SFVC regional analysis for Asia-Pacific

Asia-Pacific Action Plan 2021-2024 and the Sendai Framework Voluntary Commitments covering the Asia-Pacific region

August 2022
(Consultative version)
# Table of Contents

Background ..................................................................................................................................... 1  
Asia-Pacific Action Plan 2021-2024.............................................................................................. 1  
Sendai Framework Voluntary Commitments .............................................................................. 1  
Linkage between the Asia-Pacific Action Plan and SFVC .......................................................... 3  
Case Studies ................................................................................................................................... 4  
Sentinel Asia .................................................................................................................................... 6  
Promoting Multi-disciplinary DRR Through Research and Innovation in Higher Education in the Arab Region .......................................................................................................................... 6  
Strengthen disaster preparedness and management across the Pacific...................................... 6  
Contribute to DRR by the Economic Uplifting of Natural Hazards Prone Areas of Pakistan .... 7  
Shaping Disaster Resilient India: An initiative to build the capacities of YYPs in DRM and CCA through University Networks .................................................................................................................. 8  
Resilience in the tourism sector: ARISE Japan Activity Plan 2019-2022 .................................... 9  
Honing Agents for National Disaster Awareness (HANDA) Program: Disaster Preparedness and Business Continuity Planning for MSMEs ............................................................................. 9  
Training on Structural and Seismic Engineering between Japan and Nepal ......................... 10  
Addressing Key Gaps .................................................................................................................... 11  
Biodiversity and desertification .................................................................................................. 11  
Biological hazards ........................................................................................................................ 11  
Cascading and compounding risks ............................................................................................. 12  
Citizen science and crowdsourced data ..................................................................................... 13  
Conflict and Humanitarian-Development-Peace nexus ............................................................. 13  
Ethnic minorities, displaced populations and migrants ............................................................... 14  
Green and blue economy .......................................................................................................... 14  
Summary ....................................................................................................................................... 14  
Annex I - Actions of the Asia-Pacific Action Plan 2021-2024.................................................... 16  
Annex II – Figures for SFVC Analysis for Asia-Pacific region – August 2022 ......................... 23
Background

Asia-Pacific Action Plan 2021-2024

One mechanism to accelerate the implementation of the Sendai Framework for Disaster Risk Reduction (DRR) 2015-2030 is the development of regional action plans. The current action plan for the Asia-Pacific region was adopted in December 2021 after a consultative process and covers the period from 2021 to 2024.¹ This action plan was developed in the context of the recent global disaster: the COVID-19 pandemic which has exacerbated pre-existing conditions and risks, creating a compounding effect with more extreme impacts.

The action plan is structured according to the four priorities of the Sendai Framework. For each priority, the action plan specifies actions at three levels: regional, national and local, with a total number of 83 actions. The number of actions per priority and per level is illustrated in Table 1. Annex I of this document provides the full list of actions.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Regional actions</th>
<th>National actions</th>
<th>Local actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority 1 Understanding disaster risk</td>
<td>5</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Priority 2 Strengthening disaster risk governance to manage disaster risk</td>
<td>6</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Priority 3 Investing in disaster risk reduction for resilience</td>
<td>7</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Priority 4 Enhancing disaster preparedness for effective response and to &lt;&lt;Build Back Better&gt;</td>
<td>3</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>43</td>
<td>19</td>
</tr>
</tbody>
</table>

Table 1: Sendai Framework Priorities and related actions in the Asia-Pacific Action Plan 2021-2024

Sendai Framework Voluntary Commitments

Furthermore, following the adoption of the Sendai Framework for DRR, the UN General Assembly resolution 69/283 (2015)² called for Voluntary Commitments (VCs) by stakeholders at local, national, regional and global levels to address the priorities and the targets of the Sendai Framework. This was followed by the launch of the Sendai Framework Voluntary Commitments (SFVC) online platform in 2018 by UNDRR.³

As of 30 August 2022, 104 VCs are published on the platform, out of which 51 VCs are implemented in Asia and Oceania, covering a total of 25 countries and territories. Among the VCs with a regional scope, 16 commitments cover Asia and 6 commitments cover Oceania.

² http://undocs.org/A/RES/69/283
³ See also Reports of Secretary General A/73/268, A/71/230, A/70/282 and A/69/364.
⁴ https://sendaicommitments.undrr.org/
Excluding VCs with a global scope, the region of Asia is covered by approximately 54 per cent of VCs and Oceania by 9 per cent (See Annex II Figure 1). Among the countries, Nepal is covered by the most VCs in the SFVC online platform with 10 VCs, followed by the Philippines with 9 VCs. The figure below shows the geographical coverage of VCs by country or territory in Asia and Oceania, which can also be found in Annex II Figure 3. Some VCs are implemented in more than one region and more than one country.

<table>
<thead>
<tr>
<th>Country or Territory</th>
<th>Regional</th>
<th>National or local</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nepal</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Fiji</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Myanmar</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Vanuatu</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Viet Nam</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Afghanistan</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Bangladesh</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Lebanon</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Mongolia</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>New Zealand</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Tonga</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

*Figure: Geographical coverage of VCs by country or territory in Asia and Oceania*

These VCs cover all priorities for action of the Sendai Framework, among which Priority 1 “Understanding disaster risk” is covered by 88 per cent of the VCs (46 VCs out of 51) in the region, while Priority 3 “Investing in disaster risk reduction for resilience” is only covered by 51 per cent (26 VCs) of the VCs in the region (See Annex II Figure 4). The SFVC online platform also documents the targets and specific indicators that each VC contributes to. Target B “Substantially reduce the number of affected people” is the most covered target (71 per cent, 36 VCs) and Indicator B1 “Number of directly affected people attributed to disasters, per 100,000 population” is the most covered indicator (59 per cent, 30 VCs) (See Annex II Figures 5 and 6). Among the VCs in the region, the least covered target is Target D “Substantially reduce disaster damage to critical infrastructure and disruption of basic services” (24 per
cent, 12 VCs), while the least covered indicators were A3 “Number of missing persons attributed to disasters, per 100,000 population and F4 “Total official international support (ODA plus other official flows) for the transfer and exchange of disaster risk reduction-related technology” (both 2 per cent, 1 VC) (See Annex II Figures 5 and 6). Each VC may support more than one priority and often contributes to more than one target and indicator.

These 51 VCs are being implemented by 68 distinct organizations and involve 254 distinct partners with a total of 229 deliverables. 50 per cent of VC implementers are non-governmental organizations (NGOs), the most commonly represented type of organization implementing VCs in the region. News and media (3 per cent), United Nations and international organizations (3 per cent) as well as Regional intergovernmental organizations (0 per cent) are among the least represented types of organization (See Annex II Figure 8). For implementing organizations, the SFVC online platform takes stock of commitments by UN and national government institutions only when co-implemented by other stakeholders. Different platforms and reporting methods are used for commitments solely implemented by the UN and government institutions respectively. Among the 254 partners in the region, Academic and research institutions are the most represented (28 per cent) followed by NGOs (26 per cent), while News and media (1 per cent) is also the least represented type of organization consistent with the numbers for implementing organizations (See Annex II Figure 9).

