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COVID-19 and the ASEAN responses: Comparison and analysis through policy science

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Abstract

The World Health Organisation (WHO) announced the new coronavirus disease (COVID-19) as a pandemic on March 11th, 2020. The pandemic has brought havoc globally as more than 190 countries and territories are affected as of 30 April 2030. COVID-19 crisis suggests that no country can deal with the pandemic alone. International cooperation including regional cooperation is essential for any country to survive COVID-19. We are particularly interested in Association of South East Asian Nation (ASEAN) cooperation and performance under COVID-19 because it has been one of the regions where regional cooperation on health security has been functioning based on lessons from SARS 2003 and H1N1 2009. The “One Vision, One Identity, One Community” of ASEAN has merits under COVID-19 response but remains invisible.
The method encompasses analysis of published materials issued by and accessible from the ASEAN website, complemented with analysis for media articles including social media, supported by published academic journal articles. All of the authors have expertise on ASEAN policies in the field of health, disasters, and regional policy and planning. Some authors have also worked from various international organisations working on issues related to the ASEAN region.

This paper aims to document and analyse how ASEAN member states respond to COVID-19. It asks how to cooperate under the One-ASEAN One Response framework in the context of COVID-19. This paper also compares the 10 member states’ policy responses to COVID-19 from January to April 2020. We utilise the framework of policy sciences to analyze the responses. We found that the early regional response was slow and lack of unity (January - February 2020). Extensive early measures taken by each member state are the key to the success to curb the spread of the virus. Although, during March and April 2020, ASEAN has reconvened and utilised its existing health regional mechanism to try to have a coherent response to COVID-19 impacts. Strengthening future collaboration should be implemented by recognizing that there is a more coherent, multi sectoral, multi stakeholders and whole-of-ASEAN Community approach in ensuring ASEAN's timely and effective response to the pandemic. Finally, we call for the COVID-19 recovery should allow for healthy, just, resilient and sustainable ASEAN.

**Keyword:** COVID-19, ASEAN, Pandemic, Policy, Disasters, Health, Regional cooperation, health system resilience

1. Introduction: Existing health cooperation at ASEAN

The new coronavirus disease (COVID-19) has brought havoc globally. The World Health Organisation (WHO) announced it as a pandemic on March 11th, 2020. It originates from the city of Wuhan in China, which then spread early to the neighbouring
countries of South Korea, Japan and Iran. Due to its proximity and strong interconnections in tourism and trade, countries in the South East Asia region, countries part of the Association of SouthEast Asian Nation (ASEAN) were affected early. The 10 ASEAN countries have reported at least 20,000 COVID-19 cases with xx deaths in total as of 30 April 2020 (REF).

COVID-19 response in ASEAN should interest scholars because ASEAN is one of the regional cooperation bodies in the world where regionalism serves as a platform for cooperation in the health security sector since 1980 (ASEAN 2018). Prior to COVID-19, ASEAN has been co-managing epidemics during SARS\[1\], H1N1\[2\] and MERS-CoV (ASEAN 2020). The ASEAN Community consists of three pillars, namely the ASEAN Political-Security Community (APC), ASEAN Economic Community (AEC) and ASEAN Socio-Cultural Community (ASCC) (ASEAN 2017).

The ASEAN health cooperation is under ASCC pillar. “A Healthy, Caring and Sustainable ASEAN Community” is the vision of the ASEAN Post-2015 Health Development Agenda formulated in 2015 (ASEAN 2018). We argue the pandemic scale events such as COVID-19 requires ASEAN to strengthen its work beyond national and often fragmented community model. A more coherent, multi sectoral, multi stakeholders and whole-of-ASEAN Community approach is necessary to ensure ASEAN’s timely, tactical and effective response to the pandemic.

For COVID-19 response, under the ASCC umbrella, there are four most relevant existing mechanisms (ASEAN, 2020a). They are the ASEAN Health Ministers and ASEAN Plus Three Health Ministers and ASEAN Plus Three Senior Officials Meeting for Health Development (APT SOMHD), the ASEAN Emergency Operations Centre Network for public health emergencies (ASEAN EOC Network), and ASEAN BioDiaspora Virtual Centre for big data analytics and visualization (ABVC). Table 1 lists existing health security coordination and cooperation mechanisms that exist in ASEAN from SARS, H1N1 and recently COVID-19.
### Table 1: ASEAN existing health cooperation on Epidemic Preparedness Since SARS 2003 to COVID-19

| Timeline                  | Forms of cooperation                                                                                                                                                                                                 |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2003-2009 SARS and H1N1  | ASEAN + 3 Emerging Infectious Diseases (EID) Programme (2004-2008)  
ASEAN Highly Pathogenic Avian Influenza (HPAI) Task Force  
ASEAN Cooperation on Animal Health  
ASEAN Work Programme on HIV/AIDS III (2006-2010)  
ASEAN-Japan Project for Stockpile of Antivirals and PPE against Potential Pandemic Influenza (2006-2013)  
Regional Framework for Control and Eradication of HPAI (2006-2008)  
ASEAN Assessment of National Multi-Sectoral Pandemic Preparedness and Response (2007-2010)  
Regional Strategy for Progressive Eradication of HPAI (2008-2010)  
ASEAN + 3 Partnership Laboratories (APL)  
MOU between ASEAN Secretariat and WHO |}

| 2010-2019 Broader health risks | One ASEAN One Response Framework in ASEAN Agreement on Disaster Management and Emergency Response (AADMER)  
Disaster Safety of Health Facilities in the AADMER Work Programme (2010-2015)  
ASEAN + 3 Field Epidemiology Training Network (FETN)  
ASEAN Risk Communication Resource Centre |}

| 2020 COVID-19              | ASEAN Plus Three Senior Officials Meeting for Health Development (APT SOMHD) Mechanism Responding to COVID-19  
ASEAN Health Ministers and ASEAN Plus Three Health Ministers in Enhancing Cooperation on COVID-19  
ASEAN Emergency Operations Centre (EOC) Network for public health emergencies  
ASEAN BioDiaspora Virtual Centre (ABVC) for Big Data Analytics and Visualisation  
ASEAN Coordinating Council Working Group (ACCWG) on Public Health Emergencies  
ASEAN Plus Three Field Epidemiology Training Network (ASEAN+3 FETN)  
ASEAN Risk Assessment and Risk Communication Centre (ARARC)  
Public health laboratories network under the ASEAN Health Cluster 2 on Responding to All Hazards and Emerging Threats  
Regional Public Health Laboratories Network (RPHL) through the Global Health Security Agenda platform |}

This paper aims to document and analyse how ASEAN member states respond to COVID-19. We argue that existing regional health collaboration since 2003 and coupled with the One-ASEAN-One Response framework should have provided a strong foundation for the region to deal with the impact of COVID-19. We find that the early (January - February 2020) regional response was slow and lack of coherence. Extensive early measures taken by each member state are the key to the success to curb the spread of the virus. Although, between March and April 2020, ASEAN reconvened and utilised its existing health regional mechanism to try to have a coherent response to COVID-19 impacts. The specific objectives are:

1. To review the impacts of COVID-19 at the ASEAN level and analyse recent ASEAN regional responses specifically to COVID-19 under the light of existing health security cooperation framework.
2. To report country’s responses to COVID-19 from February to April 2020,
3. To compare these responses utilising policy science viewpoints and identify lessons learnt on how to strengthen regional responses and in the long term, the health systems resilience of ASEAN and its member states.

