

ASEAN Focus

ISSN: 2424-8045

37
SEP
2021

A BIENNIAL PUBLICATION PROVIDING CONCISE ANALYSES AND PERSPECTIVES ON ASEAN MATTERS

ASEAN Digitalisation
Beyond COVID-19

Myanmar & the
ASEAN Way

Addressing the Climate
& Biodiversity Nexus

Southeast Asia's Forests
& their Contributions

Hill Stations
of Southeast Asia

**BIODIVERSITY
CONSERVATION
IN ASEAN**

Contents

ASEANFocus is published by the ASEAN Studies Centre at ISEAS-Yusof Ishak Institute and available electronically at www.iseas.edu.sg

Published on 29 September 2021



EDITORIAL CHAIRMAN

Choi Shing Kwok

MANAGING EDITOR

Sharon Seah

PRODUCTION EDITOR

Melinda Martinus

ASSISTANT PRODUCTION EDITOR

Farah Nadine Seth

EDITORIAL COMMITTEE

Pham Thi Phuong Thao

Hoang Thi Ha

Sithanonxay Suvannaphakdy

SUPPORTED BY



The responsibility for facts and opinions in this publication rests exclusively with the authors and their interpretations do not necessarily reflect the views or the policy of ISEAS-Yusof Ishak Institute or its supporters. No part of this publication may be reproduced in any form without permission.

ISEAS-Yusof Ishak Institute

30 Heng Mui Keng Terrace
Singapore 119614

E: asc@iseas.edu.sg

Editorial Notes

Analysis

- 2 ASEAN in 2021: Breakthrough or Muddling Through?**
Mely Caballero-Anthony, Kei Koga, Evan A. Laksmana, Jayant Menon, Asyura Salleh, Sharon Seah, Sithanonxay Suvannaphakdy, Tan See Seng, Moe Thuzar, Shukor Yusof
- 4 Sustaining ASEAN Digitalisation Beyond COVID-19**
Tham Siew Year
- 12 Should the ASEAN-China Partnership be Upgraded?**
Farah Nadine Seth, Sharon Seah
- 14 The Myanmar Crisis: Reinvigorating the ASEAN Way and Centrality**
Sihesak Phuangketkeow

Spotlight: Biodiversity Conservation in ASEAN

- 16 Addressing the Climate and Biodiversity Nexus**
Kelly Siman, Debby Ng, Tze Kwan Fung, Yiwen Zeng, Lian Pin Koh
- 18 Why We Will All Benefit from Securing Species in the ASEAN Region**
Madhu Rao, Nerissa Chao, Vicki Guthrie
- 20 Future Prospects of Blue Economy**
Barakalla Robyn
- 22 Avoid the Unimaginable: Managing Marine Plastics Pollution**
Melinda Martinus
- 24 Southeast Asia's Forests and their Contributions**
Robert Nasi
- 26 Citizen Science for Monitoring Coral Reefs**
Wilfredo Y. Licuanan
- 28 The Economics of Biodiversity**
Qiu Jiahui

ASEAN In Figures

- 30 Biodiversity and Conservation Efforts in Southeast Asia**

Insider Views

- 32 Exploring ASEAN Identity Through Art**
Ha Ninh Pham

Sights and Sounds

- 35 Hill Stations of Southeast Asia**
Yong Yanminn
- 38 Some Like It Hot... and Chilli**
Kevin Neo

ISEAS-Yusof Ishak Institute (formerly Institute of Southeast Asian Studies) is an autonomous organisation established in 1968. It is a regional centre dedicated to the study of socio-political, security, and economic trends and developments in Southeast Asia and its wider geostrategic and economic environment. The ASEAN Studies Centre (ASC) was established in 2008 under the ISEAS-Yusof Ishak Institute to research on issues pertaining to the Association of Southeast Asian Nations (ASEAN) as a regional organisation. The ASC is the first Institutional Recipient of the ASEAN Prize in 2020, a prestigious award to honour outstanding achievements of individuals or organisations who have made meaningful contributions to ASEAN.

Editorial Notes

More than 18 months after COVID-19 first emerged, the Southeast Asian region continues to face growing outbreaks sparked by the Delta variant with countries struggling to manage virus transmissions and national vaccination roll-outs. While hard-hit countries, such as Vietnam, Philippines, Thailand, Malaysia and Indonesia, are enduring a confusing series of lockdowns and tightened social distancing measures in their pandemic battle, border restrictions in other parts of Southeast Asia are starting to ease with talks of treating the disease as “endemic”.

One of the biggest tests of ASEAN’s centrality and relevance remains Myanmar. The 1 February coup has left the country crippled as ASEAN has taken steps towards encouraging dialogue in Myanmar, with the recently appointed Special Envoy leading the bloc’s mediation efforts. The Myanmar people remain embroiled in political and economic limbo, their suffering exacerbated by the deteriorating humanitarian crisis arising from the pandemic. No sooner had the military junta agreed to an ASEAN request for a ceasefire to facilitate the distribution of humanitarian aid, did the National Unity Government declare a people’s defensive war.

Against the backdrop of crisis after crisis, ASEAN countries have started to look into digital economies as an innovative way to recover from the pandemic. In terms of external relations, ASEAN was asked to consider an upgrade in two sets of dialogue relations – the ASEAN-China and the ASEAN-Australia relationship.

Our *Analysis* contributors investigate these developments in the region, analysing the ASEAN perspective on the Myanmar crisis, the opportunities and risks beneath an ASEAN-China Comprehensive Strategic Partnership, and the pandemic-induced trend of accelerated regional digitalisation efforts. With the upcoming 38th ASEAN Summit in October, we ask regional experts to give their take on the multi-sectoral regional issues and milestones, including an early assessment of the Brunei Chairmanship.

With the UK Presidency bent on finally holding the delayed climate talks in Glasgow, climate change will take centre stage on the global agenda in November. Record heatwaves, devastating storms and rapid wildfires across the globe are highlighting the immediacy of the climate crisis, with the latest Intergovernmental Panel on Climate

Change (IPCC) Sixth Assessment Report showcasing the urgent need to address the nexus of climate change, environmental protection and biodiversity conservation. Much attention and hope will be placed on the upcoming 15th Meeting of the Conference of the Parties of the Convention on Biological Diversity (CBD COP 15) and the 26th UN Climate Change Conference of the Parties (COP26) as platforms to generate greater political will and global action. Southeast Asia has the dubious honour of holding two opposing titles: one of the richest biodiversity spots in the world that is also critically at risk of irreversible environmental degradation.

In that spirit, the theme of this *ASEANFocus* issue – Biodiversity Conservation in ASEAN – is constructed to shine a light on regional conservation efforts. *ASEAN In Figures* gives a snapshot of the current initiatives and gaps in regional biodiversity and conservation efforts. Our *Spotlight* contributors delve into the pressing biodiversity threats facing our region, such as endangered species conservation, deforestation and resource exploitation, transboundary marine plastic pollution and conservation challenges within the biodiversity and climate interface. All hope is not lost, with other contributors highlighting the promising opportunities for biodiversity conservation such as the allure of the blue economy, the value of citizen science, the economics of biodiversity and the circular economy.

Beyond the *Spotlight*, we are delighted to feature Mr. Ha Ninh Pham, the second resident of the ASEAN Artist Residency Programme, to share his *Insider Views* on exploring ASEAN identity through art. In the technicolour soundscape of culture and heritage that we usually present in the *Sights and Sounds* section, we invite you on a historical-literary journey to the historic hill stations of Southeast Asia. The multifaceted culinary and cultural uses, customs and benefits of the humble chilli will also be delved into.

Sir David Attenborough once said, “It’s surely our responsibility to do everything within our power to create a planet that provides a home not just for us, but for all life on Earth.” As we realise biodiversity predicates current and future human health, we – the public as well as our governments – must push for greater collective action to conserve the sanctity, biodiversity and beauty of our environment for future generations to come. 🌿

ASEAN in 2021: Breakthrough or Muddling Through?

ASEANFocus invites experts to assess ASEAN's COVID-19 response and other pressing issues at the forthcoming 38th ASEAN Summit.



Mely CABALLERO-ANTHONY
Prof, International Relations,
Head, Centre for Non-Traditional
Security Studies, S. Rajaratnam
School of International Studies
(RSIS), Nanyang Technological
University



Kei KOGA
Asst Prof, Dept of Public
Policy and Global Affairs,
College of Humanities, Arts
and Social Sciences, Nanyang
Technological University



Evan A. LAKSMANA
Senior Research Fellow,
Centre on Asia and
Globalisation, Lee Kuan
Yew School of Public Policy,
National University
of Singapore



Jayant MENON
Visiting Senior Fellow,
ISEAS – Yusof Ishak Institute



Asyura SALLEH
Adjunct Non-Resident Vasey
Fellow at the Pacific Forum, and
Special Advisor for Maritime
Security, Yokosuka Council on
Asia-Pacific Studies



Sharon SEAH
Senior Fellow and Coordinator,
ISEAS – Yusof Ishak Institute



**Sithanonxay
SUVANNAPHAKDY**
Lead Researcher (Economic
Affairs), ASEAN Studies Centre,
ISEAS – Yusof Ishak Institute



TAN See Seng
Research Advisor, RSIS and
Senior Associate, Centre
for Liberal Arts and Social
Sciences (CLASS), Nanyang
Technological University



Moe THUZAR
Fellow and Co-Coordinator,
Myanmar Studies Programme,
ISEAS – Yusof Ishak Institute



Shukor YUSOF
Founder, Endau Analytics

ASEAN's COVID-19 Response Initiatives

ASEAN has established the COVID-19 ASEAN Response Fund and the ASEAN Regional Reserve of Medical Supplies for Public Health Emergencies to mitigate the pandemic's effects in the region. What is your assessment of the implementation of these initiatives thus far?

CABALLERO-ANTHONY: ASEAN has already allocated half of the Response Fund to purchase vaccines for member countries, through COVAX, as announced by Secretary-General Lim Jock Hoi. This is important, since any effective vaccine reserve requires sufficient supplies of vaccines to fill it. The problem, however, lies in the slow pace of delivery, whereby in end-July, only 252 million doses have been successfully delivered, out of a regional demand of 1.35 billion (given a population of 676 million, and assuming two doses per person). Beyond financing, there is a need to secure vaccines that need to be purchased in the first place. However, the global vaccine availability as of end-July was only at 4.2 billion doses, which could inoculate only 2.1 billion people globally (a quarter of the world population). Limited global vaccine production capacity remains the key problem.

As ASEAN countries are accelerating their vaccination programmes, what can ASEAN do to help its members secure sufficient and timely vaccine supplies?

CABALLERO-ANTHONY: ASEAN governments need to work with the private sector in expanding the region's "vaccine resilience," without burdening global supplies with regional demand. This can be done through a partnership with international pharmaceutical companies to establish vaccine manufacturing centres within ASEAN states. This is already happening in the ASEAN region, as observed in August 2021, Indonesia's Biopharma, the region's largest state-owned biopharmaceutical plant, is eyeing to produce 250 million doses of Sinovac's vaccines. In Singapore, BioNTech is aiming to set up a plant to add hundreds of millions to its regional manufacturing capacity. Thailand's Siam Bioscience is partnering with AstraZeneca to produce 180 million doses a year.

Most recently, the Philippines is making a move. The earlier ASEAN baseline study highlighted that the Philippines had no prominent vaccine manufactures, but, today, the local firm Glovax is partnering with Korea's EuBiologics to produce EuCorVac-19 vaccines.



Indonesian President Joko Widodo receives first dose of COVID-19 vaccine

This would not have been possible without the state's commitment to buy 40 million doses and to set up "Green Lanes" to counteract red tape in securing permits/licences/authorisations. This feat required collaboration among state institutions governing health, food/drugs, trade/industry, investments and science/technology, led by its National Task Force Against COVID-19. There are indeed big opportunities to fill the gaps in vaccine access and to realise the stockpile of vaccines and other therapeutics.

ASEAN Travel Corridor Arrangement

Given the current pandemic spread and the differing progress of vaccination programmes across the region, what do you think are the main obstacles to implementing the ASEAN Travel Corridor Arrangement (ATCA)?

YUSOF: Like with many accords signed by ASEAN member states, the devil is often in the details. Not only are there differences in vaccination programmes across the region, but the approach to the threat from the virus has varied greatly from the onset of COVID-19. It is clear that while some nations continue to battle aggressively and smartly, others are lax in their Standard Operating Procedures and in the discipline to overcome the pandemic. The problem with ASEAN has often been its inability to speak as one when faced with economic and political difficulties that affect the bloc, not only due to its principle of non-interference in member countries' internal affairs but also mainly because each member has its own priorities and interests. The primary hurdles to implementing the ATCA are mainly the mistrust between member states that is caused by inequality in standards of living and the absence of a solid institution to ensure that collective decisions are well executed.

Given the ongoing COVID-19 mutations, how will the 'Future of Travel' look like in the region? What alternative models of leisure travel will open up?

YUSOF: As long as COVID-19 remains undefeated, movements of people within ASEAN will be fragmented and haphazard. It will, unfortunately, be costlier and more inconvenient to travel. Whether on air or on the ground, mobility will be curbed unless governments adopt similar measures like those in Europe and North America. International travel will remain restricted as long as borders are not fully opened. Travellers will have to plan well in advance, especially for air travel. The costs of taking COVID-19 tests at the points of departure and arrival, not to mention quarantines, will be prohibitive to many. Travel insurance costs are going to rise. For low-cost carriers whose business models will need to be readjusted accordingly, this is extremely challenging. Countries with hinterlands are likely to experience more domestic travel (by air, road and sea). Inter-rail travel, a long-held dream, could see a resurgence. For instance, a seamless Beijing to Singapore overland journey (via Indochina) may finally materialise, which is a welcome change in the battle to reduce carbon footprints.

What are your short- and long-term forecasts of the recovery of the tourism and aviation sectors in the region? What would be the worst- and best-case scenarios for these sectors going forward?

YUSOF: It is unlikely that a full, unfettered recovery is forthcoming before 2025. Despite large numbers of people being vaccinated (and countries subsequently achieving herd immunity), the risk of deadlier mutations, which will require multiple "booster" shots in the near- to mid-term means that the financial and structural damage will rise significantly. The concern is that one or more member countries within ASEAN cannot cope when the casualties mount and healthcare systems collapse. That

4 | ASEANFocus

is the worst-case scenario. If it occurs, then all bets are off as the region — home to 640 million inhabitants of largely archipelagic territories — will be gravely affected. All things being equal, aviation is a resilient industry and critical to a nation's economic health. The travel landscape for both business and leisure would have been permanently altered and scarred by the time Covid has had its say. Airlines and other travel-related entities that have successfully weathered the pandemic and emerged relatively unscathed will lead the way and be able to exploit the "new normal". In the best-case scenario, ASEAN governments can mitigate the economic losses if countries adopt standard measures advocated by the likes of the International Air Transport Association, the International Civil Aviation Organization and the World Health Organization.

Post-Pandemic Economic Recovery

The ASEAN Comprehensive Recovery Framework (ACRF) introduced a 3Rs Phased Approach to the region's recovery (Re-opening, Recovery and Resilience). What is your outlook on the region's recovery timeline and what are the necessary conditions to achieve a new post-pandemic normal?

MENON: New variants of the coronavirus, especially the Delta, are producing the worst outbreaks in Southeast Asia. The spikes in infection rates have led to concerns that nascent economic recoveries may be derailed. The Delta variant is unlikely to retest the bottom that was hit in the second quarter of 2020 for three reasons. The domestic mobility restrictions have been less draconian compared to last year, firms have learnt to adapt better to the restrictions, and stimulus spending has increased in all countries. Although the situation is evolving, relatively robust second-quarter growth suggests that this year's growth will be slightly lower than initially expected. Nevertheless, the output lost to the pandemic is unlikely to be recouped in 2021. The opening of borders will require herd immunity achieved mainly

through vaccination. A corresponding shift in mindset – from eliminating to living with the virus – and focus - from infection rates to hospitalisation rates - will help hasten the process and address the inefficiencies and inequities in the production and distribution of vaccines globally.

The Hanoi Plan of Action on Strengthening ASEAN Economic Cooperation and Supply Chain Connectivity in Response to the COVID-19 Pandemic prioritises smooth flows of essential goods and long-term supply chain connectivity and resilience. Have ASEAN countries successfully ensured uninterrupted essential supplies? Are there any lessons learnt on response to emergency situations, individually and collectively through ASEAN?

SUVANNAPHAKDY: ASEAN as a group has been moderately successful in enhancing trade flows of essential goods for its people. A preliminary analysis of the WTO Secretariat's trade measures implemented by ASEAN member states from November 2020 to June 2021 reveals that ASEAN tends to ease import restrictions, while imposing export restrictions for essential goods. For example, Indonesia has temporarily eliminated tariffs on imports of vaccines essential in combatting COVID-19, raw materials used in the production of vaccines, and equipment necessary for its production and handling since November 2020. Meanwhile, major regional rice producers and exporters such as Vietnam, Cambodia and Myanmar have not imposed any restrictions on their rice exports despite waves of infections in these countries.

However, some member states still impose restrictions on their exports of essential goods. For example, Thailand has imposed export restrictions on surgical masks for 1 year from February 2021 while Vietnam has suspended temporary import for the re-export of medical masks, medical gloves and anti-epidemic isolation suits from 22 January to 31 December 2021. This poses the risk of trade conflicts in the region as other member states



Per Meistrup@Wikimedia Commons

Food handouts to those in need during the pandemic in Thailand

may retaliate against export restrictions imposed by another member state. Given the interdependence of regional trade, increasing import demand and reducing export supply could lead to a shortage of essential goods, which raises prices of food and medical services for ASEAN people. Ensuring smooth regional trade flows, therefore, requires reductions in both import and export restrictions.

