakers.

As explained by a participant, Puerto Rico's experience with Hurricane Maria illustrated the resilience of local communities in the absence of effective government response when water, energy and food systems collapsed. This underscores the importance of decentralization and community-based solutions in disaster recovery. Participants also discussed Malaysia as an example of the need to build long-term resilience and community empowerment rather than concentrating the majority of disaster financing on emergency response. The country experiences annual flooding that displaces tens of

thousands and incurs billions in recovery costs, and yet there is still a gap between the advances made scientifically and technologically, and communities' access and capacity to use them in order to improve the WEF nexus.

The complex, evolving threats posed by climate change necessitate a comprehensive framework for disaster management. Participants highlighted the need for faster action, better data, and addressing issues like affordable insurance and housing for climate change preparedness. Innovative approaches include financial mechanisms, GIS-based tools for visualizing impacts, and transformative adaptation measures, integrating mitigation and resilience, and increased global climate financing to meet the scale of the challenge. In sum, all nexus approaches require careful consideration of local contexts, stakeholder engagement, and the balancing of strategic planning with responsive adaptation to the dynamic nature of disasters.

Engaging the Private Sector in Disaster Management & Response

The increasing frequency and severity of natural disasters, along with rapid urbanization and climate change, necessitate a paradigm shift in disaster resilience. The private sector is a vital partner due to its resources, expertise, and innovative capabilities. The challenge lies in incentivizing private sector involvement in areas where they may not have immediate business interests and ensuring that their contributions are not limited to post-disaster scenarios. Building trust and engagement with businesses before disasters occur is crucial, and companies should be encouraged to see disaster management as a proactive investment rather than a reactive measure.

Successful private sector engagement in disaster preparedness and response requires more than just financial support; it also involves collaboration on logistical and operational fronts. For example, during Türkiye's February 6, 2023 earthquakes, a credit card company's financial network played a crucial role in facilitating essential transactions. One key concern is balancing the need for speed in disaster recovery with the risk of corruption and ensuring that funds are used appropriately.

The effective use of private sector donations and ensuring that funds are spent where they are most needed remain significant challenges, according to many participants. Challenges also include political sensitivities and regulatory frameworks that affect private sector participation. In some regions, private sector involvement is hindered by a lack of



Humanitarian aid being coordinated in Ankara, Türkiye following the 2023 earthquakes in the county's south. Source: Yusuf Ozluk.

incentives or regulatory support, while in others, transparency and accountability issues persist. The conversation also touched on the need for better data sharing and understanding the needs and vulnerabilities of affected populations.

Different regions provide various examples of private sector engagement in disaster management. In Bangladesh, private sector cooperation with the government on disasters has been established since 2010, including the development of private sector emergency operation centers and disaster risk insurance. This approach aims to integrate private sector resources into national and local disaster management frameworks. Similarly, in Indonesia, private sector involvement is encouraged by highlighting the potential impact on business operations and logistics during disasters. Integrating disaster risk reduction (DRR) into private sector business plans and supply chains is recommended, as private sector involvement can enhance preparedness and response strategies.

Successful private sector engagement requires a balance between profit motives and public good. Companies are more likely to invest in disaster management when they see potential benefits, such as improved reputation or future business opportunities.

Examples include using technology and AI to enhance disaster prevention and response, as well as leveraging blockchain technology for financial transactions in disaster-affected areas. Here, participants questioned the ethics of insurance practices, particularly in high-risk areas, acknowledging the complexities of insurance and the need to balance affordability with effective risk management.

Overall, the conversation highlighted that effective private sector engagement in disaster management relies on clear communication, mutual benefits, and a shared commitment to enhancing disaster resilience. Ensuring that private sector contributions are integrated into broader disaster management strategies and addressing challenges related to transparency, accountability, and regulatory frameworks are essential for successful partnerships.

Disaster Response in Conflict Zones and Vulnerable Communities

Conflict has increasingly intersected with disaster scenarios, complicating response efforts. Conflict often leads to massive displacement and long-term crises, as seen in places like Somalia, Syria, Myanmar and most recently, Gaza. The difficulties in providing aid are exacerbated by access issues, political blockages, and the deliberate targeting of aid workers and facilities. For instance, negotiating aid access in Syria involved dealing with groups like ISIS, and delays in cross-border assistance were influenced by geopolitical dynamics. In Myanmar and Gaza, access was secured through local partnerships rather than international organizations. Efforts to aid vulnerable communities in conflict zones must navigate these complexities.

