To download the full report, visit: https://www.undrr.org

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country or territory or of its authorities or concerning the delimitations of its frontiers or boundaries. The designations of country groups in the text and the tables are intended solely for statistical or analytical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of the names of firms and commercial products does not imply the endorsement of the United Nations.

Note: The designations employed and the presentation of maps in this report do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities or concerning the delimitation of its frontiers or boundaries.

Some rights reserved. This work is made available under the Creative Commons Attribution-NonCommercial 3.0 IGO licence (CC BY-NC IGO); https://creativecommons.org/licenses/by-nc/3.0/igo/legalcode

Under the terms of this licence, this work may be copied, redistributed and adapted for non-commercial purposes, provided that the work is appropriately cited. In any use of this work, there should be no suggestion that UNDRR endorses any specific organization, products or services.

The use of the UNDRR logo is not permitted. If a translation of this work is created, it must include the following disclaimer along with the required citation below: “This translation was not created by the United Nations Office for Disaster Risk Reduction (UNDRR). UNDRR is not responsible for the content or accuracy of this translation. The original English edition shall be the authoritative edition.”

Users wishing to reuse material from this work that is attributed to a third party, such as tables, figures or images, are responsible for determining whether permission is needed for that reuse and for obtaining permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user. Sales, rights and licensing.

UNDRR information products are available for non-commercial use. Requests for commercial use, rights and licensing should be submitted via: https://www.undrr.org/contact-us

This publication may be freely quoted but acknowledgement of the source is requested.

Citation: UNDRR (2023), ARISE Annual Report 2022, United Nations Office for Disaster Risk Reduction (UNDRR).

© 2023 UNITED NATIONS OFFICE FOR DISASTER RISK REDUCTION

For additional information, please contact:

United Nations Office for Disaster Risk Reduction (UNDRR)
7bis Avenue de la Paix, CH1211 Geneva 2, Switzerland, Tel: +41 22 917 89 08

Acknowledgements

UNDRR would like to acknowledge its major core donors for their support; Sweden, Japan, Norway, Switzerland and Finland
Contents

Foreword from the ARISE Co-Chairs ......................................................... 4
ARISE at a glance ...................................................................................... 7
ARISE strategic directions ........................................................................ 9
Internal global ARISE meetings ............................................................... 10
International Day for Disaster Risk Reduction (IDDRR) ......................... 13
ARISE at global and regional events ....................................................... 14
Peer-to-peer knowledge exchange and collaboration ............................ 16
Summary of achievements on the four ARISE Focus Areas ............... 20
ARISE Network highlights in 2022 ....................................................... 28
Annex ....................................................................................................... 38

BOXES

BOX 1: ARISE Digital Roadmap: dashboard and good practices .............. 9
BOX 2: Midterm Review of the Sendai Framework for DRR .................. 12
BOX 3: Strengthening and scaling-up ARISE networks ............................. 17
BOX 4: MCR2030 initiative ..................................................................... 19
BOX 5: ARISE in the UNFCCC Climate Resilient Food Systems
   Alliance Leadership Group ...................................................................... 21
BOX 6: Success story – CARICHAM Virtual Center of Excellence .......... 22
BOX 7: Success story – ICMIF UNDRR Resiliency Benchmark ................ 23
BOX 8: ARISE members’ success stories ............................................... 26
In a time of increasingly complex and cascading risks, the past year offered significant promise for strengthening the Disaster Risk Reduction (DRR) agenda. A range of key global events and processes were held throughout the world: the Global Platform for DRR (GP2022) in Bali, Indonesia, the Asia-Pacific Ministerial Conference on DRR (APMCDRR) in Brisbane, Australia, the 27th Conference of the Parties (COP) in Sharm El-Sheikh, Egypt, and the ongoing Midterm Review of the Sendai Framework. At each turn, members of the ARISE network - the global business alliance for DRR - played a significant role, thus providing a crucial avenue for private sector engagement.

In the aftermath of the COVID-19 pandemic, efforts to strengthen the DRR agenda intensified. COVID-19 and its impacts led to increased awareness and understanding about risk management, as well as commitment to act. However, some risk drivers existed long before the pandemic – including climate change, environmental degradation, and unplanned urban growth – and they continue to worsen. Moreover, many people are increasingly vulnerable due to poverty, inequality and global violations of human rights. This coalescing of crises offers an opportunity to transform the way we see and manage risks. More than ever, we must look to all stakeholders, in particular the private sector, as active partners.

One area for such partnership relates to the UN Secretary-General’s ‘Early Warnings for All’ initiative. This is an ambitious initiative designed to cover every person on the globe with an early warning system by 2027. This effort will require warning systems that are multi-hazard, end-to-end and people-centered, thereby contributing to a more sustainable, resilient and equitable future. We can expect significant opportunities for the private sector and ARISE in pursuit of these efforts.

Another important event - the hybrid ARISE Annual General Meeting held in October - likewise took up key risk management issues. Participants reflected on the private sector’s role in disseminating multi-hazard early warning systems, contributions to the Midterm Review of the implementation of the Sendai Framework and advancing ARISE Key Performance Indicator (KPI) implementation to strengthen priorities for 2023. AGM highlights reflected the following five areas: 1) de-risking investment; 2) moving insurance from protection to prevention; 3) sharing local SME resilience tools and practices for greater uptake and localization; 4) prioritizing multi-risk management approaches, including private sector engagement in multi-hazard early warning; 5) and how to best utilize technology.

Now it is time to step-up action and ensure that ARISE is strategically positioned to enter a new stage. The strategic orientation document for 2023 has been largely agreed upon by the ARISE Board. This document will advance private sector engagement and commitment to ARISE priorities, while accelerating the Sendai Framework implementation considering opportunities presented by the Sendai Framework Midterm Review.

Thank you to all ARISE members for your cooperation and partnership. I look forward to meeting you at both the Midterm Review Risk Reduction Hub in New York City in May and the 2023 AGM in New Delhi, India in September, as well as other events. Let us continue to strengthen ARISE foundations and pave the way for ARISE members to champion the “Think Resilience” approach.
In 2022, two years after the COVID-19 pandemic emerged, the world has become more aware about the importance of devoting efforts to Disaster Risk Reduction (DRR), prevention and building resilient communities, along with the need to work with the private sector to achieve it. All DRR global events in 2022 – GP2022, APMCDRR and the COP27 – have called to increase the engagement of the private sector in the DRR and resilience agenda.

At the global events, ARISE members have been present and engaged. They demonstrated leadership in executing private-sector events at the GP2022 and the APMCDRR, contributed with two concrete briefings to the Midterm Review of the Sendai framework and hosted a successful AGM.

The 2022 AGM was especially exciting since we had an in-person component after several years. Among the participants were youth representatives invited by the ARISE Board to the main segment, with the hope of strengthening and complementing our work with young entrepreneurs. The AGM outcomes set some of the priorities for 2023, such as the advancement in ARISE focus areas, engaging with the MCR2030 initiative and coordinating efforts with other private-sector initiatives. Building upon these recommendations and the value of ARISE, the Board has agreed on the new strategic directions for 2023. This strategy focuses on three actions: enhance the sign-up mechanism to better understand the membership base, encourage commitments and DRR investment; engage mid- and high-cap companies; and further advance in all ARISE focus areas.

At the GP2022, ARISE presented a Statement at the Stakeholder Forum committing to continue to work with the public sector and other stakeholders to promote risk-resilient societies. In our statement, we underlined the importance of creating incentives for businesses to invest using a ‘think resilience’ approach that focuses on prevention and preparedness, and not only on response and recovery. To facilitate this process, we can capitalize on the potential of data and technology while increasing the awareness of the resilience dividend among consumers and other stakeholders.
Source: UNDRR
ARISE at a glance

ARISE, the Private Sector Alliance for Disaster Resilient Societies, is a network of private sector entities supported by the United Nations Office for Disaster Risk Reduction (UNDRR). ARISE was started by UNDRR in 2015 to support the private sector in becoming a key partner in reducing disaster risk. In joining ARISE, private-sector companies voluntarily commit to support and implement the Sendai Framework, aligned with the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs), Paris Climate Agreement, New Urban Agenda and Agenda for Humanity.

**ARISE mission statement:** “To create risk-resilient societies by energising the private sector in collaboration with the public sector and other stakeholders to achieve the outcome and goal of the Sendai Framework in a transparent and inclusive way that delivers local and measurable impact”.

**ARISE five commitments:**

1) **Raise Awareness**: Awareness raising with respect to disaster risk and mobilization of the private sector;
2) **Influence**: Exercising influence in respective spheres of expertise;
3) **Share Knowledge**: Share knowledge, experience and good practices amongst the private sector;
4) **Catalyse**: Be a catalyst to generate innovation and collaboration in developing risk-informed business strategies;
5) **Implement**: Implement projects and activities to achieve the targets of the Sendai Framework.

**ARISE focus areas:**

- SMEs
- Investment
- Insurance
- Resilient infrastructure

ARISE is facilitated and supported by UNDRR in Geneva and its five Regional Offices, located in Bangkok for Asia and Pacific, Cairo for the Arab States, Nairobi for Africa, Brussels for Europe and Central Asia, and Panama for the Americas and the Caribbean. By the end of 2022, ARISE grew to over 450 members and over 29 networks across the world. See a full list of members and network on the ARISE website.
ARISE strategic directions

ARISE is an initiative included in the UNDRR Strategic Framework 2022-2025 and guided by the UNDRR Partnership Strategy. At a global level, UNDRR worked closely with the ARISE Board and Network Leaders to further strengthen the governance, implementation, visibility and recognition of the ARISE initiative.

Strengthening membership and outputs remain a critical target. One of the ARISE targets is to enlarge its membership to 500 by the end of 2023. Building upon the current strengths and unique value of ARISE and the recommendations of the 2022 ARISE AGM, UNDRR as the ARISE secretariat proposed new strategic directions for 2023. The Board agreed on this proposal, which was presented at the Network Leaders Meeting on 12 December 2022 to request comments from networks. This proposal aims to make ARISE in 2023 more strategic and impactful by focusing on three actions:

i. enhance the sign-up mechanism to better understand the membership base and encourage commitments and investment in DRR
ii. engage mid- and high-cap companies
iii. advance all areas of ARISE strategic focus.

They were reviewed in 2022, with updates anticipated in early 2023. In addition, the ARISE Network Start-up Toolkit is currently under review with updates anticipated in mid-2023.

ARISE communication engagement strategy

During 2022, ARISE made efforts to strengthen back-end processes for data collection, and improve workflows and website content management. Website content updates included six new tools, the ability to list projects, and nine good practices published (nine additional ones are in the process of being published). Collecting, disseminating and promoting good practices was further enhanced by submitting and publishing them via the Sendai Framework Voluntary Commitments (SFVC), with possible interlinkages from the ARISE website (see here ARISE entries already published). The good practices template was finalized and sent to ARISE members via a Microsoft form developed and monitored by ARISE Philippines and ARISE Japan, in coordination with UNDRR headquarters.

BOX 1:

ARISE Digital Roadmap: dashboard and good practices

The Digital Roadmap aims to: (i) make reporting easy by enabling online and always accessible mechanisms for sharing information, with regular mid-year and year-end snapshots reported on the KPIs; (ii) quarterly communications on impact and progress in newsletters to feature good practices or SFVC, projects and insights on membership growth. During the AGM 2022, the Board presented the progress on the dashboard development and the next steps to monitor 2022-2025 KPI implementation.

Figure 1: ARISE Dashboard

Source: Hans-Peters Teufers from the ARISE Dashboard
Internal global ARISE meetings

Every year, the ARISE secretariat holds three types of meetings that provide a platform for sharing experience and knowledge and strengthening relationships: the ARISE AGM, organized by UNDRR and the ARISE Board in consultation with ARISE members, the Network Leaders Calls, and Board Meetings. In 2022, the AGM took place in October, Network Leaders Meetings took place in April and December, and Board Meetings took place in July, October (during the AGM) and November.

