

ACB Beats

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Expo 2020 Dubai: ASEAN brings biodiversity to 'World's Greatest Show'



The ASEAN brought the region's unique and rich natural wonders to the global stage at the Expo 2020 Dubai dubbed as the "World's Greatest Show" as part of the celebrations of the ASEAN Honour Day in the evening of 13 December 2021.

Produced by the ASEAN Centre for Biodiversity (ACB) with the support of the European Union through the Biodiversity Conservation and Management of Protected Areas (BCAMP) Project, the 360-degree video projection titled "Experience ASEAN" featuring the region's natural treasures premiered at the AI Wasl Plaza of the Expo.

The AI Wasl Plaza, an architectural marvel located at the heart of the Expo, is the world's largest 360-degree video projection that stands 67.5 metres tall and enclosing a space of 724,000 cubic metres.

"Experience ASEAN is the ACB's contribution to the ASEAN Honour Day celebrations on the global stage of Expo 2020 Dubai. Through the 360° video mapping projected on the impressive AI Wasl dome, the world gets to appreciate the importance of the ASEAN region's rich biodiversity and its profound connection to its people, culture, and to the rest of humanity," ACB Executive Director Theresa Mundita Lim said.

The ASEAN's pristine ecosystems and unique plants and animals, such as rafflesia, dugong, Philippine eagle, tarsiers, sea turtles, sun bears, and Malayan tigers, were highlighted in the film.

The film was beamed across the screens of the dome twice, and broadcast live on the ACB's social media page.

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ASEAN, Amazon bloc sign MoU for cooperation



DR. THERESA MUNDITA S. LIM
EXECUTIVE DIRECTOR, ACB

MS. ALEXANDRA MOREIRA LÓPEZ
SECRETARY-GENERAL, ACTO

The Amazon Cooperation Treaty Organization (ACTO) and the ASEAN Centre for Biodiversity (ACB) have inked an agreement that will enable them to work together on key areas of cooperation and exchange experiences, knowledge, and technologies on biodiversity conservation across the Amazon and ASEAN regions.

ACB Executive Director Theresa Mundita Lim and ACTO Secretary-General María Alexandra Moreira López led the signing of a Memorandum of Understanding (MoU) in a virtual ceremony broadcast on social media on 3 December 2021.

Under the MoU, the two parties, which are subregional organisations working with countries to conserve large and biologically-rich ecosystems, will carry out collaborative initiatives on areas of mutual interest, such as ecosystem restoration, biodiversity mainstreaming, and resource mobilisation, as well as multi-country, transboundary biodiversity conservation governance.

The ACB and ACTO will also facilitate dialogues for the exchange

of strategies, technologies, and experiences in developing policies, programmes, and projects to support the strengthening of biological diversity in the ASEAN and Amazon regions.

The Amazon is known as the world's largest reservoir of biodiversity while the ASEAN hosts ecologically-important habitats and megadiverse countries.

ACTO is a socio-economic bloc in Latin America formed by the eight Amazonian countries: Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, and Venezuela. The ASEAN, on the other hand, is composed of Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam.

"Partnership and cooperation are the backbone of our collective efforts, and are crucial, now and in the years to come," Lim said in her remarks.

"This partnership brings together two subregional organisations that are mutually interested in multi-country approaches to conserve large and biologically rich

ecosystems that are not only vital to their Member States, but are also considered globally important," she added.

López said the rapprochement between ACTO and ASEAN will generate a series of shared and learned experiences, and produce technical and scientific information for decision-makers.

"(This cooperation will) develop greater capacities for the management of our biodiversity resources and joint undertakings of projects and programs," she said.

She added that the first tasks to be undertaken by ACTO and ACB include efforts related to information systems on biodiversity.

"We, through the Amazon Regional Observatory, and you, through the ASEAN Clearing-House, hope to provide our systems with greater innovation and technology, with the generation of modern tools for public management, and with the valuable information that can be made available to the governments, of the countries and stakeholders for the conservation and better use of our biodiversity," she said.

Winners of ASEAN's Sixth Zooming in on Biodiversity bared



With the ongoing pandemic, photographs of nature have the power to inspire and cultivate a deeper appreciation for biodiversity and its protection.

On 31 January 2022, the ASEAN Centre for Biodiversity (ACB) announced the winners of the ASEAN-wide photography competition, Zooming in on Biodiversity via Zoom and Facebook live, after a thorough evaluation of photo and digital content entries.

Organised by the ACB in partnership with the European Union (EU) through the Biodiversity Conservation and Management of Protected Areas in ASEAN (BCAMP) Project, the competition was opened in November 2021 to all amateur and professional photographers and creatives in the ASEAN region.

It is part of a regional campaign #WeAreASEANBiodiversity campaign, which aims to raise awareness and mobilise support for biodiversity conservation in the region.