The paper is developed primarily through analysis of published materials issued by and accessible from the ASEAN website, complemented with analysis for media articles including social media. Published academic journal articles are used in the analysis. All of the authors have expertise on ASEAN policies in the field of health, disasters, and regional policy and planning. Some authors have worked for international organisations working on issues related to the ASEAN region. The paper is organised as follows. Section 1 examines the aim, objectives and rationale for the paper. The section further reviews existing and relevant regional mechanisms. Section 2 documents COVID-19 impacts at the regional scale and key health-responses responses coordinated by the ASEAN. Section 3 compares health-related and broader responses amongst the 10 countries. In Section 4, using the policy science viewpoints proposed by Weible et al (2020) we examined and compared these responses. We conclude with a statement on broader ASEAN health systems resilience in Section 5.

2. Impacts on ASEAN Member States and ASEAN health sector efforts to COVID-19

2.1 Impacts on ASEAN member states

The ASEAN countries, with a combined population of 649 million and GDP of US$2.8 trillion, have been badly hit by COVID-19. Key sectors that have been affected by COVID-19 lockdown and other measures include travel, tourism, retail, supply chain, manufacturing sectors and other services[4]. Employment and livelihood people of the region are also significantly affected[5]. In ASEAN, the uncertainties brought about by
the pandemic also triggered a swift outflow of capital, causing a dive in the markets and a rapid depreciation of the exchange rates across the region.\cite{1} Despite the disruption of COVID-19 to the economic sector, the ADB has forecast the economic growth of Southeast Asia will be around 1\% (ADB, 2020).\cite{2}

The confirmed cases by 29 April 2020 of 43,215, with Singapore, Philippines and Indonesia suffer the most, Singapore has 15,641, Indonesia 9,771, Philippines 8,212 cases, Malaysia 5,945, Thailand 2,947, Vietnam 270, Brunei 138, Cambodia 122, Myanmar 150, and Laos 19.\cite{1} Figure 1 shows the Epi curve of confirmed cases by 26 April 2020 (ASEAN, 2020b).

Figure 1: COVID-19 epi curve confirmed cases (Source: ASEAN 2020\cite{6})

2.2 ASEAN health sector efforts to COVID-19
The impact of COVID-19 has harmed the life of all citizen in the region and their socio economic and threatening sustainability and social security.\cite{2} ASEAN as a regional body in southeast Asia has an important role to coordinate cooperation between member states to contain the spread of the virus in the region as COVID-19 pandemic
is a transboundary problem. Figure 2 shows the webpage of the ASEAN coordinated response to COVID-19.

Figure 2: Website of ASEAN coordinated response to COVID-19 (Image)

While the early effort of ASEAN has been limited to communication exchange and information sharing among member states on COVID-19 situation and response updates. A further commitment of concerted efforts and collective action is needed to prevent and eliminate the risk of pandemic in the region particularly to assist the Member States that suffer the most of social and economic from the impact of pandemic. Table 2 summarises the timeline of key responses.

Table 2: Key timeline of ASEAN responses to COVID-19 (Source: Authors, compiled from ASEAN, 2020b)

| Month       | Date       | Responses                                                                 |
|-------------|------------|---------------------------------------------------------------------------|
| 31 Dec 2019 |            | First COVID-19 case was announced in Wuhan, China                         |
| February 2020 | 19         | Joint statement of ASEAN Defence Ministers on Defence Cooperation against Disease Outbreak, from meeting in Viet Nam |
|             | 20         | The ASEAN Coordinating Council (ACC) held a Special Meeting on 20 February 2020 in Vientiane, Lao PDR to discuss follow-up actions to the ASEAN Chairman’s Statement on ASEAN collective response to the COVID-19 |
| March 2020  | 9          | ASEAN health sector sustains cooperation in responding to COVID-19 |
| No | Date     | Description                                                                 |
|----|----------|-----------------------------------------------------------------------------|
| 10 | Strengthening ASEAN’S Economic Resilience in Response to The Outbreak of The Coronavirus Disease |
| 13 | ASEAN senior health officials enhance regional collective actions against COVID-19 pandemic |
| 7  | April 2020 Joint Statement Special Video Conference of ASEAN Plus Three Health Ministers in Enhancing Cooperation on Coronavirus Disease 2019 (COVID-19) Response |
| 9  | Joint Statement Special Video Conference of The ASEAN Health Ministers in Enhancing Cooperation on COVID-19 Response |
| 10 | Joint Statement Special Video Conference of ASEAN Plus Three Health Ministers in Enhancing Cooperation on Coronavirus Disease 2019 (COVID-19) Response |
| 13 | ASEAN Ministers Endorse New COVID-19 Response Fund Policy Brief on the Economic Impact of COVID-19 Outbreak on ASEAN released |
| 14 | Declaration of the special ASEAN summit on Coronavirus Disease 2019 |
| 17 | A series of ASEAN and other countries activities |
| 17 | ASEAN, Italian health experts exchange experiences in combating COVID-19 |
| 21 | China donates medical supplies to ASEAN Secretariat for COVID-19 prevention |
| 22 | ASEAN – Japan Economic Ministers’ Joint Statement on Initiatives on Economic Resilience in Response to the Corona Virus Disease (COVID-19) Outbreak |
| 23 | Co-Chairs’ Statement of the Special ASEAN–United States Foreign Ministers’ Meeting on Coronavirus Disease 2019 (COVID-19) |
| 24 | ASEAN, China reaffirms commitment to forge closer cooperation |

ASEAN Vision 2025 on Disaster Management highlights the importance of communication exchange between stakeholders involved. Since the official outbreak of COVID-19 in China, ASEAN Emergency Operations Centre Network for public health emergencies (ASEAN EOC Network), led by Malaysia, has taken initiative in sharing daily situational updates on the diseases. ASEAN EOC Network for public led by the Ministry of Health of Malaysia provides a platform among ASEAN member states officials working at respective crisis centers and/or disease prevention and control to share information in a timely manner through various mechanisms of communication. They set up a WhatsApp mobile application for that purpose. EOC network produces
compilation on National/local Hotline/Call Centre in ASEAN Member State which then shares to the public on social media.

