HIGHLIGHT
ASEAN Village - New Homes for Tsunami Survivors in Palu

MONTHLY DISASTER OUTLOOK
Monthly Disaster Review and Outlook for April 2020

THE OTHER SIDE
Internship at the AHA Centre - Callista Sandi

ASEAN Coordinating Centre for Humanitarian Assistance on disaster management
Hi Readers,

Volume 60 of the AHA Centre's Column comes to you in the middle of a significant global challenge, and this month we look further into the pandemic context for disaster management in ASEAN. Our Highlight article first takes us through the handover of the ASEAN Village in Central Sulawesi, a significant achievement in ASEAN disaster recovery that has been ongoing for over a year since the destructive earthquake and tsunami in the region. We then get an insight into the potential challenges faced by disaster management during a pandemic, and determine how we should approach such issues to ensure strong disaster response while suppressing the virus spread.

Callista Sandi recounts her experiences and outcomes gathered through her internship with the AHA Centre's ACE Programme, while we take a further look into a new and specific partnership with the Republic of Korea's National Fire Agency.

We wish you good health and support for your disaster management work during these challenging times, and hope you find value in the content we continue to provide through the Column’s pages.

The Editor
Overall, the ASEAN Village project developed and delivered 75 new homes to the affected communities in the Tondo area of Palu City. Thanks to the generous support of the Government of Brunei Darussalam and Direct Relief, another 25 dwellings and additional structures, such as an auxiliary health centre and a mosque, will be developed in the coming months. The project was implemented in partnership with the Housing and Settlement Department of the Palu Government, and utilized USD 723,647 to develop the homes across a 22,600sqm area. The project implementation also received additional support from the Government of the Philippines and the Government of Australia.

Funds from the Brunei Darussalam Government were a result of crowd-sourcing directly from the people of Brunei Darussalam, which forms the first time ASEAN citizens directly providing funding to an AHA Centre project. Meanwhile, the Philippines provided support as part of its solidarity to the tsunami-affected people of Palu City.

Recounting the implementation of the project in her opening speech, the AHA Centre’s Executive Director Ms. Adelina Kamal said “In the early recovery period, we submitted a proposal to BNPB for the construction of temporary shelters, with funds received from the Philippine Government and from the people of Brunei Darussalam. With operational funds from Australia, we formed a team in the field, full time, to follow through the mandate and maintain the trust given by the Government of the Philippines and the people of Brunei, and to coordinate closely with the local government”.

In her speech, the Mayor of Palu, Mr. Hidayat, said “On behalf of the Government of Palu City, we confirm that the 75 houses are well received. We hope that these permanent houses handed over by the AHA Centre will bring happiness and improve the welfare of the tsunami-affected people of Palu City.”

For the first time, the AHA Centre got involved in the recovery phase, not only during emergency response phase. We plan to properly document these experiences at the end of our project in Palu. We also hope that the ASEAN Village in Palu can serve as a model and can be done in other ASEAN Member States.”

“The AHA Centre in its role facilitating the ongoing support from ASEAN Member States, coordinated the official handover of the ASEAN Village to the Government of Palu City. Although it was undertaken online due to the limitations caused by the global pandemic, the handover maintained its true value for all involved, as the Mayor of Palu City Mr. Hidayat, other key government officials, an array of ASEAN dignitaries and other key programme representatives came together for the handover of outcomes from the new and innovative project.

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- Mr. Hidayat, The Mayor of Palu

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The handover ceremony was conducted virtually connecting the AHA Centre’s staff in Jakarta and the local government of Palu City’s Central Sulawesi. It was attended by representatives from ASEAN Member States, the donor communities (Brunei Darussalam, Philippines and Australia), AHA Centre’s partners in Palu, and was live-streamed through social media.

