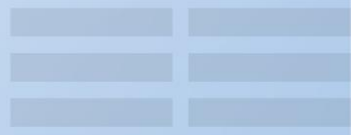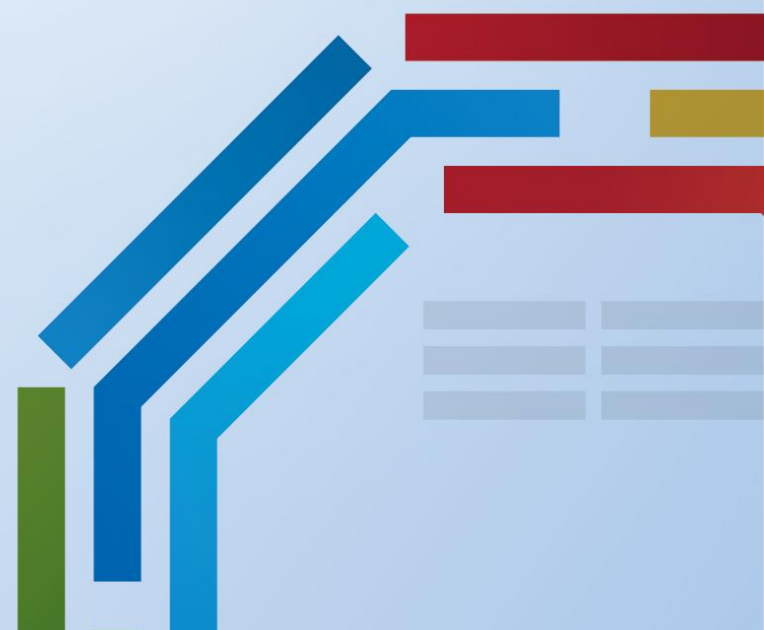# 2024 UN PUBLIC SERVICE FORUM AND AWARDS CEREMONY

WORKSHOP 5

Enhancing global resilience to disasters and climate change

CONCEPT NOTE

Organiser: Ministry of the Interior and Safety (MOIS)

Introduction

The 2024 United Nations Public Service Forum will take place in Incheon, the Republic of Korea from 24 -26 June 2024 under the theme 'Fostering Innovation amid Global Challenges: A Public Sector Perspective'.

The Forum will be comprised of a series of workshops where various elements related to the overall theme will be explored in more detail. Workshop 5 will explore cutting-edge approaches and strategies in disaster response and climate crisis management, with a focus on utilising digital technology, public autonomous governance, and novel approaches to tackling the climate crisis.

Objective

The workshop aims to facilitate knowledge exchange among experts, practitioners, policymakers, and stakeholders, offering a platform to share insights and best practices in fostering resilience to disasters and climate change. Moreover, it will explore innovative approaches, technologies, and methodologies to bolster resilience on local, national, and global scales, while fostering collaboration among diverse stakeholders to collectively address resilience gaps.

Focus

In the face of the climate crisis, there are both formidable challenges and extraordinary opportunities in disaster risk management and resilience building. Tackling these demands a deep understanding of the risks posed by more frequent and severe weather events, coupled with strategies to mitigate these risks, strengthen community resilience, and leverage innovative technologies.

To enhance community resilience, it is essential to consider "Inclusive Governance of Community-based Resilience" as one of the key aspects. This approach, characterised by decentralisation, community participation, capacity building, information sharing, and adaptive management, empowers local entities and communities to tailor disaster prevention strategies to their specific needs, vulnerabilities, and capacities.

This decentralised approach enables targeted and contextually appropriate responses, allowing local authorities to identify risks, prioritise actions, and allocate resources effectively. Furthermore, encouraging community participation fosters collaboration among communities, civil society organisations, and stakeholders, leveraging local knowledge, resources, and expertise to enhance resilience to evolving disaster and climate change challenges.

There is also an increasing opportunity to utilise innovative technologies such as AI and big data for improved prediction and management of disaster risks. Technologies like remote sensing and geographic information systems can significantly enhance emergency planning and response capabilities.

Through initiatives like "Science & Technology Innovation for Responding to Landslides and Urban Floods", stakeholders can enhance their capacity to anticipate, mitigate, and respond to landslide and flood events, ultimately contributing to enhanced resilience to disasters and climate change on a global scale. By analysing diverse data sources including satellite imagery, weather forecasts, and ground sensors, AI algorithms can predict potential landslide and flood events, providing valuable time for evacuation and preparation. Additionally, AI-based risk assessment and mapping techniques enable the generation of high-resolution hazard maps, aiding authorities in prioritising mitigation efforts, land-use planning, and infrastructure development to reduce vulnerability to various disasters induced by climate change.

Finally, "Novel Approaches to Climate Crisis" denotes innovative strategies aimed at combating climate change and bolstering global resilience. These strategies transcend traditional mitigation and adaptation measures, emphasising interdisciplinary collaboration, and new policy frameworks. This integration involves embedding climate adaptation measures within existing development plans, advocating for nature-based solutions that enhance both climate resilience and biodiversity conservation, and adopting comprehensive strategies that consider social, economic, and environmental dimensions. Leveraging advancements in technology, such as renewable energy systems, smart grids, and artificial intelligence, these approaches represent a transformative shift in addressing climate change, promising to cultivate resilience and sustainability on a global scale.