2022 ARISE Annual General Meeting

The 2022 AGM took place on 10-11 October in Geneva and online (hybrid format). The two-day event reached 114 participants from 21 ARISE Networks across multiple time zones, representing different sectors such as insurance and banking, infrastructure, tourism, and information and communications technology (ICT), among others, from small to large enterprises. It included the in-person participation of both ARISE Co-Chairs, Mami Mizutori and Hans-Peter Teufers, the Vice-Chair, Fernando Britto, other former and current Board members, and ARISE representatives belonging to the Alliance. Youth representatives from Indonesia, Philippines, Brazil and the UN Major Group for Children and Youth were also represented. Among them, Ms Rahma Hanifa, the winner of the WIN DRR Leadership award and co-founder of the U-INSPIRE Alliance, participated as a speaker.

The AGM featured almost 50 speakers, both online and onsite, in 12 sessions, and successfully showcased the achievements of ARISE members, set the next steps for monitoring ARISE progress, and strengthened the ARISE strategic orientation. The agenda featured special guests, segments for inspiring action, an Ignite Stage, the celebration of the International Day for Disaster Risk Reduction (IDDRR), with a focus on multi-hazard early-warning systems (MHEWS), two sessions for the Midterm Review (MTR) of the Sendai Framework, SME resilience, Making Cities Resilient 2030 initiative (MCR2030) panel discussions, and co-creative small group discussions about ARISE membership, projects, and advocacy. The United Nations Development Programme - United Nations Office for the Coordination of Humanitarian Affairs (UNDP-OCHA) Connecting Business Initiative (CBI) and UNICEF Business and Community Resilience (BCR) initiative global coordinators also participated in the group discussion about ARISE advocacy. The ARISE Co-Chairs also announced that the next ARISE AGM in 2023 will be hosted by ARISE India. In tandem, six ARISE members were interviewed in person. These interviews will be developed into ARISE video content in early 2023:

“ARISE has been a very important part of my personal experience and our journey to resilience-building in Dominica and the Caribbean. ARISE has opened up a wider network for us to understand best practices that exist in other countries. Also understanding what the United Nations is encouraging in terms of DRR, especially from the lens of the private sector. I believe that ARISE is a valuable network, an organization to help build the resilience of the private sector”.

Lizra Fabien, ARISE Dominica
Source: UNDRR, ARISE

“ARISE networks are a great opportunity for businesses of all sizes, and governments, to work better together to build resilience at the local level and at the national level and beyond. It creates a forum that ties directly into implementation of the Sendai Framework and works hand in hand with UNDRR to promote resilience across a number of particular focal areas”.

Adam McAllister, ARISE Canada
Source: UNDRR, ARISE

1 The 2022 AGM Report and all AGM presentations can be found here: Broader ARISE PreventionWeb community space –> AGM 2022 –> Presentations.
Among the steps to move forward, some key actions were highlighted, such as secure participation of ARISE at the MTR of the Sendai Framework Risk Reduction Hub on 17 May 2023, or engage with MCR2030 as service providers and partners (e.g. joining MCR2030 and participating in webinar series at regional level). Other ideas to move forward called to: (i) deepen the efforts on ARISE areas of insurance, risk-informed investments, resilient infrastructure; (ii) strengthen engagement of wider private sector; (iii) scale-up tools for SME resilience; and (iv) coordinate efforts with other private-sector initiatives.

Network Leaders Calls
The first Network Leaders Call, held on 13 April, gathered representatives from 19 ARISE networks. It was organized in two sessions. Session 1 focused on ARISE progress on the action points, the dashboard and KPIs, the ARISE website and the presentation of the collaborative project between ARISE US and ARISE Dominica on the Critical Asset Management System - CAMS (See Box 4). Session 2 focused on the preparations for the ARISE key milestones for 2022: GP2022, the MTR of the Sendai Framework and the 2022 AGM. The second Network Leaders Call, held on 12 December, gathered representatives from 16 ARISE networks (see section ARISE strategic directions). Network leaders from ARISE Philippines, ARISE Colombia and ARISE Mexico gave their experiences on developing ARISE networks, enhancing membership engagement and strengthening work across the four ARISE focus areas, and there were sections on the preparation of the 2022 Annual Report and the 2023 AGM. Co-Chair Mami Mizutori highlighted the importance of the suggestions for making ARISE more strategic and more impactful, and welcomed network members’ comments. Co-Chair Hans-Peter Teufers congratulated the networks for the experiences exchanged, highlighting the numerous collaborative activities among ARISE networks. He also reminded of the importance of reporting as a guiding process for enhanced results during 2023.

In-person participants of the ARISE AGM 2022.
Source: UNDRR
ARISE members made a direct contribution to the MTR, with two concrete briefings as a result of specific sessions during the April Network Leaders Call and the 2022 AGM. At the Network Leaders Call, ARISE members discussed what the networks have prioritized for preventing new, and reducing existing, disaster risks and challenges, and new and emerging issues experienced in addressing and building resilience. Lastly, they provided recommendations for enhancing what can be done for greater achievement of the Sendai Framework.

At the 2022 AGM, there were two sessions, focused on digital transformation and food systems, followed by a roundtable discussion. The MTR session was supported by Marc Gordon, Senior Coordinator of the MTR of the Sendai Framework and the specialized team, who provided insights into the review process. The roundtable discussion included three guiding questions: (1) What ARISE focus area is more aligned with your company’s activity? (2) What do you feel could be done differently in private sector’s engagement in better defining digital transformation solutions specific to the four ARISE Focus Areas? (3) Given the systemic nature of risk, and experiences of the ongoing COVID-19 pandemic, what adjustments are required to existing DR governance and management approaches and how could the private sector support such approaches?

ARISE members will participate at the MTR Risk Reduction Hub on 17 May 2023 as an opportunity to further engage with the MTR by sharing experience and recommendations.
International Day for Disaster Risk Reduction (IDDRR)

The IDDRR, held annually on 13 October, focused in 2022 on Multi-Hazard Early Warning Systems (MHEWS) #EarlyWarningsforAll, and Target G. This target is one of the seven targets set in the Sendai Framework, whose goal is “substantially increase the availability of, and access to, MHEWS and disaster-risk information and assessments to people by 2030.” ARISE networks commemorated the day by holding national or regional events, and at a global level celebrated during the AGM. Mr John Harding, Head of Climate Risk and Early Warning Systems (CREWS) Secretariat at the World Meteorological Organization (WMO), facilitated the IDDRR session. He elaborated on the importance of ensuring access to MHEWS, and their critical link in achieving Target G, and introduced the CREWS initiative, which aims to help finance MHEWS to small island developing states. He also informed the meeting that the UN Secretary-General has called for early warnings for all (#EarlyWarnings4All) by 2027. UNDRR and WMO will co-lead the global initiative. The official launch of the initiative took place at COP27, reiterating the criticality of private-sector participation.

2 For more information, see Section Network Highlights 2022, ARISE Philippines.
ARISE at global and regional events

The 7th session of the Global Platform for Disaster Risk Reduction (GP2022), was organized by UNDRR from 23-28 May 2022, in Bali, Indonesia, hosted by the Government of Indonesia. ARISE members joined sessions, organized teams, and spoke at and moderated sessions, both in the main agenda and at the Stakeholder Forum. ARISE also led or co-led three sessions to share good practices and lessons learnt:

1. **ARISE constituency session**: speakers discussed how the private sector and ARISE contribute to DRR, how to build and invest in resilient infrastructure, the role of insurance, good practices and resilience strategies in SMEs. More than 150 participants joined the session. Members also approved the statement from ARISE for the GP2022. Key lessons include: (i) the private sector can lead efforts to strengthen the social and economic value of DRR; (ii) embrace data and technology to accelerate the development of innovative, efficient and scalable solutions; and (iii) increase people-public-private collaboration and knowledge sharing to avoid duplication and to maximize synergies.

2. **DRR financing with an ESG+R approach**: speakers explained how the private sector and other stakeholders have been integrating environmental, social, governance and resilience criteria (ESG+R) into their work, good practices of risk-informed investments to minimize the generation of systemic risks, and successful strategies from the public and third sectors. Key lessons included: (i) disaster resilience needs to be integrated into sustainable capital markets and existing bond frameworks; (ii) promote forecast-based financing, digitization, artificial intelligence (AI), and technologies to influence resilient behaviour; and (iii) government regulations are crucial to creating the

---

3 Included representatives of ARISE networks from Philippines, Dominican Republic, UAE, US, Japan, India, East Africa, Dominica.
3. **Resilience is everyone’s business: learning from local experiences to build business and community resilience:** speakers discussed how the community and the private sector can work together to build resilience. Key lessons included: (i) communication is key to understanding government plans and business and community needs; (ii) private sector needs to be consulted in DRR policies and programmes; and (iii) companies should engage with DRR in a proactive and preventive manner, build their own resilience, innovate and share DRR knowledge, and they should do no harm.

### Regional Platforms for DRR

Regional Platforms for DRR represent multi-stakeholder mechanisms to assess the progress made in implementing the Sendai Framework. During these platforms, ARISE networks share knowledge and experience and discuss matters with the aim of developing common positions in support of regional DRR. These platforms occur in between Global Platforms for DRR, to enable regions to take stock of progress and identify trends and priorities to take forward at the Global Platform and in other global and regional fora. The Regional Platforms for the Arab States (8-11), Africa (16-19), and Europe (24-26) were conducted in November 2021. The Regional Platform for Asia and the Pacific was scheduled for 19-22 September 2022.

**UNDRR Regional Office for Asia and the Pacific**

The Asia-Pacific Ministerial Conference on DRR (APMCDRR) took place in September 2022 in Brisbane, Australia. The theme was *From Crisis to Resilience: Transforming the Asia-Pacific Region’s future through DRR*, and was organized on three pillars: (i) investing in resilience and preparedness; (ii) shock-proof infrastructure and systems; and (iii) resilient communities. It also had three cross-cutting themes: localization, inclusion and science, technology and knowledge. The three ARISE networks in Asia-Pacific (Japan, India and Philippines) organized, with the support from UNDRR Japan, a **Private Sector Stakeholder Meeting** to learn about the ARISE networks’ strategies and activities. Yuki Matsuoka, Head of the UNDRR Kobe Office in Japan, emphasized the role of the private sector in the Sendai Framework, “shifting the narrative of stakeholders as victims or persons at risk to agents of change, with a focus on empowerment and inclusion. There was also enthusiasm for establishing new ARISE networks in Australia and other countries in the region.”

---

**APMCDRR Private Stakeholder Meeting.**

*Source: UNDRR, ARISE*
Peer-to-peer knowledge exchange and collaboration

ARISE is a network-based organization and encourages knowledge exchange and cooperation among networks. At a global level, the AGM and Network Leaders Calls provide a platform for exchanging knowledge and experience. At regional level, there are different initiatives in place.

Asia-Pacific

ARISE Japan and ARISE Philippines hosted three knowledge-sharing sessions (KSS), after the success of the first one, held in 2021. These sessions aim to share knowledge on the four ARISE Focus Areas. The one-hour sessions featured one presentation from each network, followed by a discussion among participants from both networks.

“This KSS is one of the best practices we are doing right now. We will also look into working on common projects that other ARISE networks can emulate.” VAdm Alexander Pama, Co-Chair, ARISE Philippines.

The first session focused on SMEs’ resilience (2021). The Second KSS, (22 February), focused on resilient infrastructure. Speakers discussed the role of sustained monitoring and maintenance of hard structures, the Building Resilience Index (BRI), and the importance of the private sector in taking action and applying the available tools to make infrastructure resilient. The Third KSS (22 July), focused on insurance. Speakers discussed the role of insurers as risk managers and the insurance industry’s response to addressing DRR, by providing an overview of the insurance industry in the Philippines, the Philippines Catastrophic Insurance Facility (PCIF), and a parametric insurance product for MSMEs. The Fourth KSS, held on 25 November, focused on investments. Two investment companies, Aboitiz Equity Ventures (Philippines) and Kokusai Kogyo (Japan), discussed their means of integrating disaster and climate risk into investment decisions and how their operation addresses the threats of climate change and other forms of risk. Discussions for a tripartite collaboration, including ARISE India, were initiated in November, to start a series of training workshops with UNDRR Office for Northeast Asia (ONEA) and Global Education and Training Institute (GETI) to promote and strengthen knowledge on the Sendai Framework across the networks’ members.
Africa

The ARISE Africa Network South Africa, East Africa and ARISE affiliate member CORAF (West and Central African Council for Agricultural Research and Development) held monthly knowledge sharing and learning sessions to discuss DRR issues, including upcoming national, sub-regional, regional and international events. These events were conducted virtually in the form of webinars and moderated resilience-dialogue forums, and were opened to other constituencies who have interest in DRR.