The VCs in the SFVC online platform are linked to themes and issues related to DRR and hazards that UNDRR has identified. Among the themes and issues, capacity development is being covered by the greatest number of VCs in the region with 41 VCs (80 per cent), followed by disaster risk management with 40 VCs (78 per cent). The themes and issues with the lowest share of VCs are cultural heritage, and health and health facilities (both 6 per cent with 3 VCs) (See Annex II Figure 10). Among the hazards, floods are covered by the greatest number of VCs in the region with 47 VCs (92 per cent) followed by earthquakes with 45 VCs (88 per cent). Hazards with the lowest coverage are NBC – nuclear, biological, chemical (6 per cent, 3 VCs) and insect infestation (4 per cent, 2 VCs) (See Annex II Figure 11). Among the VCs within the region, 35 VCs (69 per cent) have fully secured their budget and 18 VCs (35 per cent) have completed their commitments.

The trends found in the Asia-Pacific region are similar to the findings in the 2022 SFVC Synthesis and Analysis Report that analyses all the VCs in the platform, with very few exceptions. More information about VCs covering Asia-Pacific region is seen in Annex II – Figures for SFVC Analysis for Asia and Pacific – August 2022.

**Linkage between the Asia-Pacific Action Plan and SFVC**

The Asia-Pacific Action Plan 2021-2024 refers to the SFVC by calling on stakeholders and associated organisations to “Effectively harness the Sendai Framework Voluntary Commitment platform to register their commitments and monitor their implementation.” Moreover, under Priority 4, National Action (i) states: “Build capacities of local organizations and responders, existing workforce and volunteers as well as youth on how to build back

---

4 Themes and issues as well as hazards are being used in PreventionWeb, UNDRR’s global knowledge sharing platform.

better in order to strengthen professional abilities and scientific skills for risk-sensitive development.”

The **purpose of this document** is to analyse the extent to which VCs covering the Asia-Pacific region are supporting the actions of the Asia-Pacific Action Plan 2021-2024, and the extent to which actions are addressed through case studies, and a gap analysis of future priorities.

**Case Studies**

Eight VCs have been selected below to show their links to the Asia-Pacific Action Plan 2021-2024, by considering their work on specific actions and their geographic coverage. Table 2 shows the list of eight VCs which contribute to all priorities for action and each VC has been linked to multiple actions in the Asia-Pacific Action Plan. It also shows that all types of actions are accounted for by these eight VCs covering regional, national, and local actions for each priority as indicated in the Asia-Pacific Action Plan. Each case study attempts to elaborate on the apparent linkages between the VC deliverables and actions within the action plan.
<table>
<thead>
<tr>
<th>Voluntary Commitment ID and Title</th>
<th>Implementing organization</th>
<th>Priority 1</th>
<th>Priority 2</th>
<th>Priority 3</th>
<th>Priority 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>20210621_001 Sentinel Asia</td>
<td>Asia Pacific Regional Space Agency Forum</td>
<td>✔️ ✔️</td>
<td></td>
<td></td>
<td>✔️ ✔️</td>
</tr>
<tr>
<td>20210527_001 Promoting Multi-disciplinary DRR Through Research and Innovation in Higher Education in the Arab Region</td>
<td>Arab Science and Technology Advisory Group for Disaster Risk Reduction</td>
<td>✔️ ✔️ ✔️</td>
<td>✔️ ✔️</td>
<td></td>
<td>✔️ ✔️</td>
</tr>
<tr>
<td>20211026_001 Strengthen disaster preparedness and management across the Pacific</td>
<td>Australian Humanitarian Partnership</td>
<td>✔️ ✔️ ✔️ ✔️</td>
<td>✔️ ✔️ ✔️ ✔️</td>
<td>✔️ ✔️ ✔️ ✔️</td>
<td>✔️ ✔️ ✔️ ✔️</td>
</tr>
<tr>
<td>20210317_001 Contribute to DRR by the Economic Uplifting of Natural Hazards Prone Areas of Pakistan</td>
<td>Geo-Tech Consultancy Services</td>
<td>✔️ ✔️ ✔️</td>
<td></td>
<td></td>
<td>✔️ ✔️</td>
</tr>
<tr>
<td>20191226_002 Shaping Disaster Resilient India: An initiative to build the capacities of YYPs in DRM and CCA through University Networks</td>
<td>Confederation of Risk Reduction Professionals</td>
<td>✔️ ✔️ ✔️</td>
<td></td>
<td></td>
<td>✔️ ✔️</td>
</tr>
<tr>
<td>20190305_008 Resilience in the tourism sector: ARISE Japan Activity Plan 2019-2022</td>
<td>ARISE Japan</td>
<td>✔️ ✔️ ✔️</td>
<td></td>
<td></td>
<td>✔️ ✔️</td>
</tr>
<tr>
<td>20210420_002 Honing Agents for National Disaster Awareness (HANDA) Program: Disaster Preparedness and Business Continuity Planning for MSMEs</td>
<td>UP Institute for Small-Scale Industries</td>
<td>✔️ ✔️ ✔️</td>
<td></td>
<td></td>
<td>✔️ ✔️</td>
</tr>
<tr>
<td>20191122_001 Training on Structural and Seismic Engineering between Japan and Nepal</td>
<td>CITYNET Yokohama Project Office, Kathmandu Metropolitan City</td>
<td>✔️ ✔️ ✔️</td>
<td></td>
<td></td>
<td>✔️ ✔️</td>
</tr>
</tbody>
</table>

Table 2 List of VCs linked to Asia-Pacific Action Plan 2021-2024
**Sentinel Asia**

The Sentinel Asia initiative is an international collaboration among space agencies, disaster management agencies, and international agencies for applying remote sensing and Web-GIS technologies to support disaster management in the Asia-Pacific region led by the Asia-Pacific Regional Space Agency Forum. This VC supports multiple DRR-related themes and issues (11) such as complex emergency, early warning, GIS and mapping, information management, science and technology, and space and aerial technology and covers the following hazards: cyclone, drought, earthquake, flood, land slide, tornado, tsunami, volcano, wild fire.

Table 3 presents the priorities and actions that this regional VC contributes to within the Asia-Pacific Action Plan 2021-2024. The VC supports four regional actions and 4 national actions within Priority 1 and Priority 4 of the Sendai Framework.

<table>
<thead>
<tr>
<th>Regional actions</th>
<th>National actions</th>
<th>Local actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Priority 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1a, 1.1c, 1.1d</td>
<td>1.2a, 1.2c</td>
<td>-</td>
</tr>
<tr>
<td><strong>Priority 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1b</td>
<td>4.2d, 4.2h</td>
<td>-</td>
</tr>
</tbody>
</table>

Sentinel Asia combines information and communication as well as space technologies (1.1a, 4.2h), through which faster and more accurate data for early warning and preparedness can be obtained (1.2a, 4.1b) and response and rehabilitation plans can be informed (1.2c, 4.2d). In particular, the Sentinel Asia VC has continued to document emergency observations in the Asia-Pacific region to be utilized by its members. As a regional VC, Sentinel Asia covers the whole of Asia and Oceania (1.1c and 1.1d).