The ASEAN BioDiaspora Regional Virtual Centre (ABVC) for big data analytics and visualisation complemented with providing a report on the national risk assessments, readiness and response planning efforts. ASEAN publishes Risk assessment report for international dissemination of COVID-19 to the ASEAN region on 10 April 2020 by ASEAN Biodiaspora Virtual Center (ABVC) to provide highlights responses and the situation overview cases and deaths in ASEAN countries.

Communication exchange was conducted through online meetings such as ASEAN health sector effort in the prevention, detection and response to COVID-19. ASEAN Health Minister (AHHM) chaired by Indonesia health Minister on 7 April 2020 convened video conference to intensify regional cooperation with various stakeholders and to step up measures to control the spread and mitigate COVID-19 pandemic. According to this meeting the agreed on (1) Further strengthening regional cooperation on risk communication to avert misinformation and fake news; (2) Continue sharing information, research and studies in an open, real-time and transparent, (3) Coordinating cross-border health responses; scaling up the use of digital technology and artificial intelligence for efficient information exchanges, (4) Strengthening and institutionalising preparedness, surveillance, prevention, detection and response mechanisms of ASEAN with other partners.

Further action has been agreed by the leaders which issued a declaration of special summit ASEAN which proposed to establish a COVID-19 ASEAN response Fund to boost emergency stockpiles for future outbreaks. ASEAN has invited ASEAN Plus 3 (Japan, South Korea and China) to contribute for this fund. The finance and resource mobilization is crucial to assist the member states in procuring medical supplies and equipment as currently lacking in some regions. The Strengthening collaboration has been called by the Declaration of the special ASEAN summit on Coronavirus Disease 2019 (14 April 2020). The following 7 measures that have been agreed by the declaration include: (1) further strengthen public health cooperation measures to
contain the pandemic and protect the people. (2) Making arrangements to preserve supply chain connectivity, (3) Further work based on a multi-stakeholder, multi-sectoral, and comprehensive approach by ASEAN to effectively respond to COVID-19 and future public health emergencies, (4) Take collective action and coordinate policies in mitigating the economic and social impact from the pandemic, safeguarding the people’s well-being and maintaining socio-economic stability, (5) Enhance effective and transparent public communication involving multiple forms of media including timely updates of relevant government policies, public health and safety information, clarifications on misinformation, and efforts to reduce stigmatisation and discrimination, (6) Prioritise the well-being of our peoples in ASEAN’s collective fight against COVID-19, and provide appropriate assistance and support to the nationals of ASEAN Member States affected by the pandemic in each other’s country or in third countries, (7) Support reallocating existing available funds and encourage technical and financial support from ASEAN’s partners to facilitate cooperation against COVID-19, including the proposed establishment of the COVID-19 ASEAN Response Fund.

3. Country specific responses

This section reports government responses taken by the individual countries. It has been proposed that country-based mitigation is extremely important to fight COVID-19 as country is the first line of defence against it[8].

3.1 Brunei Darussalam

Brunei is a tiny country with the population around 436,647 has emerged as good example of a country that provides care, concern, and preparedness not only to its citizens but also to foreign and tourist[9]. The handling of the pandemic by the Sultan Bolkiah has been argued as transparent and robust. The first case was declared on 9 March 2020. Brunei has successfully contained the virus in small number cases compared to the other ASEAN countries. It recorded 138 cases and on 6 April no new cases emerged (REF). Brunei has taken necessary steps to contain the virus, including
early massive testing since January 2020. travel bans for citizens to go abroad on March 15\textsuperscript{[10]}. All Bruneians returning to the country undergo mandatory isolation at quarantine facilities\textsuperscript{[11]}. Brunei has entirely implemented lockdown and closed its access from sea, air on March 24\textsuperscript{[12]}. Restrictions of public gathering, work from home, mosque and other worship places has been closed. The government also took measures to ensure the welfare of its citizens. The Ministry has issued a directive to all employers to pay salaries during the quarantine to its employees. On April 1, it introduced economic stimulus for micro, small and medium enterprises for BND250 million. The success of Brunei in containing the virus is early action and implemented precautionary measures and deploy and mobilize all funding and resources to ease the impact of the pandemic.

3.2 Cambodia

The population of Cambodia is around 16 million people. The first confirmed cases of coronavirus in Cambodia has been reported on 27 January 2020\textsuperscript{[13]}. The country has confirmed 122 cases of COVID-19 so far and no deaths have been reported\textsuperscript{[14]}. No new cases were reported in Cambodia for twelve consecutive days\textsuperscript{[15]}. Despite this situation Cambodia Prime Minister urged people to remain vigilant as there is no medicine to cure this infectious disease\textsuperscript{[16]}. Cambodia has lowest confirmed cases compared to other ASEAN countries despite criticism of lack testing\textsuperscript{[17]}. Several measures that have been adopted by The Royal government of Cambodia include imposed quarantine, cancel the celebrations of the Khmer New Year, issued economic stimulus\textsuperscript{[18]}. In addition, the government also passed state of emergency law on 10 April 2020 granting the country’s autocratic leader, Hun Sen, vast new powers allowing the government to carry out unlimited surveillance of telecommunications and to control the press and social media\textsuperscript{[19]}. Human rights experts argued that this law expected to weaken democracy right in the country.
3.3 Indonesia

Indonesia is the most populous country among ASEAN members with 272 million people. The risk in suffering most due to the coronavirus pandemic is amounting as the quality of health infrastructure has been inadequate. This is shown by the number of cases continues to rise and second in the region after Singapore and the mortality rate of 8.9 to 9% is one of the highest in the Southeast Asia and the world\(^{(20)}\).\(^{(11)}\) Confirmed first cases of coronavirus in Indonesia has been announced by Jokowi in 2 of March 2020 after denied the study from Harvard Marc Lipstich about the possibility of COVID-19 should have been detected in Indonesia before this announcement. Detailed analysis on COVID-19 response in Indonesia have been recently published by Djalante et al (2020b). Several key measures have been issued to respond to the coronavirus cases in Indonesia include: The establishment of Task force for the acceleration of COVID-19 on 13 March 2020\(^{(21)}\).\(^{(2)}\) Large scale social restriction for accelerating COVID-19 eradication on 30 March 2020. Recent suspension of travels between cities by air, land and water\(^{(22)}\). In addition, the government has decided to implement a travel ban for foreign visitors to Indonesia including transit since 2 April 2020 through the Ministry of Law and Human Rights No 11/2020 on temporary travel bans for foreigners who enter Indonesia territory. On 31 March 2020, 405 trillion Rupiah (USD 26.4 trillion) stimulus package was announced by government regulation in lieu of law (Perppu) No 1/2020 to legitimize much more state spending and financial relief efforts as Indonesia’s COVID-19\(^{(23)}\). On 24 April 2020 Indonesia issued domestic travel restriction during Ramadhan period until 3 of June.

