



ASEAN Socio-Cultural Community POLICY BRIEF

ASCC Research and Development Platform | Policy Brief #11 | 2024

EXECUTIVE SUMMARY

- As a type of Public Health Emergency, in the past two years, the COVID-19 pandemic has added vulnerability indices of the ASEAN Member States (AMS), which means people have become more vulnerable to cope with the impact of multiple hazards.
- Moreover, Public Health Emergency has also pushed ASEAN's disaster managers to re- think ways of conducting emergency operations, such as mobilisation of relief items and personnel, while reducing the risk of infection through the imposition of travel restrictions.
- At the height of the COVID-19 pandemic throughout 2020 to 2021, the AMS have grappled with the management of COVID-19 transmission and its cascading effects, as well as co-occurrence with disasters triggered by natural hazards.
- The ASEAN region was exposed to 1,690 disaster occurrences during this period, where ASEAN contributed 5% of the global cumulative cases and 6% of the global cumulative deaths.
- The COVID-19 pandemic's co-existence with disasters shows gaps and areas for improvement in the disaster management sector to support the region in responding to Public Health Emergencies. However, the current ASEAN Work Programme 2021-2025 is limited in terms of providing programmatic approaches to addressing these gaps.
- This policy brief aims to look at ASEAN's disaster management efforts through the lens of public health emergencies.

POLICY RECOMMENDATIONS

Considering the challenges and issues that ASEAN has faced during COVID-19 alongside the natural hazards that have occurred, these recommendations are designed to improve disaster risk efforts by strengthening disaster governance amid the Public Health Emergency.

1. To champion the implementation of the global Health Emergency and Disaster Risk Management Framework in the context of ASEAN to break silos between the health and disaster management sectors.
2. Integrating strategies among health sectors, National Disaster Management Office, and AHA Centre to improve risk assessment and monitoring.
3. Escalating Public Health Emergency based on experiences during COVID-19 and HE- DRM framework into disaster risk governance.
4. Reviewing the readiness of ASEAN Standby in Public Health Emergency settings.

This policy brief was made possible with the support of: The Government of Japan through the Japan-ASEAN Integration Fund (JAIF)



ASEAN's Disaster Management Support to Enhance Preparedness Against the Next Public Health Emergencies

Mizan B. F. Bisri

Introduction: The need for better integration of disaster management and public health emergency

The emergence of COVID-19 has provided an opportunity to strengthen disaster risk governance in alignment with public health efforts, particularly in terms of risk monitoring, preparedness and response. Considering the co-existence of disaster risk and pandemics, a more integrated framework that links public health emergency (PHE) and disaster risk management is needed. The Health Emergency and Disaster Risk Management (HE-DRM) Framework was introduced to reduce the risk and vulnerabilities of the affected people. Similar to the concept of Disaster Risk Management (DRM), this framework aims to focus on preventive measures rather than reactive,