**Promoting Multi-disciplinary DRR Through Research and Innovation in Higher Education in the Arab Region**

This initiative is an inter-regional collaboration involving Arab states in Asia and Africa to promote multi-disciplinary DRR, research and innovation in higher education and expand the scientific network for DRR and thus strengthening the role of academia, science, and technology institutions in DRR. The initiative is led by the Arab Science and Technology Advisory Group for Disaster Risk Reduction (Arab STAG) supporting the themes and issues on climate change, community-based DRR, disaster risk management, early warning, environment and ecosystems, and science and technology. It also covers the following hazards: drought, earthquake, flood, heat wave, land slide, tsunami, volcano, and wild fire.

Table 4 presents the priorities and actions that this VC contributes to within the Asia-Pacific Action Plan 2021-2024. This VC supports five regional actions and 1 national action within Priority 1, Priority 2 and Priority 3 of the Sendai Framework.

<table>
<thead>
<tr>
<th>Regional actions</th>
<th>National actions</th>
<th>Local actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Priority 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1c, 1.1d, 1.1e</td>
<td>1.2f</td>
<td>-</td>
</tr>
</tbody>
</table>

---

6 [https://sendaicommitments.undrr.org/commitments/20210621_001](https://sendaicommitments.undrr.org/commitments/20210621_001)

7 [https://sendaicommitments.undrr.org/commitments/20210527_001](https://sendaicommitments.undrr.org/commitments/20210527_001)
Through this initiative, Arab STAG will develop DRR curricula to be embedded in higher education studies \((1.2f)\); encourage grants for academic research related to DRR \((3.1b)\); encourage affiliations with foreign and international institutes already developed in the field and promote e-learning and blended technology DRR studies \((1.1c, 1.1d, 1.1e)\). This inter-regional initiative contributes overall to strengthening disaster risk governance at the country level \((2.1a)\).

**Strengthen disaster preparedness and management across the Pacific**

Disaster READY is an AUD 50 million disaster preparedness and resilience program. The focus of Disaster READY is to strengthen disaster preparedness and management across what is one of the world’s most vulnerable regions to disasters.\(^8\) This initiative is implemented by the Australian Humanitarian Partnership, a partnership between the Australian Government and Australian NGOs and it covers the themes and issues of community-based DRR, disaster risk management, early warning, education and school safety, food security and agriculture, gender and vulnerable populations. It also addresses multiple hazards, namely, cyclone, drought, earthquake, epidemic and pandemic, flood, land slide, storm surge, tsunami and volcano.

This VC supports nine regional actions, 10 national actions, and nine local actions of the Asia-Pacific Action Plan 2021-2024 related to all the four priorities areas of the Sendai Framework as presented in Table 5.

<table>
<thead>
<tr>
<th>Priority 1</th>
<th>Regional actions</th>
<th>National actions</th>
<th>Local actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority 2</td>
<td>1.1d, 1.1e</td>
<td>1.2d, 1.2h</td>
<td>1.3a, 1.3c</td>
</tr>
<tr>
<td>Priority 3</td>
<td>2.1c, 2.1d</td>
<td>2.2c, 2.2g, 2.2h, 2.2j</td>
<td>2.3a</td>
</tr>
<tr>
<td>Priority 4</td>
<td>3.1a, 3.1b, 3.1c, 3.1f</td>
<td>3.2a, 3.2b</td>
<td>3.3a, 3.3e</td>
</tr>
</tbody>
</table>

Disaster READY supports five countries in Oceania, namely Fiji, Vanuatu, the Solomon Islands, Papua New Guinea and Timor-Leste, with AUD 50 million investment towards preparedness and resilience \((1.1d, 3.1c, 3.2a, 3.3a, 4.1a)\). Special attention is given to support vulnerable groups, including women, people with disabilities and children \((2.1c, 2.2g, 2.2h, 2.2j, 3.1b, 4.2g, 4.3a)\) and to capacitate, collaborate and coordinate with all stakeholders \((1.1e, 1.3c, 2.2c, 3.1a)\), including governments \((1.2d, 2.3a)\), private sector \((3.2b, 4.3f)\), NGOs and local communities \((3.1f, 3.3e, 4.2i, 4.3c, 4.3e)\). AHP has also focused on COVID-19 response activities in light of the global pandemic \((1.2h, 1.3a, 2.1d, 4.1a)\).

\(^8\) https://sendaicommitments.undrr.org/commitments/20211026_001
Contribute to DRR by the Economic Uplifting of Natural Hazards Prone Areas of Pakistan

This commitment is implemented by the Geo-Tech Consultancy Services (GCS) Pakistan, which looks to partner with governments and other stakeholders to strengthen the resilience of vulnerable populations by providing state-of-the-art Digital Technologies and Remote Sensing tools to design economically uplifting projects encompassing DRR and utilizing local green infrastructure resources. The VC addresses 30 out of the 33 DRR-related themes and issues documented by UNDRR and 16 out of the 17 hazards.

While the VC is regional in scope, it is currently supporting national and local actions of the Asia-Pacific Action Plan under Priority 1 and Priority 3 of the Sendai Framework as presented in Table 6.

<table>
<thead>
<tr>
<th>Priority 1</th>
<th>Regional actions</th>
<th>National actions</th>
<th>Local actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority 3</td>
<td>-</td>
<td>1.2g</td>
<td>1.3b, 1.3e</td>
</tr>
<tr>
<td>Priority 3</td>
<td>-</td>
<td>3.2f, 3.2j</td>
<td>3.3b</td>
</tr>
</tbody>
</table>

GCS Pakistan is committed to offering geotechnical services to be applied to DRR-related projects including site assessment, sub-soil investigation, and laboratory testing, among other services, which can be used to inform civil works construction (1.2g, 1.3b, 1.3e, 3.2j, 3.3b). Recognizing the importance of nature-based solutions, GCS Pakistan ensures that local green infrastructure resources are considered and used in projects (3.2f).

Shaping Disaster Resilient India: An initiative to build the capacities of YYPs in DRM and CCA through University Networks

This is a Youth and Young Professionals (YYP) initiative providing a platform for the youth to work on disaster risk management (DRM), risk reduction, climate change adaptation (CCA) and other analogous fields that may support the Sendai Framework. Implemented by the Confederation of Risk Reduction Professionals (CRRP), this VC is part of an umbrella initiative called U-Inspire Alliance, addressing the themes and issues of capacity development and disaster risk management, while covering seven hazards including cyclone, drought, earthquake, epidemic and pandemic, flood, NBC – nuclear, biological, chemical, and technical disaster.

This VC supports Priority 1, Priority 2 and Priority 4 of the Sendai Framework and contributes to four actions within the Asia-Pacific Action Plan as presented in Table 7.