3.4 Lao People Democratic Republic (Lao PDR)

Lao PDR with a population over 7 million people is the last country in ASEAN infected by coronavirus. The first two cases of coronavirus were confirmed on 24 March 2020. The number of confirmed cases is only 19 and it is reported there are no new cases for 9 consecutive days on April 21. Key measures have been taken include: established National Taskforce Committee for COVID-19 Prevention and Control—a special
taskforce established on February 3, 2020; On March 29, 2020, the Prime Minister of Laos issued Order No. 06/PM on the Reinforcement of Measures for the Containment, Prevention, and Full Response to the COVID-19 Pandemic. These orders have issued following measures such as closing some provincial borders, prohibition of gathering more than 10 people, price control, residential lockdown, and work from home for government officials. These measures have been implemented from March 30 to April 19, 2020. The Lao PDR government has already allocated LAK10 billion (USD 1.3 billion) for implementing measures to prevent and control the spread of COVID-19 in the country and other key fiscal, monetary and macroeconomic measures.

3.5 Malaysia

Malaysia with a population of around 31 million people has joined the list of countries with coronavirus when the first case was confirmed on 25 January 2020\[25\]. Malaysia can maintain the confirmed cases low before sudden outbreak due to mass religious gathering attended by 16,000 people at the end of February 2020\[26\]. Malaysia’s nationwide response and collaboration can be a model for other countries to help flatten the curve of the COVID-19 pandemic\[27\]. The key measures include: on 13 March 2020, the government has banned all gatherings, including international meetings, sporting events, social and religious assemblies until 30th of April 2020\[28\]. On 18 March 2020, the government decided to implement the Movement Control Order until March 31 to address the COVID-19 outbreak under the Prevention and Control of Infectious Diseases Act 1988 and the Police Act 1967. Malaysian government launched a series of economic stimulus measures to lessen the impacts of COVID-19 to the sectors and communities. The Malaysian government announced a stimulus package worth RM20bn ($4.56bn) to enable the tourism and other industries in the country to deal with the impact of the coronavirus pandemic.\[5\] A second stimulus package worth RM250bn ($58bn) was announced, out of which RM25bn (US$6bn) will be provided to help families and business owners affected by the outbreak.
3.6 Myanmar

Myanmar’s population currently stood around 54,336,457. Myanmar’s first confirmed case was on 24 March 2020\(^{29}\). Despite the confirmed cases being relatively small compared to other ASEAN countries, there is a fear of a major outbreak due to slow widespread testing in the country\(^{30}\). The United Nations has announced a plan to donate 50,000 testing kits to Myanmar, supplementing previous donations of 3000 from Singapore and 5,000 from South Korea\(^{31}\). The country is vulnerable, the public health system in Myanmar is woefully unsuited in response for a pandemic scale\(^{32}\). In addition, there is no safety net in Myanmar which causes the poor to be the most vulnerable groups in times of health and economic crisis as an impact of pandemic\(^{33},^{35}\). The lockdown will hurt the livelihood and food security of the country\(^{34}\). Yangon imposed lockdown measures in seven townships from 6 PM on 18 April 2020 through Ministry of Health and Sport Order No. 38/2020 the Prevention and Control of Communicable Diseases Law\(^{35}\). To ease the impact of the pandemic the government announced an initial stimulus package including 100 billion kyats (nearly US $ 70 million worth of loan). The COVID-19 fund will be used to assist garment and manufacturing, hotel and tourism business as well as small and medium size enterprises owned by local people\(^{36}\).

3.7 The Philippines

The Philippines is the second most populous country in Asean with 106 million. The first imported case of COVID-19 was reported in January 2020 and the first local transmission was confirmed in early March (WHO, 2020a). As of 22 April, 91.5 percent of the 6,710 confirmed cases and 87 percent of the total reported deaths come from Luzon – the largest and most populous island in the country (WHO, 2020b). The official COVID-19 response of the Philippines has three core elements: (i) granting ‘special temporary power’ to the President by Congress, (ii) imposing a lockdown on the entire island of Luzon, (iii) employing the military and police to enforce the President’s orders and lockdown measures (CSIS, 2020). The Inter-Agency Task Force on Emerging
Infectious Diseases responsible for containing the spread of the coronavirus works alongside a National Task Force in charge of commanding operations (Office of the President, 2014; Sadongdong, 2020). The National Action Plan and nationwide COVID-19 tracker are the main tools used to support decentralization and decision making (Department of Health, 2020).

Signing into law Republic Act No.11469 or ‘Bayanihan to Heal as One Act’ initiated an economic stimulus to provide relief to affected populations (Congress of the Philippines, 2020). This includes a $3.9 billion social protection program that offers aid to poor families, earners in the informal sector, health workers who contracted COVID-19, and families of health workers who died from the disease (Department of Finance, 2020a). A $610 million ‘Bayanihan Grant to Cities and Municipalities’ to assist local government units in responding to the health crisis was approved (Department of Budget and Management, 2020). Finally, a $1 billion wage subsidy package was allotted to support social security and workers of small businesses (Department of Finance, 2020b). The country was also placed under a ‘state of calamity’ so the government can access disaster financing like Calamity and ‘Quick Response Funds’ (Paunan, 2020).

3.8 Singapore

Singapore with a population around 5.6 million confirmed its first imported case from Wuhan, China, on 23rd January 2020 (Abdullah and Salamat, 2020). Singapore was hailed globally as a model for emulation and replication by governments, epidemiologists and the mass media for “flattening the curve” through its extensive testing, contact tracing and strict quarantining of infected cases. Even on 24th March 2020, when Singapore took the unprecedented step of closing its international borders to stem the spike in imported COVID-19 cases (Ho, 2020)- including from many ASEAN countries where limited testing masked the spread of infections across the region (Nortajuddin, 2020)- local transmissions remained relatively low and were linked mainly to known clusters identified through contact tracing. By early April 2020, however, a
major outbreak of infections among Singapore’s migrant workers saw the island-state with a population of 5.7 million people (Singstat.gov, 2020) overtake all other ASEAN countries in recording the highest number of COVID-19 cases. To contain the outbreak, Singapore’s Prime Minister Lee Hsien Loong announced nation-wide circuit breaker measures to enforce social distancing from 7th April until 4th May, which were subsequently extended until 1st June 2020 (Lai, 2020). The government also intensified testing in 43 dormitories that housed 200,000 South and Southeast Asian migrants employed primarily in the construction sector. Media coverage of the migrant dormitory outbreak focused on the relative vulnerability of these workers due to their close proximity in working, travelling and living conditions, impeding their capacity to practice safe social distancing (Leung, 2020; Yeung et al, 2020).