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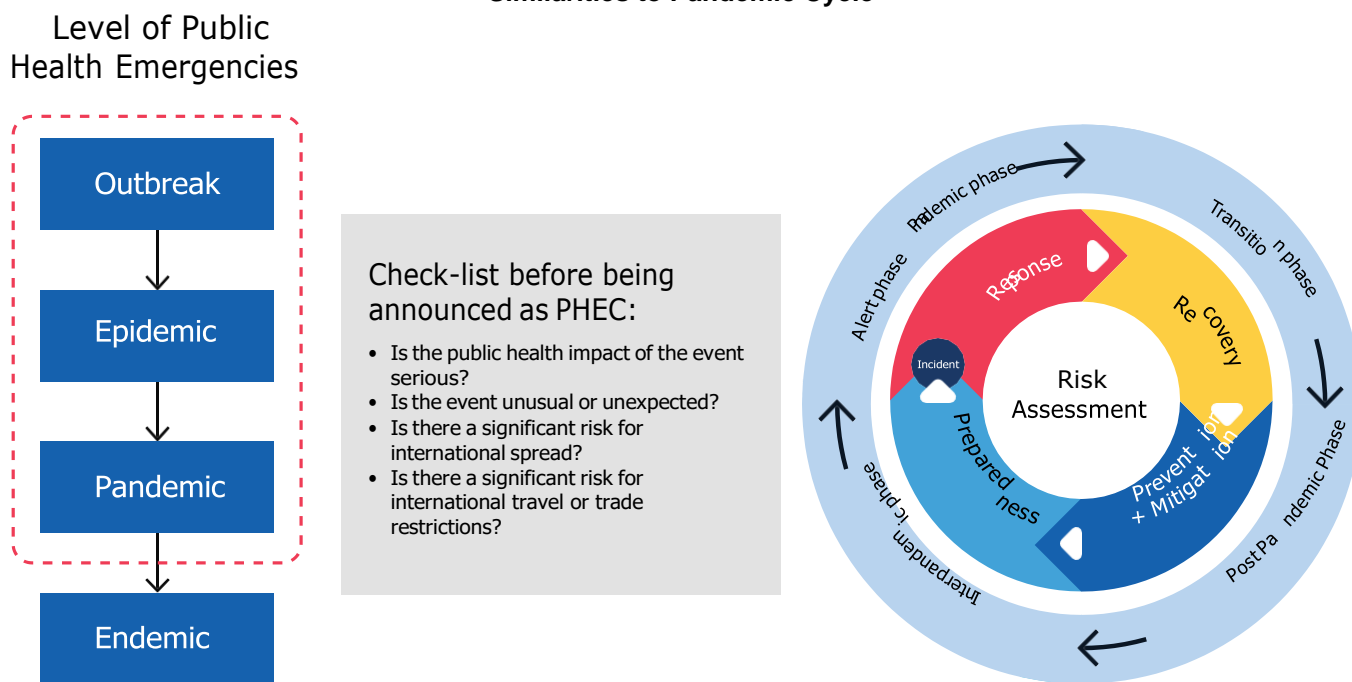
including the use of risk management approach (WHO, 2019). The rampant spread of COVID-19 coupled with global risks such as climate change, has profoundly affected all sectors of society, including far-reaching cascading consequences such as adverse economic repercussions stemming from the global pandemic. These interconnected challenges can escalate vulnerabilities. All in all, risks are becoming more systemic, and consequently are overwhelming disaster risk reduction efforts. There is a need need to urgently strengthen governance systems that address systemic risks (UNDRR, 2022).

In the context of ASEAN, the AADMER Work Programme (AWP) 2021-2025 affirmed that the COVID-19 pandemic and conflict situations perpetuated the complexity of riskscape of ASEAN, particularly in the case of co-occurrence with disasters that heightens negative exposure

to the society. It also adds a layer of challenges and threatens humanitarian access required for mobilising regional responses. Therefore, ASEAN has shifted towards a multi- hazard approach to anticipate impacts exacerbated by natural hazard disasters and PHE.

Not all disease threats worldwide are classified as Public Health Emergencies (PHE) with International Concern (PHEIC). There are several levels of public health emergencies before being declared as a PHEIC by WHO based on International Health Regulations (IHR) - an instrument of an international law that is legally binding on 196 countries, including all WHO member states (WHO, 2005). The levels include outbreak, epidemic, pandemic, and endemic.

Figure 1. Illustration of Level of Public Health Emergencies Overlayed with Disaster Management Cycle and Similarities to Pandemic Cycle



Viewed as a cycle, there is a similarity between disaster risk management cycle and pandemic whereby both show that the process may not be linear, such that a disaster event or the peak of the pandemic can occur again even after the phase considered as post-disaster or post-pandemic. A pandemic often comes in several waves within a protracted period, and this will be recurring until an effective vaccine is developed or herd immunity is reached. As such, policies for pandemic crises and natural hazard-related disasters are different, even though the principles of prevention and mitigation and preparedness phases may be similar for both disaster management and PHE (Fakhrudin, Blanchard, and Ragupathy, 2020).

Another linkage between disaster management and PHE sectors is that infectious disease outbreaks exist because of cascading events after natural hazard disasters. Several contributing factors for transmissions/outbreaks include: cities with extreme population density, insufficient health care services, close proximity of people with animals carrying zoonotic diseases, people's movement within the country and the region, and potential influence of climate change on vector-borne and zoonotic diseases (EU CBRN, 2022).

This policy brief aims to enhance ASEAN's disaster management efforts by complementing it with the lens of PHE, as a lesson learned out of COVID-19. It then provides recommendations to enhance ASEAN's disaster management efforts in future public health emergency settings. The recommendations are crafted in a manner that will break the silo between disaster managers and health workers, improve early and rapid actions from respective sectors, and support local leadership in managing disaster response amid PHE.