Micro, Small and Medium Enterprises (MSMEs) and those in the informal economy form a significant proportion of ASEAN's economy and have been hard hit by the pandemic. Regional frameworks and agreements such as the ACRF and RCEP recognise the importance of rebuilding and safeguarding employment within these sectors. What more can ASEAN do to protect and revitalise these sectors?

SUVANNAPHAKDY: MSMEs in ASEAN have been severely affected by the COVID-9 pandemic. World Bank data for five ASEAN member states show that firm sales were on average 41% to 56% lower in April and May 2020, compared to the same months in 2019. Firms suffered the largest loss in sales in the Philippines and the lowest in Vietnam. MSMEs in the ASEAN-5 countries, except Vietnam, suffered greater losses than large firms. The gap of lost sales between SMEs and large firms is particularly pronounced in Indonesia, where the sales of SMEs have fallen by 24 percentage points more than large firms.

So far, ASEAN governments have mitigated the negative impacts of COVID-19 on firms through economic stimulus package and easy monetary policy. To limit the impact of COVID-19 crisis on MSMEs and build their resilience, additional support measures in the short term should include improving MSMEs' access to regulatory and market information and affordable trade finance. In the medium term, ASEAN governments should promote greater use of digital tools and e-commerce and greater integration of domestic firms into multinational enterprises' global value chains (GVCs). Digital financial services can bring financial accounts to unbanked people and micro enterprises. Those can also reduce costs of financial transactions and increase the speed and coverage of distributing government's cash transfer to informal workers and enterprises affected by COVID-19. Integrating domestic firms into GVCs should facilitate the transfer of technology, knowledge and skills, and widen access to finance and markets for MSMEs.

COVID-19 has accelerated digitalisation in Southeast Asia. Digital trade may become a new area of growth for ASEAN in its post-pandemic recovery. How can ASEAN tap into digital economy opportunities? What are the prospects in creating enabling conditions to facilitate digital trade regionally?

MENON: The pandemic has accelerated ASEAN's move towards a digital economy. Lockdowns and social distancing measures have hastened the adoption of digital technologies and have seen a boom in e-commerce and digital trade. According to *We Are Social's 2021 Digital Trade Report*, Indonesia had the



Travellers arrive in Phuket Airport as part of Thailand's sandbox strategy

highest ecommerce adoption rate in the world in 2020 at 87%, followed by Thailand (84%) and Malaysia (83%). Online sales doubled in the past year in the original ASEAN members compared to pre-pandemic levels. As internet access improves in ASEAN's newest members, where penetration is barely 50%, e-commerce is likely to increase in tandem. This trend towards online sales may taper slightly after the pandemic, but the shift is here to stay.

Digital trade is an area not covered by the WTO in which countries participating in supply chains desire to standardise regulations. For ASEAN, which will start negotiations on the ASEAN Digital Economy Framework Agreement by 2025, RCEP provides the more immediate vehicle. Four ASEAN members are also in the more ambitious CPTPP while Singapore is spearheading deep agreements with Australia, and New Zealand and Chile. Standardising rules relating to complex issues such as data transfer remain challenging.

RCEP and Global Supply Chains

Is it likely that RCEP ratification can be completed by the end of this year to meet signatories' target to enact the agreement on 1 January 2022?

MENON: When the RCEP Agreement was signed on 15 November 2020, it was expected that it could come into force by 1 January 2022. This set a deadline of 1 November 2021 for six (out of ten) ASEAN and three (out of five) non-ASEAN countries to have it ratified so that it could enter into force 60 days later. The Delta variant may affect this target since most RCEP countries are preoccupied with managing the worst outbreak since the start of the pandemic. As of mid-September 2021, Cambodia, Singapore and Thailand (3 out of the required 6 ASEAN members) and China and Japan (2 out of the required 3 non-ASEAN members) had ratified the agreement. It remains uncertain if three more ASEAN members and one non-ASEAN country will ratify it before November. If it misses this target, it is still likely that the agreement will come into force before mid-2022.



Countries in and outside of the region have introduced new initiatives and strategies that push for diversification and resilience of supply chains. How will these moves affect the position of ASEAN economies in global and regional supply chains?

MENON: Global supply chains are born out of disruption and are continuously shifting in response to changing circumstances. Although programmes such as the Indo Pacific Supply Chain Resilience Initiative involving Australia, India and Japan have emerged, they have had minimal impact on supply chains so far. The US-China trade war has driven the shifts in some supply chains out of China and into ASEAN. The pandemic may have accelerated these shifts, but they started before the pandemic. Although the bilateral discriminatory tariffs have made it profitable to move segments of labour-intensive industries from China into Vietnam, Thailand and Malaysia, capital-intensive manufacturing supply chains have been less mobile. Although these countries have benefitted from the increased inflow of FDI, the region has been negatively impacted by the trade war. Therefore, ASEAN and the world would be better served by an early end to the trade war.

US-China Geopolitical Contest and Indo-Pacific Discourse

Do you foresee US President Biden attending the 38th ASEAN Summit this year? Why or why not?

TAN: I suspect he will attend. It is clear from the Biden administration's engagement with Asia that there is a strong effort on the US's part to build a coalition of allies and partners with which to balance China. ASEAN and

Southeast Asian countries are clearly in the frame. Aside from possible obstacles like illness, the one thing that could prevent Biden from doing so is if a fiscal cliff crisis with the US Congress arises, like what prevented Obama from attending during his presidency. All in all, there are far more reasons for Biden to attend than not.

Do you think the Biden Administration has thus far lived up to the expectations and hopes for greater US engagement in the region? Why or why not?

TAN: Yes and no. President Biden has had a full plate to deal with, ranging from domestic concerns to China, which the Biden administration has identified as the US's top foreign policy challenge. I think it is safe to say the ASEAN region is at or near the top of his agenda. It does not help that Biden (at the time of writing) has yet to take a phone call with any of the 10 ASEAN leaders. The Secretary of State Antony Blinken encountered a glitch that disrupted his planned video call with the ASEAN foreign ministers back in May, which made the US look hapless compared with Chinese Foreign Minister Wang Yi's meeting with his ASEAN counterparts in person in Chongqing. But the US stands to recover from their fumble with their defense chief Lloyd Austin's visit to the region in July and Vice President Kamala Harris' visits to Vietnam and Singapore in August.

Do you think ASEAN member states can maintain their position of not picking sides between the US and China in the long run? If yes, how? If not, why?

TAN: I sense that despite Beijing's assurances to the contrary, the Chinese pressure on the ASEAN states to pick China's side in the US-China rivalry has, in fact,

been relentless. To the extent there has been similar pressure from the US side, it was probably strongest during the Trump administration's implementation of its "Free and Open Indo-Pacific" strategy with a clear anti-China orientation. It is noteworthy that in his IISS Fullerton speech given during his Singapore stopover in July, Secretary Austin, referencing Singapore PM Lee Hsien Loong's counsel, assured his regional audience that the Biden administration is "not asking countries in the region to choose between the United States and China." If indeed it were so that the US seeks to engage deeply with the ASEAN region without pressing the ASEAN states to side with it against China, it is arguably possible for the ASEAN states to persist with strategic hedging.

The Biden Administration has continued with the competitive and confrontational approach towards China from the Trump Administration. Is this an opportunity or a poisoned chalice for ASEAN and its member states?

LAKSMANA: ASEAN has learned to balance great power politics for decades. Sure, the issues or flavours might change, but the regional and global system in which ASEAN states must operate have not. ASEAN member states will and have been reverting to hedging as their default mode of "not wanting to choose but wanting to profit" from the US and China. But ASEAN as a regional grouping will continue to be rendered strategically inept in the face of immediate and pressing problems like Myanmar and the South China Sea. ASEAN was designed for a particular set of norms exercises, which works well when member states find ASEAN the most desirable foreign policy option and the regional environment is less polarized by great power politics. Neither conditions hold today. Overall, some ASEAN members will find new ways to hedge while ASEAN will continue muddling through in a state of strategic limbo.

Both the US and China have stepped up their charm offensive and diplomatic engagements with Southeast Asia. Which country do you think has been more successful in this endeavour?

LAKSMANA: Depends on our definition of successful. If success is defined by the strategic realignment of that country's foreign policy fundamentally in one great power camp over the other, then the success seems rather limited. Most Southeast Asians are still adamantly hedging their foreign policy alignments, even if some of them are increasingly dependent on one great power over another in practice. So, if success is defined by the ability of Southeast Asian states to continue reaping the benefits of playing off one great power over the other, then yes, the charm offensive has been successful. But overall, it does seem that China has been more successful at using the carrots it has to offer, from trade to investment as well as a wide range of non-security tools like education and tourism. The US meanwhile seems to be holding on to its security relationships—education, training, exercises, and arms sales—while playing catch-up on the non-security tools.

As the Indo-Pacific discourse continues to gain further traction not only among the Quad member countries but also in the EU and key European countries, how can ASEAN best promote and execute its own Outlook on the Indo-Pacific?

LAKSMANA: ASEAN needs to first accept and acknowledge that the ASEAN Outlook on the Indo-Pacific (AOIP) is nothing more than an aspirational document—it is devoid of strategy, resources, or a plan of action. The presence of an AOIP is not a substitute for strategy. If we accept that, then we can plan better to operationalise the AOIP. Firstly, the AOIP should better convince ASEAN member states before trying to persuade ASEAN Dialogue Partners. The current AOIP is too maritime-oriented at the expense of existing sub-regional cooperation efforts. Secondly, Indonesia and Thailand both have the responsibility to formulate an implementing framework and strategy for AOIP. Without such a document, the AOIP's agenda-setting powers will be hollow and too process-oriented. Finally, the AOIP's implementing document needs to step away from norms-exercises and into practical cooperation in search of achieving specific outcomes. As it stands, the AOIP merely rehashes existing agreed-upon norms and focuses on areas of cooperation that ASEAN and its Dialogue Partners have already been working on for years.

Would a proliferation of these Indo-Pacific strategies strengthen or undermine ASEAN's centrality within this geopolitical space?

TAN: To the extent the Indo-Pacific strategies of big powers, despite their competitive intent, aim at engaging deeply with ASEAN, then that, far as ASEAN is concerned, constitutes a positive for its centrality. It is instructive that when China and the US individually held maritime exercises with all 10 ASEAN states, ASEAN leaders, fairly or otherwise, interpreted those as evidence of ASEAN's centrality and relevance. Should those strategies insist on the ASEAN states taking sides with either China or the US, then that will likely undermine ASEAN centrality in the long run.

LAKSMANA: ASEAN centrality is defined by the ability of the group to engage its Dialogue Partners and set the agenda continuously. Seen in this light, what undermines ASEAN centrality in the Indo-Pacific is not the presence of China's Belt and Road Initiative (BRI) or Japan's Free and Open Indo-Pacific (FOIP). But the group's inability to offer a serious alternative to the duelling narratives. For one thing, the ASEAN Charter has hindered a more flexible and robust response to Indo-Pacific challenges. For another, key ASEAN members prefer to explore non-ASEAN options to define and defend their interests in the Indo-Pacific. ASEAN needs to offer more to the Indo-Pacific than yet another round of norm exercises and dialogue building.



Avito C. Dalan@Wikimedia Commons

Flooding in Manila, Philippines

Role of Middle Powers

Middle powers such as Japan, Australia and India have provided various forms of COVID-19 response assistance to the region. These countries are also strengthening their bilateral and trilateral relations. Do you think ASEAN and its member states can rely on these middle powers to alleviate the bipolar pressure of US-China rivalry?

KOGA: Yes, to alleviate the strategic pressures—to avoid taking sides—caused by the intensification of US-China rivalry, ASEAN’s ties with those powers are important. Of course, the US allies and partners are democracies, and their core value system is well-aligned with those of the US. Also, they attempt to create a loose coalition for maintaining the existing international rules and norms, which have been largely consolidated by the US in the post-Cold War era. However, their approaches to ensure the value system, such as human rights protection, differ, and international rules and norms in new strategic areas, including digital economy and emerging technologies, are evolving. By strengthening cooperation with those regional powers, ASEAN and its members would, therefore, likely have more diplomatic leverage in shaping new rules and norms and be able to avoid being deeply entrapped by US-China great power rivalry.

As seen in The State of Southeast Asia Survey, Japan has been consistently viewed as this region’s most trusted power. Which are the areas where Japan can further its engagement with and provide support to the region?

KOGA: Southeast Asia’s trust toward Japan is high partly because Japan is not strategically threatening to ASEAN member states. Both Japan and Southeast Asia share interests in buttressing strategic autonomy of the region—not to fall under a particular great power’s influence. In this connection, Japan has been interested in and contributed to developing Southeast Asia’s social, economic, and defence infrastructure, increasingly through maritime capacity building and regional connectivity programmes. As Japan’s FOIP

vision indicates, Japan has been providing ASEAN littoral states, such as Vietnam and the Philippines, capacity building programmes and equipment to increase their maritime domain awareness and law-enforcement capabilities. Also, Japan has committed to strengthening physical, human, and institutional connectivity in the region through the “Enhanced Partnership for Quality Infrastructure,” which aims to ensure transparency, economic efficiency, financial viability, and social and environmental sustainability of ASEAN member states. These contributions resonate with the objectives of the AOIP, and are areas that Japan can further strengthen its engagement in.

Climate Change

With climate change high on the policy agenda of both the US and China, do you think it would spur constructive competition and technological innovation to the betterment of climate action in the region?

SEAH: It is in the self-interest of both major powers to cooperate to halt the progress of climate change. According to recent research, the world stands to lose about 10% of total economic value by 2050 if it fails to meet Paris Agreement goals. In the most dire scenario where no mitigation action is taken, China could lose nearly 24% of its GDP, the US almost 10% and Europe, 11% by 2050. There may be hawks on both sides of the Pacific Ocean against cooperation in climate change, but a level of competition can also be healthy in addressing the climate crisis. US-China competition in a climate technologies race can benefit the rest of us.

In light of the increasing focus on climate change globally, how can this year’s ASEAN Chair Brunei and the incoming Chair Cambodia mobilise climate change action support from its Dialogue Partners?

SEAH: One of the things ASEAN can do is consider establishing a set of regional mitigation targets and a roadmap to fulfil those targets. ASEAN can do a number

of things including reforming its climate governance structure to bring the issue to the highest political levels, facilitating knowledge, information and resource sharing, and playing the role of convenor to galvanise ASEAN Dialogue Partners' assistance to increase capacity-building training and research. Brunei plans to establish a climate change centre and a climate youth advisory programme which hopefully can be brought forward by Cambodia when it assumes the Chairmanship next year.

Brunei's ASEAN Chairmanship and the Myanmar Crisis

What is your assessment of Brunei's chairmanship of ASEAN thus far?

SALLEH: When Brunei Darussalam first released its chairmanship theme last year, the country was preparing to support regional recovery in a post-pandemic era. For this reason, a majority of the priorities that Brunei had set forth as the Chair was very much focused on recovery issues.

Instead, Brunei began its chairmanship with the Myanmar crisis, rising geopolitical strife and the persistent COVID-19 pandemic. The events in Myanmar also demanded that Brunei facilitate a solution to this crisis on top of achieving its predetermined chairmanship priorities. Under this restrictive yet volatile environment, Brunei was forced to adapt quickly and flexibly to the evolving landscape. Although areas such as the negotiation of the Code of Conduct has not progressed enough due to the pandemic, Brunei has been able to actively work with ASEAN member states to propose a solution and eventually appoint a Special Envoy to help address the Myanmar crisis. Brunei is also on track in implementing the other deliverables that it had earlier set out; and if this is a measure of success, then Brunei can be deemed to have performed competently as Chair.

How do you think the Myanmar crisis has affected Brunei's chairmanship agenda and priorities that it originally set out under the theme "We Care, We Prepare, We Prosper"?

SALLEH: The Myanmar crisis has demanded that Brunei accommodate a new priority under its chairmanship while risking a shift in focus away from the country's carefully crafted three-pillar theme of "We Care, We Prepare, We Prosper". As a result, Brunei's legacy as ASEAN Chair in 2021 would likely be measured against the resolution of the Myanmar crisis – an extremely high benchmark for any Chair. Despite ASEAN's delay in achieving regional consensus in appointing a Special Envoy, the final selection of Brunei's Second Minister of Foreign Affairs is an added opportunity for the country. This appointment would be in Brunei's favour. It would be able to carry more clout in seeking regional concurrence for its other chairmanship deliverables. Consequently, in addition to addressing the Myanmar crisis, Brunei has been shedding light on its efforts in implementing other ASEAN priorities, as set out in the recently released Joint Communiqué at the 54th ASEAN Foreign Ministers' Meeting.

What is your assessment of the current Chair's handling of the Myanmar crisis? Is ASEAN still a credible player in bringing a resolution to the Myanmar crisis? Realistically speaking, what are the choices left for ASEAN now?

THUZAR: We need to consider ASEAN's response and the Chair's role in the context of the increasing urgency of the political, economic and social crises in Myanmar as a result of the coup, and the expectations and hopes that the Myanmar people had placed on international and regional organisations such as the United Nations and ASEAN to intervene. Perceptions on the ground also matter as they affect the responsiveness and attitudes towards future interventions or responses by such entities. The degree to which the Myanmar people are now expressing their rejection of military rule may be considered in the light of their disappointment in how ASEAN – and by extension, the current Chair – had handled ASEAN's response to the crisis in Myanmar. The trip in June 2021 made by Dato Erywan in Brunei's capacity as the ASEAN Chair, accompanied by ASEAN Secretary-General Lim Jock Hoi seemed to project an image that the ASEAN Chair was consulting the State Administration Council on implementation of the Five-Point Consensus while not engaging with other key stakeholders. Comparisons with past ASEAN performance on Myanmar will inevitably bring up the "breakthrough" in 2008 when ASEAN bluntly asked Myanmar on whether it would choose to work with the UN or ASEAN on humanitarian assistance for recovery from Cyclone Nargis or whether the nine members of ASEAN would be compelled to openly support the Responsibility to Protect principle in delivering aid to the Myanmar people.