Americas and the Caribbean

In March, the ARISE networks of Central America, represented by the member networks of Central American Integration Network for Corporate Social Responsibility (INTEGRARSE) with the support of UNDRR Regional Office for the Americas and the Caribbean (ROAMC) and the University of Waterloo, organized the workshop "Innovation of business models for disaster resilience and sustainability." Twenty companies participated. The workshop led to the launch of a guide for risk analysis, and recommendations for innovating business models (Guía rápida para planeación de innovaciones en los modelos de negocio para la reducción del riesgo de desastres, in Spanish). This guide aims to support companies in mapping and identifying existing gaps and opportunities to align their business-model processes and resources with sustainability, prevention and DRR.

Other examples of collaboration include the TRANSFORM project (ARISE Mexico and ARISE Colombia), the Critical Assessment Management System (CAMS) Tool (See Box 4) (ARISE US and ARISE Dominica with the Ministry of National Planning) and the Business Continuity Tool (ARISE Canada and ARISE Dominica).

BOX 3:

Strengthening and scaling-up ARISE networks

The UPS Foundation supports the strengthening and scaling-up of ARISE networks, with contributions from The UPS Foundation to the DRR Trust Fund. This year, two projects were supported with seed funding:

Establishing a sustainable and scalable ARISE network in Kenya and East Africa: The Kenya/East Africa ARISE network pilot project, in partnership with The UPS Foundation, aims to establish a national ARISE network in Kenya, with a wider focus on the east African region. UNDRR Regional Office for Africa (ROA) held a consultative meeting on 30 November 2022 with participants from the private sector, academia and a government representative. They discussed the challenges the private and public sectors face, and other critical factors for establishing a scalable ARISE network. Some participants emphasized the need for developing capacity on risk prevention, mitigation and disaster risk management (DRM), and the importance of working in collaboration instead of in silos. "Disaster preparedness has started in Kenya but, until we come to our neighbours, the impact will not be there. Please also come to Uganda and we will do the same. We have the private sector; we are ready to walk with you." Rachael Daisy Mirembe from Makerere University in Kampala, Uganda.

Strengthening SMEs’ resilience in the Caribbean: The Network of Caribbean Chambers of Commerce (CARICHAM) is working with UNDRR and The UPS Foundation to support Business Resilience for Caribbean SMEs by: (i) reviewing the capacity to support the enhancing of SME resilience in collaboration with ARISE networks and partners; (ii) developing a centre of excellence; and (iii) delivering DRR and resilience capacity-development through online training for SMEs and CARICHAM members, to enhance knowledge based on materials from the portal.

---

4 The ARISE Africa Network was established in 2020 and encompasses ARISE South Africa, ARISE East Africa, and CORAF (West and Central Africa Council of Agricultural Research and Development) as an affiliate member.
Strategic collaboration

In 2022, the relationship among other private-sector initiatives has continued to grow. Collaboration between the ARISE network and UNDP-OCHA CBI uses the mandates of the respective organizations. In 2021, they updated their Outline of Collaboration. These discussions build on previous joint activities at country level, including joint work between ARISE networks and CBI Member networks in countries such as Mexico and the Philippines.

At a global level in 2022, ARISE, CBI and the UNICEF BCR Initiative\(^5\) members collaborated on two events, the GP2022 and the 2022 ARISE AGM, and published a joint article.

At the GP2022, they presented the side event Resilience is everyone’s business: learning from local experiences to build business and community resilience to showcase public-private partnerships (PPPs) for DRR and DRM. During the 2022 ARISE AGM, representatives from the CBI and UNICEF BCR Initiative led the group discussion during the breakout sessions on Opportunities for DRR integration in other private-sector initiatives. Some of the key recommendations included joint advocacy activities (blogs, online articles, webinars); global and regional DRR platforms, and increased collaboration in countries where there is overlap, sharing tools and resources.

The joint article Public-private partnerships advancing disaster risk reduction and disaster management was developed by UNDRR-ARISE, the CBI, UNDP-OCHA, UNICEF, and the United States Agency for International Development (USAID) ADVANCE Indonesia Program, implemented by Miyamoto International. It shows specific examples of PPPs and private-sector engagement models to support DRM at country, regional or global levels.

Lastly, ARISE participated in the event Harnessing the power of business for disaster management in Latin America and the Caribbean, organized by CBI in December. Two speakers from ARISE – Ms Elisa Trujillo (Executive Director, CENACED) and Mr Yezid Niño (Private Sector Adviser, UNDRR ROAMC) - presented in the session Private sector entry points in national and regional DRM plans and coordination mechanisms. The session aimed to find potential solutions to address gaps, and the challenges of meaningful engagement of the private sector in DRM.

---

\(^5\) The UNICEF BCR is an approach that aims at engaging with business to protect children from shocks and stresses by using private sector’s core expertise, operational capacities and networks.
MCR2030 initiative

The UNDRR-led MCR2030 multi-stakeholder partnership aims to ensure cities are becoming resilient and sustainable by 2030. At the Local Leaders Forum at the GP2022, Ms Mizutori urged local leaders to encourage national governments to prioritize urban resilience, to work with the private sector to develop technical services, and to advocate for financial investment in DRM. Three events jointly organized by MCR2030 and ARISE took place in 2022: two webinars and the 2022 AGM session.

Both webinars are part of a series jointly organized by MCR2030-ARISE-UNDRR aiming to highlight the technical expertise and service made available by ARISE members in supporting cities in building resilience. The webinar on Preventing cascading failures of critical assets: using the open-source Critical Asset Management System-CAMS, 12 April 2022, aimed to provide an overview of the CAMS tool and a demonstration of how to use it. The CAMS is a collaborative, open-source and data-centric tool that helps cities to identify their critical assets, and the cascading failure chains should one of them fail. The tool is available for MCR2030 cities on the MCR2030 dashboard. The webinar Private-sector partnership for improving cities’ climate-resilient infrastructure and enhancing business resilience, 7 September 2022, aimed to discuss how private-sector expertise and technical skills could support local governments in creating resilient cities.

The Strengthening private-sector action for local resilience AGM session showcased three different examples of resilience-building – one public-sector example from the city of Campinas, Brazil, and two from the private sector. Key outcomes included: (i) the private sector could benefit from joining the MCR2030 initiative as an opportunity to directly connect with its 1,386 cities for the potential of providing services in resilience-building; and (ii) opportunity of showcasing private-sector services through MCR2030 events. A way to scale-up MCR2030-ARISE events is to decentralize them by region.

Source: UNDRR
Summary of achievements on the four ARISE Focus Areas

Global ARISE Focus Areas in 2022

The figure below compares the number of activities planned against the number of activities that were actually executed (as reported by networks). While there has been good progress in the work with SMEs, the other focus areas may require further attention during 2023. Likewise, increased reporting by networks is critical for better monitoring.

1. Small and medium enterprises (SMEs)

SMEs account for about 90 per cent of all businesses and more than 50 per cent of employment worldwide, as indicated by the World Bank, positioning them closely to community structures; SMEs are recognized drivers of innovation, which is key to changing our approach to DRR.

At network level, work on resilient business models for SMEs, and business continuity planning (BCP), continued across regions.

Asia-Pacific

ARISE Japan completed the one-year pilot project on BCP development for SMEs in the travel and tourism sector. The final pilot outcomes were reported during the 2022 ARISE Japan Public Symposium Increasing resilience to disasters by strengthening SMEs as a community: learnings from the travel and tourism sector, in March. The project is run jointly by the Japan Chamber of Commerce and Industry and the Japan Tourism and Travel Association, and engaged multiple ARISE Japan members and SMEs. The project draws on existing human resources from chambers of commerce and destination-management organizations, to strengthen SME resilience through BCP workshops. The support tools include plan outlines, manuals and case studies, and are available for multiple sub-sectors related to tourism.

Figure: Monitoring of KPIs for 2022

Source: UNDRR

Note: Panel a) considers the number of activities planned as reported by all networks. Panel b) considers the figures accounting only for the networks that completed their reporting in 2022.
The Quick Risk Estimation (QRE) tool, developed by a member of ARISE India, and launched by the UNDRR ROAP in 2020, helps SMEs better understand their exposure and vulnerability to disaster risks. ARISE Philippines launched the Filipino version of the tool in June 2022. The event, QRE Tool Pilot Launch for MSMEs, organized by the National Resilience Council (NRC), ARISE Philippines and the UP Institute for Small-Scale Industries, targeted MSMEs from the manufacturing, service, retail and trading, and agribusiness sectors.

Also, ARISE Philippines held the 2022 Philippines NRC Colloquium From Risk to Resilience: Transforming Science into Action in March. Local chief executives shared their resilience experiences on compounded hazards and revealed systemic risks, highlighting the importance of participative risk governance, multi-stakeholder engagement and PPPs. Also, the network held a Branding and Marketing Workshop for MSMEs targeted at the communities affected by Typhoon Odette in 2021.

Africa
The ARISE affiliate member CORAF/WECARD (Conseil ouest et centre africain pour la recherche et le développement agricoles / West and Central African Council for Agricultural Research and Development) continued to work in fostering the resilience of agriculture SMEs in the region. In addition, Ms Nana Amoah, CORAF Senior Advisor to Executive Director, was elected to represent ARISE in the UNFCCC Climate Resilient Food Systems (CRFS) Alliance Leadership Group (See Box 5).

BOX 5:

ARISE in the UNFCCC Climate Resilient Food Systems (CRFS) Alliance Leadership Group

The CRFS Alliance aims to accelerate action towards climate-resilient, sustainable, equitable and inclusive food systems in a coherent manner, focusing on the most vulnerable countries. In June 2022, Ms Nana Amoah was selected to represent ARISE in the CRFS Leadership Group (LG) based on her experience with CORAF and on research and developing resilience in food systems for grassroots communities. The opportunity to engage on climate-smart agriculture to increase agriculture productivity and improve livelihoods of farmers aligns with ARISE and CORAF missions.

The CRFS LG had three meetings in 2022, in July, October and December. During these meetings, discussions focused on roles and responsibilities of the group, identifying strategic engagements, updates on the deliverables (solutions portfolio, the data and analytics platform, the advocacy framework and the country case-study exercise) and COP27 preparations and feedback. The LG was part of two high-level side events at COP27 - a CRFS Alliance side event, and an event in partnership with the humanitarian-development-peace (HDP) Nexus about climate-resilient food systems and peace. The group provided input to the COP27 Strategy and to CRFS messages for increased advocacy. During the last meeting of the LG, in December, they reflected on COP27 and provided feedback on investment and country case studies. ARISE was represented in the private-sector cluster, moderated by UNFCCC. The discussion focused on how the Alliance can support value chains, smallholder farmers and food entrepreneurs, suggesting a synergized message for COP28 regarding raising current climate finance for agriculture by one third. The LG also discussed existing financial investments for food systems, better funneling of funds through local SMEs, and halting the channelling of investments through harmful subsidiaries.

Source: UNDRR, ARISE
Americas and the Caribbean

Results of the TRANSFORM Project, a joint project between ARISE Mexico, ARISE Colombia and the University of Waterloo (Canada), were disseminated in 2022. Each of the six case studies highlighted sustainable practices of SMEs that can help build greater resilience to disasters, with a positive impact on operations and BCP. INTEGRARSE organized a workshop which led to the launch of a guide for risk analysis and recommendations for innovating business models. Further information about the guide is provided above. ARISE US piloted the SME Scorecard in 35 US cities and released it globally. The scorecard allows cities to assess how effectively they engage SMEs in DRR efforts.