Learning from Disaster Management and Public Health Interface During COVID-19 Pandemic and Relevance on ASEAN's Disaster Risk Score and Emergency Response Operations

The interface between disaster management and the public health sector at AMS and regional level showcase that several gaps need to be addressed. In the bid to be better prepared against future public health emergencies and their co-existence with other disaster risks, a more integrated risk assessment and monitoring and preparedness for effective and coherent response are crucial. Hence, this section focuses on these two phases within the DRM cycle:

1. COVID-19 Pandemic and the Changes in the Risk Score of ASEAN Member States

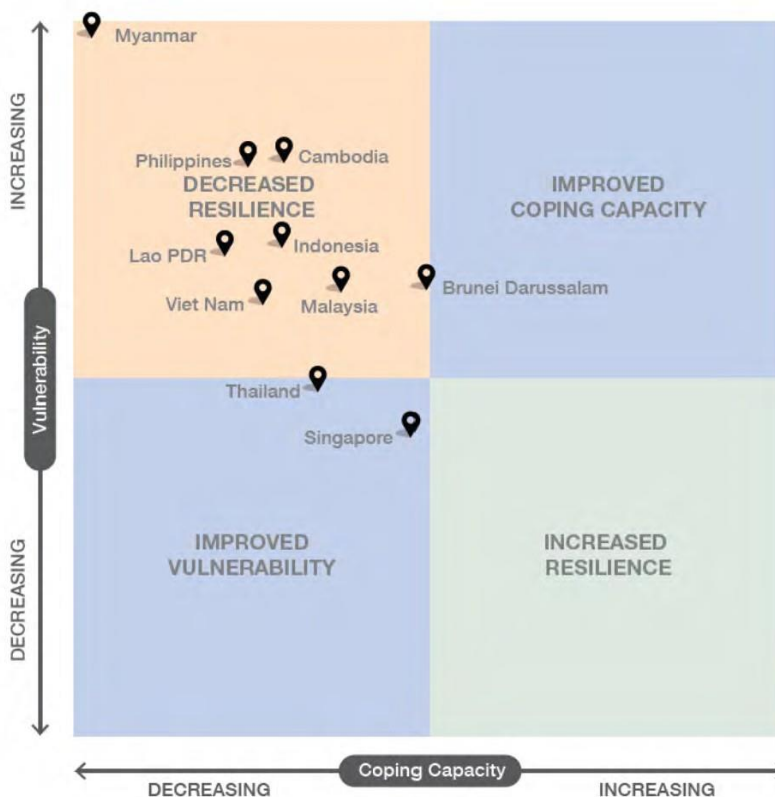
In comparison to the 2019 edition, the 2022 edition of ASEAN Risk Monitor and Disaster Management Review (ARMOR) outlined significant changes in the vulnerability score of AMS during the COVID-19 pandemic. This was attempted through the creation of ASEAN's Risk Information for Situational Knowledge (ASEAN RISK), which combined the Joint Research Centre (JRC) INFORM-Index and the AHA Centre and Pacific Disaster Centre (PDC)'s National Baseline Preparedness Assessment (NDBPA), Risk and Vulnerability Assessment (RVA) and All-hazard Impact Model 3.0 (AIM 3.0). The current ASEAN risk methodology has considered COVID-19 exposure as part of a multi-hazard component by incorporating total cases, deaths, average daily cases, average daily deaths, and unvaccinated population.'

The result shows that AMS have experienced worsening vulnerabilities exacerbated by public health emergencies in the past two years. This

study observed that the performance of Myanmar, Cambodia, and the Philippines in the Human Development Index (HDI) have declined. Of these countries, Myanmar and Cambodia demonstrated a trend of becoming more lenient toward official development assistance. Myanmar is a different case due to the additive risk posed by the ongoing political turmoil, which increases the number and exposure of vulnerable groups. Meanwhile, there is a slight decrease in the vulnerability score of Thailand and Singapore due to improved human development, health, and other economic-related variables.

On coping capacity scores, scores for all AMS have slightly declined since the ARMOR's first edition in 2019. Myanmar stands out with the most notable disparity, primarily due to lack of immunisation coverage and challenges related to government effectiveness. Contrast is observed in Lao PDR, attributable to its government effectiveness score, despite notable improvements in the country's infrastructure. Singapore and Brunei Darussalam remain as the countries with the highest coping capacity score. None of the AMS have shown progress in the overall resilience quadrant as shown in the figure below, which shows the status of AMS within the ASEAN's Risk Information for Situational Knowledge (RISK) quadrant.