ASEAN's credibility is at stake not just internationally but also (and perhaps more importantly) in Myanmar, to deliver on the Five Point Consensus, particularly the humanitarian assistance. The COVID-19 third wave in Myanmar lends an added urgency. Myanmar's crisis is primarily ASEAN's responsibility to bear. Realistically speaking, the first priority should be to prioritise (and negotiate) humanitarian assistance to reach all communities in Myanmar without hindrance by the military. This is important, as the first phase of ASEAN's humanitarian assistance for Myanmar has recently started, with the Myanmar Red Cross Society coordinating delivery on the ground. The ASEAN Envoy should also start engaging the National Unity Government, the Committee Representing Pyidaungsu Hluttaw, and the National Unity Consultative Council, to understand the situation on the ground better and build trust. It is part of the Envoy's mandate to effect constructive dialogue among all parties. Consultation comes before dialogue, and consultation with each of the key stakeholders would be the first step in this journey towards a future constructive dialogue among all stakeholders.

Sustaining ASEAN Digitalisation Beyond COVID-19

Tham Siew Yeon argues that ASEAN must enhance its broadband networks and extend support to MSMEs in order to leverage the benefit of digitalisation during the pandemic.

ASEAN's digitalisation journey was already well underway before the emergence of the COVID-19 pandemic. ASEAN member states were already gravitating towards the use of mobile technology, social media, cloud computing, fintech, Internet-of-Things and data analytics, albeit at a different pace and intensity in each country.

There was already a marked shift towards digitisation and digitalisation, especially in the retail sector. The use of the internet in retailing has expanded retailing's focus from merely off-line to on-line. In ASEAN, e-commerce is the most dynamic sector in the growing digital economy of member countries due to the expansion of the middle class, a relatively young and tech-savvy population and fast growing internet penetration rates.

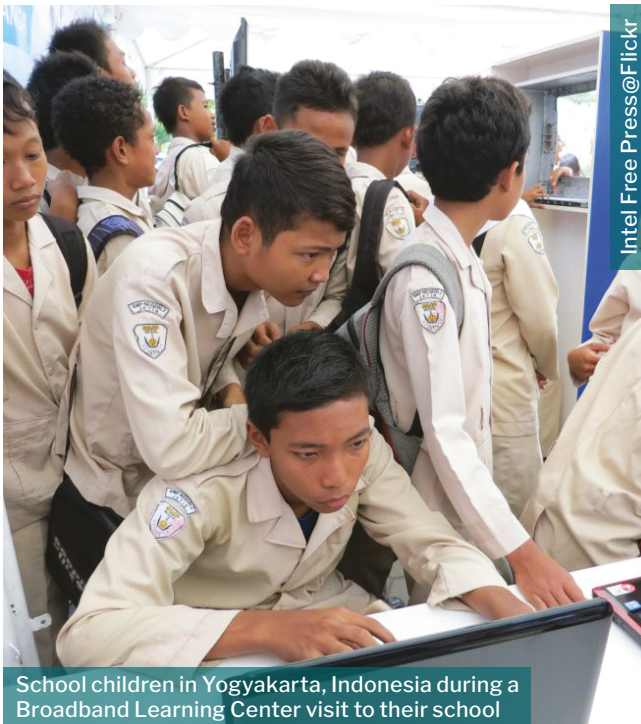
According to a joint report by Google, Temasek and Bain & Company, the gross merchandise value (GMV) or the total value of merchandise sold over a period of time for e-commerce, grew from US\$38 billion in 2019 to US\$62 billion in 2020 in six ASEAN member countries – Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam. This is expected to grow further to US\$172 billion by 2025.

The emergence of the COVID-19 pandemic in 2019 ramped up the shift towards digitalisation as strict lockdowns to curb the spread of the virus pushed workers to work from home. Consequently, more consumers learned to embrace internet usage, leading to 40 million new users in 2020, according to the same report. More importantly, nine out of ten new users intend to continue using the internet post-pandemic. These newfound habits include online purchases, be it for food, groceries, or retail, as well as the procurement of financial, education and health services via the internet.

Cognisant of changing trends, ASEAN has launched various initiatives to address different dimensions of digitalisation. For example, the ASEAN ICT Master Plan (AIM 2020) was launched to foster ICT infrastructure investments, increase support for start-ups and innovation, and digital literacy campaigns. In 2019, a Digital Integration Framework was set up, followed by an ASEAN Digital Integration Framework Action Plan 2019-2025, that was ratified on 31 October 2019. The Action Plan has five priority areas that include facilitating seamless trade, improving data protection while supporting digital trade, enabling seamless digital payments, developing a digital workforce and fostering entrepreneurship.



Working from home as the new norm



School children in Yogyakarta, Indonesia during a Broadband Learning Center visit to their school

The latest ASEAN digital initiative is the ASEAN Digital Master Plan 2025 (ADM 2025) that was launched in January 2021. The Plan aims to catapult ASEAN into “a leading digital community and economic bloc, powered by secure and transformative digital services, technologies and ecosystem.” Desired outcomes in the plan include speeding up ASEAN’s recovery from the COVID-19 pandemic and increasing the quality and coverage of fixed and mobile broadband infrastructure. The other six desired outcomes are: 1) ensuring the delivery of trusted digital services and preventing consumer harm, 2) developing a sustainable competitive market for the supply of digital services, 3) increasing the quality and use of e-government services, 4) strengthening digital services to connect businesses and facilitate cross-border trade, 5) expanding the capacity of businesses and people to participate in the digital economy, as well as 6) promoting a digitally inclusive society in ASEAN. More importantly, the ADM 2025 is accompanied with an action plan whereby each desired outcome is supported by specific action plans to accelerate their achievement.

A crucial component for speeding up ASEAN’s COVID-19 recovery is increasing investment for improving the quality and coverage of fixed and mobile broadband in each ASEAN member state. Broadband is critical infrastructure for supporting the delivery of digital services. It is especially important for Cambodia, Laos, Myanmar and Indonesia, given the connectivity gap within ASEAN. The Organisation for Economic Co-operation and Development reported that the Southeast Asian average fixed broadband penetration in 2017 was 7.47%. This rate was lower in the Philippines, Indonesia, Cambodia, Lao PDR, and Myanmar.

Surveys conducted by ASEAN in preparation for the ADM 2025 also indicated that the lack of investment has led to insufficient deployment of telecommunication networks in ASEAN. Thus, donor countries and ASEAN

governments must seize these investment opportunities to build the digital backbone in countries lacking broadband networks. More investment could also help to reduce the digital divide within ASEAN, which is also one of the eight desired outcomes in the ADM 2025.

At the firm level, micro, small and medium enterprises (MSMEs) account for 95% to 99% of all business establishments in ASEAN. It is then critical for MSMEs to utilise available government grants and loans to digitalise their operations. For example, Malaysia has offered many grants for onboarding SMEs in e-commerce and for digitalising their marketing strategies. Many of these are part of the COVID-19 recovery plans of the country. The OECD suggests that MSMEs should not only seize these opportunities to get on board the e-commerce train but also to digitalise their back-end operations as this can enhance their productivity.

To illustrate, investing in big data analytics can help support numerous applications such as strategic planning, marketing and advertising, thus leading to efficiency gains. Data analytics can help firms better understand consumer behaviour and shifts around that behaviour. For this to be possible, ultimately ASEAN countries should provide efficient and affordable access to broadband. Again, prioritising broadband upgrade and improving the coverage is critical for the less connected ASEAN member states.

MSMEs should also use digital tools to expand their business beyond domestic shores. Internationalising their business can expand their market reach, which is important for firms in small countries where demand is small. Critically, expanding their operations help MSMEs increase their access to resources, including financial support. Studies also suggest that the expanded customer and supplier base can encourage innovation from the MSMEs, which ultimately boosts their competitiveness. Digitalisation thus could help MSMEs to internationalise their business and raise their competitive advantage.

While the above scenarios show some opportunities to boost digitalisation, a lack of digital talents can hinder countries from tapping fully into the digital transformation. The digital divide within each ASEAN country also calls for supportive national policies to facilitate MSMEs. Compared to their larger counterparts, MSMEs have more opportunities to grow bigger. But they must capture economies of scale that have disadvantaged them. In sum, providing better access to digital infrastructure for MSMEs can also help to achieve some of the desired outcomes of the ADM 2025.

Finally, although some ASEAN member states have their national digital strategies and plans, aligning national endeavours with the ADM 2025 is paramount for creating more synergies. The momentum of digitalisation must be sustained beyond the COVID-19 pandemic.

Prof. Tham Siew Yeap is Professor Emeritus at Universiti Kebangsaan Malaysia and Visiting Senior Fellow at ISEAS – Yusof Ishak Institute.

Should the ASEAN-China Partnership Be Upgraded?

Farah Nadine Seth and **Sharon Seah** argue that ASEAN should establish guiding principles for an ASEAN-China Comprehensive Strategic Partnership upgrade.



(Freakestein@Shutterstock)

China's extensive cooperation with ASEAN over the years cannot be denied. Economic interlinkages are strong. China is ASEAN's top trading partner since 2009. In 2020, the bloc surpassed the EU to be China's top trading partner. Two-way trade in 2020 was valued at US\$731.9 billion while foreign direct investment inflows into the region topped US\$7.6 billion. China's extensive COVID-19-related assistance and increased cooperation on environmental protection and climate action have elevated China's soft power in the region.

With the advent of the 30th Anniversary of ASEAN-China dialogue relations this year, China has been pushing for an upgrade to an ASEAN-China Comprehensive Strategic Partnership (AC-CSP), reflecting priority on ASEAN's long-standing economic and strategic importance to Beijing.

An AC-CSP would signal higher priority in foreign affairs and more extensive cooperation across multiple sectors. Beijing's Five-Point Proposal on the future of ASEAN-China cooperation unveiled in late July 2021 includes strengthening COVID-19 response, dialogue on the South China Sea (SCS) conflict, and multilateralism, which serves as a reference point for the possible areas of an AC-CSP.

Opportunities and Concerns

Beijing's desire to strengthen bilateral ties with ASEAN is unsurprising given the changing global geopolitical landscape with a growing US-led counter-China narrative. China has been engaging in a charm offensive with the region with reciprocal bilateral visits between China and ASEAN countries in the last year, despite pandemic travel restrictions.

However, regional trust in China is low despite Beijing's COVID-19 diplomacy. According to *The State of Southeast Asia: 2021 Survey*, China recorded the lowest trust ratings and the highest distrust ratings amongst regional respondents. The top-cited concern was of China's economic and military might possibly being used to threaten ASEAN states' interest and sovereignty. A potential AC-CSP would enhance fears of ASEAN's loss of strategic autonomy.

Moreover, Southeast Asia is shaping into a geopolitical battleground, with the US and its allies viewing the region and ASEAN as integral to Indo-Pacific security interests and in countering Chinese strategic and economic influence in the region. An AC-CSP may heighten ASEAN's fears of being forced to take sides in the major power rivalry. Such a CSP would be the first between ASEAN and one of its Dialogue Partners, sending an implicit signal of ASEAN tilting towards China despite its position thus far of neutrality.

ASEAN must embark on a pragmatic cost-benefit analysis of an AC-CSP. In the SCS disputes, supporters may see an AC-CSP as an opportunity for ASEAN claimant states to seek to resolve contested boundaries. In their Proposal, Beijing indicated its willingness to step up resolution-driven dialogue with claimant states and speed up negotiations on a COC that complies with international law. However, China's track record of coercive fait accompli building of military outposts to stake its territorial claim and its disregard of the 2016 Tribunal ruling, makes it unlikely that Beijing can be persuaded to depart from its China-first doctrine. Strengthened regional ties through an AC-CSP could put claimant states under greater pressure to resolve SCS disputes bilaterally, an avenue China has long

preferred. Similarly, non-SCS claimant states may be reluctant to include the matter of SCS concessions in an institutional agreement.

The promotion of 'multilateralism with Asian characteristics' in Beijing's Proposal suggests a desire to create a China-centred multilateral order but one which is undefined and ill-articulated. A Sino-centric world view threatens to contradict the international legal order which can be problematic to both sides' stated adherence to international law, particularly in the SCS disputes. This raises a greater concern of whether strengthened ties would exacerbate the asymmetrical China-ASEAN relationship and force ASEAN to take a more China-amenable stance on other contested issues.

An AC-CSP could allow room for economic expansion vis-à-vis trade and investment volumes. However, existing trade deficits and negative impacts on ASEAN states' local economies may be exacerbated. Increased Chinese investment in connectivity projects, mostly in the Mekong region, while infrastructurally beneficial, may heighten fears of increased economic dependence on China and consequent decreased strategic autonomy.

The socio-cultural pillar may perhaps be a bright spot in an AC-CSP. The 30th anniversary year's "Sustainable Development Cooperation" theme with its focus on climate change, biodiversity and sustainable cities, points to increased future cooperation on pressing environment-related issues. Moreover, Beijing's commitment to environmental protection and innovation is underscored in their Proposal, on developing partnerships based on new growth drivers such as the blue and green economies. The Proposal's other growth area of public health suggests much-needed pandemic-related cooperation, such as joint vaccine production in ASEAN states. Functional cooperation holds promises of a "feel-good" factor and an ability to conduct arms-length cooperation without sacrificing strategic autonomy.

From an institutional standpoint, upgrading ties holds both opportunities and risks. It is worth noting that China enjoys comprehensive strategic partnerships with 8 out of 10 ASEAN member states. Only Brunei and Singapore fall within the strategic partnership and regular partnership categories respectively. Interestingly, the Mekong countries all have a higher level of bilateral partnerships that entered into force earlier than their maritime counterparts.

Would this perhaps be a critical juncture for ASEAN to upgrade its relationship with China to reflect the strengthened ties which most ASEAN states already have with Beijing? An upgraded relationship could provide ASEAN greater leverage and a unified voice when dealing with China on contested sub-regional matters – such as the Mekong issues – which individual states may have less authority to act on. However, critics could argue that the converse is just as important – ASEAN as an institution should resist upgrading relations as a last ballast of regional hedging against expanding Chinese hegemony and attempt to preserve its strategic autonomy. Yet another argument is that what ASEAN

gives the Chinese, ASEAN must also balance it with the Americans.

Moving Forward

It is crucial that ASEAN assesses and negotiates the terms of a possible AC-CSP carefully. Beijing also needs to provide more clarity on what they want to achieve in a CSP.

However, ASEAN may find it hard to rebuff China's overtures for a CSP. Given Beijing's unspoken determination to increase its regional influence and its well-known tit-for-tat modus operandi of punishing countries that rebuff it, the bloc may have little choice but to eventually accede. Moreover, a sizeable number of ASEAN states that are dependent on China's economic and political support are potentially willing to go for upgraded ties, as seen in Cambodia's recent public support. Furthermore, it could be argued that China is already engaging in a pseudo-CSP with ASEAN given the broad-based and active collaborations already underway, and an AC-CSP would be a mere repackaging exercise.

Nevertheless, it should be recognised that ASEAN states and China have a shared future given their overlapping spheres of economic and geographic existence. Common challenges such as public health, climate action, and post-pandemic recovery as well as common aspirations such as development-driven connectivity, point to potential areas of mutually beneficial functional cooperation.

Therefore, ASEAN must be mindful of the method and pace with which AC-CSP negotiations are conducted. The bloc could consider focusing on expanding cooperation in mutual 'bright spots', such as environmental collaboration or pandemic-related assistance. The pace at which negotiations are conducted should also be managed, allowing ASEAN to take an implicit wait-and-see approach to see how external powers react to ongoing negotiations and to potentially extract more concessions from a China eager to finalise the partnership. Australia's concurrent request for ASEAN to consider a CSP could provide a good cover for ASEAN to delay a decision on the matter and also give ASEAN some space to calibrate its guiding principles for upgrading partnerships.

At this point of preliminary negotiations, besides calibrating its guiding principles for upgrading of Dialogue Partnerships, ASEAN's most important priority may lie in assessing whether both sides share common worldviews and multilateral values. Geography may make us neighbours, but visions and values determine friendship.

Ms. Farah Nadine Seth is Research Officer at the ASEAN Studies Centre, ISEAS – Yusof Ishak Institute. **Ms. Sharon Seah** is ISEAS Senior Fellow and Coordinator of the ASEAN Studies Centre and the Climate Change in Southeast Asia Programme.

The Myanmar Crisis: Reinvigorating the ASEAN Way and Centrality

Sihesak Phuangketkeow exposes the challenges to ASEAN from the Myanmar crisis and argues that the grouping go beyond the rights of state to incorporate the rights of the people.



It is often said that ASEAN's brand of regionalism is uniquely its own. The so-called ASEAN Way and the much-touted ASEAN centrality have been instrumental to the success of the regional organisation.

In any discussion about the ASEAN way, the principles of non-interference and consensus are constantly invoked. Unfortunately, not always for the right reasons. Rather, the ASEAN way should be viewed for what it has achieved. Through the years, ASEAN has succeeded in creating an enabling environment for the countries of Southeast Asia to overcome their diversities and adversities, while building up mutual confidence and trust and maintaining peaceful relations.

And the notion of ASEAN centrality is certainly not a mere slogan but neither is it a given. It has always rested on ASEAN's capacity to resolve problems and manage the affairs of the region. The fact that ASEAN has been able to demonstrate that it remains central and relevant on matters of regional peace and prosperity is the principal reason why the major powers value their engagement with ASEAN. It is also why ASEAN has been able to play a pivotal role in shaping the regional order.