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The month of April 2020 witnessed a clear deviation in figures of significant disaster occurrences in comparison to the previous five-year average in April, with an 87% increase in events recorded for the month. A majority of disasters (86%) for the month of April were flooding events, with storms (11%) and landslides (3%) also registered. However, despite the increase in occurrence of significant disasters, the impact in terms of affected people was significantly lower than the five-year average with an 81% decrease. The number of people displaced by disaster events also decreased (46%), however the impact was more severe on peoples homes with a 2 ½ times increase of damaged houses reported (17,241 in total). There were 85% less deaths as well as less injuries for April 2020 in comparison to the previous five years. 56% of all disasters for the month occurred in one week alone (week 16), which may be attributed to an increase in precipitation rates of approximately 100mm across the Indonesian islands of Sumatra and Java, compared to the previous averages during that single week.

Geographically, for April 2020, 21 earthquakes with magnitudes greater than or equal to 5.0M were recorded by respective ASEAN Member States’ local seismic authorities. For the first half of April 2020, six volcanoes in Indonesia displayed increased activity but remained at Alert Level IV according to Indonesia’s Pusat Vulkanologi dan Mitigasi Bencana Geologi (PVMBG). Meanwhile later in the month, three volcanoes in Indonesia (Ngurah Rinjani, and Kerinci-Pangrango) moved to Alert Level II, with one volcano in the Philippines (Mayon) on Alert Level III. This highlights the importance of earthquake preparedness and the immediacy of response in tectonically active countries such as Indonesia and the Philippines based on their location along the Pacific Ring of Fire.

In the Mekong sub-region, the start of the Southwest Monsoon period should improve haze conditions and gradually subdue hotspot and fire activities. In the southern ASEAN region, hotspot activities are expected to remain generally subdued for May 2020. However, a gradual increase in hotspot activities, particularly in the fire-prone areas of Sumatra and Kalimantan, can be expected from June with the onset of the traditional dry season in the southern ASEAN region.

During the May to July 2020 period, rainfall over the northern ASEAN region is forecast at below-average rates. Similar forecasts for rainfall conditions are predicted for most parts of western mainland Southeast Asia (Myanmar, northern Thailand and northern Laos), however most parts of the southern ASEAN region can expect above-average rainfall. Overall, the entire ASEAN region can expect above-average temperatures.

**Monthly Disaster Review and Outlook: April 2020**

### General Review of April 2020

- **Number of recorded significant disasters**: 28
- **Number of affected people**: 143,203
- **Number of missing people**: 95
- **Number of internally displaced people**: 17,241
- **Number of damaged houses**: 7,792
- **Number of casualties**: 33
- **Number of injured people**: 91
- **Number of damaged homes**: 33
- **Number of reported significant disasters**: 28

### Regional Tally

- **Indonesia**: 143,203
- **Viet Nam**: 763,173
- **Philippines**: 7,592
- **Thailand**: 9,639
- **Brunei Darussalam**: 33
- **Singapore**: 91
- **Malaysia**: 17,241
- **Laos PDR**: 1

### Disaster Comparison in Numbers

<table>
<thead>
<tr>
<th>Type</th>
<th>April 2020</th>
<th>APRIL IN FIVE-YEAR AVERAGE</th>
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<tbody>
<tr>
<td>Earthquake</td>
<td>1</td>
<td>9</td>
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<tr>
<td>Flood</td>
<td>24</td>
<td>8</td>
</tr>
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<td>Landslide</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>Storm</td>
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<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>328</td>
<td>190</td>
</tr>
</tbody>
</table>

### Seasonal Outlook

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**Disclaimer**: AHA Centre’s estimation is based on data and information shared by National Disaster Management Organisations (NDMOs) and other relevant agencies from ASEAN Member States, international organisations, and news agencies. Further information on recorded significant disaster, description, and detail of data and information are available at: http://adinet.ahacentre.org/reports.