3.9 Thailand

Thailand with the population of almost 70 million is the first country in ASEAN and outside china infected by COVID-19 on 13 January 2020.[1] Thai government has announced partial lock down to contain the spread of the virus (Hinjoy et al 2020). The situation in Thailand is improving as the number of new cases falls, with no new imported cases due a near total ban on incoming flights since early April.[2] There is a criticism of lack of testing and suspicious low number cases reported.[3] Thailand confirmed cases approximately 2000. The measures to contain the virus include: The country was placed under a state of emergency on 26 March until 30 April.[4] The government has announced the cancellation of the Thai New Year celebrations called Songkran. The island of Phuket has been placed under lock-down from 30 March to contain the spread of coronavirus.[5] Thailand’s prime minister announced a nationwide 10 p.m. to 4 a.m curfew starting April 2 2020 to combat further spread.[6] As for the economic stimulus, the first package valued at 100 billion baht (USD 3.2 billion) aimed supporting businesses in the form of low-interest loans, deductions in withholding tax, and VAT refunds. On March 24, 2020, the Thai government issued its second stimulus worth 117 billion baht (US$3.56 billion).[7] Thailand plan to new borrowing of 1 trillion
baht (US $30.6 billion) for its latest stimulus package for economy impact of COVID-19.[8]

3.10 Vietnam

Although Vietnam shares the long and bustling border with China, the pandemic is still under the government’s control by applying various rapid responses. With the total population of 97,338,597 people, the first COVID-19 case was confirmed on January 23rd, 2020. After three months since it was detected, the Vietnam government confirmed a total of 270 cases. Of which, 225 cases had recovered, and no death was recorded as of April 26.[37]. The Vietnamese government demonstrated their prompt and aggressive response in the fight with such unprecedented diseases.[38]. In early February, Vietnam was the first nation after China to put a large residential area into the isolation zone to curb the negative impact of the COVID-19 pandemic. By isolating infected people and tracking down their contacts, the communities or villages, where were at risk of this pandemic since having close relation with the infected person, could be completely sealed off.[39]. Together with stopping issuing visas for foreigners from infected nations, all international flights coming to or departing from the pandemic areas were suspended as soon as the first case was confirmed.[40]. Vietnam temporarily cleared from the pandemic at the end of April 2020. Vietnam required all Vietnamese and international visitors who returned from abroad to quarantine at centralized facilities for 14 days, followed by the implementation of nationwide quarantine on April 1st, 2020[41]. To further prevent the spread of this pandemic, border crossings between Vietnam and Cambodia and Laos were temporarily closed.

All of the above discussion is summarised in Table 3 and 4 below.
Table 3: Summary of country responses to COVID-19 (Source: Authors, compiled from different sources)

| Country     | Key regulations / New structure formed | Overall status (As of April 2020) | National responses to the COVID-19 pandemic | Provision of Economic stimulus |
|-------------|----------------------------------------|-----------------------------------|--------------------------------------------|--------------------------------|
| 1. Brunei   | Ministry of Health as the coordinating agency | Almost all of the confirmed cases were found to be linked with a wide-reach religious event in Malaysia at the end of February. | Closed by Malaysia. All travels in and out of Brunei are banned from March 24 and March 16, respectively. Prohibit mass gatherings from April 6. Online classes are still open until mid of May. Mills are recommended to limit their customer number per serve and provide takeout orders for restaurants. | A two-week quarantine is applied for all citizens and visitors beginning of April 6. Special aiding for healthcare workers and individuals affected by the pandemic. |
| 2. Cambodia | State of Emergency Law 10 April 2020 | Underestimate the risk of COVID-19 and initially refused to apply strict action because of maintaining the close relationship with China | Closed to neighboring countries. March 17, ban on travelers came from several high-risk nations. March 30, temporarily suspending all visas types. April 10, travel within the nation including district and provincial borders is prohibited. | April 1, closing casinos and schools. March 31, "sharing information" is prohibited. On April 8, imposed a quarantine on all visitors entering Cambodia. Fiscal resources for the health sector and only “legally registered and formally verified” businesses, meaning that 95% will be excluded. |
| 3. Indonesia| Health Emergency Law 31 March 2020 Special Task Force on COVID-19 | A rapid increase in cases are observed together with the highest mortality rate in ASEAN. Land borders with Timor-Leste and in Papua province are closed. All visitors are prohibited starting April 2. Large Scale Social Restriction is implemented with domestic intercity air land and sea is suspended to prevent mass people movement as Ramadhan approaches. | | Not yet. Indonesia’s third stimulus package was introduced on March 31. |
| Country   | Key Action/Policy                                                                 | Impact/Outcomes                                                                 |
|-----------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Laos      | Prime Minister Order 29 March 2020                                                | Closed the road border with Myanmar and China by March 30.                      |
|           |                                                                                  | On March 19, schools, bars, entertainment venues, and major shopping centers were ordered to shut down. |
|           |                                                                                  | National stay-at-home order including closing provincial borders was issued on March 30. |
|           |                                                                                  | A 14-day self-quarantine is required for citizens returned back from the outside. |
| Malaya    | Movement Control Order 16 March 2020                                              | Seal off borders on March 16 (the first country to report borders in the region). |
|           |                                                                                  | The restriction is set for the daily essential list of fewer than 10 items and within 20 km from citizens' homes. |
|           |                                                                                  | Placed under quarantine beginning on March 18.                                 |
|           |                                                                                  | Three economic stimulus packages have been revealed to aid society.            |
| Myanmar   | COVID-19 Control and Emergency Responses Committee 31 March 2020                 | Land borders with China are closed.                                             |
|           |                                                                                  | All international flights and ships (except to diplomats) are suspended from March 30. |
|           |                                                                                  | A lockdown was set up for Yangon only.                                           |
|           |                                                                                  | A 14-day quarantine is compulsory for workers returning from outside and those with "potentially infected" |
| Philippines | The Bayanihan to Heal as One Act 23 March 2020                                | No border sharing                                                                |
|           |                                                                                  | All flights have been canceled until April 14.                                 |
|           |                                                                                  | Worshipers have asked to stay at home and follow online celebrations during Holy Week |
|           |                                                                                  | Close islands step-by-step starting from the main island of Luzon (including Manila) on March 16 |
|           |                                                                                  | Financial supports were allocated for local authorities and social protection program |
| Singapore | (Temporary Measures) COVID-19 Act 7 April 2020                                   | Closed by Malaysia.                                                             |
|           |                                                                                  | On January 31, prohibited all China visitors and expanded to all short-term visitors on March 22. |
|           |                                                                                  | April 3, schools and all non-essential businesses are closed.                   |
|           |                                                                                  | All dormitories of more than 20,000 migrant workers were put into quarantine from April 5 |
|           |                                                                                  | On April 6, the third round of support measures was announced                  |
gather outdoors.

