Towards an enabling environment for coherent implementation





A. Introduction

Chapters 1 and 2 describe hazards, exposure and risks in the region, and the progress made by States in managing these risks according to the Sendai Framework, which includes a broad hazard and risk scope, including cascading and systemic risks across natural, environmental, health, financial, economic and social systems. Chapter 3 reviews efforts and opportunities for coherence and integration across the SDGs, Paris Agreement and Sendai Framework to efficiently and safely address traditional and emerging systemic risks. Chapter 4 examines the structural drivers of vulnerability to and impacts of climate change and disaster risk to identify priority vulnerable groups in order to meet the new humanitarian agenda goal of leaving no one behind and reaching the furthest behind first.⁵⁵⁷ Chapters 5, 6 and 7 look at the broader contextualized background of socioeconomic development challenges in the region against which risk reduction, CCA and sustainable development efforts are taking place. They address risk reduction in urban settings against emerging trends, risk reduction in conflict and fragile settings and the food security risks emerging under growing water scarcity.

⁵⁵⁷ United Nations, General Assembly, 2016b.



This chapter considers Sendai target E (DRR strategies at national and local levels) as the starting point to address the challenges to achieving the 2030 goals on reducing disaster mortality, affected people, direct economic losses, damage to infrastructure and disruption to basic services. It reviews regional practices and challenges encountered in creating an enabling environment for coherent and integrated risk governance at national and local levels. It considers regional efforts supporting enabling environments, including institutions and initiatives for risk information, technology and data sharing. It then reviews the main practices for creating national enabling environments, namely through legal and institutional frameworks, people-centred approaches, technology and data sharing, and incentives for investment and mainstreaming with sustainable development and climate change planning. Challenges and opportunities for creating enabling environments at local level are presented, along with a discussion on entry points for an enabling environment in conflict settings.

B. Regional enabling environment for integrated risk reduction

The systemic nature of the hazards and risks prevailing in the Arab region necessitates strong coordination at different levels, scales and sectors to promote cooperation while ensuring policy coherence to address challenges. These include the allocation and efficient use of resources for generating disaggregated vulnerability and risk data, monitoring implementation across all agendas and reducing risks from cross-boundary hazards.

The ASDRR 2030 was developed within the construct of this regional cooperation and approved during the 2018 Arab League Summit.⁵⁵⁸ The strategy, which is aligned with the Sendai Framework and SDGs, proposes a multisectoral approach to reduce disaster risks in the region. It provides a framework to foster progress in the agreed areas of implementation and to produce a detailed work programme in three phases until 2030. A priority action plan setting the objectives, with deadlines, has been drawn up for the period 2019–2020. The plan was adopted as an outcome document of the Africa-Arab Platform 2018,⁵⁵⁹ with progress over the past two years. An evaluation will inform the 2021–2024 prioritized action plan that will be endorsed at the Fifth Arab Regional Platform for DRR in the last quarter of 2021.

The League of Arab States coordinates actions to implement the regional strategy. Within its technical organizations, it integrates DRR measures in technical assistance projects and programmes across the Arab States. It supports actions to mainstream DRR across sectors and to strengthen coherence between the three international agendas of sustainable development, climate change and DRR (box 8.1).

Box 8.1 Global best practices and regional initiatives for aligning international agendas for disaster risk reduction, sustainable development and climate change

The intergovernmental group established by the United Nations General Assembly to look at developing indicators for measuring progress in implementing the Sendai Framework,^a drawing on lessons learned and good practices, listed issues for countries to consider when seeking alignment between DRR, sustainable development and CCA. These include: (i) shared understanding of goals, processes and stakeholders specific to each programme; (ii) building consensus around priority objectives, mechanisms and organizations to be set up, with precise mandates, missions, responsibilities and plans of actions, including financial and human resources; (iii) establishing a joint intersectoral monitoring system; and (iv) identifying and implementing approaches supporting the joint objectives of DRR. At the regional level, the League of Arab States, working with its partners, is implementing several measures to promote this coherence, including:



558 UNDRR, 2018a.



⁵⁵⁹ UNDRR, "Africa-Arab Platform on Disaster Risk Reduction", 9-13 October 2018, Tunisia.

- (i) Regional Initiative for the Assessment of Climate Change Impacts on Water Resources and Socio-Economic Vulnerability in the Arab Region, or RICCAR,^b whose results/databases are used to prioritize activities and guide investments in national development plans, according to an integrated DRR and CCA approach. Work continues, with new regional climate modelling projections expected during the second quarter of 2021.
- (ii) AGIR fills gaps in information, analysis and monitoring of risks, vulnerabilities and exposure related to climate change and natural hazards to support decision-making in the region. Its first report in 2019, Geographic Information towards Building Resilience in the Arab Region (Water, Food and Social Vulnerability Nexus), addressed a range of topics focused on climate change as a challenge in managing and mitigating risks.
- (iii) The SDG-Climate Nexus Facility (2019–2023) strengthens resilience to risks by supporting countries in integrating climate measures into their broader actions for sustainable development. Emphasis is placed on creating and implementing innovative financing instruments and relevant partnerships, in particular to achieve SDG 13.
- a United Nations, General Assembly, 2016a.
- b UNESCWA and others, 2017a.

During the COVID-19 crisis, regional discrepancies have been observed in institutional capacity, resources, responses and technology use. Further, there has been limited coordination among governments. It is envisaged that strengthened cooperation and coordination mechanisms in the response to potential future pandemics would help address this gap.

Regional platforms and commitments for integrated risk reduction

Regional platforms are recognized as an essential element in creating an enabling environment and opportunities for collaboration. Supported by UNDRR, they play an important role in raising awareness, sharing information, cooperation and capacity-building in DRR actions. Regional platforms for DRR evolved steadily between 2005 and 2015, and their role is confirmed within the Sendai Framework. By producing and approving regional strategies and plans, and becoming politically involved with regional intergovernmental organizations, they provide a key opportunity to tackle transboundary issues. States, through the Sharm el-Sheikh Declaration on DRR in 2014,⁵⁶⁰ committed to developing national financial mechanisms to reduce disasters and cope with their impact across all sectors and local authorities while mobilizing private sector resources.