<table>
<thead>
<tr>
<th>Priority 1</th>
<th>Regional actions</th>
<th>National actions</th>
<th>Local actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority 1</td>
<td>-</td>
<td>1.2g</td>
<td>1.3a</td>
</tr>
<tr>
<td>Priority 2</td>
<td>-</td>
<td>2.2g</td>
<td>-</td>
</tr>
<tr>
<td>Priority 4</td>
<td>-</td>
<td>4.2i</td>
<td>-</td>
</tr>
</tbody>
</table>

---

9 [https://sendaicommitments.undrr.org/commitments/20210317_001](https://sendaicommitments.undrr.org/commitments/20210317_001)

10 [https://sendaicommitments.undrr.org/commitments/20191226_002](https://sendaicommitments.undrr.org/commitments/20191226_002)
Through this VC, CRRP will conduct awareness-raising and capacity-building activities aimed at the youth (2.2g, 4.2i) while applying Science, Engineering, Technology and Innovation (1.2g). Among their activities includes reflections and lessons learned from the COVID-19 pandemic (1.3a).

### Resilience in the tourism sector: ARISE Japan Activity Plan 2019-2022

ARISE is a UNDRR-led network of private sector entities, whose members commit to aligning their activities with the Sendai Framework. ARISE Japan is part of this network and has developed this initiative based on its three-year action plan which focuses on the resilience of the tourism sector in Japan. This VC supports a total of 14 themes and issues such as climate change, early warning, governance, insurance and risk transfer and private sector, while addressing multi-hazards including cyclone, earthquake, epidemic and pandemic, flood, heat wave, landslide, storm surge, tsunami, and volcano.

Table 8 shows how the VC aligns with the Sendai Framework, supporting all four priorities for action and, more specifically, five national actions and five local actions within the Asia-Pacific Action Plan.

<table>
<thead>
<tr>
<th>Priority 1</th>
<th>Regional actions</th>
<th>National actions</th>
<th>Local actions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1.2e</td>
<td>1.3a, 1.3e</td>
</tr>
<tr>
<td>Priority 2</td>
<td></td>
<td>2.2d</td>
<td></td>
</tr>
<tr>
<td>Priority 3</td>
<td></td>
<td>3.2b, 3.2i</td>
<td>3.3c, 3.3d</td>
</tr>
<tr>
<td>Priority 4</td>
<td></td>
<td></td>
<td>4.3f</td>
</tr>
</tbody>
</table>

Through this VC, ARISE Japan aims to build the tourism sector’s resilience by creating synergies with the Japanese government’s growth strategy (2.2d, 3.2b). ARISE Japan will contribute to the collection of good practices and continue to engage and collaborate with stakeholders to support the resilience plans of businesses (4.3f) and increase private sector engagement in DRR by issuing formal statements during disaster-related days and events (1.2e) and organizing events for sharing of members’ experiences (3.2i).

### Honing Agents for National Disaster Awareness (HANDA) Program: Disaster Preparedness and Business Continuity Planning for MSMEs

This program is a national commitment that promotes business continuity planning and disaster-preparedness among micro, small, and medium enterprises (MSMEs) in the Philippines. This is implemented by the University of the Philippines Institute for Small-Scale Industries (UP ISSI) which is committed to empowering entrepreneurs through knowledge creation and sharing. The program covers nine themes and issues including capacity development, community-based DRR, disaster risk management, economics of DRR, gender, indigenous knowledge, private sector, recovery and risk identification and assessment. It also

---

11 [https://sendaicommitments.undrr.org/commitments/20190305_008](https://sendaicommitments.undrr.org/commitments/20190305_008)

12 [https://sendaicommitments.undrr.org/commitments/20210420_002](https://sendaicommitments.undrr.org/commitments/20210420_002)
covers multiple hazards, namely drought, earthquake, epidemic and pandemic, flood, landslide, storm surge, tsunami and volcano.

This VC contributes to Priority 1, Priority 3 and Priority 4 of the Sendai Framework and will likely support eight actions within the Asia-Pacific Action Plan as presented in Table 9 below.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Regional actions</th>
<th>National actions</th>
<th>Local actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority 1</td>
<td>-</td>
<td>1.2f</td>
<td>1.3a, 1.3e</td>
</tr>
<tr>
<td>Priority 3</td>
<td>-</td>
<td>3.2b, 3.2i</td>
<td>3.3c, 3.3d</td>
</tr>
<tr>
<td>Priority 4</td>
<td>-</td>
<td>4.2i</td>
<td>4.3b, 4.3f</td>
</tr>
</tbody>
</table>

Through the HANDA program, UP ISSI carries out awareness-raising and capacity-building courses and webinars, and develops relevant publications to support resilience of local MSMEs (1.2f, 1.3e, 4.2i). UP ISSI has published several guides to specifically guide MSMEs in developing business continuity plans (4.3f). In the context of the global pandemic, UP ISSI has conducted relevant research and organized several events to help MSMEs sustain their businesses and recover from the effects of COVID-19 (1.3a). UP ISSI also participates in major conferences and events to ensure that MSMEs are connected with other stakeholders including governments (3.2b, 3.2i, 3.3c, 3.3d, 4.3b).

Training on Structural and Seismic Engineering between Japan and Nepal

This project focused on knowledge-sharing between Japanese and Nepali engineers to reduce future earthquake damage throughout Kathmandu and Nepal, following the 2015 Gorkha Earthquake. This VC covered several themes and issues including capacity development, critical infrastructure, disaster risk management, recovery and urban risk and planning, with a sole focus on earthquakes.

This VC was completed in 2018 and supported one regional action and five national actions of the Asia-Pacific Action Plan 2021-2024 related to Priority 3 and 4 of the Sendai Framework as presented in Table 10.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Regional actions</th>
<th>National actions</th>
<th>Local actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority 3</td>
<td>-</td>
<td>3.2f</td>
<td>-</td>
</tr>
<tr>
<td>Priority 4</td>
<td>4.1c</td>
<td>4.2d, 4.2e, 4.2f, 4.2i</td>
<td>-</td>
</tr>
</tbody>
</table>

The CITYNET Yokohama Project Office supported the reconstruction efforts of Kathmandu Metropolitan City after the 2015 Gorkha Earthquake in Nepal through a three-year training (4.1c) with a focus on “Build Back Better” initiatives (4.2e) and quality infrastructure construction (4.2f). These efforts also included capacity building of construction workers and standardizing practices (3.2f, 4.2d, 4.2i).

13 [https://sendaicommitments.undrr.org/commitments/20191122_001](https://sendaicommitments.undrr.org/commitments/20191122_001)
Addressing Key Gaps

This section presents seven examples (in alphabetical order) of actions or topics of the Asia-Pacific Action Plan 2021-2024, which are not sufficiently addressed by VCs covering the Asia-Pacific region. These topics were selected through a literature review to identify priorities and gaps followed by an analysis of the VCs covering these topics in the Asia-Pacific region in the SFVC online platform.

These topics also serve as recommendations to be addressed by future VCs.