Structure

Session 1: Climate Crisis: challenges and opportunities in disaster risk management and resilience building

This thematic session focuses on the challenges and opportunities within the domain of disaster risk management and resilience building, precipitated by the climate crisis. Participants will deliberate on the severity of the climate crisis and explore new strategies, including cutting-edge technologies and community-based resilience initiatives, aimed at preparing for the era of climate crisis.

Guiding questions:

1. *What types of disasters could worsen due to the climate crisis and what do we need to prepare for?*
2. *What are the challenges and opportunities for our society that could arise from the climate crisis?*
3. *What specific policies can governments implement to expand economic opportunities while also enhancing climate resilience?*
4. *Where and how should resources be allocated to effectively prepare for the climate crisis within a limited budget?*
5. *How should governments strategically prepare to address the disproportionate impacts of climate change on vulnerable populations and regions?*

Session 2: Inclusive Governance and Community-based Resilience

This session will explore the concept of "Inclusive Governance of Community-based Resilience", empowering local entities and communities to proactively engage in disaster risk reduction efforts. Through inclusive governance, decentralised decision-making, community participation & capacity building, and innovative policy frameworks, this session aims to underscore the significance of promoting diversity and equity in disaster management and local resilience-building through collaborative and participatory governance.

Guiding questions:

1. *How effectively can the inclusive governance structure address the issues of disaster risk reduction and climate change adaptation? What are the benefits of diversity and equity in disaster risk management?*
2. *How can decentralised decision-making integrate local knowledge and community-based solutions into the strategies for disaster risk reduction? How can governments utilise local resources to tailor disaster risk reduction strategies to their specific needs, vulnerabilities and capacities?*
3. *What capacity-building initiatives are necessary to strengthen the resilience of local authorities and communities in disaster prevention and risk reduction efforts? How can training, technical assistance and resource allocation empower individuals and institutions to effectively manage disaster risks?*
4. *What innovative policy frameworks and governance mechanisms can promote the active involvement of diverse community representatives and local empowerment? How can governments incentivise decentralised and inclusive approaches to disaster resilience and facilitate multi-stakeholder partnerships for collective action?*
5. *What innovative community-driven projects have been successful in building local resilience in different parts of the world?*

Session 3: Science & Technology Innovation for Responding to Landslides and Urban Floods

This specialised session delves into the utilisation of science and technology for landslide and flooding management. By harnessing AI algorithms, satellite imagery, weather forecasts, and sensors, the session aims to underscore how technology can elevate early warning systems, facilitate risk assessment, provide decision support, and streamline post-disaster assessment in areas prone to landslides and flooding.

Guiding questions:

1. *How can AI algorithms be effectively utilised to analyse real-time data from various sources for early detection and prediction of landslide and urban flood events, and what are the key challenges in implementing such systems?*
2. *What are the potential applications of AI-based risk assessment and mapping techniques in identifying landslide- and flood-prone areas and generating high-resolution hazard maps, and how can these maps inform decision-making and prioritise mitigation efforts?*
3. *In what ways can AI-powered decision support systems assist emergency responders and policymakers during landslide and urban flood events, and what factors should be considered to ensure the accuracy and reliability of AI-generated recommendations?*

4. *How can AI technologies such as machine learning and computer vision be leveraged for post-disaster assessment and recovery efforts in landslide- and flood-affected areas, and what are the benefits and limitations of using AI-driven approaches in this context?*
5. *How can technology, specifically AI and big data, be further leveraged to improve disaster risk management?*

Session 4: Novel Approach for Climate Crisis

In this thematic session, participants will discuss innovative strategies and methodologies aimed at addressing the challenges posed by climate change and enhancing global resilience. Through interdisciplinary collaboration, technological advancements, and novel policy frameworks, these new approaches transcend traditional mitigation and adaptation measures, offering transformative solutions for a more sustainable future.

Guiding questions:

1. *How can integrated solutions effectively address the interconnected challenges of climate change, considering the social, economic and environmental dimensions simultaneously?*
2. *What role do technological advancements, such as renewable energy systems and artificial intelligence, play in developing novel solutions for climate resilience? How can these technologies be harnessed to enhance adaptive capacity and mitigate climate risks?*
3. *How can community engagement and empowerment be effectively integrated into climate resilience initiatives? What strategies and best practices can empower local communities to take ownership of resilience-building efforts and contribute to sustainable outcomes?*

Organisational details

- This workshop is organised by the Safety and Prevention Policy Office with support from MOIS.
- Participants are expected to come from central and local government officials, policymakers, public government experts, public sector institutions, practitioners, civil society, academics, and media.
- The workshop will be conducted in English and Korean.

Contact Persons

Mr. Ahn, Sijun
Deputy Director in Charge
Safety Policy Coordination Division
Ministry of the Interior and Safety (MOIS)
camello@korea.kr