The UNDRR-ROAS co-organized, in collaboration with the League of Arab States, African Union Commission, and UNDRR Regional Office for Africa, the 2018 Africa-Arab Platform on DRR in Tunis, the first to bring together two major regions facing common challenges of drought, refugees and migration. As well as adopting the Tunis Declaration on DRR, the platform provided an opportunity to develop a joint communiqué for strengthening Africa-Arab collaboration and deliver a set of voluntary action statements from stakeholder groups in the Arab region,⁵⁶¹ namely the Arab DRR Children and Youth Group, Arab DRR Civil Society Group, Arab Gender Equality and Women's Empowerment Group, Arab Scientific and Technical Advisory Group (STAG) and Arab Red Cross and Red Crescent Societies. UNDRR also announced its commitment to the Prioritized Action Plan 2019–2020 to implement the Sendai priorities. This included:

- Support implementation of Arab DRR strategy and its programme of work.
- Strengthen coordination mechanisms between Arab States for DRR.
- Strengthen DRR integration with sustainable development and climate change through partnerships with multiple stakeholders, including the League of Arab States, United Nations Sustainable Development Group, the Regional Coordination Mechanism and SDG-Climate Facility.
- Strengthen stakeholder engagement based on principles of inclusiveness and shared responsibility.
- Support the development of national strategies, local action plans and Sendai monitoring.
- Support national loss accounting and risk assessment systems.

⁵⁶¹ International Federation of Red Cross and Red Crescent Societies Declaration Africa-Arab Platform on Disaster Risk Reduction, Tunis, 2018.



⁵⁶⁰ UNDRR, 2014.

UNDRR ROAS organized Arab DRR Partnership meetings⁵⁶² with key stakeholders engaged in DRR to expedite implementation of the Sendai Framework. The fourth Arab Partnership Meeting, in December 2019, brought together representatives from a range of stakeholder groups engaged in DRR, including the private sector, civil society, the media, women, young people, academia, NGOs and United Nations agencies. The two-day meeting in Cairo focused on stakeholder engagement and progress in voluntary action, and deliberated on challenges and the way forward. Coherence between the SDGs, CCA and DRR was also emphasized. The voluntary commitments and activities of stakeholder groups include:

- Gender Equality and Women's Empowerment Voluntary Stakeholder Group on DRR, Climate Change and Migration (GEWE) addresses issues related to climate change, migration and gender in a coherent framework. This incorporates the Paris Declaration, the global compact for migration, the Convention on the Elimination of All Forms of Discrimination against Women, the SDGs and DRR actions (box 8.2).
- STAG provides scientific information and technical advice. It coordinates the strategic engagement of science, research and technology communities with decision-makers to increase regional resilience and strengthen regional and national DRR programmes to support sustainable development. The Arab STAG's voluntary action statement comprises actions on both a long- and short-term basis (box 8.3).
- DRR working group of the United Nations Major Group for Children and Youth in the region (UNMGCY) acts as an engagement mechanism for children and youth in the implementation, follow-up and review of the Sendai Framework (box 8.4).
- Red Cross Red Crescent (RC/RC) National Societies Stakeholder Group reinforces the RC/RC approach to community
 resilience by bridging development and humanitarian work using common insights and approaches that integrate
 DRR and CCA strategies (box 8.5).
- Arab Civil Society group provides consistent guidance and advice on the coherent implementation of the post-2015 frameworks (box 8.6).

Box 8.2 Gender Equality and Women's Empowerment Voluntary Stakeholder Group

Through advocacy with Arab governments, GEWE seeks more women in decision-making roles in national and local strategy development and management processes. Their enhanced presence will better help identify women's knowledge, needs and priorities in DRR, climate change and migration, effectively reducing disaster risks while leaving no one behind. Arab women remain underrepresented in the workforce and at all levels of decision-making. Identifying and removing obstacles to their social, economic and political participation, including in DRR, is a priority to achieve SDG 5.^a GEWE guidelines are in tandem with the Hanoi Recommendations for action, reported in GAR19, on implementing the Sendai Framework to promote gender equality. They include: (i) better understand risk by updated national and local statistics, broken down by sex, age and disability; (ii) enact laws that prescribe women's participation and leadership in decision-making and create mechanisms to ensure effective implementation; and (iii) implement security and protection interventions led by women to reduce current risks and prevent new risks resulting from gender-based discrimination and violence. GEWE is co-chaired by UN Women and the AWC.

a https://sdgs.un.org/goals/goal5.

Box 8.3 Arab STAG Voluntary Action Statement to the Africa-Arab Platform on DRR

The short-term actions of Arab STAG, outlined in its voluntary action statement at the Africa-Arab Platform on DRR, include developing a status report on science and technology for DRR in the region, organizing the Arab science-policy dialogue focusing on DRR, engaging with the global STAG, supporting sustainable development in the context of climate change, developing a network of science institutions and preparing a roster of DRR experts. The long-term programme includes plans to engage governments in increasing public and private sector



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⁵⁶² UNDRR, "The Arab Partnership Meeting for Disaster Risk Reduction", 22-23 April 2018.

investment in DRR science and technology, prepare guidance to introduce science and technology in sectoral planning, and promote DRR research and innovation in higher education through regional organizations.

Since the statement, the Arab STAG, which is chaired by the CNRS in Lebanon, has taken part in a number of expert groups and programmes on DRR, such as the GRAF,^a UNDRR Integrated Research on Disaster Risk programme (IRDR) and UNDRR/ISC expert review group,^b UNDRR/ISC Sendai Hazard Definition and Classification Review Technical Report, and the regional atlas on natural risks in Arab countries piloted by UNESCO.^c It has co-organized workshops and technical courses, and is planning the first Arab regional conference on the science and technology policy interface in DRR. A master's degree programme in DRR to build expertise at sectoral and local levels is also being finalized, to expedite implementation and monitoring of DRR strategies and action plans.

a Global Risk Assessment Framework. Available at https://www.preventionweb.net/disaster-risk/graf.

- b Sendai Hazard Definitions and Classification Review. Available at https://council.science/sendai-hazard-review.
- c Presented as an instrument for the resilience and adaptation of socioecological systems on a regional scale.

Box 8.4 The Arab United Nations Major Group for Children and Youth Voluntary Action Statement

The UNMGCY is an open constituency for all young people, designed to show that they are not only part of vulnerable groups but also of the solution, driving the behavioural change required to build resilient and sustainable societies.