"(An image) can tell us a compelling story and even bring us to places we haven't seen, heard, or experienced. Such power of photography has become even more important today, as our movement continues to be limited due to the continuing threat of COVID-19 and its emergent variants," ACB Executive Director Theresa Mundita Lim said in a recorded video message.

She said the photographs of land- and seascapes, plants, and animals are reminders of the essential role of biodiversity in our daily survival.

The sixth staging of Zooming in on Biodiversity has two categories: the general category, #WeAreASEANBiodiversity: I am part of the solution, which focuses on the richness of ASEAN's rich biodiversity, and the active role of people, as part of nature, as a vital part of the solution to conserving this rich natural heritage, and the ASEAN Heritage Parks (AHP) special category, which highlights the natural and cultural richness of the 50 AHPs.

The finalists were judged following a set of criteria: relevance, composition, creativity, and technical excellence. The panel of judges was composed of ACB's Lim; Ileana Mirutescu, programme manager of the EU Delegation to the Philippines; and professional photographer Sheryl Aguiaba.

Aung Chan Thar of Myanmar bagged the grand prize in the general category and the People's Choice Award for the AHP category.

The second place and third place of the general category went to Kyaw Zay Yar Lin of Myanmar and Arturo B. De Vera Jr. of the Philippines, respectively.

Aung Kyaw Zaw of Myanmar is the People's Choice Awardee garnering the highest number of likes on Facebook.

For the AHP category, Kyaw Kyaw Winn of Myanmar won first place while Tran Viet Linh of Viet Nam and Danny Ocampo of the Philippines came in second and third.

Philippines' Expo 2020 Dubai pavilion is tribute to nature and Filipinos



ASEAN's biodiversity and its contribution to daily lives were spotlighted at the Philippines' pavilion at the Expo 2020 Dubai called *Bangkóta*, an ancient word for coral reefs.

The Embassy of the Philippines in the United Arab Emirates, in cooperation with the ASEAN Centre for Biodiversity (ACB), held the second Embassy *Bangkóta* Apex Speaker Series (E-BASS) called, "Ugnayan: Connected by seas, sharing one vision for people and nature," on 12 December 2021.

The 30-minute talk of Dr. Theresa Mundita Lim, ACB executive director, highlighted the interconnectivity of marine ecosystems and biodiversity in the ASEAN region and the Philippines' key role being at the centre of the centre of global marine biodiversity.

A region connected by seas

The ASEAN, composed of 10 countries, Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam, boasts of abundant marine resources—30 per cent of the world's coral reefs, 35 per cent of mangroves, and at least 33 per cent of all seagrass habitats.

The ASEAN region is home to vast coral reefs, mangroves, estuaries, sandy and rocky beaches, seagrass and seaweed beds, and other soft-bottom habitats. These ecosystems account for a third of the world's coastal and marine environments and provide breeding, nursing, and feeding grounds for marine plants and animals, as well as food and resources vital to coastal populations' livelihoods.

Fisheries, coastline protection, tourism, recreation, and aesthetic aspects are estimated to provide total potential yearly economic net benefits per square kilometre of healthy coral reefs alone in the region, ranging from USD 23,100 to USD 270,000. "This sector employs approximately 80 million people. The processing, marketing, distribution, and supply industries associated with fishing and aquaculture employ up to another 10 million people," said Lim. The ASEAN's coastline and marine areas are expected to house close to 500 million people by 2050. The region also accounts for 17 per cent of the world's fish production.

"While the seas may physically separate us, these bodies of water also help connect our islands, our lives, and our cultures. People depend on these coastal and marine ecosystems for food, livelihood, and

transportation, among others," said Lim.

She explained that islands are linked by the waters due to larval dispersal brought by ocean currents. Ocean currents can transport coral and fish larvae over great distances. The term "connectivity" refers to how this type of movement connects habitats.

The region's interconnectedness is also demonstrated by the movement of migratory birds traversing across the seas, and thereby connecting nations and regions.

This connectivity is exemplified by the *Bangkóta* design of the Philippines' Pavilion at the Expo 2020 Dubai. As explained by the visionary architect behind the *Bangkóta*, Royal Pineda and designer Budji Layug, it "is a living coral reef, pulsating with people, movement, activities, flora and water features; all functioning as one global ecosystem."

The *Bangkóta* is a representation of our deep connection with nature that dates back to prehistoric times.

According to the Philippine Ambassador to the UAE, H.E. Hjayceelyn Quintana who officially opened the lecture, the *Bangkóta* is a metaphor for sustainability and is also a tribute to Filipinos all over the world, who manage to thrive wherever they are, despite the circumstances.