Biodiversity and desertification

The Asia-Pacific region possesses rich biodiversity and invaluable ecosystem services. While the region has boasted high economic growth in recent years, even during the COVID-19 pandemic, this growth has been accompanied by environmental degradation and biodiversity loss. This leads to the exacerbation of disaster risk and impact as ecosystem services play an important role in preventing disasters and reducing disaster impact. The Asia-Pacific Action Plan specifically emphasizes this in action 2.1e, which outlines the need to scale up the application of ecosystem-based approaches in DRR to coherently implement the three Rio Conventions, namely on Biodiversity, Climate Change and Desertification, and the Ramsar Convention on Wetlands of International Importance.

While climate change is extensively covered by VCs published on the SFVC online platform, very few VCs cover the topic of biodiversity and desertification. In the Asia-Pacific region, there are only two VCs with a focus on biodiversity and desertification including “Grow Forests, Change Lives by the Lebanon Reforestation Initiative (LRI)” and “Ecosystems protecting infrastructure and communities” by the International Union for the Conservation of Nature. While other VCs have indicated they are contributing to SDG 14 Life below water and SDG 15 Life on land, the deliverables and description of the VCs do not directly show impacts that contribute to biodiversity and desertification.

Biological hazards

Increased understanding and preparedness for biological hazards has been at the forefront of resilience discussions because of significant impacts of the COVID-19 pandemic. According to the International Federation of Red Cross and Red Crescent Societies, the global pandemic has led to over 1 million deaths as of August 2022 in the Asia-Pacific region alone. Consequently, this has become a critical topic in the Asia-Pacific Action Plan, where COVID-

---


15 https://go.ifrc.org/emergencies/4832#analysis
19 response and recovery as well as general resilience to biological hazards have been stressed and covered by several actions, namely 1.2h, 1.3a, 2.1a, 2.2a, 2.2h, 2.2l, 4.1a, 4.2c. This is further emphasized in the series of UNDRR Asia-Pacific COVID-19 Briefs that highlights the challenges, impacts, lessons learned, and opportunities in the region related to the COVID-19 pandemic.\textsuperscript{16}

VCs dealing with these issues can be identified as they have selected the theme "health and health facilities", of which there are 9 VCs, and/or the hazard "epidemic and pandemics", of which there are 42 VCs. Out of the 9 VCs related to "health and health facilities", three are covering Asia and Oceania, two of which are regional in scope and one is national. Out of the 42 VCs related to “epidemic and pandemics”, 18 are covering Asia and Oceania, five of which are regional and 13 are national or local in scope.

While there are already several VCs that cover this critical issue, given the recent severe impacts of the COVID-19 pandemic and the importance that the Asia-Pacific Action Plan assigns to this, this is an area that can be further strengthened by having more commitments in the region.

Cascading and compounding risks

In the last two decades, the increasingly cascading and compounding nature of disaster risk has been acknowledged and a more holistic approach to disaster risk management emphasized. Recent examples of such risks turning into disasters in the Asia-Pacific region include Cyclone Yasa affecting Fiji during the COVID-19 pandemic (compounding risks) resulting in floods and landslides (cascading risks); heatwaves in northern India in 2020 which triggered health hazards and locust impacts (cascading and compounding risks); and the Melamchi flood disaster caused by a glacial lake outburst resulting in landslides and riverbank erosion leading to flooding in the Melamchi settlement zones (cascading and compounding risks).\textsuperscript{17} Likewise, this issue is also reflected in actions of the Asia-Pacific Action Plan 2021-2024, namely 1.1a, 1.2a, and 4.2a.

Among the themes and issues within the SFVC online platform that may indicate coverage of such risks are “complex emergencies”, “early warning”, and “risk identification and assessment”. While many of the VCs in the region address multiple hazards and cover one if not all the themes and issues mentioned, very few VCs mention cascading and compounding risks. This may indicate that stakeholders lack a good understanding of cascading and compounding risks and how they can be managed, which is in line with findings of the scoping study on compound, cascading and systemic risks in the Asia-Pacific region by the UNDRR and the Asia Pacific Science and Technical Advisory Group.\textsuperscript{18}

In this regard, stakeholders are encouraged to submit VCs that explicitly address cascading and compounding risks.

\textsuperscript{16} UNDRR Asia-Pacific COVID-19 Briefs can be found here: \url{https://www.undrr.org/drr-and-covid-19/policy-briefs?field_publication_type_value=All&field_hazard_target_id=All&tid=71&field_undrr_publication_types_target_id=746&field_theme_target_id=All}

\textsuperscript{17} UNDRR (2022), Scoping Study On Compound, Cascading And Systemic Risks In The Asia Pacific, United Nations Office for Disaster Risk Reduction (UNDRR).

\textsuperscript{18} See footnote above.
Citizen science and crowdsourced data

DRR initiatives supported by citizen science and crowdsourcing have been gaining attention as they encourage individuals and communities to be involved in local disaster risk management, while also promoting more open and accessible information that can be used for different disaster risk reduction processes such as comprehensive risk assessments, early warning systems, and strategic decision-making.19

Only two VCs in the region were identified that directly support this topic. While the VC "Community Mapping for Risk Identification and Communication by HOT" has a global scope, it has specific projects in the Asia-Pacific region, such as PhilAWARE and InAWARE. These projects were able to mobilize local citizens to map local infrastructure on OpenStreetMap and were both highlighted recently at the Ignite Stage of the Global Platform 2022. Another VC is “Paving the way for building Resilience in Nepal: An initiative to understand and assess risk through the use of frontier technology” which aims to engage youth and young professionals in frontier technology to map out hazards, resources and risks in Nepal.

Under Priority 1 of the Sendai Framework to better understand disaster risk, the Asia-Pacific Action Plan 2021-2024 proposes specific actions related to citizen science and crowdsourcing (1.1b and 1.2g). Hence, additional commitments that support this area would be desirable.

Conflict and Humanitarian-Development-Peace nexus

DRR in conflict settings constitutes a particular challenge and is linked to the umbrella term Humanitarian-Development-Peace nexus.

In the Asia-Pacific region, only two VCs directly refer to conflict, namely the regional VC “PREDIKT - Innovative Family Preparedness for Disaster Toolkit” with a current focus on Indonesia, and the global VC “Survivor and community-led crisis response” which refers to conflicts in Asia such as Philippines, Myanmar and West Bank/Gaza. Yet, the issue of conflict and humanitarian-development-peace nexus related to other conflicts in Asia are not covered by any VC.

UNDRR encourages the scaling up of DRR in this context given that vulnerabilities of fragile and conflict-affected countries are especially high.20 The Asia-Pacific Action Plan also proposes actions 2.1f and 4.2b that are related to this topic.

19 UNDRR and AP-STAG (2022), Status of Science and Technology in Disaster Risk Reduction in Asia-Pacific. Bangkok: UNDRR.

20 UNDRR Knowledge Base on scaling up DRR in Humanitarian Action can be found here: https://www.preventionweb.net/collections/scaling-drr-humanitarian-action
Ethnic minorities, displaced populations and migrants

DRR efforts must be inclusive and consider vulnerable groups. Several vulnerable groups are addressed by VCs including women and girls, older persons, and persons living with disabilities. Yet, ethnic minorities, displaced populations and migrants are being left behind and are not sufficiently covered by VCs in the region. This is also closely related to the previous topic on conflict and humanitarian-development-nexus.