**Data Sources**: 2020 Disaster Information Network, ASEAN Specialised Meteorological Centre.
**FUN WAY TO LEARN DISASTER THROUGH A GAME**

Various natural hazards ranging from floods, tsunami, earthquake and roaring hurricanes. It is probably not an easy feat to try to explain this to children. But there is actually a simulation game that educators can utilise so that children can learn how to respond to and mitigate disaster through an internet game.

The game was launched by United Nations in 2007 as part of World Disaster Reduction Campaign; it is simulating natural hazards and serves as an interactive educational tool for children. Targeted for age 9-16 years old audience, the player role is to plan and construct a safer environment for their local population by assessing disaster risk and limiting damage inflicted during a natural hazard strike.

The UN/ISDR secretariat developed the online video game based on the great success of the board game called “Riskland” for children aged 6 to 9, which was developed jointly with UNICEF. The Riskland game has been widely used worldwide in different languages, including local languages.

**“STOP DISASTERS”**
www.stopdisastersgame.org

The on-line game called “Stop Disasters” (www.stopdisastersgame.org) aims at sensitising children on basic notions of disaster risk reduction in a fun and entertaining manner. Its main objective is to raise awareness about the issue but do not pretend to educate children on all the aspects of disaster risk reduction issues. The game is also supported by a website offering more information and teacher guides on natural hazards.

The game includes five natural hazard scenarios (flooding, tsunami, wildfire, hurricane and earthquake) set in five different geographic environments with three different levels of difficulty that require critical decision-making and strategic planning.

This online game aims at teaching children how to build safer villages and cities against disasters. Children will learn through playing how the location and the construction materials of houses can make a difference when disasters strike and how early warning systems, evacuation plans and education can save lives.

The player assumes the role of a contractor in charge of improving the area’s response to specific natural disasters. Within a set time limit, the player must manage their resources in order to construct and reinforce local buildings, conduct training, and purchase warning systems to help make the community safer.

Each scenario takes place in various locations around the world and focuses on disasters common to that area. For example, the tsunami scenario takes place in Southeast Asia, while the wildfires scenario takes place in Australia.

The player is given a lot of freedom to make choices in the game. They can choose what to develop and where to develop it, and they can choose between developing buildings or creating defence systems. Once a structure is made, they can choose if or how they will upgrade it. The player has a set budget and they can decide how to distribute their money and which members of the population to spend it on.

The player is given a generic amount of time before a disaster strikes. They can use that time to invest in their community and build structures, create defences, and invest in warning systems and population training. Each scenario comes with a list of goals that must be met before the disaster strikes. For example, the player might have to build a school, house a certain amount of people, and develop the local economy (such as building a certain number of hotels). Each scenario also has some generic goals related to lowering the costs of the destruction and loss of life during and after the disaster. The challenge comes from managing the resources available: limited time and money and terrain-related building restrictions. The player is not given any implicit directions once the game controls are explained and is expected to figure out the game strategy on their own by clicking on objects and trying out different actions.

The game is a real-time, self-guided, point-and-click, grid-based map simulation. The player interacts with the game by clicking on objects on the map and on menus. All actions can be completed using a mouse. The player is expected to find information independently, and will be rewarded for exploring and making good choices with tooltips that appear after the action has been completed. This self-guided nature of the game drive the player to do multiple tries before correctly strategies the game play. reduces the learning component by preventing the player from acting purposefully on this information. A player’s knowledge may actually be minimized by this method because they may not be able to find all of the tooltips in the allotted time. However, the option to start the disaster early was useful as a self-guided feature because the player may finish before the time is up.
Disasters can happen at any time, and the occurrence of a pandemic, such as the world currently faces, means natural disaster becomes more challenging to manage and potentially more dangerous to communities. Dealing with response and recovery from natural disaster during the midst of the coronavirus pandemic raises an array of new and unsettling questions. Who has to respond? What assistance may be provided if hospitals are treating COVID-19 patients? What if there is already a scarcity of medical supplies and resources? Where are evacuees sheltered and housed if there is need to ensure displaced people can continue social distancing?