Figure 2. Classification of AMS within the ASEAN Risk Information for Situational Knowledge (ASEAN RISK) Based on RISK Score in 2019 and 2021 (AHA Centre, 2022)



The following figure is the result of ASEAN RISK 2021, indicating the disaster risk profile of AMS exacerbated by the combination of natural hazards and COVID-19 exposure (Dimailing et al., 2022). Notably, Indonesia, Myanmar, and the Philippines remain the three most-at-risk AMS to disasters as reported in the ASEAN Risk Monitor and Disaster Management Reviews in 2019 and

2020. Despite being exacerbated by PHE, Brunei Darussalam, Malaysia, and Singapore remain the least-at-risk AMS. Even though there is already a risk study available to support ASEAN’s efforts in preparedness and response, there has yet to be any empirical evidence on how the annual ASEAN RISK is used to support ASEAN’s robust preparedness and response strategies.

Figure 3. ASEAN RISK Scores and Ranking for 2021 (Source: ARMOR, 2022)

Member States	Risk	Risk Rank	Resilience	Resilience Rank	Coping Capacity	Coping Capacity Rank	Vulnerability	Vulnerability Rank	Exposure	Exposure Rank
Brunei Darussalam	0.240	9	0.743	2	0.654	2	0.169	9	0.236	10
Cambodia	0.455	5	0.415	9	0.337	9	0.506	4	0.339	9
Indonesia	0.530	3	0.545	6	0.480	6	0.390	5	0.694	2
Lao PDR	0.489	4	0.455	8	0.345	8	0.437	4	0.409	6
Malaysia	0.374	8	0.452	3	0.622	3	0.318	6	0.434	5
Myanmar	0.640	1	0.321	10	0.254	10	0.612	1	0.575	3
Philippines	0.580	2	0.471	7	0.472	7	0.531	2	0.720	1
Singapore	0.178	10	0.871	1	0.837	1	0.095	10	0.365	8
Thailand	0.448	4	0.590	5	0.507	5	0.312	7	0.575	4
Viet Nam	0.342	7	0.609	4	0.513	4	0.296	8	0.387	7

2. ASEAN’s Emergency Response Operations During and for the COVID-19 Pandemic

In this section, the policy brief provides an overview of ASEAN’s the emergency response operations to several disasters that were affected by various facets of the COVID-19 pandemic. Additionally, it outlines the scope of the disaster management sector and the contributions of its stakeholders to the broader COVID-19 pandemic response.

During the COVID-19 pandemic, most of the disaster events were coincidentally within local disaster response capacities (Dimailing et al., 2022). However, at least three disasters required a national level of response, which also triggered regional coordination: the Central Viet Nam flooding in October 2020, Typhoon Odette in the Philippines in November 2020, and Super Typhoon Goni in December 2021. As a result, disaster response operations, procedures, and protocols of the NDMOs and the AHA Centre adjusted to the varying degrees of restrictions

arising the COVID-19 pandemic. For instance, in the case of the Philippines and Malaysia as AMS with the highest number of COVID-19 cases and deaths, they issued and implemented a COVID-19 Operational Guidance for Camp Coordination and Camp Management and Protection during the Typhoon Goni disaster response. This measure aimed to prevent and control the infection rate inside evacuation centres (Dimailing et al., 2022).

Likewise, the AHA Centre no longer deploys neither its In-Country Liaison Team (ICLT) from its headquarters to the affected NDMO nor the ASEAN Emergency Response and Assessment Team (ASEAN-ERAT) to the disaster-affected areas. Nonetheless, the AHA Centre for the first time prioritised remote support to the affected AMS. For example, for the the Central Viet Nam flooding that affected approximately 801,000 people, the AHA Centre was able to deploy DELSA stockpiles from Malaysia to augment the efforts of Viet Nam NDMO, consisting of 1,000 shelter repair kits and 1,300 kitchen sets, without flying its ICLT or ASEAN-ERAT to facilitate the arrival of the relief items (AHA Centre, 2020a). The AHA Centre provided remote assistance to ensure that the NDMO was able to perform this function smoothly. As a comparison, in a similar major flood response in 2018 after TS Son Tinh, the AHA Centre had to mobilise its ICLT from Jakarta to Vientiane, to ensure the timely delivery of 1 Mobile Storage Unit (MSU), 2 aluminium boats, 150 family tents, 2,616 hygiene kits, and 3,500 mosquito nets (AHA Centre, 2018). These two instances demonstrated that the centre has remained highly effective in supporting the affected NDMOs by mobilising the stockpiles with minimal human resource deployment. This approach not only helped to manage infection rate but also enhanced operational efficiency. The AHA Centre only activated its ICLT for both Typhoon Odette and Super Typhoon in the Philippines as the Centre has an existing national logistic staff embedded in the NDMO.