The Arab UNMGCY has committed to actions in support of the implementation of the ASDRR2030 and Sendai Framework. These include: (i) facilitating DRR awareness campaigns, and mobilizing the growing network of Arab children and youth for DRR; (ii) providing children and youth with access to an easy-tounderstand knowledge on DRR and the Sendai Framework, and on emerging disaster trends, impacts of climate change and risks in the region; (iii) facilitating an online and offline interprofessional regional and global dialogue among young DRR experts on evidence-based best practices and emerging trends; (iv) facilitating online and in-person development and progress reports of youth-led action plans on local DRR actions; (v) facilitating children and youth-led monitoring, evaluation and reporting on the Sendai Framework; and (vi) facilitating participation of youth as equal stakeholders in the region's formal and informal avenues of DRR policy design, implementation, monitoring and review.

Box 8.5 Arab Red Cross Red Crescent National Societies Stakeholder Group

The Red Cross Red Crescent National Societies Stakeholder Group, along with the International Federation of Red Cross Red Crescent Societies (IFRC), build community resilience on the understanding that vulnerability to disasters, crises and shocks is often determined less by the scale of a hazard and more by underlying vulnerability caused by a set of interrelated risks.

In its Statement of Voluntary Commitments to the Africa-Arab Platform on DRR, the IFRC commits to working with the 16 national Red Cross and Red Crescent Societies in the Arab region, including on the following actions: (i) putting IFRC Framework for Community Resilience into operation by implementing the IFRC Road to Resilience (R2R) guide in at least five countries, ensuring every community living in a high-risk area has the capacity to reduce risk, prepare and respond to disasters, promote inclusion and mainstream gender, and strengthen volunteer/community-based networks, communities and the role of women as a force in local resilience building; (ii) scaling up support to community-led action and volunteering to contribute to resilience building; (iii) advocating institutionalization of integrated multisectoral community resilience approaches in local risk reduction policies, planning and programmes, and strengthening community and local government for DRR,



prevent new risks and make communities safer; (iv) advocating enhancement and consolidation of a culture of safety and resilience that is action-oriented and respects local realities, cultures and ancestral practices, contributing to a better understanding of risk and generating action to reduce vulnerability; (v) prioritizing actions based on the needs of those living at high risk or belonging to traditionally excluded groups, particularly migrant populations, those affected by the impact of climate change or living in areas that are geographically remote and affected by insecurity and conflict; (vi) joining forces with local and national authorities to develop local risk management and promote an approach based on community resilience and sustainability; and (vii) strengthening collaboration and coordination with CSOs and their respective national and local governments.

Box 8.6 Arab Civil Society Voluntary Action Statement

The Arab CSO group has formed a partnership with the League of Arab States to emphasize the role of civil society in developing and implementing the ASDRR and national DRR strategies. It has also partnered with the Global Network of Civil Society Organisations for Disaster Reduction (GNDR) to promote coherent action at national, regional and international levels. Work is under way to integrate DRR into the activities of member CSOs in ongoing projects on climate change, water, gender and youth.

In its voluntary action statement, the Arab CSO group committed to: (i) increase awareness and advocacy of DRR by improving public and private understanding of the Sendai Framework and concepts of DRR; (ii) encourage coordination and forge partnerships at local, national, regional and international levels; (iii) promote integration of DRR concepts in sustainable development and the 17 global goals, including in education, health and housing, and development in general, to ensure no one is left behind; (iv) build capacity to identify, monitor and assess disaster risks; and (v) build society resilience through knowledge, advocacy, research and training.

The annual Arab Forum for Sustainable Development (AFSD) is the primary regional mechanism for following up implementation of the 2030 Agenda. Convened by ESCWA in cooperation with the United Nations system, it brings together high-level representatives of ministries, planning and review bodies, parliamentarians, regional and international institutions, CSOs, the private sector, academic and research centres, and the media. The AFSD formally delivers the views of the region to the High-level Political Forum on Sustainable Development⁵⁶³ held annually in New York. Its report sets out the key messages from regional dialogue on the opportunities and challenges of implementing the 2030 Agenda, and reports progress on key priorities.

The Arab Forum for Environment and Development (AFED) has helped enable conditions for achieving the SDGs in the region, beyond capacity-building.⁵⁶⁴ Its 2018 report prioritized the need for reform of current institutional arrangements at regional and national levels, with High Councils for Sustainable Development (HCSD) recommended to ensure integrated policy formulation, adequate cooperation and coordination between government entities, and between government and other stakeholders. Such councils would also assess the implementation of proposed strategies, propose corrective measures and ensure adequate communication between stakeholders, including governments, the private sector, civil society, and gender and youth organizations. The councils are not yet fully operational, with insufficient funding and institutional support from stakeholders being a key stumbling block.

Recognizing the challenges, the League of Arab States, UNDRR and other agencies are strengthening regional cooperation and coordination towards achieving sustainable development, CCA and DRR to build sustainable cities and communities that leave no one behind.

⁵⁶³ United Nations, Department of Economic and Social Affairs, Sustainable Development Goals, "High-level Political Forum 2021 under the Auspices of ECOSOC". Available at https://sustainabledevelopment.un.org/hlpf/2021 (accessed on 11 March 2021).



⁵⁶⁴ AFED, 2018.

C. National enabling environment for integrated risk reduction

1. Legal and institutional arrangements for disaster risk reduction and sustainable development

The Sendai Framework identifies that the multisectoral, multi-stakeholder aspect of DRR governance stems from the fact that DRR mandates cut across sectoral laws not generally treated as risk management and risk reduction frameworks. These include building codes, environmental protection, land-use planning, water and waste management and ecosystem protection. For risk governance to reduce existing risk, prevent cascading risk and address systemic risks, these mandates and associated institutions and resources must function as a system.

Establishing national cross-sectoral, multi-stakeholder platforms, and strengthening existing ones, is essential to creating the enabling environment at national and local levels to allow different DRR legislative components to work as one system. Widening representation in institutional decision-making, including national platforms for DRR, to include critical infrastructure and basic service sector providers, national statistics offices, finance ministries, women and youth organizations, vulnerable communities, NGOs, research institutions and the private sector would ensure multiple sectors and stakeholders are engaged. At national level, Egypt has established policy coherence with the NSDRR 2017–2030, which states that integrating DRR into sustainable development policies is a main priority area, in particular in the sustainable development strategy, Vision 2030 of Egypt. The NSDRR recognizes that DRR is best addressed by developing a defined vision and specific plans, specializations and tasks, and high-level coordination between sectors. It prioritizes investment in the development of early warning systems to enhance preparedness and promotes insurance tools for risk transfer, both of which build private sector and community resilience against climate change.⁵⁶⁵

Strengthening legal and institutional support from national to local level and to other stakeholders, including communities, NGOs and the private sector, to help develop financial mechanisms to invest in DRR (as highlighted in the AAAA) is another factor that can expedite financing and implementation of DRR strategies. Some countries, such as Bahrain, Egypt, Jordan, Kuwait and the United Arab Emirates, have recognized the role of the private sector for partnership and insurance. The UNDRR-ROAS is also supporting countries to establish ARISE (Private Sector Alliance) Networks, including the ARISE UAE network that was successfully formed with a strong commitment to enabling the private sector to play a role in DRR.