Additionally, the timeframe for managing such a multi-dimensional challenge could be up to months, and likely even years, throughout which both the pandemic response and potential natural disaster response must both be considered. There is also a history of epidemics that follow natural disasters. The 2004 South Asian Tsunami that killed more than 250,000 people and displaced more than 1.7 million across 16 countries, also produced ideal conditions for an Acute Respiratory Infection outbreak in Aceh, Indonesia – already the worst hit region after the disaster. In 2010, the first Cholera outbreak in more than a century in Haiti resulted in 8,183 deaths, both amplifying and amplified by damage to infrastructure caused by the huge earthquake.

So on one hand, there is the fact that COVID-19 counter measures could hamper the emergency response to disasters, while on the other hand disaster situations will potentially disrupt current pandemic response actions (such as social distancing) that can increase the potential for increased spread of the virus.

With the current coronavirus pandemic adding a new layer of challenges and risks, community leaders must undertake structured planning for how they will deal with the worst-case scenario.

Planning includes asking and answering questions such as: What can go wrong? How likely is it to happen? What are the consequences? What resources do we need to mitigate the risk?

According to scientists at the University of Melbourne, there are four pre-emptive strategies that governments can adopt to counter the risks of COVID-19 and natural hazards.

**First**, identifying possible pandemic-natural disaster hybrid scenarios, including worst-case scenarios is critical. This requires the building of new hybrid forecast models that combine existing pandemic projection models and natural hazard forecasting.

**Second**, emergency responses to extreme events can be modified in advance by considering seasonal weather forecasting models. As technology can provide predictions of possible natural hazards in the coming months, planning ahead is key.

**Third**, a re-design of policy responses is needed to address different natural hazards, with a focus on social distancing. Policy changes must be introduced to a wide range of post-disaster activities, ranging from emergency aid distribution to providing shelter.

**Finally**, supporting relief agencies serving lower income communities or regions and their governments is important, as impacts of compound effects on these areas are likely to be disproportionately high.

Although an epidemic does not usually fall within the disaster management sector, in terms of scale and suffering, it potentially should. While it may be difficult and hard to think of the additional risk caused by a second crisis at this time, risk management requires exactly that—staying ahead of events and always being prepared to respond.
Starting in late December 2019, the ASCEND project seeks to create a regionally recognised certification scheme for disaster management professionals, in order to ensure and promote higher standards and quality in the management of disasters throughout ASEAN. It aims to ensure the availability of competent disaster management professionals in the region, with strong capacity to manage disasters to reduce the loss of life, respond effectively, recover more quickly, and decrease disaster risks throughout the ASEAN region wherever possible. This initiative is part of the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) Work Programme 2016-2020, and will also contribute to the realisation of ASEAN’s goal to become a global leader in disaster management by 2025, as expressed in the ASEAN Vision 2025 on Disaster Management.

The project will be implemented for three years and cover the pilot period of the ASCEND Framework and Roadmap implementation in collaboration with the KNFA. The pilot will be critical for the development of ASCEND, during which the AHA Centre will focus on the application of ASCEND Framework in a number of ASEAN countries. KNFA will contribute to the ongoing development of ASCEND by deploying their experts and sharing their knowledge and experience on disaster management from the Korean context. Similarly, the KNFA hopes to benefit with new knowledge and experience through its further engagement in the ASEAN region and perspectives. The collaboration between KNFA and the AHA Centre forms a showcase of positive collaboration and learning between individual nations and institutions from the ASEAN region such as the AHA Centre.