PH as the centre of the centre of global marine biodiversity

Endowed with two-thirds of the world's biodiversity or 70 to 80 per cent of plant and animal species, the Philippines is a treasure trove of the ASEAN region's marine biodiversity.

The Philippines, along with Indonesia, Malaysia, Papua New Guinea, the Solomon Islands, and Timor-Leste, make up the Coral Triangle, which has most of the world's coral reefs. The Coral Triangle is a vital part of the region's marine environment and is the core of the worldwide distribution of reef-building corals, as it contains more

than 75 per cent of the world's coral reefs. As the centre of the Coral Triangle, the Philippines serves as an abode to 18 of the world's more than 67 species of seagrass, and to over 500 coral species, 2,500 reef fishes, and other marine biodiversity.

Part of the Coral Triangle is the Tubbataha Reefs Natural Park (TRNP) in the Philippines. Tubbataha is the Philippines' last remaining pristine seabird habitat where more than 30,000 seabirds breed. It also has the highest density of the world's Whitetip Reef Sharks.

The TRNP was designated as a UNESCO World Heritage Site; a Ramsar Wetland of International Importance; an East Asian-Australasian Flyway site; a Blue Park and Particularly Sensitive Sea Area; and an ASEAN Heritage Park.

Biodiversity conservation, a shared responsibility

The most visible response in ASEAN to the need to safeguard marine biodiversity has been the creation of marine protected areas. The ASEAN Heritage Parks (AHP) programme is the ASEAN's flagship initiative for promoting effective protected area management and contributing to the conservation of ecosystems and resources. It recognises the region's national parks and reserves for their uniqueness, ecological diversity, and conservation values.

As the secretariat of the programme, the ACB supports the AHPs by providing capacity enhancement activities, monitoring equipment, and law enforcement support to these outstanding protected areas in the region. The ACB, the only ASEAN centre hosted by the Philippines, was created by the ASEAN Member States to facilitate the conservation and protection of biodiversity and ecosystems that are connected to the lives of the ASEAN people.

Currently, there are 50 AHPs—nine of which are in the Philippines.

The AHPs in the Philippines are Mts. Iglit Baco National Park in Mindoro, Mt. Kitanglad Range National Park in Bukidnon, Mt. Malindang National Park in Misamis Occidental, Mt. Makiling Forest Reserve in Laguna, TRNP in Palawan, Mt. Hamiguitan Range National Park in Davao Oriental, Mt. Timpoong-Hibok-Hibok Natural Monument in Camiguin, and Agusan Marsh Wildlife Sanctuary in Agusan del Sur.

"Like what the *Bangkóta* says, man is nature. Nature and our rich biodiversity are part of our origin, our voyage, and our destination," Lim said. She added that the important connection between biodiversity and its contribution to our daily lives is a reminder of our role to protect it.



ASEAN renews partnership with IUCN on regional support for biodiversity



The ASEAN Centre for Biodiversity (ACB) has renewed its partnership with the International Union for the Conservation of Nature (IUCN), providing further support to the ASEAN and its Member States in achieving their goals in line with the post-2020 global biodiversity framework and the region's recovery framework.

ACB Executive Director Dr. Theresa Mundita Lim and Dr. Dindo Campilan, regional director for Asia of the IUCN, led the signing of the Memorandum of Understanding (MoU) in a virtual ceremony on 24 November 2021 following the final session of the webinar series on sustainable financing of the ASEAN Heritage Parks.

"As two organisations whose mandates are focused on conserving biodiversity through capacity

development, information and knowledge sharing, and synergy development, we formalise again a partnership that is poised to reinforce our efforts," Lim said.

Campilan emphasised that the assets and strengths of the ACB complement those of IUCN. IUCN is a global authority on the status of the natural world, composed of 1,400 government and civil society organisations with more than 18,000 experts.

"It's becoming urgent that we work together and that organisations, such as the ACB and the IUCN need to build synergy because it is only by looking both at our strengths that we can contribute to our planetary problems," Campilan said.

The ACB and the IUCN first embarked on a partnership through an MoU in 2016. The IUCN welcomed the ACB as an official associate member of Asia Protected Areas Partnership in 2019, supporting efforts in the region to identify innovations and solutions in addressing biodiversity loss and to effectively manage protected areas and the ASEAN Heritage Parks (AHPs). Among the slated activities under

the ACB-IUCN cooperation are the conduct of the 2nd Asia Parks Congress in May 2022 in Malaysia and the Seventh AHP Conference in October 2022 in Indonesia.

The two organisations will also work closely on the Indo-Burma Ramsar Regional Initiative, which seeks to ensure the effective implementation of the Ramsar Convention in the Indo-Burma region; as well as the preparation of the new situation analysis of the intertidal wetlands of the Yellow Sea.