9. Thailand

Emergency Decree
26 March 2020

Inconsistent policies over travel and quarantine, poor communication, and supply shortages

All borders were closed on March 22.

Foreign visitors are banned starting on March 22.

Alcohol sale points were prohibited from April 10. Schools remain closed till July 1.

A national curfew was set from 10 p.m to 4 a.m starting April 3

On April 7, the third stimulus measure was issued by the cabinet. Lending rates will cut as a statement of the six largest banks.

10. Vietnam

National Steering Committee for COVID-19 Prevention and Control
31 January 2020

The pandemic management is relatively well even with limited resources and sharing bustling borders with China.

Border sharing with Cambodi a and Laos was closed from March 31.

Banned all flights to and from China from February 1.

Banning on public gatherings of over 20 people and suspending non-essential public services from April 1.

The quarantine was completely placed in several high-risk areas from mid-February. A 15-day national lockdown began April 1.

The fiscal package was focused on the most affected by the pandemic in early April

Table 4: Nine of the indicators of government policies recorded on ordinal scale
(Source: Oxford COVID-19 Government Response Tracker, www.covidtracker.ox.ac.uk)
|                | a          | b          | c          | d          | e         | f          | g          |
|----------------|------------|------------|------------|------------|-----------|------------|------------|
| Indonesia      | 2          | 2          | 2          | 2          | 1         | 1          | 3          | 1         | 1         |
| Lao PDR        | 2          | 2          | 2          | 2          | 1         | 2          | 3          | 1         | NA        |
| Malaysia       | 2          | 2          | 2          | 0          | 1         | 2          | 3          | 1         | 2         |
| Myanmar        | 2          | 2          | 2          | 2          | 1         | 2          | 3          | 2         | 1         |
| Philippines    | 2          | 2          | 2          | 1          | 1         | 2          | 3          | 2         | 2         |
| Singapore      | 2          | 2          | 2          | 0          | 1         | 0          | 3          | 3         | 2         |
| Thailand       | 2          | 2          | 2          | 2          | 1         | 2          | 3          | 1         | 2         |
| Vietnam        | 2          | 2          | 2          | 2          | 1         | 2          | 3          | 2         | 2         |

*Updated to 13/04/2020

4. Comparing the ASEAN and member countries’ responses: a policy science analysis

A recent paper asks a question on how policy sciences help us understand the responses to COVID-19 pandemic[^46]. The policy science framework is proposed by Lasswell (1956) to examine situations, challenging and informing ongoing processes and decisions, and foretelling of future scenarios, by which these actions are intended to steer government and society toward the common goal of dignified society for all.

Weible et al (2020) propose 10 viewpoints to examine COVID-19 responses: on policy making (within the country), crisis response and management, global policymaking and transnational administration, policy networks, implementation and administration, scientific and technical expertise, emotions, narratives and messaging, learning, and policy success and failure (Table 5). We further group these issues into 3 major ones of a) policy and decision making, b) communication and perception, c) science and
learning, and utilise it as a framework for analysis to compare ASEAN and AMS responses.

Table 5: Policy sciences (Sources: Modified from Weible et al (2020) based on Lasswell (1956))

| Policy Sciences perspectives | Issues to consider |
|-----------------------------|-------------------|
| **Policy and decision making** | |
| 1. Policy making (within country) | Policy making (within the country) Uncertainties exist regarding the duration and termination of policy decisions Government non-decisions become just as important as decisions |
| 2. Crisis response and management | Responses occur at strategic and operational levels Mitigating value conflicts spark public controversies and blame-games Transboundary crises can both spur and challenge collaboration |
| 3. Global policymaking and transnational administration | Inequalities drive differential impacts of policy responses, which, in turn, exacerbate inequalities Destabilization and reinforcement of global policy processes Uncertainty about the locus of authority and influence of global professionals |
| 4. Policy networks | Policy networks react and contribute to the shifting of attention to policy issues and changing of government agendas Prior policy networks condition policy and societal responses Changes in importance of policy networks’ people and organizations, relations, and resources |
| 5. Implementation and administration | Administrative fragmentation and decentralization complicate implementation Front-line workers exercise discretion and self-regulation Co-production requires overcoming collective action challenges |
| **Communication and perception** | |
| 6. Emotions and public policy | Governments appeal to emotions to help legitimize policy responses and steer public reactions Emotionally charged language can recall cultural and historical contexts Policy responses force a reevaluation of the emotional spheres in societies |
| 7. Narratives and messaging | Governments attempt to provide sufficient information in a timely manner to the public Governments attempt to provide information that is accurate and non-contradictory to the public Governments can spawn controversies by engaging in speculations |
| **Science and learning** | |
| 8. Scientific and technical expertise | Scientific and technical experts become more central in policy responses to uncertain problems Governments invoke scientific and technical expertise to inform and legitimize problems, responses, and evaluations Scientific and technical expertise can obscure accountability of decisions |
| 9. Learning | Urgency triggers learning from others’ experiences Learning manifests in different ways Different barriers inhibit learning |
| 10. Policy success and failure | Who is affected and to what extent influence frames of success or failure Success or failure judged as part of decisions, processes, and politics It is possible to conceive of a spectrum from success to failure Lenses and narratives shape perceptions of success and failure |
4.1 Policy and decision making

4.1.1 Policy perspectives
Governments adopt public policies through different pathways: (1) Learning: COVID-19 is a novel virus. There is knowledge uncertainty around it. One key reference is WHO’s information on COVID-19 and policy reference is benchmarked around what other countries have been doing including neighbours. For example, WHO’s advice to track and trace every case has been implemented by ASEAN member states such as Singapore and Malaysia. Thailand and the Philippines have confirmed dozens of cases in January 2020. The other ASEAN members such as Indonesia were late in confirming cases, only in March 2020. In addition, countries in ASEAN also learn from other successful countries in dealing with this pandemic such as mitigating the COVID-19 with partial closure for example in Malaysia, Singapore, Indonesia and started to shift their policy to more stricter such as lockdown or more large scale quarantine following the surge of infection in their countries. (2) Negotiated agreement is demonstrated by passing stimulus packages in every ASEAN country and agreement in Regional ASEAN to establish COVID 19 Respond fund in April 2020, and (3) Diffusing and transferring ideas across governments is shown that every country has their own characteristic and their own value and culture.