Capacity-building is required at national and local levels to assess and enhance governance to manage systemic risks, develop institutional frameworks for engaging the private sector in DRR, and improve monitoring progress and reporting and accountability for implementing DRR strategies. Capacity-building is required at local administrative level to develop DRR strategies, effective communication, inclusive and resilient urban development strategies, and resilient infrastructure and basic service networks.

Enhancing understanding of systemic risks, and the regional and national capacity to successfully manage them, requires new governance structures, including improved multisectoral and multi-stakeholder participation from the private sector, civil society, women, youth, NGOs and community-based organizations, the elderly, persons with disabilities, refugees and internally displaced persons. It also requires multilevel public sector partnerships with vertical coordination mechanisms (national and subnational governments) and horizontal ones (ministries and regions). Contextualizing GRAF guidance on systemic risks is a useful way forward.⁵⁶⁶

2. Vulnerability-disaggregated data and inclusive vulnerability reduction for rural and urban contexts

This RAR has identified key challenges that must be addressed to allow for a truly inclusive approach to risk assessment, policy formulation and risk reduction. These include assessing social factors contributing to vulnerability, adopting inclusive community-based DRR strategies that account for indigenous knowledge, engaging the private sector in understanding risk, engaging and sharing disaster risk information with stakeholders, and generating disaggregated risk information to inform vulnerability analysis and policy formulation.

⁵⁶⁶ Global Risk Assessment Framework. Available at https://www.preventionweb.net/disaster-risk/graf.



⁵⁶⁵ Egypt, Government of Egypt, 2017.

a. Generation of vulnerability-disaggregated risk information and engagement with vulnerable groups to enhance policy

The development of refined disaggregated data – on the basis of age, sex/gender, economic condition, ethnicity, nationality, immigration status and disabilities – on the drivers of disaster risk and climate change, and associated losses arising from them, would create a more accurate picture of vulnerable groups (children, youth, women, economically marginalized persons, older persons, persons with disability, migrants), and of the successes and challenges of vulnerability reduction initiatives. This would help ensure that CCA, risk reduction and sustainable development policies, laws, plans and budgets are designed in a coherent manner, increasing the likely success of leaving no one behind and endeavouring to reach the furthest behind first.

Engagement with vulnerable groups would help ensure an inclusive, participatory approach is adopted in the review of policy and programmatic decision-making and implementation mechanisms related to CCA, risk reduction and sustainable development. This would also assist in the adoption of a whole-of-government and whole-of-society, multi-stakeholder, multisectoral approach that brokers collaborative and coordinated action and capacity development of relevant government ministries and departments,⁵⁶⁷ parliamentarians and civil society.⁵⁶⁸

b. Capacity-building to reduce vulnerability

Developing the capacities of government and civil society actors would contribute to an enhanced understanding of the conceptual linkages between DRR, climate change, sustainable development and migration, and the priorities of different vulnerable groups across these linked agendas. This would provide insight on how to mainstream, implement, monitor and evaluate measures linking CCA and risk reduction into development instruments to reduce the vulnerability of different groups.

Building the capacity of local government and vulnerable communities, while also engaging these communities, would contribute to well-designed, sustainably financed, scalable, community-based pilots that link the CCA, sustainable development and risk reduction priorities of different vulnerable groups.

3. Technology and data sharing

The science-policy interface is an enabler for DRR. The Sendai Framework calls for enhanced science and technology work in DRR, and gives a clear mandate to the community to work in a transdisciplinary manner to develop the knowledge and technology needed to save lives and reduce disaster losses. The Sendai Framework also calls for evidence-based decision-making.

a. Hazard, vulnerability and risk information

The Sendai Framework emphasizes risk-informed decision-making through open disaggregated data sharing for gender, age and disability. Lack of data, due to gaps in data availability, quality/aggregation issues and accessibility constraints, is one of the major obstacles hindering integrated DRR actions at national, sectoral and urban levels in the Arab region. Moreover, considerable gaps are reported in fragile and conflict-affected contexts that suffer from specific problems in data collection, analysis and sharing. Developing such information will allow for meaningful cross-sectoral and multi-stakeholder linkages of DRR efforts and strategies, which will facilitate a more efficient use of resources for reducing risk. Developing disaggregated data will also accelerate linkages between CCA, sustainable development, conflict mitigation, urban development and humanitarian response efforts. A way forward is to strengthen DRR legislative systems, currently divided across ministries and agencies. Strengthening data mechanisms is also necessary to improve the process of addressing and reducing exposure, vulnerabilities, risks and losses, as well as displacement trends.

The multiplier characteristic of water scarcity with regards to hazards affecting food security – drought, floods and flash floods, transboundary animal and plant pests and diseases, and socioeconomic shocks – is cross-border in nature, which necessitates regional collaboration to better understand the risk. In particular, regional collaboration is necessary for deploying information systems integrating multiple risks. Such systems are essential for early warning, anticipation and mitigation actions to ensure that primary support reaches the most vulnerable.

⁵⁶⁸ This should include academic and research institutions in pure, applied and social sciences, the private sector, NGOs and community-based organizations working on sustainable development, climate action, DRR, migration, gender, children/youth/older persons and persons with disabilities.



⁵⁶⁷ These include environment, agriculture, urban affairs, industry, women, labour, health, foreign affairs, home, planning and finance.