ARISE Argentina, with the participation of UNDRR ROAMC, conducted three events targeted at SMEs: a BCP and resilient-investment workshop; a conference on humanitarian assistance oriented to SMEs in the health sector, and a seminar on Good practices in the transport of hazardous materials and waste for the SME transport sector. ARISE Dominica also facilitated workshops and training for businesses on BCP, and a special BCP Workshop for Haitian Entrepreneurs. Networks from Panama, Guatemala, Dominican Republic and Costa Rica conducted events on BCP, business resilience or DRM.

ARISE CARICHAM launched the Business Resilience Toolkit in March. The toolkit includes a guide, template and videos, and trained trainers to support businesses in completing their BCP. It also launched the CARICHAM Center of Excellence (See Box 6).

Europe and Central Asia

The Building the resilience of SMEs in Serbia initiative was presented at the ARISE AGM in 2021 and 2022. This study was informed by a qualitative and quantitative survey of 550 SMEs undertaken by UNDRR and partners in Serbia to better

---

Guide for risk analysis and recommendations for innovating business models.

Source: UNDRR, ARISE

---

**BOX 6:**

**Success story – CARICHAM Virtual Center of Excellence**

UNDRR and CARICHAM, through its ARISE network, have partnered with funding support from The UPS Foundation and CREWS to develop a virtual Center of Excellence. The centre aims to strengthen the capacity of CARICHAM to support the resilience of the private sector in the Caribbean, particularly MSMEs. The centre provides tools such as videos, guides, templates and checklists to help address resilience gaps in the operations of businesses, and to navigate current challenges. The project has developed almost 100 tools across five thematic areas, some of which have been translated into French and Spanish. Additionally, a two-day workshop was held in Grenada and attended by stakeholders from the private sector from 22 islands, National Disaster Management Offices and Meteorological Offices, whose work supports countries, communities and businesses in reducing losses of life and livelihoods. CARICHAM has initiated partnerships with other UN Private Sector initiatives such as the UNICEF BCR Initiative to enhance preparedness for effective response and contribute to the centre.

As the project aims to enhance SMEs’ resilience, it will benefit stakeholders who rely on MSMEs through value and supply chains. The centre is expected to reach members of 23 national Chambers of Commerce, seven Caribbean ARISE networks, and one sub-regional network in the Caribbean.
understand and address the risks SMEs face. The first draft of the SME risk-assessment methodology developed was based on UNDRR tools (translated to Serbian) and initial steps to test it were undertaken with a focus group in 2022. The dissemination of results will take place during regional events in 2023, when ARISE is also expected to be more established in the region.

2. Investment and investors

To realize risk-informed investment by the private sector at large, influencing the financial sector is key. Engagement in the ongoing global momentum under the SDGs and climate discussions offers the opportunity for the integration of disaster and climate risk into financial-sector investment decisions.

At a global level, the ARISE AGM dedicated a session to climate bonds, presented by Mr Sean Kidney, CEO of the Climate Bond Initiative. He highlighted the momentum of the green debt market, with a growth rate of over 50 per cent in the last five years, and proposed three steps to make risk-mitigation investments more visible to investors: (i) clarify requirements of an appropriate resilience investment; (ii) provide incentives to promote green markets such as financial instruments, or provide evidence of climate-change mitigation measures to credit agencies, since they have included climate-risk factors in the credit ratings; (iii) develop financing models to take some of the financial burden off the States.

Asia-Pacific

ARISE Philippines and ARISE Japan held the fourth and last KSS in November, focusing on investments. Two representatives from investment companies discussed the means of integrating disaster and climate risk into investment decisions. Also, ARISE Philippines, led by Aboitiz Foundation, launched a call in November for papers on Mainstreaming Disaster Risk Informed Investment targeted to tourism and hospitality sectors.

Americas and the Caribbean

ARISE Costa Rica supported the definition of the ESG criteria for the financial sector to guide banks to being able to determine risky actions in their investment portfolio and understand the mitigation and adaptation measures. An individual ARISE member, AI Systems Research (AISR, Brazil), developed a guidance document in partnership with issuers and investors on how to integrate resilience and DRR into the sustainable debt capital markets through existing labelled bonds frameworks, and on how to develop a “Resilience Annex”. This could be included in the documentation of any sustainable bond offering, and would disclose to investors the critical resilience and DRR aspects of that investment or that borrower.

Europe and central Asia

UNDRR with the Civil Protection Directorate of the Ministry of Interior of Croatia and the Disaster Preparedness and Prevention Initiative for South-Eastern Europe held a 3-day event on “Investing in DRR in South Eastern Europe (SEE)”. The event explored the modalities, experiences, and benefits of investing in DRR in SEE, sharing lessons and best practices from within and beyond the region. Participants included representatives from governmental institutions, civil protection, finance and development sectors.

3. Insurance

The (re-)insurance industry has a critical role to play in DRR. With risk at the heart of its business, the industry has an opportunity to lead, both from the insurance and liability side, as well as asset management, to change the current single-hazard, protection-focused business approach of the sector and encourage risk-informed business-management strategies and practices.

UNDRR collaboration with the International Cooperative and Mutual Insurance Federation (ICMIF) began in 2019, with the aim of identifying what is needed within the insurance industry to enable a shift from protection to prevention, i.e. from providing risk-transfer products and services, to protecting the insured from disaster risks, to prevention through DRR incentives, awareness, capacity and financing. Building upon the UNDRR-ICMIF partnership and the UNDRR-ICMIF report From Protection to Prevention: the role of cooperative and mutual insurance in disaster risk reduction, jointly published in 2021, ICMIF has continuously collaborated with UNDRR. This collaboration includes the constant improvement of the ICMIF Resilience Hub and the development of the Resilience Benchmark, the world’s first such tool for insurers (see Box 7).

BOX 7:

Success story – ICMIF UNDRR Resiliency Benchmark

In 2022, ICMIF convened monthly collaborative working groups of members, together with UNDRR representatives, to develop the ICMIF UNDRR Resiliency Benchmark, by gathering case studies and data to benchmark members on the seven mechanisms outlined in the above-mentioned From Protection to Prevention report, and develop the resulting Benchmark tool. The seven mechanisms include three direct mechanisms – variable pricing, incentives, and investments that reduce risks and build resilience – and four indirect insurance mechanisms focused on insurance providers – information and advice; capacity and technology; enhancing social capital for innovation in risk reduction; and collaboration with the public sector.

The ICMIF UNDRR Resiliency Benchmark tool aims to help insurers identify and improve their current business practices and insurance offers, to incentive preventive measures on the global standards for prevention activities outlined in the seven mechanisms. The co-creative process supported the review of participating companies’ current business practices, and UNDRR engagement with insurance companies, and facilitated a platform for peer-to-peer learning and sharing of best practices. The UNDRR-ICMIF establishment of the ICMIF Resilience Hub has continued to help identify and promote risk-prevention products and mechanisms. The UNDRR-ICMIF partnership and seven mechanisms have raised awareness among the ICMIF membership, representing 200 mutual and cooperative insurers in 61 countries, on the need to move from protection to prevention. Plans for 2023 include supporting uptake among ICMIF and promoting the Benchmark in the insurance industry.
From 25-28 October, ICMIF held the conference The importance of prevention for the future of mutual and cooperative insurance, to celebrate its centenary, where UNDRR and ICMIF launched the ICMIF Resiliency Benchmark. Mami Mizutori, ARISE Co-Chair, Mr Rob Wesseling, President and CEO of Co-operators and ICMIF Chair, Ms Hilde Vernaille, Immediate Past Chair, Chair of the Management Committee, P&V (Belgium), Ms Ylva Wessén, Vice Chair, President and CEO of the Folksam Group (Sweden), and Mr Shaun Tarbuck, ICMIF Chief Executive, discussed the importance of prevention in the mutual and cooperative insurance industry. One of the key takeaways was that the transition to prevention should include providing more information to help customers make risk-informed decisions, better underwriting, pricing risk correctly, and explaining to customers how to reduce risk, while ensuring inclusivity and leaving no one behind.

Asia-Pacific
ARISE Japan and ARISE Philippines held the Third KSS, on insurance and its role in incentivizing risk reduction and prevention. Also, ARISE Philippines, led by Philippine Insurers and Reinsurers Association (PIRA), organized a webinar on the Importance of Insurance Vis-a-Vis Climate Change. Topics discussed included global and local climate-change trends, types of risks, insurance products aligned to each risk, and risk-handling methods.

Americas and the Caribbean
ARISE Argentina member Grupo Sancor (insurance) has developed drought insurance for small farmers to reduce food insecurity. This parametric insurance model uses satellite indices, climate indicators and field research to analyse whether vegetation and climate variations exceed thresholds. If they do, an alert triggers compensation payment. ARISE Colombia led the forum: Financial Protection, a challenge for DRM, in November, with the aim of informing the business sector about risk-transfer mechanisms and financial protection. UNDRR, the National Unit for Disaster Risk Management, the Ministry of Finance, FASECOLDA (insurers’ union) and Insurance Grupo SANCOR (ARISE Argentina) were among the 65 participants. The business sector and the insurer initiated an alliance for articulating initiatives to use financial protection in corporate DRM.

ARISE Mexico, in alliance with the State Government of Sinaloa and the Municipal Government of Escuinapa, continued with the Resilient Community Prototype, a housing and community project to strengthen the resilience of communities exposed to hydrometeorological events. The project has four phases of implementation and two stages of housing construction. During the first and second phases, the following activities took place: the construction of 62 houses; training the community to identify and reduce risks; developing a continuity plan for communities in partnership with local authorities; civil-protection equipment for the local government, and training in DRM and first aid (1,500 indirect beneficiaries in Palmito del Verde and 1,900 in Cristo Rey). The third and fourth phases took place in 2022, with workshops on self-construction, the second phase of housing construction and housing insurance for 62 homes, with coverage including earthquakes and hydrometeorological events. ARISE US, as part of a series, organized a symposium on Insurance innovations for disaster risk reduction in December, which focused on mitigation and adaptation (barriers, policy changes, standards to apply) and parametric insurance (tools to support mitigation, BCP and disaster recovery).
In Central America, the insurance sectors of Costa Rica and Panama continued the work to create common guidelines to raise the standards of sustainability and human rights in the insurance sector. As part of the Protocol of Responsible Business Conduct for the Insurance Financial Sector in Costa Rica and Panama (Responsible Business Conduct in Latin America and the Caribbean - CERALC), representatives of insurance companies, intermediaries and public regulatory institutions participated in workshops to construct a voluntary sectoral protocol that promotes responsible business conduct. The project is being led by the ARISE Costa Rica member Asociación Empresarial para el Desarrollo (AED) and ARISE Panama member Sumarse, with the participation of the General Superintendence of Insurance of Costa Rica (SUGESE) and the Superintendence of Insurance and Reinsurance of Panama (SSRP). In Panama the protocol was agreed and published in April. It aims to promote the incorporation of responsible business conduct (RBC) and environmental, social and corporate governance (ESG) factors in the business strategies and management of the insurance sector. Participants included the SSRP, the APADEA Insurance Association and its member companies ~ 60 per cent of the insurance market in Panama. Currently, thirteen companies in Panama have adhered to the protocol.

### 4. Resilient infrastructure

With over USD90 trillion to be invested in infrastructure by 2030, it is critical this investment is risk-informed.