4.1.2 Crisis response and management
There are similarities and differences in crisis response and management in every southeast ASEAN country to COVID-19. In Indonesia for example strategic responses are coming from the President while in some other countries are in hand of Prime Ministers such as in Malaysia and Singapore. While, operational levels in every country differ for example some countries like Indonesia and Lao PDR have established task forces while other countries do not and some countries mobilize army and policy to enforce the compliance of society for quarantine some not. Some countries have volunteered for medical responses some not. Brunei, Singapore and Vietnam have
been praised to have a successful response. Although, Singapore has a second wave of infection mostly at foreign-workers accommodations. Despite successful stories, public controversies and blame games have occurred in dealing with pandemic in many countries including ASEAN particularly on the issue of measures between saving life and saving the economy which is conflicting with each other. Criticism occurred whether the government was doing good enough, timely enough to contain the virus. Conflict between different levels of government in dealing with such problems creates trouble for many world leaders, such as in Indonesia, Cambodia and Myanmar. Indeed, communication failures, political values and identities, and weak mandates can undermine efforts to achieve a collective crisis response (Bond and Hart, 2010).

4.1.3 Global policymaking and transnational administration

There is a growing inequality in ASEAN as an impact to COVID-19. Poverty is one reason some ASEAN countries could not implement strict lockdown such as in Indonesia and Philippines. In addition, vulnerable groups such as migrant workers continue to benefit less from development in ASEAN. It showed that they are proven vulnerable to get more infections of COVID-19 than any other groups or society for example the cases of infection in Singapore surged in migrant workers clusters. While in ASEAN the response of COVID-19 is more emphasis on extensive measures of member states in the first place. Regional cooperation is emerging in later stages with exchange information and information sharing among member states and ASEAN Respond Fund COVID-19 to assist member states that need funding. COVID-19 is disrupting tourism and travel, supply chains and labour supply. Among ASEAN countries, Singapore, Malaysia and Thailand are heavily integrated in regional supply chains and will be the most affected by a reduction in demand for the goods produced within them. Indonesia and the Philippines have been increasing supply chain engagement and will also not be immune. Vietnam is the only new ASEAN member integrated into supply chains with China and is already suffering severe supply disruptions.
4.1.4 Policy networks

ASEAN policy approach to past epidemics has been grounded on its unique and pragmatic networks in what is so-called as the ASEAN Plus Three (APT) (including China, Japan and South Korea) for regional disease surveillance mechanisms has developed a Protocol for Communication and Information Sharing on Emerging Infectious Diseases, with a standardized Protocol for Communication and Information Sharing on Emerging Infectious Diseases that encourages member states to report all cases of diseases that are categorized as a Public Health Emergency of International Concern (PHEIC)\(^3\). For example, Past programmes include the cooperation of Disaster Safety of Health Facilities and the ASEAN + 3 Field Epidemiology Training Network as well as the ASEAN Regional Public Health Laboratories Network (RPHL) through the Global Health Security Agenda platform. However, it is not clear how such networks contribute to effective policy making during the storm of COVID-19.

4.1.5 Implementation and administration

Response of COVID-19 needs inter-agency collaboration across fragmented and sectoral bureaucracy. Some of ASEAN countries had difficulties to have interagency collaboration due to sectoral ego. Hierarchical coordination, power struggle between levels of government such as in Indonesia decentralization complicate the effective response of COVID-19. The pandemic has disrupted the daily lives routine in all ten ASEAN countries. In slowing down the spread of COVID-19 behaviour changes are needed. People were forced to stay at home for months or more to prevent the further spread of the virus. Work, study and even prayer activities have been affected and should do these activities at home instead and conducted online. The effort of social distancing has been applied to all ten Member countries. Malaysia for example has implemented a Movement Control Order (MCO) since 18 March 2020. This MCO has extended to April 28, 2020. Similarly, in Indonesia Indonesian President Jokowi appeals to citizens to work, study and pray at home on 15 of March 2020. This social distancing has been continued with the order of large-scale social restriction in major
cities in Indonesia in Jakarta for example adopted until 23 April 2020 and this has been extended. In Singapore, closure of the workplace has to be implemented for 28 days “circuit breakers” from April 3, 2020. The Philippines also implemented community quarantine in metro Manila on 13 of March 2020 and in other parts of its region. The community needs to comply with strict measures. Social distancing was also adopted in 12 cities in Vietnam\textsuperscript{[1]}. 

4.2 Communication and perception

4.2.1 Emotions and public policy

Succeed in changing behavior during COVID-19 include establishing trust in health authorities, recommendation and information. Citizen willingness to cooperate to social distancing and understanding the threat with maintaining good hygiene and immune systems have been the key to cope with pandemic. However, for many social distancing is not an option. For example, in Philippine as they struggle to meet daily needs, they fear death from hunger and anxiety rather than from infection.\textsuperscript{[2]} Similarly with Indonesia when fulfilling the daily needs are more important than staying at home. In addition, wearing a mask in some countries has become mandatory as recently in Indonesia Jokowi appealed to citizens to wear masks in the public. Fear of the virus spread also created some unacceptable discriminatory behaviors such as in Cambodia where member of the public posted hateful Facebook comments in reaction to the Health Ministry’s original statement, blaming Cambodia’s Muslim communities of or the spread of the virus in the country.\textsuperscript{[3]} Similarly in Indonesia, people in some local region has rejected the death because of victims were going to be buried in their areas because of infection fear. They need more education and awareness of the community on the threat, to massively campaign particularly what should do and not do at local community level.
4.2.2 Narratives and messaging
Governments that communicate sufficient and accurate information in a timely and transparent manner can gain public trust during the pandemic. Governments that provide unclear rules end up creating opportunities for abuse and cause unwanted public fear and panic. In general, governments want to project force and model good governance to their constituents by showing them that ‘the government is taking action’. However, when poorly communicated it can threaten that public and drive them to unwanted behaviours. For instance, when the confirmed cases of COVID-19 was first announced in ASEAN, many reacted by engaging in mass panic buying. This occurred in several countries including Malaysia, Singapore, Indonesia. The first time the Philippine President addressed the public, he was flanked by top-ranking military and police officials, which gave the impression that the government is ‘militarizing’ the government’s response to the COVID-19 pandemic. Public perceptions and sentiments need to be managed carefully. Greater compliance to government directives such as wearing masks in public requires building and maintaining public trust. Narratives and messaging play a key role in shaping and influencing public trust. Singapore’s Prime Minister Lee Hsien Loong and Vietnam’s Deputy Prime Minister Vu Duc Dam have been models of effective communication and transparency.[48] While Indonesia has been accused of providing too little information and lack of transparency in handling the pandemic.