The VC “Updated Hazard Maps for Selected Metro Manila Communities” implemented by Earthquakes and Megacities Initiative and PLAN International Philippines is a VC with a local scope aiming to develop hazard and impact maps for specific districts in Manila. This is the only VC that directly pertains to taking displaced populations into account in the region.

According to the UN High Commissioner for Refugees, as of the end of 2021, there were 4.2 million refugees and 4.4 million internally displaced persons in Asia and the Pacific who are significantly more vulnerable to disasters. Moreover, the Asia-Pacific Action Plan 2021-2024 proposes specific actions for this (1.3a, 1.3c, 2.1c, 2.2k, 3.3c, 4.2g). Thus, it is important to see more contributions by stakeholders that address this issue.

Green and blue economy

The Asia-Pacific Action Plan emphasizes the promotion of a green and blue economy that builds resilience of businesses, including through nature-based solutions and the revival of traditional ecological knowledge. This is also closely related to the topic of biodiversity and diversification which promotes an ecosystem-based approach for building resilience.

The concept of “green and blue economy”, although not directly referenced by any VCs in the region, appears to be covered by a few VCs. For example, the VC “Contribute to DRR by the Economic Uplifting of Natural Hazards Prone Areas of Pakistan” by Geo-Tech Consultancy Services, also featured as one of the case studies, promotes the use of local natural infrastructure resources with the goal of supporting the economic uplifting of disaster-prone areas in Pakistan. Another example is the VC “Grow Forests, Change Lives by the Lebanon Reforestation Initiative (LRI)” aims to support communities to expand, manage and protect Lebanon’s forests and landscapes as they can reduce the impact of disasters and enable progress towards sustainable development.

Although there are already some VCs that cover this topic, more VCs that directly refer and cover “green and blue economy” and “nature-based solutions” are welcomed from the Asia-Pacific region.

Summary

The brief case studies above gave an idea that the VCs, which cover Asia and Oceania, support many of the 83 actions of the Asia-Pacific Action Plan 2021-2024, while the featured topics revealed that several actions could be further supported by more VCs submitted in the Asia-Pacific region.

In addition to the case studies, there are other indicators demonstrating how the VCs are aligned with the Asia-Pacific Action Plan, especially related to collaboration. Several actions of the Plan call for collaboration, and VCs are supporting collaboration between stakeholders significantly in several ways, e.g., by the fact that a VC can have several implementers and multiple partners, who all implement the VC in a collaborative manner.

21 https://reliefweb.int/organization/unhcr
The SFVC 2022 report illustrates this by looking at the CITYNET Yokohama Project Office, which implements the most VCs, and two countries, Nepal and the Philippines, which are covered by the most VCs. The CITYNET Yokohama Project Office implements its VCs with co-implementers and partners from Japan as well as from the country where the VC is implemented. In Nepal, the collaboration between international and local implementers and partners of the various VCs is remarkable, while in the Philippines the collaboration among different stakeholders and government entities is a good practise.

Another example is related to youth. The Asia-Pacific Action Plan calls for youth (among others) to be included towards decision-making and leadership, and to increase the capacities of the youth to build back better. This topic is also supported by several VCs and can be illustrated by the U-Inspire Alliance. U-Inspire acts as an umbrella in Asia, under which youth organisations implement five VCs in India, Indonesia, Malaysia and Nepal. These VCs strengthen collaboration and mostly focus on resilience and building back better.

Overall, these case studies and examples illustrate that the VCs covering the Asia-Pacific region, and the actions of the Asia-Pacific Action Plan 2021-2024 are fairly aligned. Although the Asia-Pacific region is covered by the greatest number of VCs compared to other regions, stakeholders working on DRR in the region are encouraged to submit more initiatives through the platform to better monitor and take stock of the progress made in implementing the Sendai Framework. Considering the analysis of VCs in the region, it would be desirable to have more VCs coming from stakeholders from the news and media and for VCs to continue being updated to have a more realistic picture of contributions to the Sendai Framework. Finally, it is particularly recommended that VCs are submitted covering the following underrepresented and prioritized topics: biodiversity and desertification, biological hazards, cascading and compounding risks, citizen science and crowdsourced data, conflict and humanitarian-development-peace nexus, ethnic minorities, displaced populations and migrants, as well as green and blue economy.

Despite these gaps, the Asia-Pacific region is a leading example and has consistently mobilized more stakeholders to publish voluntary commitments on the SFVC online platform allowing UNDRR to monitor and take stock of all-of-society engagement in the implementation of the Sendai Framework for Disaster Risk Reduction. More importantly, for stakeholders, the SFVC online platform continues to provide a space to highlight their achievements and an opportunity to connect and collaborate with other stakeholders working in the region.

Priority 1: Understanding disaster risk

1.1 Regional Actions

a. Further develop risk assessment methodologies and approaches to consider the systemic, compounding, transboundary, probabilistic and dynamic nature of existing and emerging disaster risks and their cascading effects, including in fragile situations and complex emergencies. The methodologies should be based on science and incorporate traditional and indigenous knowledge.

b. Enhance the methodologies and collection of standardised risk and impact data, disaggregated by income, sex, age and disability, including crowdsourced data, to inform inclusive and accessible disaster risk reduction that promotes gender equality.

c. Enhance the collaboration between regional and national scientific institutions and platforms to strengthen the understanding of short and long-term climate projections and their implications on climate and disaster risks.

d. Enhance transboundary and cross-sectoral sharing of data and good practices by utilizing existing regional platforms, promote open data, and support joint analyses among countries to enable comprehensive risk assessments.

e. Enhance transdisciplinary engagement between scientists, policy-makers, civil society and businesses to increase shared understanding of current and future risks and strengthen science-based decision-making.

1.2 National Actions

a. Assess disaster risks and drivers, vulnerability, capacity, exposure, hazard characteristics and their possible sequential and cascading effects, and take measures to guide and ensure risk disclosure in public and private transactions.

b. Survey the disaster risk reduction abilities of stakeholders and strengthen linkages between NDMOs, National Statistics Offices and national science, environmental, hydrological, agricultural, geological, maritime, meteorological, social protection, gender equality and public health agencies to support and provide guidance towards the collection, availability, analysis, interoperability, sharing and use of disaggregated disaster-related data to support risk-informed development.

c. Update national comprehensive risk profiles and disaster risk reduction status reports regularly to document changing risk dimensions and mechanisms to address them.

d. Support policymakers to better understand the root causes of vulnerability and how discrimination and social norms can interact to exacerbate disaster risk based on an

individual’s gender, disability, race, age, education, socio-economic status, geographical area and other factors, in order to enhance risk-informed policy making.

e. Improve public awareness and understanding of disaster risk reduction, including through the national commemoration of the International Day for Disaster Risk Reduction (13 October) and World Tsunami Awareness Day (5 November), by encouraging the participation of all stakeholders.

f. Incorporate disaster risk reduction in formal and non-formal education in primary, secondary and tertiary levels and in professional training curricula including through partnerships with Higher Education Institutions, universities and relevant organizations.

g. Apply and share science, engineering, technology and innovation advancements and promote the development of innovative, accessible and low-cost technologies and tools, which can be deployed for disaster risk reduction and prevention, complemented by traditional and indigenous knowledge as well as citizen science.

h. Strengthen the understanding and early detection of biological hazards and emerging infectious diseases, beyond COVID-19, which could potentially cause public health emergencies, through a multi-hazard, multi-sectoral and multi-disciplinary approach.