Despite these adjustments, NDMOs and the AHA Centre faced shared challenges when conducting emergency responses, all while the pandemic loomed in the background. First, logistics became the most challenging due to both domestic and international movement restrictions (AHA Centre, 2018). Second, there was slower data collection and situational reporting due to additional arrangements for deploying disaster assessment teams (AHA Centre, 2018). Third, delay in the delivery of relief assistance, which was due to the combination of a more complex decision-making across sectors and logistical limitations (AHA Centre, 2018).

During the response, there was no conclusive evidence that an integrated analytics and data sharing were undertaken between emergency operations centres (EOCs) in the disaster management and health sector. Primarily, the epidemiological surveillance and health-risk information update were used to inform auxiliary risk to the emergency response operations. One of the examples is reflected through ASEAN's response to Super Typhoon Odette (Rai) in the Philippines in 2021 when the National Disaster Risk Reduction and Management

Council (NDRRMC) of the Philippines accepted the AHA Centre's offer of assistance. The typhoon that hit the southern part of the Philippines was recorded as the strongest storm in 2021 amid the pandemic, followed by outbreaks of food-and water-borne disease. However, the situation updates released by the AHA Centre presented limited analysis regarding the impact on public health or how public health challenges could impede humanitarian operations, despite the provisions of the region's health sector experts (AHA Centre, 2020b). Furthermore, it remains unclear how ASEAN mechanisms respond to

COVID-19, including the collaborative efforts between ASEAN EOC Network, the Health Division of the ASEAN Secretariat, ARARC, and the AHA Centre during the super typhoon.

Civil society organisations (CSOs) and non-government organisations (NGOs) have limited role in supporting the region’s collective COVID-19 response (ASEAN, 2020a). Similarly, there is limited evidence illustrating the roles played by the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) Partnership Group (APG) in facilitating ASEAN’s remote support during the aforementioned disasters. This is a setback as ASEAN CSOs and NGOs have been in a close collaboration with the AHA Centre and ASEAN Committee on Disaster Management (ACDM) under the umbrella of APG. Without the involvement of CSOs and NGOs, the ASEAN COVID-19 response is state-centred, despite the localisation agenda and aim to work with CSOs as reflected in the AADMER Work Programme 2021-2025. Leading to the 36th ASEAN Summit, human rights violations throughout combatting COVID-19 have intensified, which triggered 45 CSOs actively advocating for the exclusion of civil society participation during the summit. However, overlooking the role of CSOs during COVID-19 remained reflected in the outcome of the 36th ASEAN Summit, which only mentioned one phrase of “Civil Society” without explicitly highlighting its role in the context of COVID-19 response (ASEAN, 2020c). From the health sector side, the role of CSOs is still limited to AIDS and drugs-related programme. This is despite the role of CSOs being highlighted as among the key stakeholders for the ASEAN Post-2015 Health Development Agenda (APHDA) Health Cluster 2 Work Programme 2016-2020 and 2021-2025 (ASEAN, 2016). However, APHDA does not serve as an operational and tactical document to guide regional action promptly nor does it specify epidemic or pandemic

scenarios such as COVID-19 .