At a global level, ARISE participated at the GLOBE Forum 2022 Investing in Resilient Infrastructure, where speakers discussed climate-resilient investments, barriers for increasing private capital for climate-resilient infrastructure, policies and good practices. Mami Mizutori, ARISE Co-Chair, highlighted the need to shift the mindset from the short term and under-prioritizing disaster risk, to a ‘think resilience’ approach. Also, Hans-Peter Teufers, ARISE Co-Chair, participated in the third meeting of the Governing Council of the Coalition for Disaster Resilient Infrastructure (CDRI) in March 2022. He highlighted the progress ARISE has made by defining four focus areas (one of them being infrastructure) and KPIs for better monitoring; and the opportunities to capitalize on the momentum of CDRI to engage more companies to work in DRR. Lastly, ARISE, in partnership with UNDRR and MCR2030, held two webinars, on CAMS and PPP for improving cities' climate-resilient infrastructure, as part of a series of webinars aiming to highlight the technical expertise and service available from ARISE member companies in supporting cities in building resilience (See Box 4).

### Arab States

UNDRR, ARISE UAE and the International Real Estate Federation (FIABCI) launched the Real Estate Resilience Tool in November, which provides guidance to owners, investors and developers in facilitating the shift from Disaster Risk Management (DRM) to DRR. Mr Sujit Mohanty, Chief of UNDRR ROAS, presented this tool at the ARISE AGM.

---

By testing a new technology in a real-world setting, the project aims to improve the efficiency and safety of urban transport. The results of the testing will be analyzed to determine the effectiveness of this approach and to identify areas for further improvement.

---

Project implemented by the International Labour Organization (ILO), the Organization for Economic Cooperation and Development (OECD) and the Office of the UN High Commissioner for Human Rights (OHCHR) and funded and designed in collaboration with the European Union.
Asia-Pacific

ARISE Philippines and ARISE Japan held the Second KSS, on resilient infrastructure. Also, ARISE Philippines and the Philippine Institute of Civil Engineers (PICE) organized a webinar to launch the BRI app. The BRI provides the building sector with a web-based hazard-mapping and resilience-assessment framework. All sector stakeholders can use BRI to assess, improve and disclose the resilience of their projects or portfolios. IFC has chosen the country for piloting BRI with the nationwide roll-out in 2023, in partnership with Resilient PH, a network member.

Americas and the Caribbean

ARISE US has initiated several projects related to resilient infrastructure on the ground: the CAMS tool, the City Scorecard Action Guide to help filling gaps reported by scorecard users, and the Food System Resilience Addendum to City Scorecard, to measure the resilience of communities’ food supply chains and delivery methods, and the integration of food considerations with DRR. Also, the network organized a Flood Symposium in February, with the aim of exploring policy and technology innovations for better flood-risk reduction in the US.

BOX 8:

ARISE members’ success stories

ARISE Mexico – United for Them (Unidos por Ellxs in Spanish) platform:

United for Them is a digital platform that articulates multiple actors specializing in emergencies and disasters, with the aim of providing assistance to the population in a timely manner. ARISE Mexico works in alliance with the Government of Mexico (National Civil Protection Coordination, National Center for Disaster Prevention, and CENACED, the coordinating agency) and four United Nations agencies – UNDRR ROAMC, UNICEF, UNDP and OCHA. ARISE Mexico supports the prevention side, the CBI response and recovery, and CENACED coordinates the platform to connect the community needs to private-sector solutions. The platform provides risk-alert notifications, courses and maps with DRR initiatives. Once the protocol for emergency is validated by the different federal governments, it activates in case of need and the private sector supplies goods and services.

ARISE Philippines – NCR Adopt-a-Municipality Project by Aboitiz Foundation:

This project develops a comprehensive, science-based approach to community disaster and climate change adaptation in Iligan City, the Philippines. Iligan is exposed to natural hazards (typhoons, flooding), climate-related risks (droughts) and human-induced hazards (gang fights and terrorism). A memorandum of understanding (MOU) was signed in November for a three-year partnership for building a disaster and climate-resilient city. Iligan has agreed to reconstitute the local Disaster Risk Reduction Management (DRRM) council as the local-resilience council, to include private sector and academic partners and to complete training on climate and DRM, systems thinking, and bridging leadership in 2023. The programme includes courses in Leadership & Governance, and Science & Technology, to guide and empower the city in developing and implementing scientific and technology-based plans. It contributes to Target E of the Sendai Framework.
With my deep advocacy in disaster resiliency, I firmly believe that risk reduction is a cross-cutting issue that requires a long-term planning perspective, mainstreaming and integration across sectors, and a change in mindset from response to preparation and prevention. Just as important is the realization that reducing risks and impacts of disasters is a shared responsibility among the many actors and other concerned stakeholders.” - Honorable Frederick Siao, Mayor, Iligan City.

ARISE Dominica – BCP Support for Haitian Entrepreneurs

Over the last decade, there has been increasing migration of Haitian nationals to Dominica, resulting in a growing number of Haitian entrepreneurs. Dominica ARISE used the Business Resilience Toolkit resource provided by CARICHAM, and translated into Haitian Creole, with the International Organization for Migration. The tool was used through a two-part workshop for entrepreneurs, to increase their understanding of DRR and to develop plans. This resulted in enhanced plans by Haitian entrepreneurs, which reduces their risk of disasters, leading to more sustained livelihoods and an increased contribution to socio-economic development. The Haitian entrepreneurs’ group was not previously supported in enhancing their resilience through BCP and, as such, this increased their resilience and that of the general community. The project intends to secure impact and a coherent approach to climate- and disaster-resilient sustainable development at national and local levels, in particular for the most vulnerable and marginalized groups.

ARISE Costa Rica – Integral Risk Management tool (GIRA in Spanish)

AED, the national focal point for ARISE Costa Rica has provided one of their risk-management tools, GIRA, to support the management of hydrological risks in operating entities of drinking-water supply in the area of Los Santos, Costa Rica. Most of these operating companies lack the resources to identify and address the risks they are exposed to. The tool aims to strengthen the capacities of the operating companies, by identifying the levels of vulnerability and risks, and developing work plans to prevent those risks. The population where these companies operate also benefits since there is a better and continuous water supply.
ARISE Network highlights in 2022

ARISE national and regional networks (ARISE Networks) are set up in alignment with the specific requirements of each respective country and region, with the overall mandate to promote, enhance and support the implementation of the Sendai Framework. There are currently 29 networks and over 450 members. This section provides an overview of selected activities, projects and initiatives as reported and carried out by some ARISE networks during 2022.

ARISE Japan
Network Leader: The Japan JTB Tourism Research and Consulting Co, Tourism Resilience Japan

The year 2022 marked the third and final year of ARISE Japan’s work plan Resilience in the tourism sector: ARISE Japan Activity Plan 2019-2022, submitted as an SFVC. Activities addressed the ARISE Focus Area on SMES: ARISE Japan Public Symposium 2022: Creating disaster resilient communities by ‘going local’ in DRR, an annual event open to the public, in March (Japanese report, English article); sharing progress at the ARISE Constituency Session at GP2022 and at the ARISE AGM, and the dissemination of the BCP development support tool for tourism business operators in October (output here). The SFVC was marked as successfully completed in November.

ARISE Japan members played a role at the GP2022, APMCDRR, and the ARISE AGM. Board member Satoshi Hijikata, represented by Yoshiko Abe (both Kokusai Kogyo), joined the GP2022 ARISE session planning team, and Hiroo Shimada (TMNF) and Sandra Wu (Kokusai Kogyo), and Masato Takamatsu presented at ARISE-organized sessions. Japan Conservation Engineers, together with ARISE Japan, presented a virtual booth. At the APMCDRR, Yoshiko Abe joined the Pillar 2 Working Group and ARISE Japan, Philippines and India organized the Private Sector Stakeholder Meeting, with support from UNDRR Kobe Office in Japan, and submitted a joint statement. Also, the Japan Bosai Platform set a booth and made a presentation at the Ignite Stage. Board member Satoshi Hijiika, represented by Yoshiko Abe, joined the ARISE AGM planning team, and Hiroko Urashima (MS&AD) and Takuya Otsu (Kokusai Kogyo) presented along with Masato Takamatsu.

The KSS with ARISE Philippines on the ARISE Focus Areas was completed with three sessions in 2022, on resilient infrastructure, insurance and investment. Further information about the KSS is highlighted earlier in this report.

ARISE Japan secretariat keeps its members apprised of developments within ARISE and UNDRR through bi-monthly (or more) email communications sent through the ARISE workspace. ARISE Japan held its belated internal summer meeting in September, and its internal winter meeting in December. The internal meetings featured information-sharing on global and domestic events and developments by UNDRR Japan and ARISE members, and collaborative planning of events and statements.

ARISE Philippines
Network Leader: SM Prime Holdings

ARISE Philippines’ efforts in 2022 focused on harmonizing and synergizing action for resilience. Initiatives, projects and activities, organized in work themes (WT) and priority areas (PA), included: WT 1 - DRM strategies, led by the NRC: the programme Adopt-a-City is a multi-stakeholder partnership to empower local governments in implementing technology-based plans, policies, and systems. A MOU was signed in November for a three-year partnership for building a disaster- and climate-resilient city in Mindanao; WT 2 - Education and training, led by the Manila Observatory. In August, the Observatory organized a south-east Asia Workshop on Loss and Damage (L&D) 2022: Making Sense of and Responding to L&D. A policy brief Loss and Damage: Perspectives from Southeast Asia resulted from the workshop and was released in November. The Observatory, as part of Allied for Climate Transformation by 2025, with its partner International Centre for Climate Change and Development (ICCAD) held a side event, Beyond dialoguing to action and support to avert, minimize and address loss and damage at COP27 that highlighted that L&D should be a funding facility for stricken communities to transform their way of living into a sustainable and resilient future; WT 3 - Urban risk reduction and resilience, led by Build Change, which implemented the Disaster Resilient Housing Microfinance Program, addressing low-income families whose houses were affected by typhoon Rolly (Goni), to provide microfinance for resilient houses.

Key projects and activities in 2022 for each PA included: SMEs – led by the Philippine Disaster Resilience Foundation (PDRF), which organized the branding and marketing workshop for MSMEs in December, targeted at the communities affected by typhoon Odette, aiming to capacitate the women cooperative members on product and business development, to utilize sewing and embroidery machines. The training used the

---

7 This section is based on the national network reports submitted to UNDRR and edited for the purposes of this report.
ARISE Philippines Secretariat conducted new activities such as the GETI workshop training and the ARISE Philippines Podcast. The GETI training in November *Understanding the Sendai Framework: An Option to Reduce Cost*, showcased scenarios of DRR benefits for businesses and resiliency tools for businesses. The podcast series, launched and sustained by the private sector, focused on the importance of EWS devices to tackle Target G, theme of the 2022 IDDR. The two-part podcast: (i) *Dr. Sherdon Uy of Manila Observatory* and (ii) *Prof. Mario Rodriguez* (Ateneo de Zamboanga University) informed about a web application Automated water-level and rain monitoring using near-real-time observation (ALeRTO), an EWS that provides real-time status of the rain and water levels of 10 river basins (pilot sites) through SMS and websites. Also, ARISE Philippines was represented at the GP2022 and APMCDDR by VAdm. Pama. At the GP2022, in the *Ministerial Roundtable Discussion on Thinking Resilience: Changing the Approach to Disaster Risk Reduction Financing*, VAdm. Pama laid out a ten-point agenda for collaboration among the private sector, government and other stakeholders, for a more resilient world. For the APMCDDR, ARISE India, Japan and the Philippines held a Private Sector Stakeholder Meeting. Also, ARISE Philippines hosted a partner event in collaboration with the NRC, Asian Institute of Management (AIM), SM Development Corp. (SMDC), UNICEF and IFC. The panel discussed how technology can be maximized for disaster resilience through PPPs, multi-sectoral and regional partnership.

The KSS with ARISE Japan on the four ARISE Focus Areas was completed in 2022, with sessions on resilient infrastructure, insurance and investment. Further information about the KSS and the network’s work on the Focus Areas has been highlighted earlier in this report.

**ARISE India**

Network Leader: The Federation of Indian Chambers of Commerce and Industry (FICCI)

ARISE India efforts in 2022 were devoted to assisting the government during the COVID-19 waves, innovation challenges in DRR, the programme Drought Free India by 2030, support the MSMEs, and capacity development.