Regional cooperation is an opportunity to improve systems for collecting, analysing and sharing missing data, in particular for hazards and risks common to the region, for cross-border hazards and risks, and for complex and systemic risks. In an attempt to address this issue, UNDRR initiated an Arab States DRR Partnership Group as a community of practice to advocate data sharing and aligned actions for DRR at local, national and regional levels. This regional mechanism facilitates discussion of DRR among Arab governments and international partners working in the region to collectively develop, implement and assess DRR actions.

b. People-centred, multi-hazard, early warning systems

The Sendai Framework, in its target G, calls for a substantial increase in the availability of and access to MHEWS. Some countries such as Bahrain, Jordan, Qatar and the United Arab Emirates have advanced early warning technologies, while others, including Algeria, Comoros and Djibouti, depend on regional weather forecasts made available to them. Further, community-based early warning systems are not given due importance. Existing systems mostly provide information based on weather events and are not multi-hazard in nature. Lack of reliable information on various aspects linked to disaster risk and food security is a key gap in the region, highlighting the importance of investing in food security and nutrition information systems. One way forward is to first assess, regionally and nationally, gaps and linkages in the four elements necessary for the functioning of people-centred MHEWS, which are multi-hazard risk assessment, prediction and forecasting, messaging and dissemination, and response. Improving hazard- and risk-disaggregated information may then be used to strengthen linkages between the elements and act as an enabling factor towards developing evidence-based strategies, policies and programmes that can prevent and mitigate the impacts of shocks across the three main agendas of DRR, CCA and the SDGs.

Box 8.7 Geoinformation for disaster risk reduction/decision-makers

Emphasizing the need for capacity-building in disaster risk mapping and management, the sustainable natural resource management platform and early warning system was established by the Lebanese CNRS in 2014 to assist the DRM Unit. Equipped with skilled experts, hardware, software, an Internet-based satellite receiving station and associated infrastructure for producing and storing geoinformation, it assists both emergency operations and prevention and preparedness actions, serving stakeholders and decision-makers in DRM. The platform currently provides daily predictions for the next 72 hours for forest fire potential across Lebanon. A risk bulletin is released on a daily basis, along with alert messages via mobile apps to all stakeholders in each municipality and district where the fire risk index is between high and extreme.

c. Data science and interoperability of data

Using existing geospatial automated models for remote data capture (remote sensing data, climate data, agricultural and population statistics) to collate data on Sendai Framework indicators would generate datasets to inform the Sendai Framework monitor and help ensure a coherent approach to CCA, DRR and the SDGs. It would also mitigate existing data collation challenges, including in environments where insecurity or low prioritization impedes collection on the ground.

The use of interoperable information would facilitate organizations' data entry and analysis. For example, bottom-up approaches have the potential to improve data resolution and disaggregated data. Data innovations by the science and technology community, such as mainstreaming integration of geospatial information and citizen-generated data and investing in the physical infrastructure of the information technology sector, would contribute to online reporting and loss accounting at all administrative levels. Building capacity in cartography and geospatial data, and aligning regional targets and indicators (for countries with similar geopolitical and hazard profiles) to enable spatial comparisons is necessary. Better data management, dissemination and sharing among stakeholders, including CSOs, the private sector and communities, is best achieved through legislation. One way forward is to strengthen the role of national statistics offices, research centres and remote-sensing centres in DRR practices to improve the science-policy interface.



d. Technology facilitation mechanisms

The AAAA seeks the creation of a technology facilitation mechanism to strengthen global cooperation for access to science, technology and innovation and to support the goals of sustainable development. At international and regional cooperation levels, Arab states in Africa stand to gain from the European Union and the African Union uniting their research communities around flagship projects such as the H2020 and Africa Centres of Excellence funded by the World Bank. It would be helpful to develop similar cooperation initiatives in the Arab region.

4. Enabling environment for integrated risk reduction at urban levels

Several countries in the region are embarking on projects to improve urban governance, integrate DRR into their development plans and build urban resilience. The State of Palestine is adopting spatial planning interventions, characterized by a participatory approach focused on vulnerability. Aqaba in Jordan is integrating DRR into city development and land-use planning to build resilience to floods and earthquakes. Ain Draham in Tunisia is designing flood risk governance mechanisms using a partnership framework with the private sector and NGOs. Lebanon conducted detailed hazard and risk assessment of riverine and flash floods across the country, with the results and recommendations mainstreamed in the general urban planning scheme and as an action plan for stakeholders. Dubai is developing an institutional framework to enable stakeholders to conduct a comprehensive urban risk assessment and mobilize resources for DRR. But cities in the region face a multitude of challenges and growing vulnerabilities associated with rapid and haphazard urbanization. Such challenges are best addressed through improving risk governance in all its dimensions, namely by empowering local authorities with mandates to build urban resilience and reduce risk, adopting a participatory approach to engage all stakeholders, enhancing inclusive governance of informal areas, building urban resilience in conflict situations and investing in urban infrastructure.

a. Governance and financial capacity

The role of local governments in building urban resilience and addressing the multiple risks associated with urbanization is central to sustainable urban development processes. DRM at local level needs to be based on an understanding of risks and vulnerabilities to inform decision-making and to incorporate DRR considerations in urban planning.⁵⁶⁹ DRR efforts must be mainstreamed throughout formal and informal planning processes and the entire planning cycle, and integrated into the planning system as such, including legal and regulatory frameworks and financing arrangements.⁵⁷⁰

Delineation of mandates and allocation of resources at local level would help address the scarcity of data to measure urban resilience. Building capacities and mobilizing resources for partnerships, and multisectoral and multi-stakeholder engagement helps coherence and integration efforts to bring about local resilience building. Stronger legislative mechanisms would also expedite the engagement of cities and international actors with private sector actors, academic organizations, civil society, vulnerable communities and other stakeholders to ensure a coherent whole-of-society approach to DRR and climate resilience building.⁵⁷¹

b. Inclusive governance of informal urban areas

Complex and multidimensional urban challenges have led to the emergence and growth of informal settlements, and increased the influx of people to informal areas to seek safety and access to housing and job opportunities. Informal settlement dwellers in the region are often exposed to factors that increase their vulnerability, including lack of tenure security, poor access to basic urban services and infrastructure facilities, location in unsafe or hazardous areas, social stigmatization that often obstructs the ability to access formal livelihood opportunities, and poor health conditions. As informal areas increasingly become integral parts of the urban fabric, more attention and resources need to be given to integrating and upgrading them in urban planning policies. Socioeconomic and environmental aspects must be considered, to mitigate the socioeconomic exclusion that acts as a key driver for violent extremism and conflict.