Inherent in both the concepts of the ASEAN way and ASEAN centrality has been the regional organisation's ability to reconcile the diverse political, security and economic interests of the member states in a way that the pursuit of the national and the regional interests has largely been in harmony.

Yet for proponents and detractors alike, the limitations and constraints of the ASEAN way and ASEAN centrality are coming to light in the face of the ongoing crisis in Myanmar.

From the very beginning, ASEAN has been seen as lacking unity, political will and leadership in its response to tragic events unfolding in Myanmar. There have been statements, an emergency meeting of foreign ministers and an unprecedented leaders' meeting. But there has been little concrete progress.

The ASEAN way of non-interference in internal affairs has been blamed for much of ASEAN's dilemma. Indeed, the question of whether, when and how to intervene in the crisis in Myanmar has reflected diverse views.

When the Myanmar military, known as the Tatmadaw, seized power on 1 February of this year, the other nine member states were not oblivious to the fact that the tragic events in Myanmar were bound to have repercussions for the region and on ASEAN's credibility, its economic integration and community-building efforts as well as its ties with major dialogue partners. The apparent divide was due in large part to the different lenses they chose to wear. Those who advocated a more proactive stance saw the situation in Myanmar principally from the regional perspective. Those who took a more passive approach viewed the developments mainly from the prism of their national interests.

Some observers have attributed ASEAN's predicament to the ideological divide between the more democratic and more authoritarian governments within ASEAN including to the rising tides of nationalism and populism. Perhaps, there are some elements of truth in that assertion. But for sure the issues of geographical proximity, national security and economic interests, domestic politics and domestic political concerns weighed heavily in the minds of ASEAN policymakers. For some member states, the principle of non-interference

provided an expedient safeguard mechanism as they sorted out their policy options.

Nonetheless, the tragedy that continues to unfold in Myanmar has been a much-needed reality check in so far as the principle of non-interference in internal affairs is concerned.

ASEAN's claim to be a rule-based and people-centered regional organisation would be inconsequential if ASEAN failed to act in the face of the massive violations of human rights and the atrocities that we have witnessed in Myanmar.

Under the ASEAN Charter, the principles of respect for sovereignty and non-interference are by no means absolute rights and must be applied against the commitments that all the member states have made to adhere to the principles of "democracy, the rule of law and good governance, respect for and protection of human rights and fundamental freedom".

It was with these principles in mind that the Charter begins with the phrase "We, the people..."

These are not just meant to be aspirational goals.

Putting the people at the center of ASEAN's community-building efforts means that the ASEAN way must go beyond espousing the rights of states but incorporating the rights of the peoples of ASEAN as enshrined in the ASEAN Charter. And ASEAN must not turn its back at a time when the rights of the Myanmar people and their democratic aspirations are being transgressed by the flagrant actions of the Tatmadaw.

So far, ASEAN's diplomacy has not kept pace with the rapidly unfolding events in Myanmar. The country is on the verge of civil strife and civil war. Clearly, the notion of ASEAN centrality is being called to question.

The crisis in Myanmar could not have come at a worse moment for ASEAN. The shifts in the region's geopolitics, the challenge posed by China's rise and the ensuing major power rivalries between the US and China, have all had the effects of pulling ASEAN member countries in different directions. The mounting tensions over the South China Sea and the Mekong River have further undermined the relevance of ASEAN centrality.

Containing the scourge of the COVID-19 pandemic and the urgency of promoting economic recovery have preoccupied ASEAN governments and leaders. Under such circumstances, domestic priorities take precedence over the foreign policy agenda and national interest trumps the regional interest.

Against this backdrop, ASEAN certainly finds itself hard pressed to muster the cohesion, the political will and leadership needed for collective action in dealing with the protracted conflict in Myanmar.

The ASEAN Five Point consensus agreed at the Leaders' meeting almost five months ago remains pretty much

in abeyance. The only progress so far has been the appointment of Brunei's second Foreign Minister, Dato Erywan Pehin Yusof, as the ASEAN Special Envoy on Myanmar. Even that appointment took almost three months after much going back and forth in the discussions among the ASEAN foreign ministers.

Sensing that ASEAN is not united, General Min Aung Hlaing and the Tatmadaw have been back tracking on the ASEAN-led peace process.

But the military leadership would just be deluding themselves by thinking that they can turn back the clock of democracy in Myanmar. The people of Myanmar in their struggle have made it loud and clear that they have had enough of military rule.

The announcement by the National Unity Government (NUG) declaring the waging of a people's defensive war against the military regime is bound to intensify the conflict and hostilities even further.

ASEAN's centrality is under pressure both from within and outside of the region. The international community and the major powers have all urged ASEAN to redouble its efforts.

For the moment, there seems to be not much hope for a breakthrough. ASEAN itself is both constrained by complexities of dynamics of the situation in Myanmar as well its own inherent limitations. Even the major powers like the US and China know that they too have limited leverage to influence the course of events in Myanmar given the current stalemate.

If ASEAN is to maintain a semblance of its centrality, it must press on even if it is tantamount to an alibi diplomacy, as well-known ASEAN affairs expert Ambassador Bilahari Kausikan has noted.

It is certain that at the upcoming ASEAN Summit in October, the nine other ASEAN leaders need to think long and hard about what to do next, should the Myanmar military remain intransigent and continue to renege on its commitments.

Indeed, as many have pointed out, the crisis in Myanmar has become ASEAN's own crisis. Both the ASEAN way and ASEAN centrality are subject to stress and strain. Drawing upon the events in Myanmar, ASEAN will need to rethink the ASEAN way and find ways to reinvigorate ASEAN centrality.

As a community, ASEAN is at a crossroads. ASEAN must seek to advance its regionalism to a higher level if it is to remain relevant in confronting the new challenges both within and without. Most important of all, in this endeavour, ASEAN must not fail the people of Myanmar.

Mr. Sihasak Phuangketkeow is former Permanent Secretary of the Ministry of Foreign Affairs of Thailand and currently serves as Secretary-General of the Asian Peace and Reconciliation Council (APRC).

Addressing the Climate Change and Biodiversity Nexus

Kelly Siman, Debby Ng, Tze Kwan Fung, Yiwen Zeng, and Lian Pin Koh show how climate change and biodiversity degradation could compound economic losses and suggest Nature-based Climate Solutions for a more equitable and sustainable society.



Firefighters put out forest fire in Kalimantan, Indonesia

donny sophandi@Shutterstock

Climate change and biodiversity loss are twin global threats with impacts felt disproportionately in the ASEAN region. Despite the landmark 2015 Paris Climate Agreement to achieve net-zero by 2050 to limit warming to below 2°C, greenhouse gas (GHG) emissions continue to rise at a pace of 1.4% per year, putting us on track to reach 3.2°C by 2050 (4°C by 2100). We are currently witnessing an increase in climate events such as unprecedented droughts, earlier and more intense forest fire seasons, and more frequent and powerful storms which are felt acutely in the ASEAN region. Additionally, the region's high rate of biodiversity loss corresponds with the decline of ecosystem functions and resilience.

Ecological and Economic Vulnerability in ASEAN

ASEAN comprises a disproportionate number of countries which are at-risk and vulnerable to climate change's ecological and economic impacts. In particular, the region is especially financially susceptible to future GDP loss – exponentially so in comparison to other regions. For example, in models developed by the Swiss Re Institute and McKinsey, ASEAN GDP loss will match average global projections (-4.2%) even in the best-case scenario where we achieve the Paris Climate Agreement objectives. However, in the current business-as-usual (worst-case) scenario, ASEAN will experience a near nine-fold decrease in the current GDP valuation (-37.4%), an estimated loss of US\$2.8 to US\$4.7 trillion annually. We are at a pivotal moment where we cannot afford not to act. In spite of the dire forecasts, the ASEAN region holds enormous potential for nature-based climate solutions.

Nature-based Climate Solutions

Nature-based climate solutions (NCS) are actions that protect, manage, improve, or restore natural ecosystems to increase carbon sequestration and/or avoid GHG emissions. Since the signing of the 2015 Paris Climate Agreement, nature-based climate solutions have emerged as a leading, cost-effective, and essential solution to climate change mitigation and adaptation.



Mangrove forests on Siargao Island, Philippines

Alexpunker@Shutterstock



Ethan Daniels@Shutterstock

Prop roots of a red mangrove tree in shallow waters

Studies show that investing in nature-based climate solutions increases the likelihood of achieving the Paris Climate Agreement goal by 66%. As such, over 80 countries have increased their commitment to invest in NCS in their Nationally Determined Contributions (NDC). Paradoxically, our region's vulnerability to climate change presents an enormous opportunity as ASEAN enjoys a high density of carbon stocks.

Recent research from the NUS Centre for Nature-based Climate Solutions shows that Southeast Asia yields one of the best opportunities for carbon prospecting (those carbon projects that produce a positive return-on-investment) for NCS investments. Protecting, managing, and restoring our natural capital assets within the ASEAN region could potentially generate a return-on-investment of nearly US\$ 18.5 billion per year. This is due to the vast tropical forests, as well as blue carbon mangroves. Yet, despite the ample opportunities for climate change mitigation and adaptation, as well as the projected fiscal GDP loss, only 3% of global climate investments go towards funding nature-based climate solutions.

If we build climate resilience and adaptation capacity within ASEAN to curtail the predicted 37.4% GDP loss and the 3.2°C scenario projected by 2050, we cannot look at the 2050 twin goals of achieving net-zero and living harmoniously with nature as mutually exclusive pursuits. Rather, living harmoniously with nature and investing in NCS go hand-in-hand towards mitigating emissions and stemming predicted economic losses. This means co-benefits - positive side effects generated from a particular measure which can yield value for other facets of the economy and society. These benefits include economic opportunities for local fisheries within mangroves to larger NCS projects like carbon investment.

Addressing the Climate Change and Biodiversity Nexus

There is a growing urgency to address biodiversity loss and climate change mitigation simultaneously. Typically, these issues are seen as mutually exclusive when, in fact, climate change and biodiversity loss greatly threaten societal and economical stability. Optimally functioning and resilient ecosystems that enjoy high native biodiversity typically sequester carbon far more efficiently than degraded or mono-culture systems. Biodiversity protection, carbon sequestration,

and climate adaptation and mitigation are thus intricately connected.

In anticipation of potential NCS economic investment opportunities, and ahead of the 2021 COP26 conference, developed countries have pledged US\$ 100 billion per year for NCS projects that protect, restore, and promote afforestation.

All eyes will be on the Convention on Biological Diversity (CBD) (COP15) to be held in Kunming, China, in October 2021, which seeks to adopt a "post-2020 global biodiversity framework". This framework is a stepping stone towards the 2050 CBD objective of "living in harmony with nature". Second, while COP21 in Paris was about getting the Parties to agree to limit global warming to within 2°C, COP26, to be held in November 2021, will focus on countries' action in carrying out their NDCs to limit GHG emissions. At COP26, there will be a particular emphasis on, *inter alia*, nature-based climate solution actions.

Nature-based Climate Solutions and Society

What we have seen quite viscerally over the past two years is that the more humans encroach on natural systems, the greater the increase in zoonotic diseases such as COVID-19 (H5N1 Avian Flu being another example). Zoonotic diseases that explode into global pandemics not only impact the global GDP adversely, but are also projected to flourish in areas with both high biodiversity and biodiversity loss - adding another risk to the ASEAN region. Thus, the more biodiversity we lose through anthropogenic means such as deforestation and climate change, the more compounded the impact will be for the region's projected GDP losses.

Our social stability, environmental quality, and global economic strength are more intrinsically connected than perhaps we may have realised. The ASEAN region has the opportunity to capitalise on its exposure to socio-ecological and economic risks by transforming it into a chance to lead the way towards nature-based climate solution investments.

Dr. Kelly Siman, Ms. Debby Ng, Ms. Tze Kwan Fung, Dr. Yiwen Zeng, and Dr. Lian Pin Koh (Centre Director) are part of an interdisciplinary team at the Centre for Nature-based Climate Solutions at the National University of Singapore.



Paramarta Bari@Shutterstock

Youth climate activists in Yogyakarta, Indonesia

Why We Will All Benefit from Securing Species in the ASEAN Region

Madhu Rao, Nerissa Chao, and Vicki Guthrie highlight the need to develop robust biodiversity protection frameworks in the region.

It is an extraordinary year for biodiversity as Parties to the Convention of Biological Diversity (CBD) negotiate ambitious targets toward the 2050 Vision of Living in Harmony with Nature. This is particularly significant for the ASEAN community, which boasts both extraordinarily high levels of biodiversity and fast-developing economies.

The region, reeling from the continuing impacts of COVID-19, is already experiencing devastating consequences of climate change. The 2050 Vision offers much needed hope and an opportunity for ASEAN member states to make bold commitments to conserve biodiversity, using it as a fundamentally important mechanism to address climate change and prevent future pandemics.

Many species native to ASEAN landscapes are found nowhere else on earth, making the region a global biodiversity priority. Yet a great number of those species are extraordinarily threatened. Without urgent attention, many will become extinct in the next few decades. Species and their habitats are under severe pressure stemming from the illegal wildlife trade and habitat loss driven by commercial agriculture, infrastructure, and energy projects.

Studies suggest that animal and plant species groups are more threatened in Southeast Asia than other similar large regions. Unsustainable, demand-driven exploitation for the commercial wildlife trade is a major threat.

Snaring, a dominant hunting method in the region, poses a critical threat due to its indiscriminate trapping of any large or medium-sized animal including Critically Endangered species such as the Saola and Large-antlered muntjac. Demand driven exploitation for its casque has resulted in rapid declines of Helmeted Hornbill, also Critically Endangered, and one of many iconic species in the ASEAN region.



Cambodian officials clearing snares

Wildlife Alliance

However, there is some level of political support and commitment to address wildlife crime within and across national borders, including from the 2019 Chiang Mai Statement of ASEAN Ministers responsible for enforcing illegal wildlife trade laws, rules, and other restrictions.

An Undeniable Link between Wildlife, Public Health and Climate

Wildlife trafficking not only undermines good governance and the rule of law. It also carries biosecurity risks. Together with habitat loss, exploitation of wildlife by people through hunting and trade involves close contact between animals and people, increasing the risk of virus spillover, according to recent research.

Studies also show that both legal and illegal wildlife trade are associated with the risk of zoonotic disease (disease spread by contact between animals and people). Effective implementation of the ASEAN Guidelines for Detecting and Preventing Wildlife Trafficking is essential to minimize these risks.

Securing habitats and restoring ecosystems are important for the recovery of several highly threatened species. Protecting the remaining swathes of lowland tropical forest ecosystems in the ASEAN region will not only advance the recovery of species such as Sumatran and Bornean Orangutan, Sumatran Rhinoceros, and Helmeted Hornbill, it will also contribute significantly to addressing climate change.

The science is clear. Studies show that forests with high ecological integrity are irreplaceable, holding immense and unique value for both climate stability



ZakiFF@Shutterstock

Helmeted Hornbill



Southern River Terrapin

Thida Leiper@Wildlife Conservation Society

and biodiversity. As remarkable natural storehouses for carbon, they absorb roughly a quarter of total global carbon emissions annually. Forests with high ecosystem integrity store significantly more carbon than degraded forests. Close to 25% of global greenhouse gas emissions are produced by unsustainable land use, including the damage or destruction of forests.

Community Stewardship for Conservation

Ecosystem-based efforts targeting species recovery are intertwined with improving the well-being of rural communities. Landscape-scale conservation for site-based recovery of highly threatened species such as the Southern River Terrapin in Koh Kong province in Cambodia can ultimately secure mangrove habitats and associated wetlands. Such habitats, vulnerable to climate change, are vital for food security of dependent communities.

Supporting rights-based approaches and recognising community-led conservation efforts are key for recovering highly threatened species in ASEAN.

In an exceptionally important year for multilateral biodiversity policy, an ambitious spatial CBD post-2020 Target 3, which aims to protect and conserve 30 % of the planet by 2030, will be negotiated for final adoption by the CBD Parties at the 15th Conference of Parties (COP) in Kunming, China, later this year.

While Protected Areas have long been recognised as primary mechanisms for biodiversity conservation, the formal recognition of Other Effective Area Based Conservation Measures (OECMs) by the CBD COP in 2018 has created an unprecedented opportunity. Governance bodies delivering biodiversity outcomes can now include indigenous territories, traditional pastoral lands, fisheries management areas and privately protected areas as eligible measures toward the 30x30 target.

This is significant for species conservation, as OECMs can recognise community-led conservation efforts for highly threatened species beyond formal Protected Areas. In addition to area-based conservation measures, targeted action to support the recovery and conservation of species is more specifically embodied in Target 4 of the Post 2020 Framework.

A Roadmap for the Recovery of Threatened Species in the ASEAN Region

There is growing regional momentum and recognition of the need for urgent action for species in Southeast Asia. A new collaborative report, “Halting Species Extinctions in the ASEAN region”—prepared by the ASEAN Centre for Biodiversity and the International Union for Conservation of Nature (IUCN) Species Survival Commission’s (SSC) Asian Species Action Partnership—gives critical recommendations for the recovery of highly threatened species.

There are three areas of note:

Increasing targeted investment: A significant boost in financial investment for the recovery of highly threatened species through strengthening field-based protection, combating wildlife trafficking, reducing demand for wildlife products, and doing targeted research is essential.

Strengthening the effectiveness of area-based conservation measures: Ensuring that all important sites for threatened species are protected for long-term biodiversity outcomes is paramount. The network of ASEAN Heritage Parks (AHPs) covers a significant portion of the threatened species’ range. The network of AHPs should be strengthened in effectiveness and expanded to include other priority sites.