Regarding COVID-19 efforts, network member ActionAid Association continued their support and contacted eight million people through the second and third waves of COVID-19 and provided life-saving primary care, medicine, testing, counselling, referrals, helpline support, food and cash to cover essential needs for families experiencing hardship. Two innovative solutions developed by ARISE members in 2021 - the oxygen cylinders and a mobile hospital that can be used at the site of the disaster - expanded during the third wave in 2022.

Different innovation challenges took place:

1. The SARTHI Initiative 2022: to foster and promote innovative solutions for building resilience. The 10 shortlisted most relevant innovations, among the 175 received, participated at the GP2022. These innovations were shared within ARISE India members and adopted wherever applicable;

2. Gramothan 2022: RIKa, a member of ARISE India, co-organized an innovation challenge for transforming rural India Self-Reliant, in line with the government self-reliance campaign. Technology-oriented solutions included applications of evidence-based models and prototypes on infrastructure, systems, demography and demand. Cash prizes were given to encourage social entrepreneurship;

3. The Tech Emerge Resilience Challenge led by the Resilience Innovation Knowledge Academy, in collaboration with the Indian Institute of Technology, that started in 2021, continued. Seven innovators are implementing their technology-based solutions (AI, IoT, drones, digital low-tech Wi-Fi connectivity, radios) to enhance the DRR capacity of the communities and government in two states, Himachal Pradesh and Uttarakhand, with the potential of being scaled-up;

4. The Innovation Challenge for School Children on SDGs in partnership with SDG Chaupal and Collins India finished in 2022. The six-month programme aimed to educate youth on the SDGs. In March, the three most innovative projects were awarded, from among the twenty teams, each formed by five students from public and five from private schools.

ARISE India focuses on finding innovative solutions to battle floods and droughts. The company Excel Geomatics Private Limited developed a flood early-warning system, which provides a prediction of the scale, timing, location and likely damages of the flood. The Government of Tripura is using the system. The Drought Free India by 2030 programme, in cooperation and coordination with the government and other stakeholders, aims to support farmers. Global Vikas Trust (GVT), a member of ARISE India, developed a model to green the area. In 2022, more than 6,000 farmers switched to horticultural plants and 16 million trees on 9,000 acres were planted in 28 districts in the states of Maharashtra and Madhya Pradesh. Also, a Farmers Education Centre was constructed.

Regarding the support to MSMEs, the Quick Risk Evaluation App (by RIKA INDIA and ADPC), launched by UN Asia Pacific Office in 2020, experienced a large increase of users during 2022.

Among the capacity-development activities, FICCI organized a series of workshops and training on resilience in industrial infrastructure; earthquakes and fire safety; surveillance technology; and cyber-risk mitigation and management; and continued with the webinars on DRM related to the COVID-19 crisis.

Mr Brig (Dr) BK Khanna, CEO ARISE India, participated in various global events representing ARISE India: at the ARISE AGM, he presented ARISE India updates, including the announcement of the 2023 AGM in India; at the GP2022, he presented at the ARISE Constituency Session and at the conference *The importance of integrating resilience in environmental, social, and governance (ESG) investing – an ESG+R approach*. For the APMCDDR, ARISE India, Japan and the Philippines held a Private Sector Stakeholder Meeting.
**ARISE Egypt**
Network Leader: Egyptian Businessmen’s Association (EBA)

The Egypt network was launched in October 2021. The network participated at different UNDRR-ARISE global events in 2022: at the ARISE AGM; at the GP2022 participating at the ARISE Constituency Session and the Seventh Arab Partnership Meeting organized by UNDRR ROAS. This meeting aimed to showcase the importance of international solidarity and cooperation, address the MTR of the Sendai Framework stock-take, identify emerging issues, uncover context shifts, and build coherence with other frameworks, to better address the systemic nature of risk; at the launch of the Real Estate Resilience Tool which aims to assist with strategic decision-making that brings greater resilience in business operations and assets; and at COP27, at the Eighth Arab Partnership Meeting for DRR organized by UNDRR ROAS in cooperation with the Government of Morocco, creating a forum for technical and operational deliberations on the progress and challenges in the implementation of the Sendai Framework in the Arab region. Egypt has been the host for the COP27 in Sharm El-Sheikh Egypt from 7-18 December 2022.

**ARISE United Arab Emirates (UAE)**
Network Leader: International Real Estate Federation, Estmaraya Consulting and the CEO Club

Dr Al-Burai, Chair ARISE UAE and ARISE Board Member, participated in various global events including the ARISE AGM and the Seventh Arab Partnership Meeting. At the COP27, the network also participated in the Eighth Arab Partnership Meeting for DRR organized by UNDRR ROAS in cooperation with the Government of Morocco.

ARISE UAE, UNDRR and FIABCI launched the Real Estate Resilience Tool in November. The tool will assist with strategic decision-making that brings greater resilience in business operations and assets. Furthermore, it is considered an advocacy tool to achieve change in the real-estate sector, and its industry practices at various stages. A Real Estate Committee was established, and operates under the guidance of ARISE UAE. The committee brought together private-sector experts in the real-estate industry to support and facilitate the development of the Real-Estate Resilience Tool. Also, Mr Sujit Mohanty, Chief of UNDRR ROAS, presented the Real Estate Resilience Tool at the ARISE AGM.

**ARISE Argentina**
Network Leader: ILAPyC, INFOREST, SpaceSur, Comisión de Gestión de Riesgos del Colegio de Ingenieros Especialistas de Córdoba (ProCórdoba) and SANCOR Seguros

The Argentina network was formally launched in 2021. The efforts during 2022 focused on publicising the network and liaising with the government to contribute to the goals of the national DRR strategy. The president of ARISE Argentina participated in the launch of the VIII Regional Platform in October, where he introduced the network. ProCórdoba organized a virtual meeting in March to disseminate information on ARISE to companies from different sectors, to raise awareness about comprehensive disaster risk management (CDRM), DRR, and to increase membership. On the government side, ARISE participated in the launch of the National Plan for Adaptation to Climate Change in October and in the annual meeting of the Business Advisory Council (CCEGIRE in Spanish), of the National Emergency Management System (SINAGIR, in Spanish) in November. In both cases, ARISE Argentina presented the network’s priorities, challenges and work plan. The board of directors of ARISE Argentina met 13 times in 2022.

The main activities carried out and participated in by ARISE Argentina members include: the creation of the Argentine Network of Women and DRM, promoted by ILAPyC, which was presented at the VIII Regional Platform in Uruguay 2023; the submission of a report on an independent survey conducted by ILAPyC with REDULAC on the implementation of the Sendai Framework. State agencies, academia and civil society from 18 countries participated; the contribution on the update of the National DRR Plan 2018/23 through the Chamber of Transport of Hazardous Materials and Waste (CATAMP) and the development of a Manual on Social Perception of Disaster Risk by CIEC; and SpaceSur and ILAPyC participated in the ResilienceTech Challenge 2022 guiding a team of students and young professionals from the University of Palermo, Buenos Aires, jointly with the NGO Litro de Luz and I VOX from the US.

Projects and activities aligned with ARISE Focus Areas included: SMEs - (1) workshop on BCP and resilient investments organized...
In 2022, the focus of ARISE Canada has been on building interest in the network, reinvigorating the membership and continuing to identify key activities relevant to disaster resilience in Canada's private sector.

Key efforts in 2022 included:

1. ARISE Canada website and member engagement: addition of three new members, outreach to existing members to ensure network activity relevance, complete design and development of the new website and dedicated email address, collaborative development of ARISE Canada highlight articles demonstrating interface of activities with ARISE objectives;

2. Strengthened engagement with ARISE US: monthly meetings, membership on ARISE US working groups with cross-border relevance, attendance at the ARISE US Flood Management Symposium, consultative contributions to the development of the CAMS tool spearheaded by ARISE US, expert review and advice on the development of the SME for Cities Scorecard addendum led by ARISE US;

3. ARISE Global: led discussion and engagement with UNDRR and ARISE Global Board towards enabling registration of ARISE networks as formal business entities; in-person attendance at the ARISE AGM in Geneva; launched discussion on linkage of Sendai Framework objectives with the Task Force on Climate-Related Financial Disclosures, the world-leading disclosure framework for private-sector transparency on climate-related risks and opportunities;

4. Collaborative activities: completion of the CARICHAM Business Resilience Toolkit project and workshop series for the Caribbean region with funding from UNDRR and delivery by ARISE Canada member McAllister & Craig Disaster Management, and support and advisory for ARISE Mexico on developing their SME Resilience Assessment and educational material;

5. Initiated creation of the ARISE Canada Working Group on Indigenous Private Sector Disaster Resilience. The goal is to bring indigenous business perspectives on disaster resilience, identify opportunities for indigenous business to support community disaster resilience on and off reserve areas, and to ensure those ideas are shared across all ARISE networks and with UNDRR. UNDRR ROAMC Deputy Director has extended full support on the initiative. ARISE Canada is engaged in discussion with key indigenous business organizations and entities to ensure the working group launches with effective, self-determined voices at the table.

Lastly, projects and activities on EWS included:

1. Presentation at the ARISE AGM of the MHEWS technological risk-management platform that allows the development of online analysis and information easily shared via the web (by SpaceSur together with ILAPYCY and CELLTICK); (2) presentation at the UNDRR STAG-Americas call for good practices on EWS with focus on MHEWS, the EWS model for mountain rivers in Córdoba, developed by Carlos Catalini with support from ILAPYCY and (3) the presentation of a bill promoted by ILAPYCY before the Argentina Chamber of Deputies to bring the MHEWS technology to potentially affected population.

ARISE Canada
Network Leader: McAllister & Craig Disaster Management

ARISE Colombia
Network Leader: National Association of Entrepreneurs of Colombia (ANDI) | Colombian Safety Council (CCS)

ARISE Colombia efforts in 2022 focused on SMEs, insurance, DRM and developing the 2022-2024 network’s work plan. Projects and activities aligned with ARISE Focus Areas include:

SMEs – (1) results of the ARISE-TRANSFORM pilot project Strengthening disaster resilience in local spaces: The role of SMEs in the transformation of communities in partnership with ARISE Mexico and the University of Waterloo, highlighted sustainable practices of SMEs for resilience and business continuity; (2) the 55th Congress on Safety, Health and Environment organized by the Consejo Colombiano de Seguridad-CCS (ARISE focal point), June 29-July 1. Presentations included the guidelines on the importance of the private sector in DRM, the ARISE initiative and a presentation by Mr Nahuél Arenas, Deputy Head of UNDRR ROAMC on Crisis Management and BCP.

Insurance – the Forum: Financial protection, a challenge for DRM, was held in November, with the aim of informing the business sector about risk-transfer mechanisms and financial protection. The 65 participants included UNDRR, the National Unit for DRM, the Ministry of Finance, FASECOLDA (insurers’ union), Grupo SANCOR (ARISE Argentina). At the event, FASECOLDA’s made official its decision to join ARISE Colombia.
ARISE Colombia members participated as speakers in different DRM events: (1) Sixth International Symposium on technological accidents triggered by events of natural origin: a global look at natech risk management; held on 10-11 March. The 29 panellists from eight countries focused on the exchange of research experiences and lessons learnt in the risk management of technological accidents triggered by natural events (natech). More than 1,200 people from 42 different countries participated (202 in person, 1,033 online) and ARISE Colombia raised the importance of the private sector in the management of these kinds of risk; (2) the 10th Anniversary of the Law 1523 of 2012 of the National Policy of DRM (April 26), where the private sector is recognized as a key actor of the National DRM System (SNGRD in Spanish), contributing with important innovative solutions in DRM; (3) the bi-national event Transfer of experiences of Colombia in the incorporation of DRM in public-private agendas, May 3-4. ARISE Colombia shared experiences in the incorporation of DRM in the country’s sectoral agendas at the public and private levels, as a contribution to the guidelines and public policies for the government of the Dominican Republic.