Policy Opportunities and Gaps for ASEAN to Better Integrate Disaster Management and Public Health Emergencies

At the strategic level, the policy brief utilises the components under the HE-DRM Framework to examine disaster management and health sectors’ policy documents and identify opportunities and gaps (WHO, 2019). Although the framework is originally introduced at the global level, ASEAN has a bigger opportunity to manifest the components of HE-DRM under the overarching ASEAN Regional Disaster Resilience Platform (ADRP), compared to the ailing synergy between WHO and the United Nations Office for Disaster Risk Reduction (UNDRR). The table below shows that ASEAN has checked almost all of the HE-DRM components. Nonetheless, there are some missing policies, tools and mechanisms related to health infrastructure logistics, health and health-related services, community capacities for HE-DRM, and monitoring. Some of them including those pertaining to health infrastructure and logistics, health and health-related related services may not be necessarily achieved through regional mechanisms. These components are more suitable to be achieved at the national and local levels, augmented by ASEAN as necessary. However, ASEAN can do more in ensuring community capacities for HE-DRM using its existing collaboration with APG as practiced in the context of natural hazard-related disasters. Monitoring and evaluation is needed to ensure a whole-of-ASEAN approach. The monitoring and evaluation can also provide an opportunity to assess the current efforts that have been in line with HE-DRM framework, such as policies, coordination, and risk communications.

Figure 4. Components and ASEAN’s Relevant Documents on DM-PHE (Source: Author’s Analysis)

COMPONENTS UNDER HE-DRM FRAMEWORK	ASEAN Documents, Tools, Mechanisms
POLICIES, STRATEGIES AND LEGISLATION	AADMER, ASEAN STRATEGIC FRAMEWORK FOR PUBLIC HEALTH EMERGENCIES
PLANNING AND COORDINATION	ADRP, ASEAN Secretariat, AHA Centre, future ACPHEED and APHECS
HUMAN RESOURCES	Health Sector of ASEAN Secretariat, AHA Centre, ASEAN EOC Network managed by Malaysia, ABVC
FINANCIAL RESOURCES	AADMER, ASEAN-SHIELD, ASEAN Care for Economy
INFORMATION AND KNOWLEDGE MANAGEMENT	AHA Centre, ABVC, ASEAN EOC Network, future ACPHEED
RISK COMMUNICATIONS	AHA Centre, ABVC, ASEAN EOC Network, future ACPHEED
HEALTH INFRASTRUCTURE AND LOGISTIC	Not available yet
HEALTH AND RELATED SERVICES	Not available yet
COMMUNITY CAPACITIES FOR HEALTH EDRM	Not available yet. Potential role for the CSO/AADMER Partnership Group (APG)
MONITORING AND EVALUATION	Not available yet

At the operational level, the AADMER Work Programme 2021-2025 was developed amid COVID-19 pandemic, yet the linkages between disaster management and PHE are not apparent in the five Priority Programmes (PP). Although the five-year programme committed to anticipate multi-hazards, the scope of the AWP is still limited to natural and man-made disasters including those exacerbated by climate change, but does appear to have a strong and systematic interface with PHE. However, the Terms of Reference of ACDM allows enhancements to the existing design of the priority programmes to ensure a silo-breaking approach between disaster management and health sectors, especially through PP on Risk Assessment and Monitoring, Prevention and Mitigation, and Preparedness and Response.

The PP on Risk Assessment and Monitoring plays a pivotal role in engaging the health sector in bolstering capacities to forecast, assess and monitor multiple risks using science-based, climate-responsive, and innovative approaches. This includes leveraging ASEAN systems for multi-hazard early warning and risk communication. Moreover key initiatives from the health sector such as the APHDA designed to promote regional cooperation in addressing health issues based on lessons from past cases of infectious diseases such as H5N1 and SARS in the past, can be utilised effectively in this programme. The APHDA allows the ASEAN Health Sector Cooperation to mobilise and use the existing health mechanisms for information sharing, technical exchanges, and updates on policy-related measures in responding to public health emergencies. The ASEAN

Emergency Operations Centre Network for Public Health Emergencies (ASEAN EOC Network), led by Malaysia's Ministry of Health, was set up in 2017 to ease coordination, surveillance, and information exchange. Following its establishment, this network initiated further efforts to create an ASEAN Centre for Public Health Emergencies and Emerging Diseases (ACPHEED), with the aim of advancing risk assessment and communication in future. Investments are being allocated to enhance the capacity for regional cooperation in the field of public health.