The ACB and IUCN also pledged to advance the region's adoption of the IUCN Green List of Protected and Conserved Areas, the first global standard of best practice for area-based conservation.



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Asian Business Leadership Forum Talks



Dubai, United Arab Emirates— While an immediate response is necessary for recovery, long-term strategies that aim to respond to the pandemic should take into account nature and biodiversity to prevent future outbreaks and graver impacts, the head of the ASEAN Centre for Biodiversity (ACB) said in one of the panel discussions at the Expo 2020 Dubai.

ACB Executive Director Theresa Mundita Lim joined environment experts and leaders in one of the sessions of the prestigious Asian Business Leadership Forum (ABLF) Talks on 25 October 2021 at the Expo 2020 Dubai.

The ABLF is Asia's most influential business leadership platform that brings together global leaders in conversation and collaboration. The ABLF Talks on Monday was held in Dubai and live-streamed to an audience of over 11,000 worldwide.

Lim shared how the ASEAN harnessed digital platforms to adapt to the pandemic and engage with the youth and the private sectors.

"The COVID-19 pandemic was an eye-opener," Lim said, emphasising that there are currently 1.7 million undiscovered viruses in mammal

and avian hosts, 540,000-850,000 of which could infect humans.

Thus, Lim emphasised that efforts should not just focus on immediate concerns but also long-term strategies that take into account nature and biodiversity.

Joining the ACB head in the panel were Major Ali Saqr Sultan Al Suweidi, founder and CEO of Emirates Marine Environmental Group; Dr. Tiffany Delpont, co-founder of Eco Edition: The Possibilities Project; and Sheikh Dr. Majid Al Qassimi, advisor to the UAE Minister of Climate Change and Environment. Broadcast live on CNBC-UAE, the discussion was moderated by Tom Urquhart, presenter of Dubai One TV.

Lim noted that biodiversity conservation does not need to be pitted against development. "They can coexist. The key is to manage your resources well so that as you work on your progress and development, you also protect the environment," she added.

She said businesses have much at stake in biodiversity. "We hope more businesses are realising that biodiversity should not just be part of their corporate social responsibility but also

of their business models and processes."

Bringing together over 100 global leaders in conversations around urgent socio-economic issues, the hybrid ABLF Talks featured in-person sessions complementing virtual streaming on Monday, setting the stage for the monthly event with icons from varied sectors in impactful dialogues.

Majid, when asked about how individuals can make a difference, said choosing sustainable goods and services will have positive impacts.

"Every business has in their interest to listen to their customers and deliver especially in the day when we are so connected globally by social media. Consumers want to support companies that have the same ethos (for the environment)," Majid said.

Delpont, meanwhile, underscored the urgency to enhance educational systems and integrate the environment to help form long-lasting partnerships, especially with the youth. This was supported by Major Ali, saying that the knowledge on the environment passed down through generations in households should be part of lessons in schools and universities.



Biodiversity in cities catalyses healing, wellness, and resilience

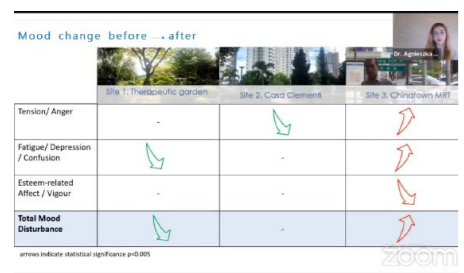
Can urban areas make you unwell?

The answer is yes, according to experts during the recent ASEAN workshop on Therapeutic Horticulture led by Singapore's National Parks Board (NParks) and the ASEAN Centre for Biodiversity (ACB). The virtual workshop gathered experts who shared the restorative benefits that people can reap from urban green spaces.

Discussing the link between urbanisation and mental health, Dr. Agnieszka Olszewska-Guizzo, president and co-founder of international research group NeuroLandscape, cited a meta-analysis showing that the urban environment is increasing the risk of any mental disorder by as much as 39 per cent.

From March 2019 to September 2020, NeuroLandscape conducted a study in collaboration with the NParks on the effects of landscapes on the brain activities of selected respondents in Singapore. The study, which measured self-reported moods and pleasantness; brain activity; and the Contemplative Landscape Model (CLM) scoring, showed that moods and brain activity change after being exposed to certain landscapes.

The respondents' feelings of tension and anger dropped after being exposed to green spaces in a residential area in Singapore. Fatigue, depression, and confusion also dropped for those who were exposed to therapeutic gardens, thereby improving their overall mood.