4.3 Science and learning

4.3.1 Scientific and technical experts and information
Scientific, medical and public health experts are evidently central in policy responses to COVID 19. Indonesia proposed the establishment of ASEAN-China Ad-Hoc Health Ministers Joint Task Force during the Special Meeting of the Ministers of Foreign Affairs of ASEAN and People’s Republic of China (PRC) on February 20, 2020. The Task Force is expected to focus on the exchange of information and data, especially in
handling the COVID-19 outbreak, organizing expert team meetings, and encouraging joint research and production for virus detection and vaccine.[i] More recently, during the ASEAN Plus Three (APT) Summit, April 14, 2020, the Indonesian President called for leaders to provide guidance to the Health Ministers to strengthen research collaboration to create anti viruses and vaccines. In anticipation of a pandemic going forward, Indonesia also proposed the establishment of an APT country special task force for a pandemic whose task would be to provide comprehensive steps to strengthen the resilience of the APT Region in the face of a future pandemic.[ii] The pandemic however actually has exposed disparity in terms of capacity, role and influence of communities of scientific and technical experts across ASEAN countries. Across the region, governments who made decisions based on medical and scientific evidence — relying on public health and medical officials — have come out on top. Governments who have made their decisions based on short-term economic and political calculations have not been able to get ahead of the situation.[iii] in ASEAN countries where the pandemic responses have been more effective, scientific, medical and public health experts have played important roles in decision-making processes.

4.3.2 Learning
Lessons learned from their own nations and other neighbors when dealing with the previous epidemic could provide valuable insight into the combat with this current pandemic. In parallel with SARS and MERS, COVID-19 was found to share a similar characteristic of origin, symptoms and host immune response (5). Thus, it creates a change to boost the national responses to combat the infection and prepares for an outbreak of similar coronavirus in the future. Several triggers need to be urgently improved including surge healthcare capacity, infection prevention and control and update information for the whole public. To improve healthcare capacities, various supports were allocated from their own national budget or even sent from international organizations and nearby nations. Singapore, Indonesia, Myanmar, and Philippines activated their economic stimulus package for healthcare spending. Besides, the World
Bank, Asian Development Bank also supported Cambodia, Indonesia, Laos to the purchase of medical supplies. Whereas, Singapore, Vietnam and other nations (China, South Korea, Japan, USA) also aid their neighboring ASEAN countries by training medical workers, medical supplies or even sending medical experts. Further, the COVID-19 public information campaign existed in all nations as assessed from the Oxford COVID-19 Government Response Tracker. This brings the benefits of the digital evolution to broaden and daily update information for the whole population.

4.3.3 Policy success and failure

During COVID-19 onset during January - February 2020, ASEAN’s “One ASEAN - One Response” (OAOR) framework was put to the test. Despite OAOR’s main focus on natural hazards, however, some of the ASEAN Committee on Disaster Management (ACDM) members have been the leading agencies responding to COVID-19 such as BNPB in Indonesia. In addition, despite being proven relatively successful in the past, the ASEAN coordinated response to COVID-19 seems less visible in the first quarter of 2020. COVID-19 impact on ASEAN economy will be tremendous. Unfortunately, ASEAN did not discuss quite meaningfully to protect its interest in the integrity of ASEAN Economic Communities including its Blueprint 2025 that would offer US$2.6 trillion for over 622 million people (https://asean.org/asean-economic-community/) that have been implemented since 2016.

The “One Vision, One Identity, One Community” seems to be an utopia as each ASEAN member state treats their borders as their absolute sovereignty while lacks the collective vision of “greater good” for all. Therefore, fuller understanding ASEAN’s response to COVID-19 should be based on individual analysis of each member. Most ASEAN countries have implemented measures to contain the virus by closing borders, travel restrictions, closure of schools, working place, lockdown or quarantine. The existing principle of non-interference and the reliance on action of individual member states in the first place contained the virus could be blamed as the slow join and collective action from regional ASEAN to address the pandemic. The meeting on 20 February of
ASEAN-China foreign ministers meeting in Vientiane, Laos was a watershed in bringing together China and ASEAN member states to combat the COVID-19 epidemic. Driven by security and economic interests, ASEAN and China decided to expand.[47]

5. Toward broader ASEAN health system resilience

This paper has documented and analysed ASEAN as a regional organisation and the 10 member states respond to COVID-19. Our main finding is that regional responses in January and 2020 were considerably slow and lack of unity. Extensive early measures laid with the member states, which were the key to the success to curb the spread of the virus. In March and April 2020, ASEAN has actively reconvened and utilised its existing health regional mechanism to try to have a coherent response to COVID-19 impacts. There is more action that needs to be done to curb the virus in the region. Strengthening future collaboration should be implemented by recognizing that there is a more coherent, multi sectoral, multi stakeholder and whole-of-ASEAN Community approach in ensuring ASEAN's timely and effective response to the pandemic.

COVID-19 shows that shocks and changes can occur anytime and at different scales, and health systems need to have the ability to absorb, adapt and transform in dealing with the shocks. This concept is called health systems resilience.[51] Resilience is critical for health systems to be able to avoid disruption, collapse or even total failure. Health systems need to have the following six functions to be able to deliver safe, quality and sound health services: leadership and governance, information, health workforce, medical products, service delivery and financing.[52] We have discussed in detail in Section 4 how leadership and time and tactful national governance is the key factor for successful COVID-19 early response. The provision of accurate, timely, and relevant information which is delivered in a clear and authoritative manner helps to build trust from the public to government and in turn encourage compliance to behavioural changes needed and adherence to the movement restriction. The next three functions are related to the health systems capacity of the health workforce, medical products and service delivery. Flattening the curve is about early and decisive actions to delay the
impacts reaching the peak and lowering the peak as well so that the health system will have more time to prepare and get on top of the impacts. The last issue is about financing, which is related to short-term and urgent needs for testing, tracing, and treatment from COVID-19 and also larger, longer term financial stimulus to deal with COVID-19 impacts as well as investment in health system to be better prepared for pandemic, or any other large scale health emergencies.

Finally, we are entering the super year of sustainability through accelerated implementation of the Sustainable Development Goals (SDGs), along with other global frameworks such as the Paris Agreement on Climate change, the Sendai Framework for Disaster risk Reduction and the New Urban Agenda. Health is the cross-cutting issue within the global frameworks. ASEAN and its whole communities need to build health system resilience that is also just, green, and sustainable.

Credit author statement
All authors contributed equally to the conceptualization, methodology, formal analysis and writing of the paper

Declaration of interests
The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests

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