ARISE Colombia also conducted activities in collaboration with other networks, such as the meeting with ARISE Chile (May 12) aiming to learn about work strategies and mechanisms of each network. The meeting defined sharing of information commitments of the self-assessment tool for DRM plans of public and private entities developed in Colombia and the self-assessment tool for exposure and vulnerability, and other proposals for MSMEs developed in Chile. Also, ARISE Colombia deepened the dialogue with UNDRR through a meeting with Mr. Nahuel Arenas, Deputy chief of UNDRR ROAMC (June 28). Some of the ideas discussed to better support the ARISE networks included: centralized communication from UNDRR to ARISE; financing to replicate DRM projects and the importance of collaboration between ARISE networks, among others.

ARISE Colombia secretariat had five meetings in 2022 to define the 2022-2024 National Work Plan. The plan is aligned with the ARISE KPIs and the national and international priorities in DRM for the private sector. The network has been participating in ARISE events, such as the Network Leaders Call (December) by presenting on strategies for network development, member engagement and strengthening work in the ARISE Focus Areas, by Adriana Solano, President of CCS (ARISE focal point).

ARISE Costa Rica
Network Leader: Alianza Empresarial para el Desarrollo (AED)

AED is the national focal point for ARISE Costa Rica and supports the dissemination of issues related to DRM, business resilience and BCP. AED is part of the National Commission for Risk Prevention and Emergency Response (CNE in Spanish), with the aim of enhancing the collaboration of the private sector in DRM at national level. In 2022, there were two meetings to review commitments of the different organizations and propose and implement activities to engage the private sector in DRM.

AED started developing an innovation space on adaptation and resilience, which includes a series of virtual and in-person sessions to learn about climate scenarios and risks, and tools to identify, evaluate, prevent and mitigate those risks. Some planned activities include: sharing success stories where companies integrate DRM plans, as well as exchanging challenges, strengths, and opportunities when planning for risk.

ARISE held two talks on DRM in 2022 that will be part of its above-mentioned innovation space. The first one on sustainable and resilient cities, to the company Deloitte (39 employees), and the second talk, on climate change risks and adaptation, targeted to a group of joint ventures (40 participants). The main project has been the use of the integral risk-management tool to support the management of hydrological risks in operating entities of drinking-water supply in the area of Los Santos (See Box 8).

Regarding investments, AED supported the definition of ESG criteria for the financial sector, for banks to be able to determine risks in their investment portfolio, and understand the measures that can be proposed for risk management, mitigation or adaptation.

ARISE Dominica
Network Leader: Dominica Association of Industry & Commerce (DAIC)

The network facilitated workshops and training to businesses on BCP, resilience and DRR: Business Climate Resilience HUB DRR Workshop (February 15 and 17), BCP Workshop for Haitian Entrepreneurs in Dominica (May 4), Virtual Private Sector Table Top Session for Disaster Preparedness (May 17), Taking Care of Business Show Post-COVID Business Growth (May), Financial Management Training for MSMEs (September), and BCP Workshop for MSMEs (November 29-30). During the last workshop DAIC collaborated with IsraAID Dominica and DRR professionals to provide assessments and coaching for the businesses. Additionally, the network has hosted other workshops for businesses, which included coaching sessions beyond the workshop to ensure the specific needs of the businesses are addressed.

One of the main highlights of 2022 was the BCP Support for Haitian Entrepreneurs. ARISE Dominica used the Business Resilience Toolkit resource provided by CARICHAM, and translated into Haitian Creole. This tool was used through a two-part workshop for entrepreneurs to increase their understanding of DRR and to develop plans (See Box 8).

ARISE Dominican Republic
Network Leader: Red Nacional de Apoyo Empresarial a la protección Ambiental (ECORED)

In March, the network officially welcomed two new members, Energas and CEPM, both companies from the energy sector. A representative from these two companies participated as a speaker at the ARISE Stakeholder Forum of the GP2022 Resilient communities, build back better, and investments into infrastructure. In March, the network, along with other six ARISE Central American networks, participated in the workshop Innovation of business models for disaster resilience and sustainability organized by INTEGRARSE (see Section Peer-to-
peer knowledge exchange and collaboration). Five companies from the network participated in the workshop. In September, ECODED was the host of the X1 edition of the regional conference on business sustainability Getting Converted 2022, organized by INTEGRARSE focused on DRM from the private sector. ECODED also devoted efforts on disseminating DRM issues through its website by writing notes on DRR in the aftermath of Hurricane Fiona and on MHEWS to commemorate the IDDRR or disseminating UNDRR webinars, such as the webinar Early warning and early action before every tsunami or Using CAMS to build resilience (see Box 4).

**ARISE El Salvador**  
**Network Leader:** Fundación Empresarial Para la Acción Social (FUNDEMAS)

FUNDEMAS is the national focal point for ARISE El Salvador. During the annual national sustainability and CSR week 2022, FUNDEMAS hosted workshops on climate change awareness and adaptation in addition to promoting business resilience. The theme this year was Global risks for companies, and 1,208 people registered. During the CSR Week 2022, FUNDEMAS partner company, DAVIVIENDA Sustainable Club developed, in coordination with the Biodiversity and Business programme of GIZ, a workshop about the role of biodiversity in business response to the climate crisis. There was also a practical component where companies made a diagnosis and completed the Innovation guide in business models for risk reduction of disasters. In December, ARISE, UNDRR, the Latin American and Caribbean Economic System (SELA) and the Central American Integration System for natural-disaster prevention (CEPREDENAC in Spanish) organized the Dialogue for the strengthening of PPPs in the integral management of disaster risk in Central America and the Dominican Republic, with the inclusion of social protection. Participants included the private sector and governments in the region and FUNDEMAS participated as a panelist. The event highlighted the key role of the private sector in DRM and climate action. FUNDEMAS continued with the working group Business Resilience and BCP with the aim of sharing knowledge about DRM and the development of business plans for DRR, and counted the participation of 19 partner companies.

One of the network’s members, Davivienda Seguros, through its green life-insurance product, and FUNDEMAS, have since 2019 been implementing a mangrove forest restoration programme in Barra de Santiago, Ahuachapán. The project is being developed in coordination with a local association led by women, generating local employment and increasing the production of ecosystem services typical of the mangrove forest. The programme currently has 6.2 hectares of mangrove forest in the process of restoration, planting more than 15,000 mangrove seedlings, water restoration and production of 40,000 mangrove seedlings in nurseries. The goal of the project includes restoring the ecosystem, protection against storms, reproduction of animal and plant species and CO2 fixation, among others. It directly benefits more than 180 families in the area.

**ARISE Grenada**  
**Network Leader:** Grenada Chamber of Industry & Commerce

The Grenada Chamber of Industry & Commerce disseminates CARICHAM and ARISE tools for business to tackle some of both the natural and man-made disasters Grenada faces. The Chamber provides training on BCP and readiness strategies for disasters. The BCP training targets companies’ management and staff to support them in creating a BCP, and increasing awareness on how businesses can use a simple method to have a big impact on their operations’ success and continuation.

The Grenada Chamber hosted the three-day meeting Integrating Private Sector on MHEWS Governance and Actions, organized by CARICHAM, with the support of UNDRR and the CDB, from 21-23 November.

**ARISE Guatemala**  
**Network Leader:** CentraRSE

CentraRSE is the national focal point for ARISE Guatemala. In 2022, CentraRSE held different workshops and fora on DRM and disseminated DRM through newsletters, the website and social networks.

Two of the DRM workshops focused on business plans for BCP and two on incorporating DRM in the business value chain. The business forum XV National Forum for Business Transformation aimed to strengthen risk management in businesses. Each event had more than 200 participants. CentraRSE engaged in the flagship programme Views from the Frontline, which aims to increase the inclusion of communities in DRR and climate change adaptation around the world. Twelve organizations from all sectors in Guatemala have joined this programme.

CentraRSE held a forum focused on DRM in the context of COVID-19, targeting three remote rural regions (south, west and central). CentraRSE used its sustainable-dialogue methodology along with the comprehensive risk-management methodologies developed to conduct the forum. The forum aimed to train community leaders on how to discuss and negotiate the needs of their community, and create PPPs. Participants included more than 150 people in each region and more than 40 community leaders were trained. Fifteen companies committed to continuing to work in these rural regions.

The network along with six ARISE Central American networks participated in the workshop Innovation of business models for disaster resilience and sustainability organized by INTEGRARSE and UNDRR ROAMC (see Section Peer-to-peer knowledge exchange).

CentraRSE carries out a permanent DRR and DRM awareness campaigns through newsletters, website and social networks. Some of the videos they have developed include risk management in case of earthquakes or business risk management in case of a health emergency, among others.
ARISE Honduras
Network Leader: Fundación Hondureña de Responsabilidad Social Empresarial (FUNDahrse)

FUNDahrse is the national focal point for ARISE Honduras and prioritizes the issue of DRR in the corporate social responsibility (CSR) and sustainability agenda of companies by organizing capacity-development activities on prevention, DRM business plans and BCP.

In March, ARISE Honduras, along with other six ARISE Central American networks, participated in the workshop *Innovation of business models for disaster resilience and sustainability* organized by INTEGRARSE with the support of UNDRR ROAMC (see Section Peer-to-peer knowledge exchange, collaboration). Following this workshop, one of the participant companies, DIUNSA, was chosen to participate in a project financed by the GIZ Green Recovery project, which aims to strengthen the value chain of 24 companies in the region. During the project *Intensifying climate action for business continuity focus on business resilience and green recovery*, four SMEs suppliers of DIUNSA will be trained in 2023 in topics such as risk awareness, financial and environmental sustainability, innovation, prevention or recovery planning. In July, FUNDahrse organized a three-day-course focusing on the development of business plans in DRM to 35 participants from 30 companies.

FUNDahrse has increased the visibility of ARISE both in its website – including an ARISE section - and in its social networks. Also, FUNDahrse has linked the emergency committee site to the Central American Integration System for natural-disaster prevention (CEPREDENAC) climate-monitoring centre to keep companies informed about weather conditions. Lastly, FUNDahrse emergency committee developed a humanitarian aid platform to provide aid to vulnerable groups in the event of human or climate-related disasters. The platform offers different aid channels: donation in kind or monetary donations, and also receives requests for help from hospitals, foundations, institutions or communities.

ARISE Mexico
Network Leader: Centro Nacional de Apoyo para Contingencias Epidemiológicas y Desastres (CenacEd)

The efforts during 2022 focused on establishing and promoting the four ARISE Mexico Working Groups (WG) aligned with the ARISE Focus Areas and consolidating the collaboration of the network with the government, NGOs, private sector and UN Offices in Mexico.

In September, the launch event of the ARISE Mexico WG was held, to disseminate the objective and progress of the WG. Also, the network and the National Coordination Civil Protection signed a voluntary cooperation agreement. Participants in the event included representatives of the private sector, federal government, UN organizations, foreign and national chambers and NGOs. The event was published in 27 Mexican digital media and the UNDRR website and it received wide interest on social media - 2,600 views as of December 2022. The WG were established based on the strategy of ARISE with the aim of promoting action and sharing good practices aligned with the SDGs and the Sendai Framework. The WG, led by network members, are designed on the World Bank methodology to serve as platforms for co-creation and multisectoral cooperation for each area. As a follow-up event, in November, ARISE Mexico and the Communication Council held a webinar DRR Ensures Business Security: ARISE Mexico, to raise awareness of the importance of the private sector working on DRR. The webinar had the participation of the four leaders of the WG and was moderated by Elisa Trujillo, General Director of ARISE Mexico.

In December, CENACED and ARISE Mexico organized an event *Christmas United for Them 2022*, to celebrate the platform United for Them. Seventy people participated, including representatives of chambers, companies, government agencies, civil-society organizations and cooperation agencies. It aimed to present the working model of the initiative, the digital content of the platform, the creation of an emergency response and attention protocol and the progress made by communities. Further information about the platform has been highlighted earlier in this report.