Nature's impacts on the brain

Among the other findings of the study is the effect of the physical environment on the human mind and emotions. Looking at urban scenes or landscapes prompts the brain to release specific cognitive resources to process sensory stimuli, which according to Olszewska-Guizzo, is indicated by the heightened oxy-hemoglobin (Oxy-Hb), or the oxygen-carrying form of hemoglobin in the blood vessels in the brain. Oxy-Hb among respondents exposed to the therapeutic gardens are much lower, indicating less cognitive strain, meaning they are more relaxed in this setting. Meanwhile, respondents who were exposed to the busy urban areas, where "not even the sky was visible" and even in the residential green areas showed a significantly higher oxy-Hb indicating higher brain activity.

Additionally, the study also found that in the sub-samples of 26 individuals with clinical depression, there is an increased alpha power in the brain's right frontal cortex which is associated with positive emotions, as they were much more relaxed in the therapeutic garden than in any other environments.

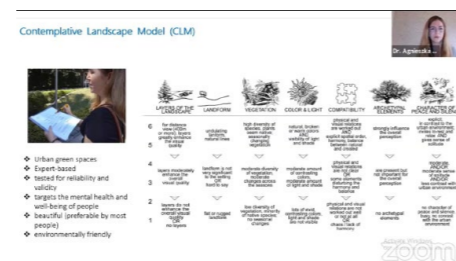
Incorporating nature into landscapes

Designing healthier and more pleasant landscapes in the cities, such as those found in Singapore can lead to wakeful relaxation and mindfulness. The CLM, a psychometric tool developed by NeuroLandscape scientists can be used "to measure and define the subjectivity in landscape aesthetics" such as landforms, vegetation, colour and light, character of peace and silence.

Results from the study of NeuroLandscapes show that the higher the CLM scores the higher the

alpha activity is, which translates to wakeful relaxation and theta activity, which means mindfulness.

Using the CLM scores, urban green landscapes can be designed using components that provide specific benefits. For instance, designing for healthy brain activities can focus on landscape layers and archetypal elements, while designing for public appreciation can emphasise peace and silence components.



"These recommendations put forward by the study incorporate landscape features in the green spaces to achieve specific mental health and well-being targets," said Olszewska-Guizzo. She also pointed out that more research is needed to "assess the long term exposure effects of different landscapes and to extrapolate the results on various populations."

Parks as Prescriptions

Green spaces and nature in the cities contribute not only to mental well-being, but with the physical as well. Research studies shared by Dr. Nicholas Alexander Petrunoff, Assistant Professor from the Saw Swee Hock School of Public Health, National University of Singapore suggests that green spaces such as parks help promote physical activity and "help keep people active, healthy, and well."

"Physical inactivity is also a global pandemic since it's a leading risk factor for morbidity and mortality globally," Petrunoff said. He called physical activity a "wonder drug"

because it reduces risks of over 20 chronic health conditions including diabetes, cardiovascular diseases, depression and many cancers.

One of the projects of the National University of Singapore, the Parks and Health Project, demonstrated that negative correlation of the time spent in the park with the lower the Body Mass Index and the risks of cardiovascular diseases.

Meanwhile, the Park Prescription Intervention project was designed in collaboration with healthcare providers and community partners to utilise parks, trails, and open space for improving individual and community health. The study showed that the participants felt motivated to exercise and described being empowered to continue physical activities and group exercises. Non-regular attendees of group exercises, however, preferred to have unstructured activities which they could do in their own time.

Petronuff emphasised that parks and green spaces are important for both human and planetary health. "We need to redesign back into our urban lives links with nature to avoid developing chronic diseases for much of the population," he said, noting that development plans of the governments should include improving access to parks and making cities more sustainable.

Nature as therapy

Angelia Sia, deputy director of Research at the Centre for Urban Greenery and Ecology, NParks shared the results of two studies on park prescription, effects of landscapes on brain activity, and therapeutic horticulture.

The first study showed that nature-related activities such as nature walks and gardening resulted in the improvement in the psychological status, biological markers, and immune cell composition of the senior participants.

In the second study, a 24-week programme for elderly with a range

of cognitive and physical status showed a significant reduction in anxiety and improvement in cognitive functioning and reported more positive emotions after each session.

According to Sia, these research findings have since been translated into actionable insights, lending further science-based evidence for policymakers to support greening initiatives in the city.

"To bring the benefits of therapeutic horticulture closer to more people, NParks is planning for a network of therapeutic gardens across Singapore," said Sia, adding that they have already implemented six of these therapeutic gardens. Guidelines to inform the design of therapeutic gardens have also been published to enable external agencies to implement restorative landscapes in their premises.

Meanwhile, Tham Xin Kai, Design Director of Hortian Consultancy and Co-founder of Hortherapeutics shared how dementia patients from a nursing home in Singapore benefited from a well-designed therapeutic garden. By using a multi-sensory approach such as planting fragrant plants and flowers, memories can be triggered by the smell while wind chimes can stimulate their hearing. Plants with different colours and textures are also abundant in the therapeutic garden so that patients can touch and appreciate them.