Tackling commercial overexploitation: Eliminating or effectively regulating unsustainable commercial exploitation is a vital step towards ensuring species recovery. Snaring must be addressed as a serious threat to wildlife populations. National legislation for the protection of species threatened by domestic and international trade should be strengthened, including improving compliance of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

The need to create and implement a policy framework to avert species extinctions is included within the ASEAN Socio-Cultural Community Blueprint. Achieving the 2050 Vision of Living in Harmony with Nature is within reach for ASEAN nations. It will require a bold approach in safeguarding the region’s unique biodiversity as an important mechanism to combat climate change and prevent future pandemics.

As we look to protect ASEAN’s biological heritage, is it now time to consider a new Declaration — as was done with ASEAN Heritage Parks — to recover and successfully conserve the unique species in the globally significant ASEAN region?

Dr. Madhu Rao is Senior Advisor at the Wildlife Conservation Society Asia Programme. **Ms. Nerissa Chao** and **Ms. Vicki Guthrie** are Director and Partnerships & Communications Manager respectively at the IUCN SSC Asian Species Action Partnership.

Future Prospects of Blue Economy

Barakalla Robyn highlights the future prospects of blue economy and opportunities for regional initiatives in ASEAN.



Shawn Eastman Photography@Shutterstock

Mangrove forest in Nusa Lembongan, Indonesia

The discussion on blue economy or blue carbon has been emerging not only in scientific communities but also within public policy and financial discourses over the past few years. According to a report by the United Nations Environment Programme (UNEP), blue carbon is organic carbon captured, sequestered, and stored by coastal marine plants, including seagrasses, mangroves, and tidal marshes. Blue carbon possesses greater carbon content than terrestrial ecosystems, and if kept protected and undisturbed, it promises to sequester carbon for much longer.

Understanding blue carbon from the market perspective is more important now than ever. The restoration and protection efforts of blue carbon ecosystems could enhance carbon market-based mechanisms which are known as 'carbon offsets' or 'carbon credits'. With a robust accounting scheme, blue carbon ecosystems can help to compensate for carbon emissions produced elsewhere such as energy generation, transportation, and industrial activities.

Many reports have validated the economic value of blue carbon ecosystems. For instance, a study by the Marine Pollution Bulletin estimates the coastal ecosystems of the European continent that include seagrass, mangroves, and saltmarsh carries an accounting stock value of about US \$180 million. An OECD report currently values the blue economy at US \$1.5 trillion with the employment of 31 million persons globally.

While blue carbon could enhance efforts in mitigating carbon emissions, it could also strengthen a push in climate adaptation, particularly to protect the livelihoods of indigenous people and local communities in the coastal areas. Thus, protection and restoration efforts must incorporate rigorous co-benefit considerations, including understanding carbon stocks and flows at the community level. It is also important to explore opportunities to incorporate other ecosystem services that could generate income and food production such as sustainable coastal fisheries and non-timber forest products (NTFPs).

Blue Carbon Economy in Southeast Asia

Southeast Asia is one global hotspot when it comes to blue carbon ecosystems, but it also has a high rate of loss. This region is also home to the most climate-vulnerable indigenous peoples and local communities. Five of the top eleven mangrove-holding countries globally are in Southeast Asia: Indonesia (2.71 Mha), Malaysia (0.56 Mha), the Philippines (0.26 Mha), Thailand (0.25 Mha) and Vietnam (0.22 Mha). However, according to the ASEAN Centre of Biodiversity, ASEAN lost approximately 33% of its mangrove forest or 63,000 square kilometres between 1980 and 2020.

The primary causes for mangrove loss are conversion to aquaculture (33,721 ha), oil palm plantations (18,456 ha), deforestation (5,483 ha) and urbanisation (4,476 ha). However, across the region, some 17,496 ha of new mangrove growth was identified, mostly in the delta

regions and abandoned marshland, according to a dataset by Partnership in Environmental Management for the Seas of East Asia (PEMSEA) in 2017.

To ensure the protection of blue carbon ecosystems, governments need to ensure not only that national climate adaptation plans are in place but to also include sub-national development plans. This strategy should also be supported by an inter-sectoral approach to break the silos among governments' sectoral bodies. In Indonesia's National Adaptation Plan, for instance, marine and coastal protection was included as one of the priority sectors along with agriculture, water, and health. Environmental disruptions in marine and coastal area could cause a significant economic and biodiversity loss if not addressed properly.

Hybrid structures such as 'Green Gray Infrastructures' has been seen as one solution in the effort of catering coastal ecosystem restoration and protection and at the same time ensuring sustainable economic growth. Indonesia's National Climate Adaptation Plan, for instance, emphasises the importance of coastal protection in building infrastructure projects. While infrastructure upgrades are much needed for the county's economic development, Indonesia pledges to protect 413 hectares of coastlines by adopting Ecosystem-based adaptation (EbA) and community-based adaptation (CbA) approaches.

The implementation of coastal dynamic monitoring systems must also be incorporated to ensure all stakeholders are informed. Sudhiani Pratiwi, Senior Planner and Coordinator for Climate Resilience Development in the National Planning Agency (BAPPENAS) highlighted a need for such multi-stakeholder collaboration. The consolidation in planning, implementation, and monitoring on one platform would enable stakeholders to access equal information and insights. This systematic platform would also help stakeholders to measure the impacts of the project accurately.

One of the key challenges of blue carbon projects is financial sustainability. Some of blue carbon projects still depend on donors' contribution and grants to operate. There is a need to develop more robust micro-financing models to attract investors so that projects can be sustained in the longer term. Additionally, stakeholders must incorporate investment decisions that prioritise not only financial returns but also social and environmental impacts — especially for indigenous people and local communities.

Much of the conversation about blue carbon may seem top-down and focused on national governments' commitment to climate change. But, there are many emerging initiatives carried out by the non-state actors, particularly the private sector. They are increasingly interested in understanding climate risks and impacts from the financial perspectives. There are some financial instruments under development such as insurance frameworks, resilience bonds, and market-driven adaptation credits relevant to the blue carbon economy.



Thai fishery villagers seeking coastal oysters in mangrove mud flats

stockphoto mania@Shutterstock

In the insurance sector, there is an emerging conversation on how to protect coastal assets from natural disasters. Insurance companies can provide a blended financing approach to maintain financial sustainability of the overall blue carbon projects. However, in order to fully take-off, these mechanisms require not only capital support from the private sector but also political will and regulatory support from governments.

Opportunities for ASEAN

ASEAN holds a large share of blue carbon ecosystems globally and is potentially the epicentre of blue economy. Therefore, it is critical for ASEAN to step up and initiate projects to reap the benefits of this unexplored opportunity.

To start, ASEAN needs to convene regional efforts to monitor, evaluate, and encourage member states' initiatives on the blue economy. This starting point will allow more upcoming projects to be well coordinated at the regional level. Incorporating climate transparency (based on Article 13 of the Paris Agreement) within the regional monitoring and evaluation processes will also help to create a more just and equitable cooperation.

Second, ASEAN could initiate a regional portfolio approach to scale up local initiatives. The main challenge of implementing blue economy projects is the bankability of local initiatives. Thus, if local initiatives can be managed under the regional portfolio, it may increase investment attractiveness.

Third, since blue economy is a cross-sectoral and cross-boundary issue, a regional lead can help member states to set up a basic framework to foster synergies. From an administrative point of view, a regional framework could help improve financial efficiency. This is especially important for developing ASEAN member states that require financial assistance to achieve their climate goals.

Finally, the main objective of blue economy is to help member states to enhance their climate ambition while providing another avenue for economic growth. Both bilateral and regional cooperation of ASEAN member states on blue economy ultimately need to be reoriented towards achieving their Nationally Determined Contributions (NDCs) under the Paris Agreement.

Mr. Barakalla Robyn is Climate Mitigation & Adaptation Director at Conservation International.

Avoid the Unimaginable: Managing Marine Plastics Pollution

Melinda Martinus suggests that ASEAN needs to unlock circular economies to prevent conflicts and environmental damages arising from marine plastics pollution.



Maxim Blinkov@Shutterstock

Plastic pollution at Bali beach, Indonesia

Ground-breaking research conducted in 2017 by Ocean Conservancy identified half of the global ocean plastics coming from China, Indonesia, the Philippines, Thailand, and Vietnam. The report is alarming for ASEAN. Despite the Hanoi Plan of Action calling for the prioritisation of marine conservation, and the ASEAN Coastal and Marine Environment Working Group (AWGCME) having convened since 1999, four ASEAN member states are still among the major plastic polluters today.

According to the report, demand for consumer goods among the rising middle class of those ASEAN countries had grown in tandem with their economies in past years. Unfortunately, domestic waste-management infrastructure remains woefully inadequate. When people litter and waste facilities do not handle plastic trash properly, rainwater can wash debris into storm drains that eventually carry it into the ocean.

Establishing programmes to stop plastic trash from spilling into the ocean is critical for ASEAN. In 2017, Thai authorities found a patch of plastic trash almost 10 kilometres long floating off the coast of the Gulf of Thailand, prompting the officers to clean up the trash immediately. Had the trash been neglected, wind and ocean tides could have scattered it to other coasts. It is not hard to imagine that disputes over marine litter could arise in the Gulf of Thailand as Malaysia, Cambodia, and Vietnam share the semi-enclosed tropical sea.

ASEAN has seen an increase in transboundary disputes caused by environmental negligence between states. One recurring issue is the transboundary air pollution arising from the forest and land fires in Indonesia, affecting Malaysia, Singapore, and as far north to Thailand and even the Philippines. This problem continues to spark tensions between the affected ASEAN countries and causes significant disruptions to people's daily lives and health.

Although not as intense as transboundary air pollution, concerns due to trash mismanagement are starting to worry the region. A paper published in *Environmental Science & Technology* in 2007 cited the Mekong River as one of ten rivers that carried nearly 89% of plastics into the world's oceans. The river, traversing roughly 4,300 kilometres through China, Myanmar, Laos, Thailand, Cambodia, and Vietnam, carries approximately 40 thousand tonnes of plastic — just enough to fill 200 football fields—into the world's oceans annually, according to National Geographic.

In order to overcome the issue, the Mekong River Commission Secretariat recently launched a capacity-building program for government officials and experts from Cambodia, Laos, Thailand, and Vietnam to understand the region's current state of plastic pollution. The program was much needed to raise awareness to share the responsibilities of protecting the Mekong River. Negligence and ignorance over this issue will

only intensify tensions among the Mekong countries in the future.

The issue of marine plastic pollution has also become a common concern amid the escalating territorial disputes in the South China Sea. Together with abolishing overfishing and toxic waste dumping, experts suggest eliminating ocean waste littering to enhance cooperation and build mutual trust between states in the environmental commons.

The Unimaginable Costs of Marine Plastics Pollution

It is also essential to look at the consequences of transboundary marine plastic pollution beyond the state disputes lens. The most unimaginable costs are environmental damages because these impacts cannot be reversed.

A case in point is the deaths of marine animals caused by plastic ingestion and entanglement. A dead Irrawaddy dolphin was found in Koh Rong Samloem beach with a visible plastic mass in the mouth in August 2018. The marine mammal, native to the coast of mainland Southeast Asia, is under severe threat, with just over 90 individuals still alive in the region. Other animals such as sea turtles are often found dead in the Gulf of Thailand due to plastics clogging in their digestive systems.

Similarly, studies find that the increasing incidence of microplastic ingestion by edible marine species has been alarming. A team of scientists from the Indonesia Institute of Science (LIPI) found that microplastics have contaminated around 80% of dried fish caught in Indonesian waters. Several studies have pointed out that the accumulation of microplastics could lead to metabolic disturbance, neurotoxicity, immune system degradation, and an increase in cancer risks in humans, especially in children.

Plastics pollution in tandem with climate change also poses a double-whammy threat to marine ecosystems balance. Plastics submerged and wrecked in the ocean could accelerate ocean acidification, where seawater becomes more acidic. Together with the rising ocean surface temperatures, marine plastic pollution could accelerate coral bleaching. Unless serious steps are taken to halt ocean acidification, Southeast Asia could see a falling supply of shellfish and crustaceans such as crabs, lobsters, and shrimp in the near future.

What Does ASEAN Need to Do?

ASEAN has been showing some efforts to tackle the issue of marine plastic pollution. The Bangkok Declaration on Combating Marine Debris in the ASEAN Region and the ASEAN Framework of Action on Marine Debris are seen as foundational in combating marine pollution. There has been growing awareness among ASEAN governments to intensify regional cooperation on integrated land-to-sea environmental management. Yet, concrete implementation on the ground remains to be seen. The declaration and framework of action on marine debris are not legally binding instruments. There are no

legal consequences should ASEAN states fail to comply with the framework.

On the policy level, information and resource-sharing initiatives have started to materialise. With support from the Government of Japan and other Dialogue Partners, the Regional Knowledge Centre for Marine Plastic Debris at the Economic Research Institute for ASEAN and East Asia (RKC-MPD) was recently launched to share knowledge and developments among ASEAN experts and governments.

However, solving plastics pollution requires a much larger action than merely stopping waste from entering the ocean. Many of today's environmental problems originate from excessive consumption and waste mismanagement. The noxious contaminants in the air, biodiversity degradation due to resource extraction, and mountainous waste dumped in the ocean are the most pressing threats that our world faces today. These problems will be much more intensified due to the increasing demand and utilisation of natural resources. Moreover, the interdependence of global chain goods production will increase the likelihood of natural resources supply and price volatility.

Looking at the root cause of the waste problem, it is more important now than ever for ASEAN to move towards a circular economy. Termed by environmental economists, the circular economy offers more resource-efficient and waste-less production and consumption. In the circular economy, materials should be able to be disassembled and fed in the production later on, resulting in continuous cyclability rather than a linear system of goods production (extract, manufacture, utilise, and discard).

The circular economy can be applied to manage plastic waste. While industries and manufacturers are still scaling up efforts to phasing out plastic packaging completely at the production level, ASEAN could take the opportunity of extending the lifecycle of plastic waste by restorative and regenerative design. Across the globe, the reuse and recycling of waste have started to galvanise support from businesses and investors. For instance, IKEA recently launched a used furniture buyback programme to enhance its recycling push. Unilever collaborated with local waste banks to collect plastic packaging from customers.

With the adoption of advanced engineering, artificial intelligence, and the advent of 3D printing, the circular economy holds promise as an attractive and high-value industry to support economic growth and job creation in the future. To do this at the practical level, ASEAN could set up a regional circular economy hub to engage engineers and investors to scale up plastic recycling initiatives.

Ms. Melinda Martinus is Lead Researcher (Socio-Cultural Affairs) of the ASEAN Studies Centre at ISEAS – Yusof Ishak Institute.

Southeast Asia's Forests and their Contributions

Robert Nasi proposes that ASEAN governments conserve intact forests, restore the degraded ones, and manage the production of forest products sustainably.



Rich Carey@Shutterstock

Deforestation for cultivation of palm oil

Humanity is the biggest force to shape the earth. We have caused climate change, rapid biodiversity loss, and loss of eco-resilience. Paradoxically, while human actions are challenging the prospects for our future, humanity does not matter in the grand scheme of things. After all, 99% of organic species that have existed since life first appeared are now extinct. And while we might not survive the 6th mass extinction that we are triggering, other forms of life will.

If we want to ensure the survival of the human species we need to take matters into our hands. Combatting the loss and restoring the biodiversity of our forests, which harbour 80% of terrestrial diversity, would be good place to start.

Forests of Southeast Asia

The forests in ASEAN member countries covered about 193 million hectares in 2020. Indonesia harbours about half of these forests, followed by Myanmar, Malaysia, Thailand and Vietnam. These natural forests can be roughly classified as tropical humid forests (mostly in Indonesia, Malaysia, and The Philippines), tropical dry forests (spreading throughout Cambodia, Thailand, Laos, Vietnam, and East Indonesia), montane forests, peat swamp forests (where a third of the global tropical peatlands are located in Indonesia), and several small but “special” forest ecosystems that play an important role for biodiversity and carbon storage. These special forests include mangrove, kerangas, and karst forests.

Southeast Asia lost 34 million hectares of natural forests between 2000 and 2020. It has long been a hotspot of deforestation. The main drivers of deforestation in the region are large and small-scale agriculture that profit from the conversion of forests into cash crops (such as oil palm and rubber) or food crops (such as rice, cassava, and soy). Timber logging is not a major source of deforestation, except in peatlands because of the fragile nature of these ecosystems. But timber logging activities open access to forested areas which is then followed by other deforestation developments. ASEAN lost about a third of its mangroves in the last 40 years, with aquaculture and rice farming among the main causes of deforestation.

Today, 86% of the remaining natural forests are more or less “intact” and 14% are “degraded.” To safeguard their biodiversity and their benefits, the remaining 166 million hectares of intact forest must be protected. Degraded forests are essential too because they still possess more biodiversity than agricultural lands. Therefore, even degraded forests should also be protected or restored rather than converted into other forms of land uses.

The Multiform Contributions of ASEAN's Forests

The ASEAN region's forests provide a wealth of ecosystem goods and services essential to the economies and well-being of the member countries. ASEAN is a major producer, exporter, and consumer of wood and wood products from sawn timber to plywood, paper and furniture. These come both from the



abovementioned natural forests but also from plantation forests. The ASEAN region is one with the highest ratio of planted/natural forests in the world.

The wood industry remains of tremendous importance for the economies of several countries of the region but it has a significant impact on forest quality and diversity. Although illegal or predatory logging still exists, there are some positive signs in the conservation work of major wood producing countries like Indonesia and Vietnam. The government of Indonesia enacted a moratorium on the exploitation of primary forests and peatlands that could protect around 66 million hectares of forests. In Vietnam, where the number of forested areas has increased, the major wood production is coming from plantations. The country's export value of wood and wood products in 2019 was almost US\$19 billion.

