# Resilient Economies and Societies, and Disaster Risk Reduction



# Recommendations

# **Headline Recommendation**

Shift focus of disaster management from response to preparedness and resilience.

# **Detailed Recommendations (Transboundary Water Governance)**

- Political leadership is needed to raise awareness, strengthen science (that includes a gender perspective), policy and planning, upgrade education, and mobilize financing.
- The HLPW Action Plan should be utilized as a useful guide and connector for advancing the actions towards achieving the SDGs, Agenda 2030, climate agreements and the Sendai Framework in an integrated manner. Platforms on Water Resilience and Disasters among all stakeholders should be formulated in countries to facilitate dialogue and scale up community-based practices.
- Disaster risk prevention and resilience should be integrated in long-term planning.
- Financing for and investment in water-related DRR and resilience should be doubled within the next five years. "Principles on Investment and Financing for Water-related DRR" should be used to make effective use of this increased investment and could help increasing investments in countries.
- Global research networks, a global disaster database, integrated scientific tools for assessing risks, and a global platform integrating science and policy including higher education should be developed and provided to support countries.
- Special Thematic Sessions on Water and Disasters should be organized biennially in the UN General Assembly to raise global awareness.

# Challenges

Globally, water related disasters account for almost 90% of the 1,000 most disastrous events since 1990, threatening lives, basic services, and infrastructure. Damages attributed to water-related disasters can mount up to 15-40 % of annual GDP for certain countries. Moreover, climate change is exacerbating the extremes in hydro-meteorological events including both floods and droughts. Together with other global drivers under change – population growth, rapid urbanization, increased asset values – this may result in increased frequencies and even higher impacts of water-related disasters and other disturbances that threaten people's quality of life. Drastically accelerated actions on Disaster Risk Reduction, resilience, and adaptation are a must if we hope to ensure sustainable development in communities, countries, and the world.

# The changes we need

Reversing the increasing trend of losses caused by water-related disasters is urgently needed. Countries should shift their focus of disaster management from response to preparedness and resilience. For this, leaders are urged to raise awareness, strengthen science, policy and planning, upgrade education, and mobilize financing. Special attention should be given to vulnerable groups, such as the poor, women, elderly, and children in all aspects of DRR and resilience actions.

This would require boosting financing for water-related disaster risk reduction and increased resilience, and effective use of available funds. Total investment and financing on water-related DRR should be doubled, targeting the main threats to human life, and our social and economic well-being. Economic externalities must be evaluated to promote preparedness of water-related systems facing more relevant disasters, shocks and disturbances, as the population at risk keeps growing. This should be supported by further improvements in science and technology which provide the evidence base for financial implications of investment, and the tools and data required for appropriate investment decisions.

# Contributions of the Panel

HLPW has taken leadership in raising global awareness on importance of water related disasters in the UN Global Platform on DRR in May 2017. The HLPW Statement on DRR and Climate Change, which was announced during the Cancun Platform, helped impact the discussion and was amply reflected in the final outcome document of the Cancun GPDRR.

Mexico has also shared good practices and lessons on disaster preparedness and response. The country recently experienced and undertook effective ways to address restoration and continuation of water supply and sanitation services during and after disasters.

The 3rd UN Special Thematic Session on Water and Disasters was held in July 2017 at the UN Headquarters in New York was co-organized by the Panel and co-chaired by Special Adviser Dr. Han Seung-soo. The session brought together high-level participants, including heads of state and ministerial participants, and reaffirmed the importance of addressing the issue of water and disasters as a core component of sustainable development, and called for an increase in preventative investments. The session provided a platform for states and relevant stakeholders to share and exchange lessons and good practices and translate them into global solutions.

To act on the recommendations of the session, the High-level Experts and Leaders Panel on Water and Disasters (HELP) is compiling "Principles on Investment and Financing for Water-related Disaster Risk Reduction" in order to aid the effective utilization of financial resources. HELP is also analyzing and producing case studies on good practices, including validation of investments for water-related disasters.