Urban horticulture and empowerment

The movement restrictions during the worse periods of the COVID-19 pandemic not only limited the peoples' interaction with nature. The temporary standstill of the local and national economy caused the loss of livelihoods and income.

Improving job competencies and increasing employability are among the benefits of urban horticulture, according to Tham Siang Yu, Therapeutic Horticulture Practitioner and Founder of By Wind and Wave. She highlighted the three types of therapeutic horticulture programme models: vocational (providing employment opportunities), therapeutic, and social (importance of community integration and promoting social interaction) that can benefit specific segments of society. For instance, the horticulture vocational programme among young adults with autism in Singapore, which Tham led, focused on improving the students' attention span and ability to follow a work schedule. Another example cited is the Rikers Island Prison Program in New York, where inmates who participated in the therapeutic horticulture programme can join a team that designs and tends the gardens in the city once they are released.

"Apart from learning gardening and horticultural skills, the participants learn valuable life skills such as responsibility and time management and these empower them to turn their lives around," Tham said.

Protecting cities from climate change

Well-planned and mindfully-developed urban areas where biodiversity thrives are essential, especially as the ASEAN region strives to recover from the public health crisis, and re-energise its trajectory. Not only will it help alleviate moods and other mental conditions, biodiversity in cities provide protection against the climate crisis as well.

"Despite the threat of a new COVID variant looming before us, the ASEAN region strides towards COVID-19 recovery and slowly eases back to normal," ACB Executive Director Theresa Mundita Lim said. "We feel relieved and rejuvenated to be given the opportunity to appreciate the open spaces around us that remind us of nature's ability to heal – providing not only physical, but also mental

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ACB joins first ASEAN-Seychelles high-level forum on ocean sustainability



With the commonalities among oceanic states and regions with islands—from the abundant resources from shore to sea to risks and threats, stronger cooperation is crucial.

At the first-ever high-level forum on ocean sustainability held on 10 December 2021 and organised by the ASEAN Secretariat and the Republic of Seychelles on the sidelines of the Expo 2020 Dubai, ASEAN Centre for Biodiversity (ACB) Executive Director Theresa Mundita Lim explained the many similarities that island ecosystems across the world share.

“With increasing climate risks and multiple challenges that we are facing today, moving towards stronger cooperation among island nations and regions with islands, which have a lot in common, is logical,” she said.

Nine ASEAN Member States have coastal areas, and all 10 have vital river systems and waterways that drain into the sea. The ASEAN peoples depend on these coastal and marine ecosystems for

food, livelihood, commerce, and transportation, among others.

Like Seychelles, one of the pioneers of blue economy, the ASEAN region exports products derived from marine sources.

ASEAN Secretary-General Dato Lim Jock Hoi opened the forum on 10 October 2021, which was attended by dignitaries and business officials.

“I would like to emphasise the importance of sustainability to ensure socio-economic development is compatible with the health of our oceans. As we all know, the overall economic potential of the oceans – including all ocean-based economic activities that use both inputs from, as well as outputs for, the oceans – is huge,” Jock Hoi said.

Dotted with more than 28,000 islands, collectively, the region’s coastal and marine habitats are home to 34 per cent of the world’s coral reefs, with over 600 species of hard corals and over 1,300 reef-associated fish species. The region also contains 51 of the world’s 70 mangrove species and 23 of the 50

seagrass species, the ACB said.

Former President of Seychelles James Michel, the executive chairman of the James Michel Foundation told the meeting the initiatives that Seychelles has undertaken in advancing blue economy.

“Seychelles has already achieved 30 per cent protection of its ocean space and has committed to do even more in the years to come. This is a major achievement. Through our collaboration, the Seychelles’ model can be shared and adapted to convert the marine protected areas in ASEAN to become sources of finance to help the development of fishing communities, local tourism and conservation supported by capacity building to empower coastal communities to care for their waterfronts as their lifetime assets,” Michel said.

Winners of ASEAN’s Sixth Zooming in on Biodiversity bared

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Meanwhile, in, the #WeAreASEANBiodiversity Tiktok Challenge, Pavina Vongsouvanh of Lao PDR won the Creativity Award. Maria Fe Felicilda of the Philippines had the most liked entry and bagged the People’s Choice Award.

Winners took home prizes between USD 300 and USD 1,500.

“We saw powerful messages, stunning landscapes, and superb wildlife captured in your photos. They show us the many creative perspectives highlighting the natural and cultural richness of ASEAN

Heritage Parks and interactions of humans with biodiversity,” Miritescu of EU said in a video message.

Moderated by Antoinette Taus, UN Environment Programme Goodwill Ambassador and one of the voices of the ACB’s #WeAreASEANBiodiversity campaign, the awards ceremony also featured one of the first environment champions hailed as ASEAN Biodiversity Heroes.