The global organic personal-care market is projected to reach US\$25.11 billion by 2025. The organic cosmetics market in ASEAN is predicted to grow at a rate of 9% through 2020, with revenue totalling US\$4.4 billion by the end of the forecast period according to the Global Cosmetics Industry. These markets are expanding at a compounded annual growth rate of about 9% over the last decade and they depend on forest products for their raw materials.

Although still unexplored, the main contributions of Southeast Asia's forests to society are the ecosystem services they provide. Forests store carbon, regulate hydrology, affect micro and meso-climate and of course harbour a large biological diversity source of food and medicinal products for local people and globally. The

economic value of these services is huge and their loss or preservation will impact their biodiversity.

Research shows that the annual value of ecosystem services is staggering: one hectare of mangrove is worth US\$190,000; one hectare of peatland is US\$26,000; and one hectare of tropical forest is US\$5,300 annually. The loss of mangrove could cost ASEAN countries US\$2.2 billion annually in 2050 through the loss of coastal protection and habitat or nursery support for fisheries. The total economic value of Malaysian forests is estimated at US\$3 billion. Indonesia's total peat carbon store is estimated at 28.1 gigatonnes for carbon. If the value is at US\$51 per tonnes, this represents more than US\$1 trillion.

Conclusion

The ASEAN region's forests still cover significant areas in the region and provide innumerable and non-substitutable goods and services. Their contribution depends on their biodiversity intactness. Should it be lost or degraded past a tipping point, forests might become sources of greenhouse gas emissions, megafires, and emerging infectious diseases. Therefore, it is of critical importance for the ASEAN countries to reinforce their policies related to the forest and forestry sectors. This requires clear actions to conserve intact forests, restore the degraded ones, and manage the production of forest produce sustainably.

Dr. Robert Nasi is the Director General of the Center for International Forestry Research (CIFOR).

Citizen Science for Monitoring Coral Reefs

Wilfredo Y. Licuanan suggests that ASEAN can incorporate a bottom-up approach to monitor coral reefs in the region.



Coral reefs in Tubbataha, Philippines

SARAWUT KUNDEJ@Shutterstock

Corals are made by often tiny, soft-bodied polyps that deposit a carbonate skeleton beneath and around them. Coral reefs are formations of coral skeletal material that accumulate over thousands of years into structures spanning several kilometres. Australia's Great Barrier Reef is a series of coral reefs stretching over 1,200 kilometres. Indonesia has 18% of the world's coral reefs, followed by Australia (17%) and the Philippines (9%). They rival rain forests as marvels of life in the tropical world.

The size and variety of shallow-water habitats that coral reefs provide can support over one-quarter of marine life. The massive archipelago of Indonesian, Malaysian, and Philippine islands is home to numerous coral species. Both the Philippines and Indonesia have over 500 species of reef-building corals on their reefs. For comparison, Australia has about 400, eastern Africa has around 300, Guam and the Marianas about 200, the Hawaiian chain about 100, and the Caribbean basin about 60 coral species. Reef fishes, snails, crustaceans, and many other reef-dwelling organisms follow similar geographic patterns of species richness.

The marine life that coral reefs support makes them essential for the food and livelihood security of mostly low- and medium-income countries. Coral reef fisheries support a fifth of total fisheries production in the Philippines, but poverty is also highest among fishing households. As self-regenerating breakwaters, coral reefs are also essential for protecting coastlines from

storm surges, tsunamis, and sea-level rise. Many coral reef organisms have been found to produce chemical compounds with vital medicinal properties. Healthy coral reefs make up to 5 kilogrammes of white sand per square meter per year, contributing to their immense value in supporting coastal and nature tourism.

Sadly, coral reefs in ASEAN are under severe stress and in rapid decline. A recent reassessment of the status of coral reefs in the Philippines revealed the loss of about one-third of their coral cover over the last decade. Giant clam stocks were severely depleted and had to be reintroduced into marine protected areas to allow them to propagate on their own. As overfishing drove decreases in reef stocks, mariculture production took over in some areas but poor fish-farming practices added to the pollution of coastal waters and further reef declines.

A group of academics has worked together to produce a series of periodic assessment reports on the region's coral reefs ever since the inception of the ASEAN-Australia and ASEAN-US Collaborative Programs in Marine Science. These reports formed reliable parts of the Global Coral Reef Monitoring Network (GCRMN) and the region's Coral Triangle Initiative. Periodic status reports are valuable for guiding a long-term and broad-scale policy. Coordinated policy across the region is important because ocean currents transport eggs, larvae, and propagules of marine organisms across geospatial jurisdictions. Thus, the recovery potential of reefs

from disturbances is dependent on the health of coral reefs (and their management) in other jurisdictions. For example, Japan's coral reefs are fed by eggs and larvae carried from Philippine reefs. This inter-connectivity of coral reefs is the rationale for the proposed joint management of disputed reefs in the South China Sea.

However, status reports inform about the changes in the health of coral reefs only after such changes have occurred. The impact of status reports on management is more limited at the state, provincial, or municipal levels. The spatial and temporal resolution of the data is also too coarse. Further, the field methods, the parameters measured, and the metrics used means changes in reef state are not detected for early warning to be issued. Early warning is essential because even though environmental stressors such as climate change and ocean acidification are global, their impacts could be mitigated locally to allow for the recovery of the reefs. For example, mass coral bleaching is driven by the warming of the oceans and made worse by sedimentation and overfishing. Early signs of bleaching should trigger the closure of reefs to human access, as they do in parts of Malaysia and Thailand.

Management requires real-time information on the state of reefs, which could only be derived from detailed monitoring of the same reefs over time. Advances in technology, particularly in imaging, artificial intelligence, and remotely operated vehicles, have allowed scientists to assess and monitor more reefs and more extensive areas in finer detail. However, science and technology must produce management-actionable information for monitoring to enable coral reefs to cope with climate change and human impacts.

Further, monitoring should yield more granular metrics such as average coral cover and generic diversity for clearly defined areas or sets of reefs, not just tabulations of the number of 'poor,' 'fair,' 'good,' 'excellent' reefs. The monitoring must have well-defined sampling units representing the actively growing part of the reef, not just the part of the reef that happens to be under the existing coral sites. These sampling units must be large enough to allow for more synoptic mapping from satellites, drones, or towed- or remotely-operated instrument platforms. The mapping, delineation, and naming of reefs, coupled with monitoring, bring us closer to measuring reef habitat extent and quality and, thus, estimates of hectares or square kilometres of coral lost or gained, not just

percentage coral cover. These techniques require applying sound sampling designs focused on clearly defined objectives relevant to national or regional reef management concerns. These designs must also be coupled with specific sampling-site selection criteria to enable valid comparisons among reefs, and the development of valid baselines and benchmarks of management performance

The general public must be part of the monitoring effort to rapidly and effectively cover the vast reefs in ASEAN. Citizen science, defined as public involvement in scientific data collection, processing, and interpretation, can provide the multiplier effect needed to maximize the impact of the relatively small number of reef scientists vis-à-vis a large area of coral reefs available in ASEAN. Involvement in citizen science also promotes awareness among members of coastal and fishing communities. Awareness, in turn, promotes compliance with reef management regulations. Reef Check Malaysia demonstrates how citizen science can produce updated status reports for the country in collaboration with university researchers.

In addition to the sound monitoring criteria described earlier, citizen science monitoring of reefs should use image-based, standardized field methods. These images must be archived and made available for more detailed processing and cross-validation. The effort must be coordinated nationally and regionally (e.g., through the ASEAN Centre for Biodiversity and Global Coral Reef Monitoring Network) and done under the supervision of scientists. Data processing and interpretation, not just the data collection, must be participatory. The results and findings of the citizen science monitoring of reefs must be available to the broader community, not just to reef managers. This will allow the general public to be involved and remain engaged. The monitoring should eventually be expanded to monitor threatened and endangered corals, giant clams, fishes, and other reef organisms.

It should be noted that ASEAN could initiate a meaningful action agreeing on a common framework to develop and encourage the citizen science monitoring of reefs across the region. ASEAN could then declare a "Check our reefs day," which could involve local governments and universities to participate. ASEAN could also formulate a scorecard on the status of reefs to encapsulate the findings of the citizen science efforts. Common regional standards will allow the public to appreciate, interpret, and evaluate the meaning of the scorecards.

As the old business management adage teaches, you cannot manage what you cannot count. That statement also applies to the conservation and management of corals, coral reefs, and their denizens. Coral reefs are part of our shared culture and identity, and we must help them face threats through collective, participatory action.

Dr. Wilfredo Y. Licuanan is a Full Professor and University Fellow of De La Salle University-Manila and the Director of the Br. Alfred Shields FSC Ocean Research Centre.



Achmad Husein Nyompa@Shutterstock

Reef monitoring research at Kapoposang Island, Indonesia

The Economics of Biodiversity

Qiu Jiahui highlights the need to value biodiversity and radically transform the perception of economic growth.



Economic models have historically excluded natural capital in the pursuit of production and poverty alleviation. Yet, our society is in fact embedded within the biosphere, and our relationship with nature is now more relevant than ever. *The Dasgupta Review*, led by Professor Sir Partha Dasgupta, builds a bridge between economics and biodiversity, guiding sustainable and nature-conscious development. It argues that inclusive measures of wealth should recognise nature as an asset not to be ignored. The rapid depreciation of natural assets has been humanity's strategy for achieving GDP growth, a short-term measure of economic activity that is sometimes synonymised with economic growth; but sustainable development should instead be founded on the maximisation of inclusive wealth, and ultimately the social worth of humanity's global assets.

Biodiversity as a Natural Asset

Natural capital refers to the stock of natural assets, including geology, soil, air, and living organisms. Biodiversity comes in different forms — genetic diversity within species, species diversity within ecosystems and ecosystem diversity. Ecosystems are combinations of the abiotic environment (sun, water, etc.) and biological communities (animals, plants, fungi, microorganisms) to form energy and nutrient cycles regenerative units. Different groups within the ecosystem perform functions

that contribute to these cycles. Primary producers like plants use sunlight and carbon dioxide to make food. In other words, they fix atmospheric carbon into biomass, which is then stored, consumed or recycled by other organisms, allowing energy and nutrients to flow through the ecosystem.

Ecosystems provide services that benefit humans directly or indirectly. They can be classified into three types: provisioning services, which provide materials and energy through food; freshwater and fuel regulating and maintaining services such as climate regulation, disease control and protection against storms; and cultural services like aesthetic value and natural heritage, which can drive tourism and recreation.

Biodiversity and the Resilience of Natural Assets

Our natural capital can depreciate in several ways such as through the harvest of goods or the pollution of nature. In addition to the products and services offered by ecosystems, it is also important to consider ecosystem resilience to disturbances as part of their productivity. How much disturbance can an ecosystem withstand, and how quickly can it recover?

Biodiversity often enhances the overall resilience and productivity of an ecosystem. One reason is functional

diversity — different functional groups of organisms complement one another to maintain the ecosystem. Decomposers drive the nutrient cycle by breaking down organic matter, while earthworms maintain soil structure, thus working together to protect soil health. In addition, because species within an ecosystem are mutually dependent, a loss in some species can affect the ecosystem overall. Some species, called keystone species, are especially crucial. The endangered Asian elephant, which can be found across Southeast Asia, is an “ecosystem engineer” that maintains forest habitats, opening pathways through dense vegetation for small animals and creating puddles that form micro-ecosystems. Another factor is the availability of multiple redundant species with similar functions, such that if one species declines, others can compensate for it. For example, the same species of plant can have several seed dispersers.

The Supply and Demand of Nature

The preservation of nature is hampered by the fact that current economic systems do not reflect the goods and services of the biosphere. This stock consists of various assets: non-renewable natural resources like fossil fuels and living organisms that regenerate. For instance, primary producers generate stock in the form of biomass, and the net primary productivity (NPP) of an ecosystem is its flow of biomass. The accounting price of a unit of biomass from a primary producer is its social worth or contribution to the common good. By estimating the goods and services provided by nature, we can record the contribution of the stock of natural capital to societal well-being — its accounting value. The supply of natural goods and services can then be quantified by weighting the stock of natural capital by its regenerative rate.

We can also measure our demands of nature in the form of harvesting and consuming its goods and services, and using it as a sink for our waste. This can be derived from population size, human economic activity, the efficiency with which natural goods are converted to GDP and the extent to which the biosphere is transformed by human waste.

Peatlands in Indonesia provide ecosystem services such as carbon sequestration, water quality regulation and timber. Logging and palm oil plantations have rapidly depleted them. According to the World Bank, 52% of peatlands in Kalimantan and Sumatra were converted to other land types between 1990 and 2015. Such a consistent decrease in stock signifies a stark demand-supply gap as peatland clearance rates exceed regeneration rates. In order to close this gap, peatlands can be restored to increase supply, and programmes such as REDD+, which offers payments to local communities in exchange for avoided deforestation, and improvements in agricultural techniques to maximise yield, can also reduce demand by enhancing the efficiency with which nature is used.

Globally, the rate at which we consume nature’s goods is greater than the rate at which it can regenerate. To stabilise the amount of natural capital we have, demand

must be equal to supply. While there are many end states and pathways to achieving this, *The Dasgupta Review* argues that the optimum pathway entails maximising an inclusive measure of wealth at each point in time.

Inclusive Wealth as a Crucial Indicator for Sustainable Development

The Dasgupta Review proves that decision-makers must be aware of how potential activities affect the inclusive wealth of their economies by internalising a new approach to sustainable development.

First, capital goods can be classified into produced capital (e.g. buildings, machines), human capital (e.g. health, education) and natural capital (ecosystems, sub-soil resources). Second, accounting prices reflect the social worth of goods and services and are not necessarily the same as market prices (many natural assets are not included in the market system). In turn, social worth is defined as worth to people in the present and the future. Third, the inclusive wealth of an economy is the sum of stocks of all capital goods (produced, human and natural) it possesses, weighted by their respective accounting prices. Fourth, sustainable development is achieved if and only if intergenerational well-being does not decline. Therefore, all assets determine intergenerational well-being, and the accounting prices of capital goods measure the marginal contribution they make to intergenerational well-being.

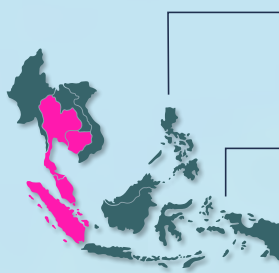
Following this, the *Review* then proposes the Sustainable Development Theorem: “intergenerational well-being increases over a period of time if and only if inclusive wealth increases over that same period of time.” An increase in inclusive wealth can be interpreted as a positive value of net inclusive investment or as aggregate consumption that is less than the Net Domestic Product (GDP minus the depreciation of capital goods). This approach places the focus on stocks, which allows it to incorporate the interests of future generations. In contrast, focusing on GDP would encourage immediate consumption and investment.

In order to pursue sustainable development, humanity needs to radically change its perception of growth and the value of its assets. Southeast Asia is rich with ecosystems and unique biodiversity. It holds 20% of all plant, animal and marine species on just 3% of the world’s surface. Valuable ecosystems including mangroves, forests, coral reefs and limestone karsts throughout the region are threatened by human activities. Business-as-usual projections estimate forgone annual benefits of US\$2.2 billion from the loss of mangroves and an annual loss value of US\$5.6 billion from the loss of coral reefs in 2050. If their true value to society — and the true cost of their loss — were understood and acknowledged in our economic systems, we may think twice about sacrificing these ancient, regenerative assets for short-term gains.

Ms. Qiu Jiahui is Research Officer at the Climate Change in Southeast Asia Programme at ISEAS — Yusof Ishak Institute.

Biodiversity and Conservation Efforts in Southeast Asia

Environmental Degradation and Biodiversity Loss



Almost **93%** of the Philippines' original forest cover and **70%** of the mangrove cover were gone since 1990s ⁽²⁾

Most of the **25 million hectares** of tropical peatlands in Southeast Asia were lost to deforestation over the last three decades ⁽³⁾

The Southeast Asia region has lost **376,000km²**, nearly one-sixth of its forests between 1990 and 2020. Indonesia and Cambodia lost one-fifth and one-quarter respectively ⁽⁴⁾

At least **310** fish species are listed as threatened in the five Lower Mekong countries ⁽⁹⁾

The degradation of coral reefs in the Gulf of Thailand due to coral bleaching in 2010 amounts to **70%** of the total coral area ⁽¹⁰⁾

More than **85%** of reefs in the Coral Triangle is threatened by overfishing and unsustainable tourism. **79%** of reef fish reproductive gatherings have ceased to form and are declining ⁽¹¹⁾

US\$57.98 billion: The estimated cumulative loss in value of reef-related fisheries in Southeast Asia between 2000 to 2050 under business-as-usual scenarios ⁽¹²⁾



Indonesia (**1,988 species**) and Malaysia (**1,928 species**) rank 4th and 5th in the world with most number of threatened species ⁽⁴⁾



WWF

Tigers are now functionally extinct in Cambodia due to illegal trading of live tigers and tiger body-parts ⁽⁶⁾



Nearly half of Singapore's native butterfly species have vanished over the past 160 years owing to the extinction of specific plants and deforestation ⁽⁸⁾

The last Javan rhino in Vietnam was declared extinct in 2011, where poaching was suspected to be the likely cause of its death ⁽⁶⁾

Sumatran rhinoceros was officially declared extinct in Malaysia in 2019 ⁽⁷⁾

13% - 42% of ASEAN's flora and fauna species will face extinction by **2100** due to the loss of **10% - 90%** of habitats ⁽⁵⁾



Illegal Wildlife Trading in Southeast Asia ⁽¹³⁾



225,000kg of African Elephant *Loxodonta Africana* ivory in 2008-2019 (Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam)

Over **96,000kg** of pangolin scales, mostly of African species in 2017-2019 (Malaysia, Singapore and Vietnam).