Effective disaster response in conflict zones requires balancing immediate needs with long-term community-building and leveraging technology for better resource allocation and communication. Participants touched on the need for rigorous vetting of NGOs and careful tracking of aid to avoid corruption and political bias. Ethical considerations in disaster response involve ensuring that aid meets actual needs and does not exacerbate existing inequalities and vulnerabilities.

The discussion highlighted the importance of including vulnerable populations, such as women, children, and ethnic minorities, in disaster planning and response. This involves leveraging local knowledge and ensuring that aid addresses their specific needs. Capacity building in conflict settings requires a shift from short-term interventions to sustainable,



Firefighters drop fire retardant on California wildfires. Source: Logan Bush.

long-term solutions. The role of diaspora communities and local expertise in strengthening response efforts was emphasized.

Discussion then turned to the crucial role of local communities, and the necessity to nourish and respect their indigenous expertise. A recent example was how neighboring villages became first responders in the September 2023 earthquake that devastated the High Atlas Mountains in Morocco. Another example was from Türkiye, where the February 6, 2023 earthquakes illustrated the crucial role of neighborhood systems and local volunteers. The conversation underscored the importance of not only supporting these local responders but also addressing the constraints they face. Ethical considerations are significant, particularly in relation to mental health support and ensuring that aid efforts do not inadvertently exacerbate conflicts. Participants noted that mental health is increasingly recognized as a critical component of disaster response, both for affected individuals and aid workers. Efforts to integrate mental health support into disaster management are growing but still face challenges.

Emerging Trends and Future Directions in Disaster Management

Disaster systems are complex, and need adaptive, dynamic solutions. Addressing the root causes of risk involves not just technical solutions but also cultural and educational changes, from elementary levels to advanced research. This dialogue underlined the need for better risk-based approaches in education and decision-making.

"We are focusing a lot on hazard, but the problem is how we are dealing with hazard, our weaknesses and vulnerabilities, be they physical, social, political or economic."

Dialogue Participant

Throughout the dialogue, participants recognized

that technologies such as geographic information system (GIS), satellite imaging and remote sensing are crucial in early warning structures, but resisted the notion that new technologies will be the ultimate answer in disaster preparedness and mitigation. There was emphasis on the need to optimize the use of technology by adapting it to local needs and capacities. Issues such as access to power, internet, and even more basic communication lines are still unresolved in many parts of the world; and here is where public-private partnerships will be important to champion. Participants also underlined that the private sector is the gateway to integrating technologies like AI and blockchain into disaster management and response. Finally, participants underscored the disconnect between scientific research and practical implementation, arguing for a shift towards need-driven research that manages to address real world applications, and better communication of findings to policymakers.

Participants also discussed the shifting landscape of disaster management, emphasizing how new theories and methodologies are reshaping the field. There has been a shift from qualitative studies to mixed methods, with an increasing emphasis on longitudinal data to better understand preparedness behaviors. The conversation highlighted the importance of integrating engineering and social sciences, despite institutional and cultural barriers. Funders are encouraging collaboration between these disciplines, yet practical integration remains challenging. Several participants emphasized the importance of international and transdisciplinary dialogue in reaching a better understanding of disaster response priorities and translating scientific knowledge into actionable and comprehensible formats for the public.

By integrating past knowledge with new data, translating global frameworks into local contexts, and making climate and economic data comprehensible to stakeholders, the disaster management community can enhance disaster preparedness and response. Developing a culture of community-led interventions and leveraging existing local resources through training and capacity building are essential to improving resilience and fostering effective global and local collaboration.

Cover Photo: Floods in Florida following Hurricane Debby in 2024. Source: Bilanol.



The Hollings Center for International Dialogue is a non-profit, non-governmental organization dedicated to fostering dialogue between the United States and countries with predominantly Muslim populations around the world. In pursuit of its mission, the Hollings Center convenes dialogue conferences that generate new thinking on important international issues and deepen channels of communication across opinion leaders and experts. The Hollings Center is headquartered in Washington, D.C. and maintains a representative office in Istanbul, Türkiye.

To learn more about the Hollings Center's mission, history and funding: http://www.hollingscenter.org/about/mission-and-approach info@hollingscenter.org