A significant learning that ASEAN can obtain from Korea is related to the development of the Korea Disaster Relief Team (KDRT). The United Nations International Search and Rescue Advisory Group (INSARAG) has certified the KDRT as a Heavy Search and Rescue (SAR) team, meaning that it is considered as one of the leading SAR teams globally. Within ASEAN itself, there are two nations with SAR teams that have successfully obtained the INSARAG Heavy classification – namely the Lionheart team from Singapore and the SMART team from Malaysia. Additionally, the Indonesian BASARNAS (the National Search and Rescue Body) has just received its INSARAG classification as medium Urban SAR in November 2019. Therefore, there is value for ASEAN to learn more about the KDRT, in particular related to how the KDRT maintain its readiness, recruits and trains new members, and maintains its high standards and quality on an ongoing basis. Such knowledge could support and improve the management and training activities of other Search and Rescue Teams within the ASEAN region.
Callista Sandi joined the AHA Centre as an intern in the AHA Centre Executive (ACE) Programme after completing her first year of her International Relations Bachelor degree at the University of Groningen, Netherlands, and will continue studying through Tokyo International University. In this volume’s Other Side article, Callista shares with us her experience and insights after eleven months with the AHA Centre team.

I have always been interested in the humanitarian field, especially disaster management and disaster diplomacy. As an International Relations student studying International Politics, Law and Economics, this opportunity provided me a deeper understanding on the importance of multilateral coordination between ASEAN Member States. The internship increased my connection to my own country by understanding Indonesia’s disaster management capabilities at the national level, as well as our contribution and role in strengthening regional capacity. The internship experience also complimented my educational learning objectives by analysing disasters through disaster diplomacy, that urges disaster-related activities to remove diplomatic barriers, in particular for humanitarian purposes.

Being an intern at the AHA Centre also enhanced my understanding about the communities and policy makers within ASEAN disaster management, and the efforts of the ASEAN region to develop future-ready disaster management mechanisms. It is a great example for me as an undergraduate student to understand, contextualise and analyse such disaster management mechanisms within the ASEAN context. The programme serves as a strong platform for young leaders who want to push their ideas and who enjoy interactive discussions on disaster management.

Being part of the ACE Programme allowed me to understand disaster management from various lenses, and even more importantly from a youth perspective. One of my favourite aspects of the ACE Programme is that it provides us as the future generation input into the disaster management sector, and a fresh voice within the AHA Centre itself. These fresh voices and views are nurtured in the ACE Programme, that is undertaking efforts to re-design its framework to even better prepare emerging disaster management leaders to be future ready. The ACE Programme is funded by Japan-ASEAN Integration Fund (JAIF).

But what does it mean, what does it require, and who should be involved in this idea of ‘future-ready’? Through this experience I learned that being future-ready means bridging the technology gap to disaster management. It’s time for disaster management to be more aware of the opportunities’ technology has to offer. With the evolution of the disaster management sector, future utilisation of technology will be more dominant, and therefore our region must completely open itself to engaging technology within all aspects of disaster management.
The Association of Southeast Asian Nations (ASEAN) was established on 8 August 1967. The Member States of the Association are Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam. The ASEAN Secretariat is based in Jakarta, Indonesia. As set out in the ASEAN Declaration, the aims and purposes of ASEAN among others are to accelerate the economic growth, social progress, cultural development, to promote regional peace and stability as well as to improve active collaboration and cooperation.

The ASEAN Agreement on Disaster Management and Emergency Response (AADMER) is a legally-binding regional policy framework for cooperation, coordination, technical assistance and resource mobilisation in all aspects of disaster management in the 10 ASEAN Member States. The objective of AADMER is to provide an effective mechanism to achieve substantial reduction of disaster losses in lives and in social, economic and environmental assets, and to jointly respond to emergencies through concerted national efforts.

The AHA Centre is an inter-govermental organisation established on 17 November 2011, through the signing of the Agreement on the Establishment of the AHA Centre by ASEAN Foreign Ministers, witnessed by the ASEAN Heads of State / Government from 10 ASEAN Member States: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam. The Centre was set-up to facilitate the cooperation and coordination among ASEAN Member States and with the United Nations and international organisations for disaster management and emergency response in the ASEAN region.