ASEAN Biodiversity Hero of Cambodia Sophea Chhin, one of the founders of Birds of Cambodia Education and Conservation, in

a conversation with Taus, talked about his passion for photography and wildlife conservation and his community’s appreciation for wildlife.

“Before, a lot of people (in my community) were using slingshots to shoot birds. Wildlife was bushmeat for them then. It changed when they started using a camera,” Sophea Chhin said.

Biodiversity in cities catalyses healing, wellness, and resilience ...continued from page 9

health benefits as well, contributing to the overall well-being of an individual, or even a community.”

On 29 October 2021, the international community celebrated World Cities Day highlighting the crucial role of nurturing biodiversity in urban areas as a mechanism to build climate resilience. With the theme Adapting Cities for Climate Resilience, the celebration underscores the important role of nature-based solutions to reduce climate-related risks for urban populations.

Coincidentally, the updated Handbook on Singapore Index on Cities’ Biodiversity, which provides practical guidance on how to enhance

greenery in densely populated areas, has recently been released. The Index is a self-assessment tool that cities around the world can use to ‘benchmark and monitor’ their efforts to conserve biodiversity in urban areas through various indicators.

Lim noted that apart from health benefits, healthy ecosystems provide protection and buffer against climate change manifestations such as super typhoons, flooding, storm surge, and help mitigate the long-term impacts of drought, sea-level rise, and saltwater intrusion.

In the cities, green spaces with abundant trees and other vegetation help regulate water and air quality,

keep the area cool, and provide shade in addition to being a source of food as well as relaxation to the urban populations.

“We look towards nature for healing and protection. Conserving and integrating biodiversity – from our homes to our cities, and to our region – can advance a safer, better and more resilient future,” Lim said.

Wendy Yap, Director of International Biodiversity Conservation from NParks said the virtual ASEAN workshop on Therapeutic Horticulture is the first of the two-part regional workshop, which aims to explore the health benefits of urban biodiversity and greenery. Singapore will be hosting the second part of the workshop next year. Yap further expressed her hopes that the programmes shared and discussed in the virtual workshop can be considered by other cities and countries.



ASEAN expert warns health risks from hunting bats, lauds PH team in wildlife operation



The head of the ASEAN Centre for Biodiversity (ACB) praised the efforts of the Philippine authorities in accosting suspected wildlife poachers and the seizure of wrinkle-lipped bats in a protected area in Bulacan.

ACB Executive Director Theresa Mundita Lim warned the public against poaching of bats, which scientists regard as high-risk viral reservoirs. “They are known key sources of diseases that can spread to humans and lead outbreaks, and even pandemics,” Lim said in a statement made on 22 October 2021.

According to a report of the Philippines’ Department of Environment and Natural Resources (DENR), more than 6,000 wrinkle-lipped bats (*Chaerephon plicatus*) reported to be worth over PHP 90,000 (DENR) were seized during an operation in Biak-na-Bato National Park (BNBNP).

The joint operation was carried out by the DENR-Community Environment and Natural Resources Office, the Philippine National Police,

and the National Anti-Illegal Logging Task Force in BNBNP.

Criminal charges in connection to violating Section 20 (a) of the Republic Act No. 7586 or the National Integrated Protected Area System (NIPAS) law as amended by Republic Act 11038 or the Expanded NIPAS law have been filed.

Violators are facing up to PHP 500,000 fine, exclusive of the damage value of the wildlife, and a maximum of six years of imprisonment.

“One of the many valuable lessons we can derive from the COVID-19 pandemic is the importance of keeping wildlife in their natural habitats to reduce the risks of outbreaks and pandemics,” Lim said.

“We commend the Philippine authorities and the communities of Biak-na-Bato National Park for working together in safeguarding wildlife in the protected area,” Lim said.

Lim, a former director of the Biodiversity Management Bureau

of the DENR, noted that the seized bats belong to insectivorous species, which can control the population of insect crop pests.

Wrinkle-lipped bats can live only in caves that are found in limestone karst environments. Preserving these unique habitats not only will ensure their survival but will tremendously benefit local communities, one of which is through additional revenues generated from tourism activities.

On the other hand, these bat insects may carry diseases that can be harmful to people, hence, poachers should think twice before exploiting these wild animals.

The government authorities immediately buried the dead bats to avert a possible spread of zoonotic diseases and released back into the wild some 100 alive bats.

The ASEAN region has rich and diverse wildlife species, including 346 bat species and over 2,000 migratory avian species, making it a likely hotspot for emerging zoonotic diseases, Lim said.