Evidence has shown that adopting a people-centred approach to urban and land-use planning, in addition to enforcing laws and building regulations to ensure sustainable urban development, can reduce urban vulnerabilities and exposure to risks.

569 UNDP, 2018b.



⁵⁷⁰ UNDRR, 2020c.

⁵⁷¹ UNDRR, 2013a.

c. Build back better as entry point for urban resilience in cities affected by conflict

Building urban resilience in cities affected by conflict and those facing humanitarian situations and an influx of migrants requires careful consideration in urban resilience strategies of the special requirements and vulnerabilities of refugees and internally displaced persons, including poverty, gender considerations, youth and human rights. There is a growing need to develop durable solutions for displaced persons and returnees in Arab cities to ensure their long-term safety, security and local integration. Recovery is an opportunity to build back better, in a more sustainable and inclusive way, reduce future disaster risks through risk-informed development measures and build more resilient infrastructure networks and associated basic services, and an entry point to link DRR, the SDGs and CCA efforts with conflict rehabilitation and reconstruction efforts.

d. Building resilient urban infrastructure

Target D of the Sendai Framework promotes resilient infrastructure and seeks a reduction in damage to critical infrastructure. In the region, unplanned urban development along with poor networks of roads, communication, electricity and drainage are frequently observed. Vulnerable infrastructure leads to the creation of systemic risks with cascading effects. While efforts have been directed at shifting towards green infrastructure, the scale of investment is still limited in comparison with needs and the scale of challenges. This is exacerbated by the fact that critical infrastructure is often targeted in conflict areas.

Developing critical infrastructure protection plans, strategies and policies that consider these infrastructure sectors as one interlinked network/system can help significantly reduce damage and interruption to basic services. This can act as an entry point to create linkages to CCA and SDG efforts. Such plans are usually based on treating infrastructure sectors as one network, with interlinked characteristics of resistance, reliability, redundancy, response and recovery.

5. Innovative finance mechanisms as a means of implementing national strategies and an entry point for coherent integration with climate change adaptation and the SDGs

The Sendai Framework recognizes that effective implementation of national DRR strategies depends on the resources made available at global, regional, national and local levels. Priority action 3 therefore calls for greater investment in DRR. Access to sustainable finance is a prerequisite for enabling a suitable environment for DRR, especially in countries in the region already suffering from economic crises. National DRR strategies recognize the importance of finance without identifying funding sources for implementation. However, the AAAA, the Agenda for Humanity and the Warsaw International Mechanism for Loss and Damage associated with Climate Change focus attention on funding DRR through the prism of sustainable development and CCA.

The AAAA promotes the consideration of climate and disaster resilience in development finance and calls for diversifying financing mechanisms and using innovative instruments that allow countries to better prevent and manage risks. It recommends strengthening the capacity of national and local actors in the management and monitoring of DRR financing. The agenda prioritizes financial measures targeting vulnerable groups and employment generation, such as social protection schemes, access to basic health services and support to micro, small and medium-sized enterprises. Through a five-point plan, the Agenda for Humanity seeks increased national resources for risk mitigation, including through extending tax coverage, better spending efficiency, emergency reserve funds, devoted budget lines for DRR activities and risk transfer through risk insurance. It calls on developed countries to devote at least 1 per cent of their ODA to DRR activities by 2020. Arab countries spend on average 0.6 per cent of their annual public budget on DRR, unlike the best performing countries, which spend an average of 2.4 per cent. The Warsaw International Mechanism was mandated to promote implementing approaches to address loss and damage caused by the adverse effects of climate change, including support for finance, technology and capacity-building.

At regional level, however, significant gaps remain in resource allocations for DRR, a major challenge for national and local authorities, civil society and other stakeholders. As part of the ASDRR 2030, the League of Arab States called on member States to substantially increase their participation in DRR actions and to allocate a minimum 1 per cent of national funding to developing and implementing DRR measures. This remains below the level in developed countries; in Japan, for example, more than 5 per cent of the general national budget is earmarked for mitigation, preparedness, and response and recovery measures.⁵⁷²

⁵⁷² Phaup and Kirschner, 2010.



a. Strengthening the case for investment in disaster risk reduction

Traditional arguments focused on the value of disaster risk and resilience investments fail to appeal to stakeholders in environments with significant resource constraints or where resources are allocated to conflict or to responding to the fallout of conflict. Arguments for DRR interventions must be relative to the operational realities across all stages of the DRR cycle, including prevention, mitigation, preparedness, response and recovery. Developing evidence to strengthen the case for DRR in fragile and conflict contexts and the return on investment through case studies and key advocacy messages for use with governments and donors is one way forward. Leveraging the information provided by peacebuilding actors in the region, the DRR community can better position interventions to reduce drivers of fragility and conflict, thereby increasing its appeal.

Further, DRR interventions should identify context-specific arguments in settings where non-traditional actors are major powerbrokers and governance systems are ruptured or not responsive to community needs. This means exploring processes to decentralize DRR in non-permissive environments away from national stakeholders and generating localized DRR responses. In this manner, DRR investment in fragile and conflict contexts in the region can be attached or mainstreamed in ongoing peacebuilding and emergency or post-conflict recovery programmes.

b. Linkages with tools for sustainable development

Arab countries have access to a diverse pool of financial mechanisms and tools to support DRR, and more broadly, sustainable development, including ODA, foreign direct investment, mechanisms associated with the World Bank, OPEC Fund for International Development, GEF, Global Climate Funds, European Bank for Reconstruction and Development and Islamic Development Bank.⁵⁷³

There is limited data to rigorously monitor ODA expenditure, particularly that related to DRR. GAR19 indicates that within the framework of the Global Readiness Review for monitoring achievement of Sendai global targets, in particular target $F_{,574}^{,574}$ only 38 per cent of responding countries reported sufficient data to inform indicator F-1 relating to ODA and other total international flows. Analysis of global data provided by the OECD for the period 2005–2017 showed that spending for DRR amounts to \$5.2 billion, or 3.8 per cent of the total amount. Most of the ODA – \$122 billion, or 89 per cent – is spent on emergency response, while \$9.84 billion is dedicated to aid for reconstruction and rehabilitation.