1.3 Local Actions

a. Incorporate the lessons of the COVID-19 pandemic into disaster risk reduction capacity development efforts aimed at local leaders, including representatives of women and girls, youth, older persons, persons living with disabilities, migrants, displaced persons, those in the informal economy, those living in remote areas, other marginalized groups as well as the private sector.

b. Enhance capacities for the inclusive collection and analysis of quality disaggregated risk, climate change and disaster impact data, which include regular updates of baseline data, of data on the socio-cultural and ecological context as well as of risk assessments, maps and profiles, through use of new technologies as well as through standard methodologies and tools.

c. Make risk, forecast, early warning and disaster impact information, including information about operational services and facilities, publicly available in formats that are accessible and customized to be easily understood by everyone in the community, keeping in mind the disproportionate risks faced by children, women, persons living with disabilities, older persons, migrants, ethnic minorities and persons living in remote areas. Risk communication and warning dissemination systems should address misinformation and include a feedback mechanism to verify that the messages have been received, understood and actions have been taken.

d. Assess, preserve, promote and enhance local, traditional and indigenous knowledge and practices, which includes documentation of knowledge and practices that are orally passed down, to complement science-based knowledge. Integrate traditional and indigenous knowledge into risk profiles and early warning systems.

e. Improve cities’, towns’ and private sectors’ understanding of risk, including the impact on supply chains, and enhance their commitment to inclusive local climate and disaster risk reduction and resilience building as well as prevention and mitigation activities.

Priority 2: Strengthening disaster risk governance to manage disaster risk

2.1 Regional Actions
a. Ensure country and sector-specific technical assistance is provided, through regional and development cooperation mechanisms, to strengthen linkages and complementarity between climate change policies and actions, especially National Adaptation Plans, disaster risk reduction strategies and national COVID-19 recovery efforts.

b. Support implementation of sub-regional frameworks, such as the Framework for Resilient Development in the Pacific and the Association of Southeast Asian Nations Agreement on Disaster Management and Emergency Response.

c. Support the meaningful participation of women, children, youth, persons living with disabilities, indigenous peoples, older persons, those displaced, migrants and ethnic minorities as an enabler of inclusive resilience building.

d. Promote the implementation of the health aspects of the Sendai Framework, noting the Bangkok Principles, to ensure more systematic cooperation, coherence and integration between disaster risk reduction, the health sector for the management of biological hazards, including epidemics and pandemics.

e. Scale up the application of ecosystem-based approaches in disaster risk reduction to coherently implement the three Rio Conventions, namely on Biodiversity, Climate Change and Desertification, and the Ramsar Convention on Wetlands of International Importance, to prevent and reduce the impact of water-related disasters as well as to build disaster resilience and to mitigate climate change.

f. Support the development of conflict-sensitive disaster risk reduction approaches, policies and plans in fragile contexts and complex emergencies.

2.2 National Actions

a. Adopt and promote coherent planning and implementation of national and local disaster risk reduction and climate change adaptation strategies, including through enhancing the linkages between national development plans, Nationally Determined Contributions, disaster risk reduction strategies, National Adaptation Plans and national COVID-19 recovery efforts, while systematically and scientifically optimizing the effective disaster risk reduction measures across all policy sectors with an emphasis on pre-disaster investments.

b. Establish mechanisms to monitor the implementation and to evaluate effectiveness of the national and local disaster risk reduction and climate change adaptation strategies, including through the formulation of monitoring, evaluation and accountability frameworks.

c. Establish or strengthen close collaboration between national and local disaster management organizations.

d. Establish or strengthen close collaboration between disaster management organizations and other organizations and ministries, such as for planning, finance, education, health, human rights, agriculture, environment, social affairs, women and gender equality, cultural heritage, local and urban development, persons living with disabilities and older persons, national meteorological and hydrological services, as well as the private sector and community-based organisations to support risk- informed development, anticipatory action and ex-ante disaster risk reduction financing.

e. Review and enhance legal, regulatory and policy instruments and institutional mechanisms to ensure risk-informed sustainable development and promote decentralized decision-making for risk-informed local-level investments.

f. Promote accountability and transparency in disaster risk ownership and risk transfer.
g. Increase diversity and inclusivity as well as the representation of women, youth, persons living with disabilities, and indigenous peoples in leadership and decision-making, including through incentives, affirmative recruitment policies and an enabling working environment.

h. Implement disaster risk reduction actions that promote gender equality, particularly in the context of the COVID-19 recovery, including through the implementation of the Ha Noi Recommendations for Action on Gender and Disaster Risk Reduction and taking into account the Gender Responsive Disaster Risk Management Status Review and Recommendations for implementing the Sendai Framework for DRR in the Asia Pacific.

i. Promote and support universal access to sexual and reproductive health as well as prevention and response to gender-based violence in national and local disaster risk reduction strategies and plans in order to reduce vulnerability to risk.

j. Promote the inclusion of persons living with disabilities and older persons in strategies and plans, including through the implementation of the Dhaka Declaration on Disability and Disaster Risk Management.

k. Integrate prevention of displacement as key elements of disaster risk reduction strategies and relevant sectoral strategies.

l. Review disaster risk reduction strategies, policies and legislations for better integration of biological hazards and incorporate lessons learned from the COVID-19 pandemic.

m. Support a human rights based approach to disaster risk reduction, in line with obligations under human rights conventions.

2.3 Local Actions

a. Strengthen the capacity of local authorities to develop and implement community-based inclusive and sustainable disaster risk reduction and climate change adaptation plans that enhance meaningful participation of diverse population groups.

b. Accelerate the implementation of Making Cities Resilient 2030 as a mechanism to enhance the advocacy, planning and financing of local resilience, and promote urban disaster risk management that combines social, environmental and economic aspects, and incorporates inclusive and sustainable land-use planning and service delivery.

c. Enhance linkages and collaboration between schools and local authorities to better integrate school safety and children’s participation into local disaster risk reduction strategies.

Priority 3: Investing in disaster risk reduction for resilience

3.1 Regional Actions

a. Enhance cooperation for the development and application of predictive models to scale up anticipatory actions and financing.

b. Increase and track investment in knowledge, education, research, innovation, technology and the empowerment of young researchers and professionals, particularly women and indigenous people, in science and technology to advance multi-disciplinary disaster risk reduction, climate change adaptation and resilience.

c. Analyse the impact of disasters and risk on graduating LDCs and support the integration of disaster risk reduction in relevant policies and investment; advance
resource mobilization for LDCs in the Asia-Pacific region that cannot fund the implementation of the Sendai Framework.

d. Enhance engagement of central banks and international financial institutions to promote the integration of climate and disaster risk into financial stability measures, including through progressive steps towards risk disclosure.

e. Encourage multilateral development partners and the private sector to invest in north-south and south-south regional knowledge transfer on risk informed development.

f. Support localization by financing local and grassroots groups to rapidly address their varied risks and vulnerabilities.

g. Reaffirm the importance of investments that contribute to disaster risk reduction, beyond risk financing and other risk transfer mechanisms.