Additionally, the HLPW through the Special Advisor has been helping lay the foundations of a research/university alliance on water and disasters to encourage creation and use of a knowledge base and tools, facilitate decision making, build science-based policy making capacity through integrated education of policy studies and natural science, and promote application of innovative technologies in the field. The creation of this "Alliance of Alliances" was agreed by numbers of DRR research networks in September 2017. Platforms on Water and Disasters for facilitating dialogue among all stakeholders and scaling up community-based practices into basin-wide and/or nation-wide solutions has also been promoted in collaboration with the UN agencies including UNESCO, WMO, UNISDR and UNU.

# Findings and conclusions

The HLPW Action Plan should be utilized as a useful guidance and connector for advancing the action towards achieving SDGs and Sendai Framework in an integrated manner.

### DRR and Resilience to be high on political agenda

- Special Thematic Sessions on Water and Disasters should be organized biennially in UN General Assembly to raise global awareness, share good practices and experiences, and motivate actions on water-related DRR.
- Disaster risk prevention and increasing resilience should be integrated in long-term planning. This will enable stakeholders to identify opportunities for synergies with planned investments, including plans for assessing vulnerability and adaptation to climate change.
- Platforms on Water Resilience and Disasters among all stakeholders should be formulated in countries to facilitate dialogue and scale up community-based practices.

### **Doubling investment on DRR**

• Financing and investment for water-related disaster risk reduction should be doubled globally within the next five years and ambitiously targeted at an adequate fixed percentage of a country's GDP with a focus on disaster risk reduction/preparedness. Furthermore, the proportion of financing aimed at disaster risk reduction/preparedness and that for emergency response/rehabilitation should shift from 10%:90% to 90%:10% by 2030 via 50%:50% by 2023 at least for international development aid.

• "Principles on Investment and Financing for Water-related Disaster Risk Reduction" should be developed, adopted at the global level, and widely used in countries to provide member states a practical guide to effectively utilize financial resources in line with Sendai Framework.

## **Development of Education, Science and Technology in DRR and Resilience**

- Alliance of Alliances on DRR Researches, which was initiated by the HLPW Action Plan, should be promoted to create advanced knowledge and technologies and swiftly disseminate them in every corner of the world.
- Disaster database at global scale should be developed to enable assessing and announcing direct and indirect loss of disasters immediately after the events. Available scientific data and tools for assessing risks should be widely deployed and applied to identify and prioritize actions.
- Good practices and lessons on these and other key issues on DRR should be widely shared by governments and stakeholders through, inter alia, compiling and publishing such cases and practices on water-related disasters.
- Higher education covering policy studies and natural science and technology in integrated manners should be promoted. Platforms on Water and Disasters among all stakeholders should be formulated in countries to facilitate dialogue and scale up community-based practices to basin and national levels.
- Risk management, alert, and information systems as well as local risk atlases and hazard maps should be developed to empower leaders, authorities, and stakeholders in addressing risks at all levels and create a risk resilient culture.

# Increasing resilience of water systems and infrastructure

- Provision of water and sanitation services should be swiftly restored and maintained to save lives and livelihoods
  of affected people during and after disasters/disturbances.
- Infrastructure should be designed, built, maintained, and operated with resilient operational protocols to adapt to the multiple plausible risks and threats.
- Operational protocols have to be adapted with sufficient robustness to undertake plausible responses to disasters and disruptions, and to return people's quality of life to normality.
- Water systems have to be built back better learning from each disruption or disaster into a new configuration towards economic, social and environmental goals with integrated water resources management to achieve water security and resilience.

### In addition:

- Raise awareness on the issue of water-related disasters at the highest levels by biennially organizing the UN Special Thematic Session on Water and Disasters
- Develop and promote "Principles on Financing and Investment for Water-related Disaster Risk Reduction" and promote incorporation in the national policies and practices as part of the activities of the new International Decade for Water
- Establish a water-related disaster loss database and set up a quick reporting system on preliminary losses data, including direct and indirect losses, for cases of mega-disasters.
- Accelerate development of science and technology on DRR by promoting an Alliance of Alliances on DRR researches. Promote research and development focused on water-related disaster risk reduction, and encourage application of innovative technologies in the field.
- Encourage the international community to collect consistent and continuous data on water-related disasters that will assist the development of indicators, and enable governments to set priorities, engage citizens in an inclusive way, and measure progress