100,000 Pig-nosed Turtles *Carettochelys insculpta* in 2003-2019 (Indonesia)

Over **45,000** songbirds in 2018-2019 (Sumatra and Java)

Did You Know?

ASEAN committed in 2019 to meet their obligations with regards to the UN Sustainable Development Goals, including a collective action amongst governments to curb environmental crime. ⁽¹⁹⁾

The ASEAN Working Group-CITES (AWG-CITES) was created in 2016 by merging the previous ASEAN Wildlife Enforcement Network and ASEAN Expert Group on CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora), while the Working Group on Illicit Trafficking of Wildlife and Timber (WG-ITWT) was established in 2017. WG-ITWT helped to supplement the work of AWG-CITES in developing a coordinated response to wildlife and timber trafficking, with a special focus on the strengthening of international and regional legal cooperation to clamp down transnational criminal syndicates. ⁽²⁰⁾



Over **6,000** Indian Star Tortoises *Geochelone elegans* in 2017 (Malaysia, Singapore or Thailand)

Over **3,800** bear equivalents in Asia in 2000 to 2016 (involving almost all Southeast Asian countries)

3,700 to 4,500 tonnes: The amount of wildlife products traded and consumed in Vietnam per annum

Annual economic benefit per square kilometer of healthy coral reef in Southeast Asia (e.g. derived from tourism and coral reef fisheries) ranges from **US\$23,100 to US\$270,000** ⁽²¹⁾



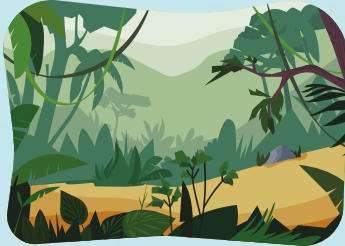
Going green could bring economic benefits to Southeast Asian economies that worth up to **US\$1 trillion** by 2030 ⁽²²⁾

US\$100 million was invested in the Maritime Singapore Green Initiative, which offers incentives for the adoption of green shipping beyond the International Maritime Organization's minimum requirements ⁽²⁴⁾

Over US\$50 billion was allocated to the National Blue Ocean Strategy in the Eleventh Malaysia's Five-Year Strategic Development Plan ⁽²³⁾

Biodiversity Conservation Efforts

20% of the world's animals, plants and marine animals live in Southeast Asia. There are at least **six of the world's 36 biodiversity hotspots** in the region ⁽¹⁴⁾



The Philippines, Pacific Ocean hotspot is one of the world's ten most threatened biodiversity hotspots. This is a habitat for **6,000** endemic species and a large indefinite number of bird species ⁽¹⁵⁾

29% of the total forest area in ASEAN placed under protection, but this still falls short by 4% to meet the 17% set for terrestrial ecosystems in Aichi Biodiversity Target 11 ⁽¹⁶⁾



There are **50 ASEAN Heritage Parks** known for their unique biodiversity in the region, nine of them have marine components ⁽¹⁷⁾



Brunei, Indonesia and Malaysia signed the Heart of Borneo Initiative in 2007 to conserve **200,000 km²** through a network of protected areas and sustainable forest management ⁽¹⁸⁾



2,400 hectares of rainforest were replanted by local women since 2008 in North Sumatra, Indonesia ⁽³⁰⁾



10 tonnes of waste bottles collected from Samet Island and coastal areas in Rayong Thailand since 2017 as part of marine ecosystem preservation by the Upcycling the Oceans Thailand campaign ⁽³¹⁾

75% of orangutan in Sabah, Malaysia now live in protected areas as compared to 25% in 2000 as a result of the community-based Kinabatangan Orangutan Conservation Program ⁽²⁵⁾

200 rescued pangolins were released into the wild in 2018 due to the collaboration between UN Environment and Vietnam's biggest coffee shop chain – Highlands Coffee ⁽²⁶⁾

86 rare Philippine eagles has been rescued by The Philippine Eagle Foundation since the launch of its program during the 1970s ⁽²⁷⁾

Burmese roofed turtle species are nearly saved from biological extinction in the early 2000s and has a captive population that amounts to **1,000** today in Myanmar ⁽²⁸⁾

130,000 wire snares particularly dangerous for Saola across Laos and Vietnam have been removed since 2011 by the Saola Working Group's and its partners' programme ⁽²⁹⁾

540 animals were born to the Wildlife Reserves Singapore in 2017. The animals are of 145 species, of which, 39 are listed as threatened ⁽³²⁾



Sources:

- (1) Food and Agriculture Organization of the United Nations (FAO), 2020 (2) Convention on Biological Biodiversity (3) Nature Geoscience, 2020 (4) International Union for Conservation of Nature (IUCN), 2021 (5) The Princeton Guide to Ecology, 2009 (6) World Wide Fund For Nature (WWF) (7) National Geographic, 2009 (8) The Strait Times 2020 (9) IUCN, 2014 (10) CBD, 2014 (11) WWF 2012 (12) The Economics of Ecosystems and Biodiversity for Southeast Asia, 2015 (13) Southeast Asia: At the Heart of Wildlife Trade, 2020 (14) The Conservation, 2017 (15) Conserve Energy Future (16) ASEAN Centre for Biodiversity, 2017 (17) ASEAN Secretariat, 2019 (18) WWF (19) TRAFFIC, 2019 (20) ASEAN Secretariat, 2019 (21) Partnership in Environmental Management for the Seas of East Asia, 2015 (22) Bain & Company, 2020 (23) Gamage, 2016 (24) Sagar, 2016 (25) U.S. Fish and Wildlife Service (26) United Nations Environment Programme (27) National Geographic, 2021 (28) Wildlife Conservation Society (WCS), 2020 (29) Saola Working Group (30) Orangutan Information Centre (31) National Geographic (32) The Straits Times, 2018

Exploring ASEAN Identity through Art



Vietnamese artist **Ha Ninh Pham** is the second resident of the ASEAN Artist Residency Programme. He shares with ASEANFocus about his journey towards visual arts, reflections on the ASEAN creative sector, and his pursuit to promote his work globally.

What drew you to art, specifically visual art, as a means of artistic expression?

Someone once said that if you do something ten thousand times, you will have it hardwired in your body for the rest of your life. Similarly, I do visual art because it appears the most haptic to me. I know that sometimes I can make good art, which will bring me some generic self-worth. Outside of this field, I remain a nobody.

In three words, how would you describe your artistic style?

Nameless, Humanless, and Timeless.

Many of your artworks explore the theme of “understanding alternate worlds and territories from afar”. In particular, you utilised cartography and navigation motifs in these pieces, attempting to map concretely a nebulous imaginary world. Tell us why you chose to focus on bridging the parallel worlds of reality and imagination.

I am very curious about how far I can go with my imagination. Interestingly, the more I dive deep into my practice, the more I find that imagination and invention are the same. When we imagine something, we also invent it. Now, suppose we choose to believe the deterministic explanation about our physical universe, saying that all physical stuff can neither be created nor destroyed. In that case, things that turn something out of nothing like our imagination must be metaphysical. This is why to me, imagination is always a mysterious and sacred process.

When we think about imagination, we will refer to closing our eyes and letting the brain bring us where it wants to bring. But I believe imagination cannot happen without a medium. At least to me, I cannot imagine without the

medium of drawing. All of my imagination happens on the surface of the paper. When I start my work, I don't try too hard to come up with an idea of what the work will look like. I just ask myself what else I can do to soak the work with meanings, to keep it interesting and invite more imagination. The form, be it an imaginary world or a parallel universe, comes naturally as a result.

What do you hope your audience will take away from viewing your works?

I hope that my audience will see a world that they have never seen before, in a similar way as to being “reborn” again. I carefully avoid references so that my audience learned everything from scratch. Afterwards, they might want to have a conversation on how our world could have come into being different.



Ha Ninh Pham

Artist's piece entitled "[mothermap]"

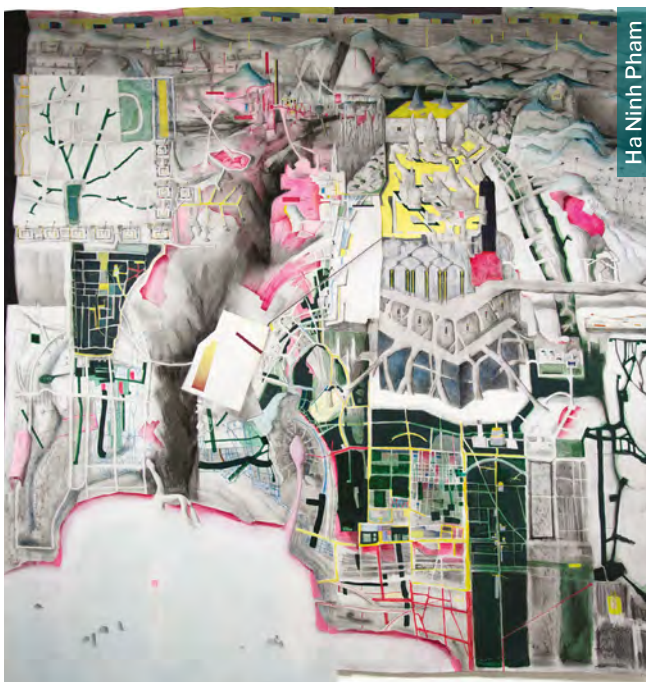
What is your impression of the creative arts sector in ASEAN currently? What are some key trends that you have noticed?

I did not do a good job of keeping myself updated with the art scene in the region. As for me, my job is to make art, and I try my best to do so. I used to be very conscious about what was happening around me. But at some point in my career, I decided to manage my energy carefully. My art demands a lot of energy. Positioning myself at the centre of the tumultuous art scene is not the smartest strategy.

But from my observation, since the 2000s, the tendencies have still been about different narratives. Established artists reclaim their cultures, traditions and political visions. Young artists explore their historical positions within a new world. Technology levels the playing field, and the ease of traveling makes us more connected than ever. What I find interesting is that most art people I have encountered here consider art not just as a job but as a way of life.

In a recent interview, you spoke of the need for more “cultural producers” in the region who articulate their own artistic voice. Could you elaborate? How else can the creative sector continue to grow?

The old-school idea is that artists are formally trained in a specific professional domain to fit a position in the industry. For example, the artist makes work, then the work will be framed by a curator and assessed by a critic. It worked in the past but turned out to be quite ineffective in our time and place. Nowadays, an artist can be a curator, a writer, an educator, a Youtuber, and so on. Take a look at some young artists’ bios, and we can see a lot of hybrid identities. Their approaches are not profession-based but vision-based. I call them “cultural producers”.



Artist's piece entitled "B5 [Wax Fortress]"



Artist's piece entitled "B5.1 T-U-H [theodolites]"

If you are an artist, and you can draw or paint, that is great! But it would be even more awesome if you can proactively develop different strategies to turn your drawings or paintings into a culture within the community. We tend to think that culture is pre-existing, but it is always good to keep in mind that we are producing it every day.

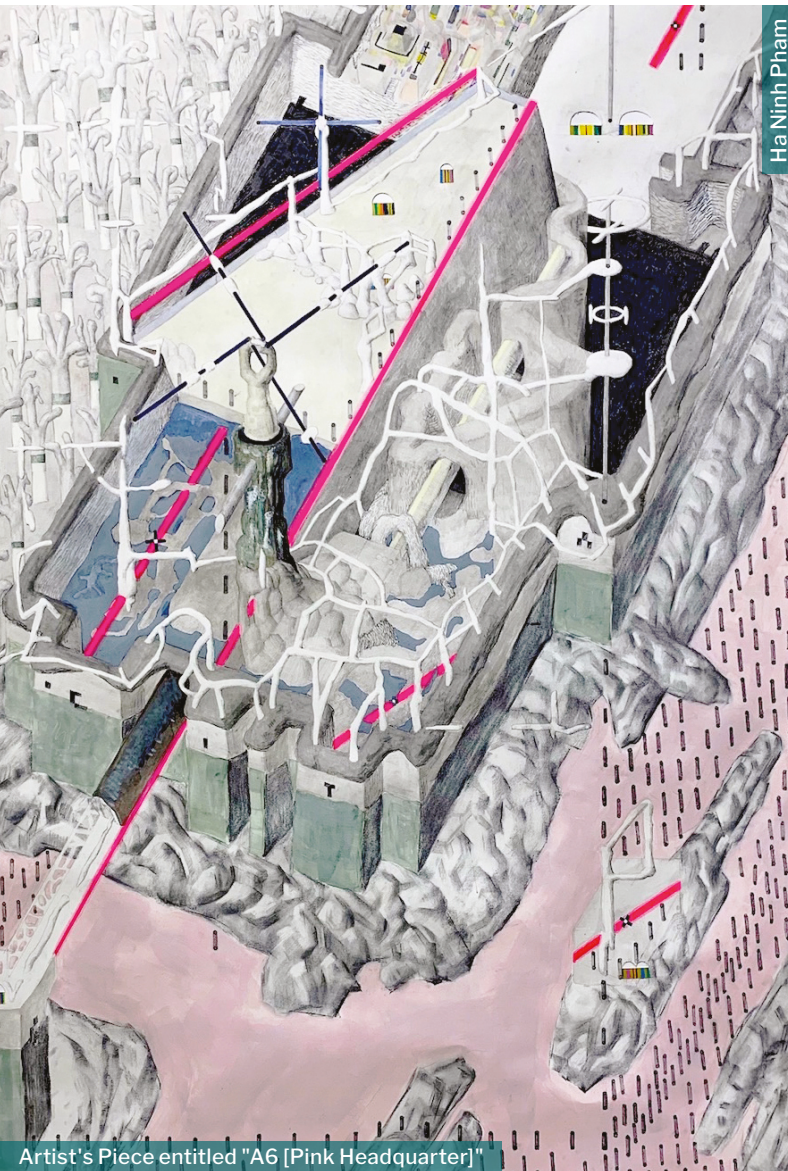
The ASEAN Artists Residency Program (AARP) is a significant step in supporting and profiling Southeast Asian artists to a wider audience. As only the second AARP Resident Artist, how has the programme aided you in your artistic endeavours so far? What do you hope to achieve during your residency?

My residency is supposed to happen in 2020, but we had to postpone the residency three times due to the pandemic. And now we are in the middle of 2021. Unfortunately, the residency is still not in sight.

However, when waiting for a more manageable situation, the AARP Team and I have done many meaningful projects together. It was difficult at first, because I was not quite familiar with the protocols of developing projects internationally. But we got everything nicely done until the end. I appreciate the effort of the AARP Team in keeping the opportunity and support open during this challenging time.

What can ASEAN, national governments and other stakeholders do to support the growth of the local art scene and artists, particularly in this period of the pandemic?

In this pandemic, people are more likely to die due to isolation than the virus itself. So I look forward to seeing more support for online projects that connect many people in the region. We don't need to be too ambitious. Maybe a simple activity that everybody can join. How about a show of lockdown “windowscape” drawings?



Also, we need to get the pandemic over soon. The art community has suffered enough. Most of artists are poor and do not enjoy permanent support from institutions. This makes us more vulnerable in catastrophic situations like this. It is heart-breaking to see our friends get Covid or commit suicide without a chance to get support. The situation is more frustrating to me as vaccination seems to be slow across the region.

Even if a Southeast Asian identity remains more an aspiration than a reality, is it worthwhile for ASEAN – as the representative grouping of Southeast Asia – to foster such a regional identity? Can contemporary arts facilitate such aspirations?

This is a big question that I don't think I can address adequately. Group identity is already a complicated topic. The identity of a region is even more challenging to define. If we do not know what it is, it will be impossible to know the right thing to do about it.

However, my take on this is that we should approach this topic with an open mind. Identity can only be explored. It cannot be planned. There are already specific reasons

why we are here together, in a group. I think these reasons are a part of our identity. For other parts, let us explore them together.

What will your next project be about?

A project that crosses between art and design. Let me reveal the project in an exhibition later. So, stay tuned!

How would you see yourself evolve as a visual artist in the next five years?

I want to have a position in both the regional art scene and the art community in Vietnam. To be honest, I still feel quite distanced toward the system of major Biennales and art festivals in the West. Here everything is much more fun! I want to do something meaningful for the people around me and be appreciated by them.

I will still be here in Vietnam. I never quit this country. Vietnam is both resilient and exciting at the same time. I have soon realized that a lot of energy nowadays is flowing into the creative fields, thanks to a better standard of living. I am very curious about the future of my country and want to be part of it.

What advice would you give to young Southeast Asians considering pursuing art as a profession or looking to dip their toes in the Southeast Asian art industry?

I am still an emerging artist. Maybe I am just a few years older than the young artists we are talking about. My piece of advice is what I remind myself every day as a young artist: stay humble, healthy, be connected and do a lot of work. Everything else will come after.

We live in good times, with support, foundations and opportunities that the past generations could never have. The world is more open than ever. As long as we can set the highest bar in anything we do, our work will hold up its value regionally and globally.



Ha Ninh Pham at work

Hill Stations of Southeast Asia

Yong Yanminn captures the historical features of Southeast Asian unique hill stations and highlights the environmental challenges that they face.



Cameron Highlands tea plantations, Malaysia

Rolling hills covered in lush greenery is one of the most mesmerising natural wonders of Southeast Asia. Beyond its scenic landscape and fertile land, these natural elevation sites are also blessed with a pleasant climate that offers a respite from the tropical heat. Perhaps, this was what lured the Europeans into building “summer resorts” carved from the mountainsides of their colonial territory. Colonialism came and went, but the hill stations borne of that era stood the test of time, carrying with them architectural heritage, economic activities, and leisure sites that embody traces of the past.