3.2 National Actions

a. Allocate the necessary resources, including financial and operational resources as appropriate, at all levels of administration for the development and the implementation of disaster risk reduction strategies, policies, plans, laws and regulations in all relevant sectors, as well as for ex-ante public investment in structural measures such as resilient infrastructure for flood prevention and earthquake resilience.

b. Encourage the integrated financing of disaster risk reduction and climate change adaptation actions through incentivized public-private partnerships and business-to-business collaboration for risk-informed and green investments, including engaging of key national business federations and chambers.

c. Establish frameworks to enhance nationwide investment in prevention and guide the development of integrated national financing frameworks that integrate prevention and reduction of risks in sustainable development.

d. Facilitate an enabling environment for layered, blended and innovative financing to prevent and reduce disaster risk, including mobilization of private capital flows and leveraging multi-stakeholder initiatives.

e. Strengthen public financing tracking mechanisms to enable multi-sector disaster risk reduction.

f. Develop, disseminate and apply standards and guidelines based on universal design principles for inclusive and climate and disaster resilient infrastructure, including for often ageing water, energy, transportation, telecommunications, health and education infrastructure, incorporating existing seismic and fire resistant building codes as well as cyber security.

g. Ensure through investments that services, such as social protection, water distribution and primary health and other essential services, are resilient, accessible and inclusive of all.

h. Promote forecast-based financing and anticipatory actions, including through shock-responsive social protection, risk-informed micro-credit initiatives as well as inclusive disaster risk insurance for people, properties and livelihoods in order to manage residual risks, remaining after the application of disaster risk reduction measures.

i. Strengthen collaboration between development partners, regional organizations and business networks to establish social security and safety nets, including through regulatory measures, to support the resilience of micro, small and medium-sized enterprises (MSMEs), especially women-led MSMEs, livelihood groups and communities.

j. Promote a green and blue economy that builds resilience of businesses, including through nature-based solutions and the revival of traditional ecological knowledge.
k. Promote gender budgeting for financing of disaster risk reduction and climate change adaptation actions and build capacities in this regard.
l. Encourage digitization of the economy to facilitate business continuity and the delivery of assistance both in the context of disaster-responsive social protection and in humanitarian action.

3.3 Local Actions

a. Ensure budget and institutional commitment for implementation of local disaster risk reduction, climate change adaptation and resilient development strategies.
b. Integrate universal design principles for accessible, inclusive, liveable and resilient cities and infrastructure, as well as for early warning and evacuation mechanisms.
c. Enhance business resilience in partnership with local authorities to ensure economic stimulus and recovery programmes reach all enterprises, in particular MSMEs and, in combination with social protection programmes, the informal sector and migrant workers.
d. Encourage the private sector to invest in resilience building through innovations and new technologies, including through social entrepreneurship and seed funding for young people who can bridge the gap between new and traditional techniques.
e. Finance local, community, women’s rights and women-led, youth-led, child-led organisations and enterprises as well as organisations of persons living with disabilities, older persons associations and children’s rights/welfare organisations to reduce disaster risk and build resilience.

Priority 4: Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction

4.1 Regional Actions

a. Enhance regional cooperation and policy commitments to support countries in recovering from the COVID-19 pandemic and to build back better, while ensuring resilient, equitable, sustainable and climate-sensitive societies.
b. Strengthen impact-based forecasting as well as end-to-end, people centred and multi-hazard early warning with regional organisations supporting governments to enable early and anticipatory actions.
c. Share knowledge, including indigenous knowledge, and best practices on how to build back better and greener for recovery, rehabilitation and reconstruction.

4.2 National Action

a. Prepare or review and periodically update disaster preparedness and contingency policies, plans and programmes, considering climate change scenarios and their impact on disaster risk, and adjust the approaches in light of the dynamic compounding and cascading nature of disaster risks.
b. Strengthen collaboration on the Humanitarian-Development-Peace nexus and the integration of disaster risk reduction in humanitarian action to ensure long-term resilience building that links relief, recovery and disaster risk reduction interventions.

c. Evaluate the effects of the COVID-19 pandemic, including the social, health, psychosocial and the gendered impacts as well as the economic losses.

d. Expand pre-disaster recovery planning considering disaster risks, and enhance capacities for developing recovery assessments as well as risk-informed and climate-smart recovery, reconstruction, development and land use plans.

e. Embed prevention principles and processes, including minimum standards, in recovery and “Build Back Better” strategies and policies, ensuring that all new investments, infrastructure or public programmes are risk-informed.

f. Promote the resilience of new and existing critical infrastructure, including water, energy, transportation, telecommunications, health and education infrastructure.

g. Protect and promote the rights of marginalized groups during disaster-induced evacuation and displacement.

h. Leverage new technologies operating on climate-sensitive and disaster risk reduction data to build back better.

i. Build capacities of local organizations and responders, existing workforce and volunteers as well as youth on how to build back better in order to strengthen professional abilities and scientific skills for risk-sensitive development.

j. Extend “Build Back Better” principles to the reconstruction of heritage and cultural sites, while adhering to preservation policies, and develop guidelines and standards accordingly.

4.3 Local Actions

a. Develop and strengthen accessible regular and reliable weather and climate information as well as localized and end-to-end early warning systems that account for the special needs of marginalized populations, including accessible evacuation routes and centres for persons living with disabilities and older persons.

b. Promote regular disaster preparedness, response and recovery exercises, including evacuation drills, training and the establishment of area-based support systems, as appropriate to local needs.

c. Promote meaningful participation and leadership of marginalized groups in preparedness planning and resourcing for community level early actions and responses and ensure that individuals who experience intersecting inequalities can access and benefit from anticipatory action.

d. Develop and update education continuity plans and integrate “Build Back Better” principles into the education sector; promote “Safe back to school” during recovery.

e. Integrate psychosocial support as part of disaster risk reduction, response and recovery mechanisms, and enhance psychosocial aspects of education curricula to protect the wellbeing of children and their teachers.

f. Promote and facilitate the development of business continuity plans that incorporate risk awareness and adaptive solutions to staying in business and recovering quicker and more sustainable after a disaster.
Annex II – Figures for SFVC Analysis for Asia-Pacific region – August 2022

- **51** Voluntary commitments
- **68** Implementing organizations
- **229** Deliverables
- **254** Partners

**Figure 1. Regional distribution for VCs with regional and national or local scope**

**Figure 2. Regional distribution with scope breakdown**

**Figure 3. Country or territory distribution with scope breakdown**
Note: Figures 4, 5 and 6 indicate the number of VCs in Asia and Oceania out of a total of 51 VCs that contribute to each priority, target and indicator. A single VC may support more than one priority and often contributes to more than one target and indicator.