ARISE Panama
Network Leader: Sumarse

ARISE Panama was launched in April 2021, and Sumarse is the national focal point of the network. Projects and activities are aligned mostly with the SMEs and insurance focus areas. SMEs – the organization of the *Programme for the strengthening SMEs business strategies*, which aimed to provide SMEs with the tools to create new sustainable business models. During the eight-session programme over four months, participants learnt to carry out a ‘canvas’ of their business model, mapping stakeholders and including DRM. As a result, companies developed a *Toolbox for Strengthening Business Strategy for SMES* and nine companies delivered their business-model canvases. In March, Sumarse, along with other six ARISE Central American networks, participated in the workshop *Innovation of business models for disaster resilience and sustainability* organized by INTEGRARSE (see Section Peer-to-peer knowledge exchange, collaboration). Insurance - Protocol of responsible business conduct for the insurance financial sector in Costa Rica and Panama. This protocol was developed in the framework of the CERALC project. It aims to incorporate RRBC and ESG factors in the business strategies and management of the insurance sector. Further information about the protocol has been highlighted earlier in this report.

ARISE US
Network Leader: Peter Williams Solutions LLC, Resilient City LLC, Climate Resilience Consulting, Debora A.K. Johnson LLC

In 2022, ARISE US increased its membership by 35 per cent, launched its website and launched multiple initiatives and projects.

Projects and activities aligned with ARISE Focus Areas include:
- SMES – *SME Scorecard*, which allows cities to assess how effectively they engage SMEs in DRR efforts. Scorecard has piloted in 35 US cities, fully developed digital and hard-copy versions and has been released globally, along with a website for capturing data. *Infrastructure* – (1) City Scorecard Action Guide: to help Scorecard users decide how to move forward, filling a gap reported by users. Version 1.0 was completed with
chapters on: Summary of fact-finding survey, prioritization, financing, community engagement, communication of risk. Version 1.0 of the Standards Compendium was also completed; (2) Community Wildfire Risk Reduction Toolkit: this toolkit includes multiple sources of data and advice to create a single point of access for communities seeking to understand, mitigate and manage their wildfire risk at the individual property, neighbourhood and landscape scales. The first draft of wildfire-specific version of the City Scorecard has been completed and available for comment and beta test; several action guide chapters are being adapted to form part of the toolkit; (3) CAMS (See Box 4) open-source software tool to enable cities to make an inventory of critical assets and map relationships between them to manage the risk of cascading failures. MVP has been created and is available for use; the system and documentation is available in Spanish and the code has been placed in public domain on Github. Pilot testing (Santa Ana, Costa Rica and Dominica) will be conducted in 2023; (4) Food System Resilience Addendum to City Scorecard, to measure the resilience of communities’ food supply chains and delivery methods, and the integration of food considerations with DRR. Five US locations were piloted in project funded by USDA – Charleston SC, Fargo, ND, Montgomery AL, St Louis MO, Waco TX. The draft was finalized with UN FAO and UNDRR.

ARISE US also launched a series of symposia (i) Flood Symposium (February) with the aim of exploring policy and technology innovations for better flood-risk reduction; (ii) Equity Symposium (July) highlighted and explored the need for equity in DRR, and strategies for achieving it. ARISE US formulated an equity statement; (iii) Insurance Innovation Symposium (December) to explore what is required for beneficial innovations in the insurance industry to receive widespread promulgation by the industry and take-up by customers.

Individual ARISE member highlights in 2022

AI Systems Research Ltda (AISR) – Brazil

The main activities and projects of 2022 conducted by AISR, that will continue in 2023, are the following:

1. Local Resilience Plan Web Tool: development of the new version of the free web tool that supports cities’ transition from the implementation of the Scorecard/DRE to the elaboration of the Local Resilience Plan through a template that integrates the Global Development Agenda;

2. ESG+R & UN Coherence Living Lab aims to make cities smarter and more resilient by supporting the development and implementation of integrated strategies and planning, including ESG+R and the UN Coherence concept in an all-of-society approach. The building resilience guidance applied in Campinas that led to winning of the Sasakawa Award is used as the baseline to integrate the Global Development Agenda and other initiatives (ESG+R, PRI, MCR2030, among others) resulting in a Local Sustainability and Resilience Plan and in a quarterly Impact Report;

3. Resilience and DRR in Sustainable Debt Capital Markets: in partnership with issuers and investors, AISR has developed a document that provides guidance on how to integrate resilience and DRR into sustainable debt capital markets through existing labelled bond structures and a Resilience Annex;

4. DRR, Resilience to Urban Risks and Collaboration with Stakeholders: partnerships with local governments and stakeholders to reduce urban risks through an all-of-society approach.
In 2022, RESALLIENCE has engaged with ARISE in advocacy activities to accelerate climate change adaptation strategies and policies; to strengthen international cooperation and to implement normative frameworks to help private sector achieve resilient investments, infrastructure and projects.

Other activities with ARISE included:
(1) participation in a MCR2030-ARISE-UNDRR webinar (See Box 4): Private sector partnership for improving cities’ climate-resilient infrastructure and enhancing business resilience where RESALLIENCE presented the Resilience Performance Assessment (RPA) tool applied to cities;
(2) in-person attendance to the ARISE AGM;
(3) UNDRR 2nd Global Meeting of Regional STAG: presentation of the RPA tool.

RESALLIENCE has continued to expand the use of the RPA, a decision-making tool that provides a holistic approach, combining visualization through a digital platform of current and future climate change impacts such as hazards, and a dashboard to assess the vulnerability scores of future and existing assets. This tool allows the formulation of recommendations and a costs-benefits assessment to estimate the resilience performance of each project or policy aiming at improving the resilience of cities. In 2022, there are 14 projects using RPA in different countries, including France, for resilience of buildings, transport and logistics, water-management and telecommunications infrastructures; Morocco and Romania for an urban-resilience strategy for public and private sector in two provinces; Kazakhstan to quantify the resilience of industrial facilities to erosion and sand-dune movement and two projects in partnership with the IFC, Barbados for investments projects on critical infrastructure and the Philippines for resilience of a resort destroyed by a hurricane.

BJD Reinsurance Consulting, LLC – USA & Europe
BJD Reinsurance Consulting, a global risk-financing and strategy-management company, has engaged with UNDRR and ARISE in advocating for reducing risk exposures to large-scale disasters and closing the insurance-protection gaps. In 2022, Mr. Bogdan J. Dumitrescu, Founder and CEO, attended and made contributions at the following events: Partnership Forum and the 60th Commission for Social Development, at United Nations Headquarters in NY (February); the UN Ocean Conference in Lisbon (June); the French National Conference on Natural Hazards in Strasbourg (October); the Paris Peace Forum (November) and the 11th Session Business and Human Rights, organized by UNOG in Geneva (December).
Mr Dumitrescu also attended the ARISE AGM in person and participated in the discussion. For 2023, the firm will dedicate efforts to raising attention on the Romanian Nat Cat insurance system, implemented in 2010 through a mandatory insurance policy that covers homeowners for earthquake, flood and landslide risks. Only 20 per cent of national coverage has been reached over a decade. To recover the sums unpaid for the last decade, action needs to be taken through mayors, the last actors in the implementation of the laws and regulations.
### Annex

## Key ARISE events of 2022

### GLOBAL

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>29-31 March</td>
<td>GLOBE Forum 2022: Session on Investing in Resilient Infrastructure</td>
</tr>
<tr>
<td>12 April</td>
<td>MCR2030-ARISE-UNDRR Webinar Preventing cascading failures of critical assets: Using the open-source Critical Asset Management System (CAMS)</td>
</tr>
<tr>
<td>23-28 May</td>
<td>The 7th Session of the Global Platform for Disaster Risk Reduction (GP2022)</td>
</tr>
<tr>
<td>7 September</td>
<td>MCR2030-ARISE-UNDRR Webinar Private sector partnership for improving city's climate resilient infrastructure and enhancing business resilience</td>
</tr>
</tbody>
</table>

### INTERNAL GLOBAL ARISE MEETINGS

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 April</td>
<td>Network Leaders Meeting (first)</td>
</tr>
<tr>
<td>27 July</td>
<td>Board Meeting (first)</td>
</tr>
<tr>
<td>10-11 October</td>
<td>Annual General Meeting</td>
</tr>
<tr>
<td>11 October</td>
<td>Board Meeting (during AGM) (second)</td>
</tr>
<tr>
<td>21 November</td>
<td>Board Meeting (third)</td>
</tr>
<tr>
<td>12 December</td>
<td>Network Leaders Meeting (second)</td>
</tr>
</tbody>
</table>

### REGIONAL

#### Africa

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly</td>
<td>Virtual knowledge sharing and learning sessions to discuss DRR issues including upcoming national, sub-regional, regional and international events</td>
</tr>
</tbody>
</table>
| 22 June       | Ms. Nana Amoah, CORAF Senior Advisor was elected to represent ARISE in the UNFCCC CRFS Alliance Leadership Group:  
1. First LG meeting (July 13)  
2. Second LG meeting (October 11)  
3. Third LG Meeting (December 7) |
| 30 November   | Consultative meeting - Kenya/East Africa ARISE network pilot project, in partnership with The UPS Foundation. |

#### Arab States

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 November</td>
<td>ARISE UAE, UNDRR and FIABCI launched the Real Estate Resilience Tool</td>
</tr>
<tr>
<td>Americas and the Caribbean</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>20 May</strong></td>
<td></td>
</tr>
<tr>
<td>INTEGRARSE workshop Innovation of business models for disaster resilience and sustainability</td>
<td></td>
</tr>
<tr>
<td><strong>7 September</strong></td>
<td></td>
</tr>
<tr>
<td>Launch event of the ARISE Mexico Working Groups</td>
<td></td>
</tr>
<tr>
<td><strong>September</strong></td>
<td></td>
</tr>
<tr>
<td>XI edition of the regional conference on business sustainability Getting Converted 2022, organized by INTEGRARSE, hosted by ECORED (ARISE Dominican Republic)</td>
<td></td>
</tr>
<tr>
<td><strong>16 November</strong></td>
<td></td>
</tr>
<tr>
<td>Forum: Financial Protection, a challenge for DRM (ARISE Colombia)</td>
<td></td>
</tr>
<tr>
<td><strong>29 November</strong></td>
<td></td>
</tr>
<tr>
<td>Webinar Disaster Risk Reduction Ensures Business Security: ARISE Mexico</td>
<td></td>
</tr>
<tr>
<td><strong>21-23 November</strong></td>
<td></td>
</tr>
<tr>
<td>Integrating Private Sector on MHEWS Governance and Actions, organized by CARICHAM, with the support of UNDRR and the CDB.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Asia and Pacific</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>22 February</strong></td>
</tr>
<tr>
<td>ARISE Japan and Philippines Knowledge Sharing Session, Part 2- Resilient Infrastructure</td>
</tr>
<tr>
<td><strong>2 March</strong></td>
</tr>
<tr>
<td>ARISE Japan’s Annual Symposium focused on Creating disaster resilient communities by ‘going local’ in DRR</td>
</tr>
<tr>
<td><strong>23 March</strong></td>
</tr>
<tr>
<td>2022 Philippines National Resilience Council Colloquium</td>
</tr>
<tr>
<td><strong>22 July</strong></td>
</tr>
<tr>
<td>ARISE Japan and Philippines Knowledge Sharing Session Part 3- Insurance</td>
</tr>
<tr>
<td><strong>19 – 22 September</strong></td>
</tr>
<tr>
<td>Asia-Pacific Ministerial Conference on Disaster Risk Reduction (APMCDRR)</td>
</tr>
<tr>
<td><strong>October</strong></td>
</tr>
<tr>
<td>Webinar: The Importance of Insurance Vis-a-Vis Climate Change, ARISE Philippines and PIRA, Inc.</td>
</tr>
<tr>
<td><strong>25 November</strong></td>
</tr>
<tr>
<td>ARISE Japan and Philippines Knowledge Sharing Session Part 4- Investment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>25-27 October</strong></td>
</tr>
<tr>
<td>Investing in DRR in South Eastern Europe (SEE), UNDRR in partnership with the Civil Protection Directorate (Ministry of Interior of Croatia) and the Disaster Preparedness and Prevention Initiative for South-Eastern Europe</td>
</tr>
</tbody>
</table>