At national level, tracking ODAs and other international flows is also complicated. This is confirmed by the Arab Sustainable Development Report 2020 that states that the indicators corresponding to SDG 17 on strengthening the means of implementation and revitalization of the global partnership for sustainable development are not sufficiently available, in particular those concerning indicator 17.3.1, "... foreign direct investments (FDI), official development assistance and South-South cooperation".⁵⁷⁵

The flow of total ODA provided to Arab countries from outside the region has increased substantially since 2011 but remains volatile, fluctuating from year to year. A significant portion is devoted ex post to refugees and humanitarian aid, particularly in the Syrian Arab Republic, Somalia and Yemen (figures 8.1 and 8.2). A significant portion of funding for DRR would appear to be devoted to preparedness and recovery, to the detriment of that devoted to risk assessment and risk reduction. In addition, sectoral distribution of ODA in the region shows declining trends in aid flows to education, health, water supply and sanitation sectors.

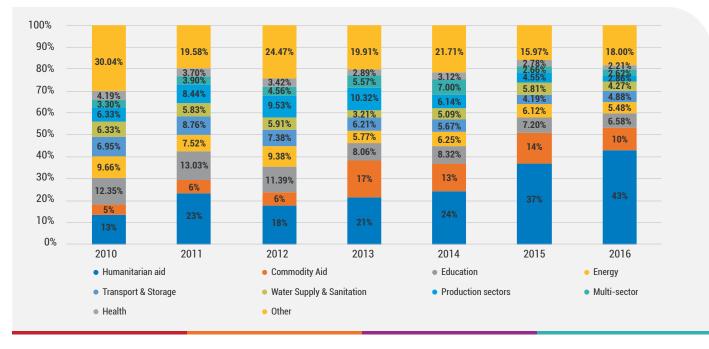


⁵⁷³ AFED, 2018.

⁵⁷⁴ Target/objective F encourages strengthening international cooperation with developing countries through adequate, sustainable support for their action plans. Three indicators measure official international support for national DRR actions. This support takes the form of ODA in addition to other total international flows (indicator F-1), delivered via multilateral agencies/organizations (indicator F-2) and/or bilateral (indicator F-3).

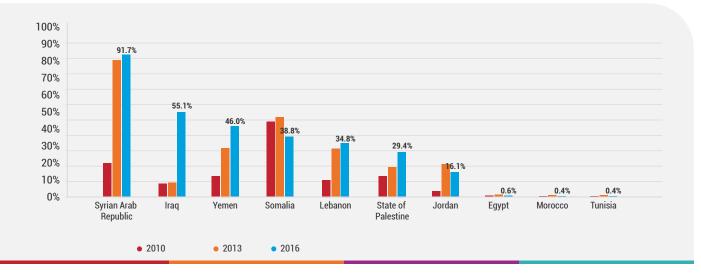
⁵⁷⁵ UNESCWA, 2020b.

Figure 8.1 Distribution of ODA to Arab countries, by sector



Source: AFED, 2018; OECD, "International Development Statistics". Available at http://stats.oecd.org/qwids (accessed on 15 March 2021).

Figure 8.2 Share of humanitarian aid in relation to ODA expenditure for 10 main recipient countries, Arab region



Source: AFED, 2018; OECD, "International Development Statistics". Available at http://stats.oecd.org/qwids (accessed on 15 March 2021).

c. Innovative financing

To mobilize additional resources for development and supplement traditional international resource flows, Arab countries are piloting innovative financial instruments, mainly through multilateral organizations, to scale up climate finance and accelerate funding and partnerships to synergize new finance opportunities under national SDG and CCA plans. Recent initiatives also associate additional financing with the notion of results, such as result-based financing, performance-based contracting and debt transformation for development.

One way to proceed is to expedite the establishment of the SDIC regional centre for sustainable finance that will help shape future SDG investments, increase the number of PPPs and use of blended financing instruments, and improve reporting on the business impact on SDG achievements.



6. Risk reduction in conflict and fragile countries

The widened scope of the Sendai Framework and the need to integrate with other post-2015 frameworks requires DRR practitioners to embed strategies and policies in the strategic socioeconomic, development and conflict mitigation priorities of the country under consideration.

The setting and the level of conflict significantly alter the opportunities and challenges, and the stakeholders available to successfully implement DRR interventions. To integrate more efficient, flexible and context-adapted programming, the DRR community must better integrate research and data on ongoing conflict dynamics across the region to develop guidance on different types of conflict, available resources, coordination mechanisms, access and approach. This type of analysis will likely come from collaboration with peacebuilding actors and will be invaluable in developing efficient DRR responses. Efforts should be directed at enhancing the understanding of all stakeholders, including the DRR community and donors, that DRR and climate change are both important pieces of the HDPN and prevention agendas to ensure that a DRR and climate perspective is applied to all peacebuilding and recovery investments.

At regional level, there are multiple operational examples of DRR being implemented in fragile and conflict settings. The DRR community at regional and national level should work to harness this operational learning to deepen the understanding of approaches and best practices to implement DRR in conflict-affected and fragile settings. The catastrophe-conflict-fragility link in the region was recognized in the Tunis declaration, an outcome of the 2018 Africa-Arab Platform on DRR.

a. Building capacity for integrated and coherent conflict-sensitive disaster risk reduction strategies

Conflict analysis and sensitivity should be integrated into the identification, design and implementation of DRR programmes through the creation of appropriate guidance and tools, and training and capacity-building for DRR practitioners. The required skillset will result from cooperation between the CCA, humanitarian, peacebuilding, development and DRR communities. Mainstreaming conflict-sensitive approaches in the DRR community can be achieved through forums that engage peacebuilding and DRR actors. Risk analysis in affected settings should reflect on how a community or society has adapted to the pressures of conflict and integrate this in the design of DRR interventions.

Institutional arrangements and regional cooperation have a part to play in collecting, analysing and advocating good practices to promote cross-pollination and dissemination in other cases and places of intervention. Another part will be in supporting implementation of the Sendai Framework in conflict zones, building on recent initiatives such as the joint agreement between UNDP and the UNDRR, which seeks to integrate DRR into national planning and decision-making process, and the CADRI Partnership that integrates conflict sensitivity into its diagnosis and planning for DRR.

b. Displacement as an entry point

Policy architecture addressed through a displacement perspective could provide a viable entry point to advance DRR in the region. Significant conflict and disaster-induced displacement provides a relevant link between disaster and conflict. Integrating DRR policies in active ventures to resolve the vulnerabilities created through displacement can advance DRR in conflict settings.

