











"Towards a Resilient Future: Science, Technology, Policy and Private Sector Nexus for Disaster Risk Reduction"

2-3 October 2023

Conference Palace, Tunis - Tunisia

Outcome Document

TUNIS "CALL FOR ACTION" ON SCIENCE AND TECHNOLOGY FOR DISASTER RISK REDUCTION IN THE ARAB STATES AND IN AFRICA

3 October 2023

We, the representatives and heads of delegations of governmental and nongovernmental organizations, international organizations, the members of the Arab and Africa Science and Technology Advisory Groups, the ARISE Private Sector Networks on Disaster Risk Reduction (DRR) and academic and research institutions, having met in Tunis, Republic of Tunisia, on 2 and 3 October 2023 on the occasion of the Arab-Africa Conference on Science and Technology for Disaster Risk Reduction under the theme: Towards a Resilient Future: Science, Technology, Policy and Private Sector Nexus for DRR, convened by the Government of Tunisia and the United Nations Office for Disaster Risk Reduction, and the African Union Commission, appreciate the hospitality and warm welcome accorded to the conference delegates by the Government and the people of Tunisia, and agree on the Tunis "Call for Action" on Science and Technology for DRR in the Arab States and in Africa that seeks to strengthen the nexus between science, policy, and the private sectors in reducing disaster risks.

Preamble:

- 1. We renew our commitment to accelerate the implementation of the Sendai Framework for DRR 2015-2030 to achieve the Sustainable Development Goals and the Paris Agreement through the implementation of this "call for action".
- 2. We recall that the role of the science and technology community and the private sector are highlighted in the Sendai Framework, and recognize that the lack of collaboration and coordination among these sectors remains a barrier to the integration of scientific research and private sector innovation into disaster risk reduction policy-making processes, which hinders progress towards resilient













communities. We are determined to bridge the gap between science, technology, policy, and the private sector in Africa and Arab States.

- 3. We welcome the Political Declaration from the United Nations General Assembly high-level meeting on the midterm review of the Sendai Framework (A/RES/77/289). This declaration recognizes that insufficient access to technology continues to hinder progress in implementing the Sendai Framework and that private sector investment in preventing and reducing disaster risk remains insufficient and do not match the scale of existing and future risks. We therefore reaffirm the call for enhanced participation of academia, and the private sector in the design and implementation of DRR policies, plans and programmes.
- 4. We pledge to focus on the accelerators contained in this outcome document to create synergies between science and technology, policy, and the private sector towards more effective, efficient and coordinated approaches for disaster risk reduction and resilience at all levels.
- 5. We recognize that disaster risk reduction has become a seminal aspect of global development strategies. While national and subnational governments are primarily responsible for managing disaster risks, the private sector and academia also have a vital role to play in promoting knowledge development, innovation, and financing, among others, to reduce disaster risk and build more resilient communities.
- 6. We acknowledge the urgent need to address the increased complexity of risks and their cascading impacts across different geographies, systems, sectors, and scales. We will therefore adopt all-hazard and all-of-society transformative approaches to enhance social and infrastructure resilience and achieve sustainable development.

We hereby agree to accelerate action in the following areas:

Priority 1 – Understanding Disaster Risk

- 1. Improving disaster risk management through science-based and data-driven policies, loss and damage accounting, risk assessments, and communication for urban and rural regions, particularly in less developed regions.
- 2. Utilisation, enhancement of proficiency, and investment in emerging technologies such artificial intelligence; crowdsourcing, geospatial information systems, remote sensing, and space-based technologies as well as modelling to gain and continue to develop a better understanding of disaster risks at all levels.













- 3. Co-creating and co-designing research and social innovation on the use of specific technologies such as robotics, AI, drones, big data as well as existing technologies.
- 4. Strengthening national, regional, and inter-regional collaboration on disaster risk information and science to enhance understanding of complex disaster risks, including those that are transboundary, cascading, and compound.
- 5. Enhancing cross-sectoral collaboration, research and innovation forums, promote data sharing under agreed upon trans-national protocols, exchange of best practices, technological innovation and expertise, and foster stronger partnerships between the academic and private sectors to effectively manage risks through risk assessments, visualisation, and communication.
- 6. Strengthening data-driven approaches via improved data collection and management mechanisms, and enhance access to data, in line with ISO standards, to inform actionable decision making.
- 7. Developing participatory scientific frameworks and methods to identify resilience deficits at a national level and monitor, analyse and evaluate the resilience of systems over time, in line with the Sendai Framework.
- 8. Supporting, empowering and investing in local innovations and scientific networks to lead context-specific solutions tailored to regional needs.
- 9. Strengthening regional/trans-boundary cooperation for risk knowledge sharing, lessons learned and capacity building on inclusive innovation.