Hopping on a train that runs along a British colonial railway in Mandalay will take you into a flower-festooned plateau antithetical to Myanmar’s sweltering city centres. Once alight, find yourself greeted by a vibrant town decorated with English-style country manors and Victorian horse-drawn carriages. Formerly known by the name of Maymo as a tribute to its founder, Colonel May, Pyin Oo Lwin used to be a summer retreat for the British ruling elites. As with other hill stations, it is today a resort town that houses the vestiges of colonialism. Be it stumbling across the centrally located Purcell Tower built in commemoration of the Silver Jubilee of the reign of King George V or having a leisurely stroll in the National Kandawgyi Park that very much resembles the Royal Botanic Gardens, exploring Pyin Oo Lwin incessantly reminds one of the indelible histories of Western imperialism.

Standing in stark contrast to Pyin Oo Lwin’s well-preserved colonial architecture is the skeleton of a sprawling French resort sitting at the heart of the Bokor Hill Station. Initially designed as a luxury getaway for Europe’s rich and famous, the town was abandoned twice: once by the French when Cambodia gained independence in 1953 and another time by the Cambodian upper echelons when the Khmer Rouge reigned. Its decaying Palace Hotel and crumbling Catholic church hark back to a time of decadence, where men were forced into intense labour to bring the hill station into existence. These dilapidated buildings soon became an attraction to adventure-seekers who are drawn by the mysteries of ghostly towns, emerging as a popular “hippie trek”. Interestingly, Bokor’s uncanny ambience has earned the site an opportunity to be featured in thriller films such as the *City of Ghosts* and the *R-Point!*

What was left behind in these hill stations were more than just colonial structures. Nestled amidst Le Petit Paris of Vietnam – Da Lat – are coffee producing plantations ever since the French introduced Arabica trees to the highland in the early 1920s. After colonial rule, the farming of aromatic coffee from tree to cup was continued by the K’Ho tribespeople and was eventually turned into a sustainable business known as the K’Ho Coffee. Such coffee plantations in Da Lat have unquestionably contributed to Vietnam becoming the world’s second-largest coffee producer. Meanwhile, in the hillsides



Claire Backhouse@Flickr

Horse-drawn carriage in Pyin Oo Lwin, Myanmar

of Cameron Highlands, Malaysia, production of an alternative to coffee can be found. Established by a British businessman, the BOH Tea Plantation is home to various tea plants that carpet the valleys in shades of green. Today, this tea brand is the largest black tea manufacturer in the country, producing about 70% of Malaysian tea output.

Although plantations are a major economic activity in the hill stations, the locals have created extra streams of income. The majority of these plantations are simultaneously promoted as tourist spots where visitors can opt for informative tours and catch sight of picturesque hilly terrains. Farm-to-table cafés have also sprung up, enabling tourists to have a taste of freshly brewed *Cà phê sữa đá* and *Cà Phê Trung* (Vietnamese-style coffee with a touch of condensed milk and eggs respectively) or the classic scones-and-tea combo. A variety of farms were developed, taking advantage of the cool weather, to cultivate strawberries, vegetables and lavenders. These business innovations serve as new channels for the locals to earn a living and gradually improve their quality of life.

Built for recreational purposes, these hill stations are also abundantly equipped with sites for leisure activities. One notable man-made leisure facility is country clubs with fairways lined with green foliage, trees and lagoons. These places were once frequented by colonial masters who wish to enjoy crisp mountain air over the course of their Gentlemen's Game – golf. The Baguio Country Club in the Summer Capital of the Philippines and the Cameron Highlands Golf Club are few of the many golf courses settled in valleys 5000 feet above sea level, providing a natural air-conditioned environment for golf matches. Over the decades, these country clubs have become open to affluent members who would like to have meetings preceded (or followed) by rounds of golf. In fact, these hilltop golf courses have been favoured by ASEAN functionaries and were repeatedly selected as locations for ASEAN informal ministerial retreats where closed-door discussions and golfing can happen concurrently.

Gifted by Mother Nature, most, if not all, of the hills are endowed with natural formations that never fail to enchant visitors with their ethereal appearance. In the outskirts of Indonesia's Bogor Hill Station lie a majestic waterfall that cascades down to a cerulean-blue pool. Known by the name of *Curug Bidadari Cikoneng*, the waterfall is a hotspot where nature lovers can swim in clear, serene pools while families picnic on the small sandy beach surrounding the waterfall base. For hikers and mountaineers, the Forest Bathing Trail of Camp John Hay in Baguio offers an exhilarating walking experience through pine woods where the sounds of rustling wind, chirping birds and chorusing crickets blend harmoniously to form a melodious nature symphony.

Snuggled somewhere in the Daen Lao Range of Thailand is an exceptional hill town established not by colonialists as a summer retreat but by an accident of history. Officially named *Santikhiri*, the "hill of peace" in Thai, Mae Salong is a village where many travel guides have waxed lyrical about it being a miniature Shangri-La. Founded by the anti-communist Kuomintang remnants who helped combat communist insurgency along the Thai frontier



Mark Roy@Wikimedia

The Palace Hotel and Casino at Bokor Hill Station, Cambodia



Shan noodle sold in Mae Salong, Thailand

WT-en Kokwei@Wikimedia

in exchange for asylum, the town has come to be known for its lingering Chinese influence. Restaurants lining the streets of Mae Salong serve not just Thai but Yunnan cuisine such as Shan noodles with bean gravy and the Yunnanese braised pork leg. Apart from its unique Chinese cultural heritage, the town, like many other hill stations, also has its economic base rooted in the development of plantations, including tea, coffee, flowers and fruit trees.

Unfortunately, a slew of environmental threats has imperiled the sustainability of these hill stations. In hopes of boosting the economy via agritourism, many hill towns have witnessed a massive proliferation of plantations and agricultural sites. Overdevelopment often comes at the expense of highland forests, contributing to climate change and biodiversity loss. Hill towns such as Cameron Highlands and Baguio are increasingly struggling with higher landslide events amidst intense rainfall caused by climatic changes. Uncontrolled deforestation in places like Da Lat have also destroyed the habitats of native species. In fact, six bird species in Da Lat are currently threatened with extinction.

Destruction of ecosystems threaten to impair hill stations' ability to produce agricultural goods and diminish its appeal as a tourist attraction – two fundamental economic engines of Southeast Asian hill towns. Thus, there is an urgent need to strike a balance between development and conservation to ensure that these sites can continue to preserve its valuable functionalities.

As the environmentalist and Nobel Peace Prize winner Wangari Maathai once expressed, “The environment and the economy are both two sides of the same coin. If we cannot sustain the environment, we cannot sustain ourselves”. Sustaining the hill stations of Southeast Asia, however, means more than just maintaining the prospects of economic development; it includes the preservation of certain ways of living, heritage, and most importantly, fascinating pieces of history.

Ms. Yong Yanminn is Research Intern at the ASEAN Studies Centre, ISEAS – Yusof Ishak Institute.



Da Lat coffee plantation, Vietnam

TeeFarm@Pixabay



Da Lat train station, Vietnam

USJ @ Shutterstock

Some Like It Hot... and Chilli

Kevin Neo explores how chilli became such an important part of Southeast Asian food culture and beyond.



michel_arnault@Shutterstock

Wide variety of chilli sold in Southeast Asian markets

The common Thai saying *Mai phet mai aroy* or "not spicy not delicious" sums up the love of chilli across Southeast Asia. Chilli constitutes a ubiquitous cuisine component in Southeast Asia, serving either as a main ingredient, part of a dish, or an accompanying condiment. While chilli is commonly found across Southeast Asia today, it was only introduced to the region 500 years ago. Chilli is native to South America, where it has been part of the region's diet since 7500 BC. But it was not until the European merchants came to the Southeast Asian region that chilli was traded as a food commodity. Thanks to Southeast Asia's favourable climatic and soil conditions, chilli has been cultivated and has become part of the food staple of the region since the 15th century.

Today, Southeast Asians can easily spot shiny stacks of colourful chilli in various forms and colours in local markets. Not only does it provide a visual appeal with its bright shades of red, orange, yellow and green and make dishes look more appetising, this shiny ovary fruit is also rich in vitamin A, vitamin B complex, vitamin C, vitamin E and minerals. Some research has suggested that chilli provides more vitamin C than oranges. Despite the burning sensation, eating chilli can increase feelings of pleasure and well-being due to capsaicin, a substance that triggers the production of endorphins in human brains.

It is a universal truth that spicy food is prevalent in Southeast Asia. Malaysian families always store dried chilli inside their condiment racks. Whenever they need some spicy kicks to be paired with main dishes, they will make *chilli boh*, a mixture of grounded crinkly dried chilli cooked in oil, shallots, garlic, and salt. Dried chilli is versatile and a must-have ingredient for making festive Malay food such as *beef rendang*, *gulai*, and *ayam masak merah*.

Singapore, the melting pot of Southeast Asia, also prides itself on its love for chilli. Almost all local dishes in the cosmopolitan city, whether of Chinese, Malay or Indian origin, are prepared and served with sauces on the side, providing a spicy kick. The famous chilli crab of Singapore, for instance, is cooked in a sweet and savoury tomato-and-chilli-based sauce. Another popular dish, Hainanese chicken rice, is served with a fragrant and spicy sauce



dolphfyn@Shutterstock

Malaysia's national dish nasi lemak



Assortment of Indonesian sambal or chilli pastes

combining chilli and other aromatics such as ginger and garlic. Hokkien fried mee, which many visitors to Singapore love, is always accompanied by a fiery sambal chilli sauce. *Nasi lemak*, a dish comprising rice cooked in coconut milk, served with *ikan bilis*, omelette, cucumber slices, also comes served with a spicy chilli sauce as a condiment.

The importance that chilli encapsulates can be seen back in 2009 when Singaporeans jointly protested after McDonald's Singapore changed the recipe of the garlic chilli sauce provided with all their meals. The global fast-food chain eventually had to reintroduce the original garlic chilli sauce recipe in Singapore in order to appease their diners. Southeast Asians no doubt wear our hearts on our sleeves when it comes to food, and our united love for chilli across the region exemplifies it all.

Another country in the region, Indonesia, probably holds the accolade as the most chilli-loving country in Southeast Asia. It is estimated that approximately 80% of Indonesian cuisine is spicy. Beyond its role in enhancing the taste of food, chilli also plays an essential economic role in boosting the livelihoods of the locals. The cultivation of *Hiyung Cayenne*, the spiciest chilli in the country, has enabled the locals in southern Borneo to earn an income six times the local average. *Hiyung Cayenne* thrives exceptionally well in the acidic, swampy and peaty soil in the area which is not suitable for rice, a staple crop of Indonesia. But, rising temperature and erratic rainfall due to global warming has increased the risk of wildfire or floods in the soil drained of moisture to facilitate the planting of *Hiyung Cayenne*, exacerbating the risk to a favoured chilli in the region and more critically, the livelihood of the chilli-growing farmers.

In the Philippines, locals in the Bicol Region southeast of Manila take their chilli seriously. The local saying is that during a typhoon, the locals in Bicol will ensure that their chilli plant is safe before securing their own house. The famous spicy dish of the Philippines, Bicol Express or *bikol as sinilihan*, was inspired by the local vendors who would sell the dish to passengers on the train that runs between Bicol and Manila. Bicol express is a creamy and spicy pork stew dish cooked with coconut milk, prawn paste, aromatics and *Siling Haba*. *Siling Haba* is the hottest chilli in the Philippines. In a bid to capture the attention of the chilli-loving locals in Bicol, a local cafe even came up with a chilli ice cream made with *Siling Haba* and coconut milk known locally as Sili Ice Cream. The unique creation is available at three different levels of spiciness to cater to locals with varying spice tolerance



Sriracha sauce

and was even named Philippine’s best dessert at the ABS-CBN Choose Philippines Award 2016.

Chilli propelled Sri Racha, a coastal city southeast of Bangkok, Thailand, to international fame. The reason behind it is none other than the global craze over *Sriracha* sauce, a hot sauce concocted in the USA but inspired by Southeast Asia. The sauce was originally made to go with seafood in the seaside city of Sri Racha, located alongside the Gulf of Thailand. Inspired by it, David Tran, a Vietnamese refugee residing in California, created his own *Sriracha* sauce.

During its humble beginnings, *Sriracha* sauce was sold in recycled glass baby food jars and delivered it to the customers with bicycles. The sauce was originally invented to complement Vietnamese *Pho* (noodles), but it quickly went viral and grew into a phenomenal cult following. Today, *Sriracha* sauce is paired with almost any food. Travelling to beaches in California, tourists can easily find food trucks selling Mexican tacos, American fried chickens, Chinese bao buns, hotdogs, and burgers served in *Sriracha* drizzle. It is recently making its rounds on Tiktok videos as a fun way to jazz up ramen noodles.

This humble chilli concoction from Southeast Asia has come full circle and is brought back to its original turf. However, most Thais would probably say they still prefer their local version, which is perfectly balanced and more natural. Nevertheless, the international fame of *Sriracha* sauce has generated greater awareness of Southeast Asian spicy sauces, which connoisseurs now enjoy all around the world – and even extra-terrestrially on the International Space Station!

The genuine love for chillies provides many opportunities for Southeast Asians to experiment, explore, and preserve their food and cultural heritage. Throughout culinary history, we have noticed cooking techniques and tastes over food evolving over many generations. But, spicy food survives across generations and is still intimately part of our region’s shared culture today. Teaching the younger generation how to preserve food culture, cooking techniques, and agriculture will give them a chance to learn about Southeast Asia’s colourful cultural and culinary mosaic.

Mr. Kevin Neo is Research Assistant at the ASEAN Studies Centre, ISEAS – Yusof Ishak Institute.



SunyawitPhoto@Shutterstock

Thai shrimp paste sauce and assorted vegetables



Dwi Martono Photo@Shutterstock

Harvesting of chilli in Central Java, Indonesia



THE WANG GUNGWU VISITING FELLOWS PROGRAMME

The **Wang Gungwu Visiting Fellows Programme** honours Professor Wang Gungwu, former Chairman of the Board of Trustees at ISEAS – Yusof Ishak Institute (ISEAS) for his distinguished tenure of 17 years and for his key contributions in nurturing a strong culture of research excellence at ISEAS.

The programme aims to nurture the next generation of scholars and policymakers who seek to explore the nexus of big-power relations and its impact on Southeast Asia. The programme is open to pre- and postdoctoral candidates and mid-career policymakers. Visiting Fellows will be expected to conduct policy-relevant research in the following priority areas:



Developments in US-China relations and their impact on Southeast Asia



Asia Pacific security issues (i.e. South China Sea, China-ASEAN relations)



Progress and prospects of global economic cooperation initiatives like the Belt and Road Initiative and the Regional Comprehensive Economic Partnership



Rise of China and its impact on Southeast Asian communities



Use of digital media and technology by major powers to shape perceptions and interests in Southeast Asian countries

Fellowships may be for a minimum of two months up to a period of six months. Successful applicants are expected to be in residence at ISEAS for the duration of their fellowship.



Expected Outputs and Publication Opportunities

Wang Gungwu Visiting Fellows (WGWVF) are required to contribute to *ISEAS Perspective* and *Fulcrum* publications in the areas of their research and give an in-house seminar on their research findings during their fellowship at ISEAS. As WGWVF, researchers will be part of a network of regional scholars and are welcomed to contribute to ISEAS after their fellowship.

Stipend and Benefits

The **Wang Gungwu Visiting Fellows Programme** offers successful applicants a fixed monthly stipend (inclusive of a housing subsidy) for the duration of their fellowship at ISEAS and a round-trip economy airfare between their home base and Singapore.

As a Wang Gungwu Visiting Fellow, you will be invited to a meeting with Professor Wang Gungwu during the duration of your fellowship.

Successful applicants will enjoy access to an office space, computer equipment and IT services, ISEAS Library and all other facilities at ISEAS.

Proposals for partial/full cost-sharing will also be considered.

Application Requirements

Applications for the 2023 intake will be open from May to July 2022. Applicants must submit:

- Cover Letter
- CV/Resume
- Research Statement (3 pages, double spaced) addressing:
 - Area of research, research methodology, timeline and expected outputs
 - Duration of fellowship in residence at ISEAS
- Two Reference Letters
- Proposal for partial/full cost-sharing (if applicable)

Eligibility

The **Wang Gungwu Visiting Fellows Programme** is intended for pre-and post-doctoral research fellows and mid-career policy makers. For mid-career policy makers, we welcome applicants who may not have a Ph.D. or equivalent degree, provided that their CV/Resume can ascertain an appropriate level of professional experience and research interest.

Apply Now

Applications should be submitted by email to: development@iseas.edu.sg

With the subject heading: Application for the Wang Gungwu Visiting Fellows Programme

Or mailed to:

Alice Wu
Assistant Director, Development
ISEAS – Yusof Ishak Institute
30 Heng Mui Keng Terrace
Singapore 119614

MBARU NIANG

Indonesia

The Mbaru Niang traditional houses in the secluded village of Wae Rebo on the island of Flores in East Nusa Tenggara Province, Indonesia are the cultural pride of the Manggarai people. Once dotting the region, these traditional houses are today largely limited to Wae Rebo village. At one point threatened with structural decay, these houses were successfully rebuilt and the village was later bestowed the Award of Excellence in the UNESCO Asia-Pacific Awards for Cultural Heritage Conservation in 2012 and shortlisted for the Aga Khan Award for Architecture in 2013. Embodying the community spirit of its people, each of these unique large conical thatch-covered structures houses 6 to 8 families and is divided into five levels that provide communal living quarters, food and seed storage space as well as a sacred area for ancestral offerings. With only 7 of these unique houses left standing, the village has developed into a tourist site with visitors making the long trek to behold the architectural and cultural marvel of the Mbaru Niang and a forgotten time.

(Sources: Ministry of Tourism and the Creative Economy of the Republic of Indonesia; UNESCO; Aga Khan Foundation; Kompas; The Straits Times)