At community level, engaging displacement-affected populations, including internally displaced persons and host communities, provides an opportunity to better integrate localized sociocultural and conflict dynamics into the design of DRR interventions, alongside the preferences and coping strategies of the affected populations. In situations where governance structures are weak or impeded, community-centred approaches can create the foundations for broader national advancements in DRR. Mobility dimensions should be better integrated in DRR responses. Including human mobility patterns and mobile populations in DRR will ensure newly settled communities and those that are still mobile are informed and engaged in DRR. This is central to ensuring affected populations have ownership and are engaged in the design and implementation of DRR strategies. It also enables strategic partnerships across the HDPN.

c. Climate change as an entry point

With increased focus on CCA, there are opportunities to make the link with conflict over key regional issues such as water scarcity, flooding, rising sea levels and unsustainable temperatures, and the role of DRR.

In Somalia, the IOM has integrated DRR mechanisms such as water and sanitation management in camps, building resilient infrastructure to reduce the risk of flooding. This has been achieved partly through reforestation. Another example at country level is reported in Yemen, where drought risk reduction has been used by FAO and IOM to mitigate conflicts related to water scarcity. These experiences indicate it is possible to integrate DRR into humanitarian assistance activities, and support post-conflict recovery, rehabilitation and reconstruction plans, by collaborating with peacebuilding actors and those intervening in the aftermath of conflicts, using building back better, priority 4b of the Sendai Framework.

7. Food security under water scarcity

a. Food security and nutrition information systems

Investing in food security and nutrition information systems is key to strengthening reliable data on various aspects linked to the disaster risk and food security nexus. This would significantly improve early warning and anticipatory actions, which have considerable impact on preventing and mitigating the impact of shocks. Reliable information systems would also help ensure that different categories of vulnerable people receive the right support at the right time, thereby contributing to the new humanitarian agenda of leaving no one behind and endeavouring to reach the furthest behind first.

b. Evidence-based risk-informed policies

Using information systems to help develop evidence-based and risk-informed policies is indispensable for effective DRR in the agriculture, energy and water sectors, all of which are crucial to food security. Evidence-based food security policies would help shift focus from increased production towards sustainable management of natural resources. This may be achieved by reforming policies to increase water efficiency in agriculture, including moving from cereal cultivation to more horticultural-based farming. As horticulture can provide smallholders with a better living, these policies can be part of the agricultural transformation required in the region to close the rural-urban gap in productivity, poverty and public services.

c. National and regional collaboration

Strong national and regional coordination between different sectors to ensure policy coherence is necessary to address the systemic, transboundary nature of hazards and risks related to food security. For instance, addressing volatility to economic shocks requires institutional frameworks, policies and actions related to agriculture and trade.

d. Disaster risk reduction investments at institutional and farm levels

Properly designed and implemented and mutually reinforcing DRR interventions at institutional and farm levels can address multiple hazards related to food security, holistically and sustainably, and present a way to enhance the resilience of farming families to natural hazards.⁵⁷⁶ The full package of climate-smart agriculture and implementation of agroecological approaches would reduce vulnerability to climatic shocks and also result in valuable environmental benefits. Using drought-resistant seeds and adopting good agricultural practices would build resilience to the increasing droughts and dry spells experienced in the region, such as the recent one in the Maghreb countries.

At institutional level, implementing well-designed agriculture insurance schemes would help reduce the impact of disasters, particularly drought and transboundary animal diseases, on smallholders, and contribute to valuable economic benefits.

Implementation of various safety net interventions would support vulnerable groups with anticipated and uninterrupted access to cash to ensure access to adequate and healthy food and other basic necessities. Related safety net interventions would also significantly reduce the cost of livelihood-based responses.

e. A holistic resilience-building approach

A holistic resilience-building approach represents a sound entry point to ensure that people's vulnerabilities to multiple shocks are coherently addressed. In countries receiving humanitarian assistance, such approaches would be

⁵⁷⁶ FAO, 2018b.



implemented under the overall framework of the HDPN to ensure the response measures reinforce social and economic developments while protecting the environment.

D. Closure

Since GAR11, it has been clear that exposure, vulnerability and risks – as opposed to natural hazards – are directly related to development pathways. The Sendai Framework and GAR19 further enhanced the understanding of risks by identifying emerging systemic risks across and within natural, environmental, health, social, economic and physical systems. This RAR-Arab States highlights emergent systemic risks, which bring high degrees of uncertainty, interacting with existing uncertainty related to climate change impacts. This requires a new approach for the governance of systemic risks, based on more transparent, inclusive and coherent strategies and policies across systems and frameworks.

The expanded scope of the Sendai Framework is a starting point, complemented by GAR19 and GRAF at international level, and more recently by this **RAR** at regional level. Designing, financing and implementing coherent, national and local DRR, CCA, inclusive urbanism and sustainable development strategies that leave no one behind and endeavour to reach the furthest behind first is a complex task, particularly in countries in the region subjected to or impacted by conflict. It requires context-specific, good-practice principles for risk-informed sustainable development that is also informed by international best practice.

Effecting change, however, is more than simply developing the required policies and capability of governments and other development stakeholders. Achieving a paradigm shift requires capabilities, agency and a value change. GAR19 recognized important paradigms with critical impacts on DRR and resilience-building efforts, namely the pervasive extraction-production-distribution-consumption-disposal linear process of resource use in the current economic paradigm. It highlighted the systemic nature of risk, enshrined in the 2015 agreements on climate change, sustainable development and DRR, and called for a fundamental change in approach, to adopt systems-based approaches and work in new ways to collaboratively reduce the creation of new risk and manage the existing stock of risk. Further, GAR19 emphasized the need for a new paradigm for understanding and living with uncertainty and complexity. Crucially, it reminded us that disasters are not natural but a product of the interaction between naturally occurring events and human agency. Finally, GAR19 reiterated that paradigms are not corrigible by normal science and that paradigm change is a value change⁵⁷⁷.

Similarly, the Human Development Report 2020 highlighted the three critical dimensions of human development, namely capabilities, agency and values, drawing special attention to our interactions with nature – to our stewardship of the planet.⁵⁷⁸ This RAR-Arab States argues that for the Arab region – which is facing a multitude of systemic risks, against a backdrop of inequality, vulnerability and fragility, non-sustainable consumption and production patterns, and conflict – to push forward a resilient, inclusive sustainable development while managing and mitigating systemic risks, it must clearly and promptly address the three dimensions of human development.

577 Kuhn, 1962. 578 UNDP, 2020.