The PP on Prevention and Mitigation primarily centres on disaster risk governance and climate change, with limited emphasis on addressing the complexities arising from PHE and disasters. The ASEAN health sector's expertise in PHE can be leveraged to explore potential joint activities within this programme. Crucially, within the framework of a "safe hospital" that can serve the needs of both disaster management and health sectors, there is an opportunity for the disaster management sector to tap into the assets of the health sector. For instance, the effort to enhance knowledge and capacity on resilience of key infrastructure and services within the "safe hospital" framework could benefit from adopting and internalising practices observed in initiatives such as the ASEAN Plus Three Field Epidemiology Training Network

and ASEAN BioDiaspora Regional Virtual Centre (ABVC) led by the Philippines. ABVC provides extensive data analysis and visualisation to support national risk assessments, readiness, and response planning efforts, and addresses the need for virus mitigation measures at international points of entry and exit (ASEAN, 2020b).

As for the PP on Preparedness and Response, there appears to be a missing link in terms of attention given to the types and quantities of DELSA

stockpiles required to meet the needs of PHE and natural hazard-related disasters. The utilisation of DELSA for PHE initially intended for natural-hazard related operations may exhaust the prepositioned stockpiles allocated for deployment during sudden disasters or for the scenarios listed in the ASEAN Joint Disaster Response Plan (AJDRP). What this suggests is that, a review of the AJDRP scenarios to incorporate PHE settings may be beneficial. It is also important to explore the expansion of DELSA's satellite warehouses to accommodate health-related stockpiles with specific technical requirements, including those necessitating cold-chain storage.

Concerning the linkage with ASEAN disaster management tools and mechanisms, it is noteworthy that in 2020, ASEAN developed the ASEAN Strategic Framework for Public Health Emergencies which drew inspiration from the accomplishment of AADMER. The strategic framework aims to complement the work of the AHA Centre and capitalise on the best practices of the ACDM. With this framework, ASEAN can scale up the regional response using existing regional tools and mechanisms from the health sector, including those managed by the AHA Centre such as the ASEAN Joint Disaster Response Plan and ASEAN-ERAT. Usable DELSA stockpiles such as personal hygiene kits, masks, family tents, and mobile storage units (MSU), which are originally prepositioned for natural hazards-related disasters as per the AHA Centre's mandate, were deployed to support the national COVID-19 responses in Malaysia, Thailand, the Philippines, Cambodia, Indonesia, and Myanmar.

While it is commendable that ASEAN attempted to link its health sector with the regional disaster management architecture, there is a pressing need for a more comprehensive review of the readiness of the existing ASEAN disaster management and

health sector tools and mechanisms. Given the greater maturity of the tools and mechanisms within disaster management including the established role of the AHA Centre, it is essential to extend the scope of the existing tools and mechanism to effectively respond to natural hazards related disasters in PHE settings. This readiness review should be based on the scope and mandate of the AHA Centre as the operational engine of the AADMER and ACDM. Hence it is essential to keep referencing the initial definition of disaster and the Terms of Reference of the AHA Centre and ACDM. The definition and mandate do not explicitly restrict the scope of work for the Centre, allowing it to potentially contribute to addressing public health emergencies.

Policy Recommendations

It is without a doubt that ASEAN, through the AADMER Work Programme, is poised to champion an approach that breaks down silos between the disaster management and health sectors, given the commitment of the five-year plan to focus on a multi-hazard perspective. While incorporating health approaches into the existing plan may not be within the scope of the NDMO, the impacts brought by PHE are interlinked. ASEAN has a significant opportunity to facilitate cross-sectoral collaboration, under the umbrella of the recent ADRP, which is the reformed Joint Task Force for Humanitarian Assistance Disaster Relief (JTF-HADR), with the following specific recommendations to enhance the existing AWP 2021-2025:

1. To champion the implementation of the global HE-DRM) Framework within the context of ASEAN to facilitate a silo-breaking approach between the health and disaster management sectors.

2. To channel the information from key strategic documents, and from tactical and operational plans of the health sector into the efforts of the NDMOs and the AHA Centre in expanding the sectoral datasets as part of risk assessment and monitoring. This expansion could facilitate a better understanding of the systemic, cascading, and compounding risks.
3. To expand the scope to include PHE through the inclusion of best practices of the health sector during COVID-19; infusion of HE-DRM framework into disaster risk governance; and, exploration of joint avenues for supporting capacity building of health and disaster management personnel interfacing with hospital management.
4. To review the preparedness and readiness of ASEAN standby arrangements and scenarios, and include disaster management requirements within PHE settings. Under this priority programme, it is also essential to leverage the role of CSOs and NGOs as part of a whole-of-ASEAN approach. Utilising NGOs and CSOs may contribute to helping ASEAN reach out to the community level to build resilience.

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