ASEAN calls to place biodiversity at the centre of decision-making processes



Photo by: CGTN

On 15 October 2021, the ASEAN Member States (AMS) took part in the sessions of the first part of the 15th meeting of the Conference of Parties (COP 15) to the Convention on Biological Diversity (CBD), joining the global call to scale up efforts in mainstreaming biodiversity in the decision-making processes across sectors.

“The ASEAN Member States have agreed to, among others, intensify regional efforts on protected areas, in particular, to improve the management effectiveness of ASEAN Heritage Parks, through research, technology transfer, innovation, capacity enhancement, and the adoption of sustainable financing strategies,” according to the ASEAN Joint Statement delivered by Brunei Darussalam in an intervention at the High-Level Segment of the COP 15 on 13 October 2021.

Brunei Darussalam is this year’s chair of ASEAN under the theme, *We Care, We Prepare, We Prosper*.

In the statement, the AMS call for the parties of the CBD and other governments to develop a post-2020 global biodiversity framework “that will conserve and restore priority ecosystems with strong

actions to curb species extinctions, improve management effectiveness of protected areas, promote sustainable use, and secure the fair and equitable benefit-sharing from the utilisation of genetic resources.”

“Transformative action, mainstreaming biodiversity across various development sectors, and the sustainable management of ecosystems, including through ecosystem-based approaches, nature-based solutions, as well as the participation and contributions of subnational governments, the private sector, IPLCs, women, and the youth, are but a few measures that the ASEAN Joint Statement identifies as our ways forward,” Brunei Darussalam said.

In a video message, ASEAN Centre for Biodiversity Executive Director Dr. Theresa Mundita Lim lauded the leadership of the People’s Republic of China in the COP 15 under the theme “Ecological Civilization-Building a Shared Future for All Life on Earth.”

“These are unprecedented times with manifold challenges. The scourge of the COVID-19 pandemic has exacerbated the precarious state of our people and our planet.

On top of this, the world continues to experience the grave impacts of biodiversity loss and climate change. Now is the time for our concerted actions,” Lim said.

She said with the growing traction of synergies among the multilateral environmental agreements and mainstreaming of biodiversity considerations into development sectors, the challenges “may be critical but certainly not insurmountable.”

The High-Level Segment of the COP 15 closed on 13 October with the adoption of the Kunming Declaration, where Parties to the Convention committed to develop, adopt, and implement an effective post-2020 global biodiversity framework that would put biodiversity on a path to recovery by 2030 at the latest, towards the full realisation of the 2050 Vision of “Living in Harmony with Nature.”

The landmark post-2020 global biodiversity framework is due to be adopted at part two of the UN Biodiversity Conference in May 2022, following further formal negotiations in January 2022.

An urgent call to halt species loss in the ASEAN region

Halting species loss in ASEAN

BASELINE INFORMATION ANALYSIS



The ASEAN region is of global biodiversity importance. It is exceptionally species-rich and contains extremely high proportions of country-endemic species found nowhere else. However, due to increasing threats, many species in the region could become extinct in the next few decades unless we act swiftly. Halting imminent species extinctions in the ASEAN is an urgent global priority.

Proportionately, most species groups are more threatened in Southeast Asia than in other similarly large regions. These species and their habitats are under severe pressure from overexploitation fuelled by the illegal wildlife trade and habitat loss driven by drastic changes in the ecosystems.

This 2022, the ASEAN Centre for Biodiversity (ACB) and the International Union for Conservation of Nature Species Survival Commission's Asian Species Action Partnership (IUCN SSC ASAP) released the report, *"Halting Species Extinctions in the ASEAN region"* which gives critical recommendations for the recovery of highly threatened species.

A roadmap for the recovery of threatened species

The collaborative report provides recommendations for highly threatened species conservation and recovery in the ASEAN region based on a comprehensive review of threats, area-based conservation measures, ongoing conservation efforts and the policy context. Key areas emphasised are:

Increasing targeted investment:

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

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).

Nerissa Chao, the dDirector of ASAP said, "Bold and urgent action is needed for biodiversity in the ASEAN region. This report draws attention to critically important regional conservation issues and represents a first step towards developing a joint ASEAN response to safeguard the region's unique biodiversity."

The report also calls for an ASEAN Species Declaration (akin to the ASEAN Heritage Parks Declaration) to galvanise urgent action to avert species extinctions and secure the region's extraordinary biodiversity.

"The ACB is confident that this baseline report will serve as a useful reference for the region, and will provide a solid basis for the development of an ASEAN action plan on the conservation of critically endangered species in line with the new targets," ACB Executive Director Dr. Theresa Mundita Lim said. "May this report serve as an impetus for immediate and informed transformative action for the conservation and sustainable use of biodiversity as we build a better normal."

Read the full report in the [ACB e-library](#). Find out more about the IUCN SSC Asian Species Action Partnership at www.speciesonthebrink.org.