Priority 2 – Strengthening disaster risk governance to manage disaster risk

- 1. Bridging the gap between policy, science and technology to ensure policy is informed by scientific evidence and technological innovations.
- 2. Developing participatory national frameworks to support the integration of science and technology in the implementation of the Sendai Framework at the national and local levels.
- 3. Translating complex scientific findings into understandable and accessible information to be used in public- and private-sector decision-making processes.













- 4. Strengthening the nexus between the public sector, private business, and academia at all levels (national, local, trans-boundary and regional) through global hubs for innovations for DRR.
- 5. Setting and updating robust policies and coordination mechanisms to enable the integration of innovation and technology in national and regional DRR strategies.
- 6. Supporting the development of robust policy and regulatory frameworks that lay the foundation for unlocking the full potential for private sector engagement in DRR through incentives in business and investments.
- 7. Supporting the integration of DRR into infrastructure regulatory frameworks, financing strategies, appraisal mechanisms and decision-making of public and private entities in all sectors and at all levels.
- 8. Promoting the empowerment of individuals and the communities in informed decision making through education, public awareness and shared principles, standards, and guidelines that emphasize transparency and accountability in technology development and use.
- 9. Enhancing participatory and intersectional approaches to science and technology in DRR, including gender responsive and disability inclusive approaches.

Priority 3 – Investing in disaster risk reduction for resilience

- 1. Promoting private investment in DRR through advocacy with financial institutions, credit rating agencies, and capital market actors to integrate DRR into their decision-making processes, including multi-hazard and long-term risk analysis.
- Focusing on innovative technical solutions as well as social solutions to create an enabling environment for investments in science and technology for DRR (financial, logistical, technical, social protection, and human resources) from the private sector and civil society organizations.
- 3. Enhancing financing for DRR and de-risk investment practices by engaging public and private sectors, including capital markets, investors, and insurance, and developing policies on incentives to facilitate private sector investments for DRR.
- 4. Addressing societal and business challenges through joint private and public funding.













- 5. Enhancing understanding of the benefit of investing in DRR by supporting public sector in tagging and tracking of investments in DRR and conducting cost benefit analysis.
- 6. Strengthening the role and capacity of small and medium enterprises and startups in building resilience at the local level, including through community-based DRR initiatives and training programmes.

Priority 4 – Enhancing disaster preparedness for effective response and to "build back better" in recovery, rehabilitation and reconstruction

- 1. Fostering common understanding and synergies between the public and private sectors to drive the design, finance, construction, operation, maintenance, stress testing, renovation and reconstruction of resilient and sustainable, infrastructure.
- 2. Supporting the role of multi-disciplinary science and technology in effective predisaster planning, preparedness, response, rehabilitation, recovery and reconstruction to build back better.
- 3. Developing efficient and effective cooperation among the scientific community, disaster managers and business sector by utilizing the advancements of the rapidly-evolving information and communication technology, including artificial intelligence and big data.
- 4. Stimulating the application of effective nature-based solutions in regional, national, and local DRR policies and strategies; disaster preparedness, recovery, rehabilitation, and reconstruction strategies; and climate change adaptation plans.
- 5. Enhancing cooperation between governments at global, regional, national levels, the private sector and academia to share knowledge, build capacity and strengthen inclusive multi-hazard early warning systems that lead to better disaster preparedness and anticipatory action.

Adopted in Tunis, Republic of Tunisia, on 3 October 2023, at the Arab Africa Conference on Science and Technology for Disaster Risk Reduction, themed - "Towards a Resilient Future: Science, Technology, Policy and Private Sector Nexus for Disaster Risk Reduction".