



中国-东盟环境保护合作中心 China-ASEAN Environmental Cooperation Center

生态环境部对外合作与交流中心 Foreign Environmental Cooperation Center



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## Expert Views at Nature-based Solutions: ASEAN-China Mangrove Conservation Cooperation Partnership and Sustainable Development Practice (I)

On 26 October, Nature-based Solutions: ASEAN-China Mangrove Conservation Cooperation Partnership and Sustainable Development Practice, the sub-forum of ASEAN-China High-level Forum on Green and Sustainable Development & ASEAN-China Environmental Cooperation Forum 2021, was held in Nanning City, Guangxi Zhuang Autonomous Region in the form of online & offline conference. This event was guided by the Ministry of Ecology and Environment of the PRC, the People's Government of Guangxi Zhuang Autonomous Region, the Mission of the People's Republic of China to ASEAN, supported by the ASEAN Secretariat, the ASEAN Center for Biodiversity, and sponsored by the Department of International Cooperation of the Ministry of Ecology and Environment/China-ASEAN Environmental Cooperation Center, the Department of Ecology and Environment of Guangxi Zhuang Autonomous Region. Pei Xiangbin, Counselor of the Department of Marine Ecology and Environment, Ministry of Ecology and Environment of the PRC, San Oo, Deputy Director General/ASOEN Chair, Environmental Conservation Department, Ministry of Natural Resources and Environmental Conservation of Myanmar, Zhou Jun, Director of the Department of International Cooperation of the Ministry of Ecology and Environment, Li Min, Deputy Director General of the Department of Ecology and Environment of Guangxi Zhuang Autonomous Region, and Zhang Jing, Director of the Department of Ecology and Environment of Hainan Province attended and addressed the forum. The excerpts of the main expert views are as follows.

# PEI Xiangbin Counselor Department of Marine Ecology and Environment Ministry of Ecology and Environment The People's Republic of China



China attaches great importance to marine environmental protection, steadily promotes the conservation and construction of beautiful bays, continuously improves the land-sea coordinated management system of marine ecology, actively participates in global and regional marine ecological environment management, as well as promotes the construction of a "Maritime Community with a Shared Future". Through conducting regional mangrove conservation on Nature-based Solutions, more practical cooperation will be promoted in such areas as coordinated response to climate change, protection of marine biodiversity, and improvement of the livelihoods of coastal communities.



San Oo
Deputy Director General / ASOEN Chair
Environmental Conservation Department
Ministry of Natural Resources and
Environmental Conservation of Myanmar

Myanmar is promoting the country's green development by formulating a green development strategy framework, increasing green investment and financing, developing green and low-carbon technologies, conserving and restoring ecosystems, as well as carrying out capacity building. As the key content of Myanmar's ecological restoration, the conservation and restoration of mangrove ecosystems urgently requires the participation of multiple stakeholders.

# ZHOU Jun Director Department of International Cooperation Ministry of Ecology and Environment The People's Republic of China



China and ASEAN countries have reaped rich fruits through 15 years of environmental cooperation. The start of the ASEAN-China Year of Sustainable Development Cooperation fully demonstrates the importance that two sides attach to the field of sustainable cooperation. The successful convening of the first part of the UN Biodiversity Conference (COP 15) has boosted the global determination to protect biodiversity and injected new impetus into global environmental governance. Nature-based Solutions are highly compatible with the concept of China's ecological civilization, giving full play to its role in promoting the conservation and restoration of ecosystems and addressing climate change.



LI Min
Deputy Director General
Department of Ecology and Environment of Guangxi
Zhuang Autonomous Region

As the gateway and frontier of ASEAN-China cooperation, Guangxi has a good foundation of cooperation with ASEAN countries for many years. It has gradually established stable cooperation channels and established a mature cooperation model in environmental protection. It's hoped that this exchange can further build consensus and expand cooperation to promote the establishment of ASEAN-China mangrove conservation cooperation partnership.

ZHANG Jing
Director
Department of Ecology and Environment of
Hainan Province



Based on the concept of high-quality development and high-standard construction of a free trade port with Chinese characteristics and a National Ecological Civilization Pilot Zone, Hainan Province will make full use of its policies and geographical advantages as a new highland of domestic reform and opening up to actively participate in the establishment of mangrove conservation cooperation partnership, and to promote relevant practices in sustainable development.



### SUN Lili President of the Society of Entrepreneurs & Ecology

Mangrove conservation and restoration plays a vital role in coordinatively addressing such global hotspot issues as climate change and biodiversity loss. Enterprises can participate in mangrove conservation and restoration in the following ways: first, consciously implement strategies of corporate social responsibility (CSR) and environmental, social, and governance (ESG), assess and manage natural and climate risks, restore and conserve mangroves; second, cooperate with international non-governmental organizations to raise charity funds for mangrove conservation; third, promote the construction of mangrove-friendly cities through multiparty cooperation.

# WANG Yujuan Senior Specialist China-ASEAN Environmental Cooperation Center / Foreign Environmental Cooperation Center Ministry of Ecology and Environment The People's Republic of China



China and ASEAN countries have carried out a lot of work on regional mangrove conservation through policy dialogue, joint research, and capacity building, which has attracted the participation of many stakeholders. It's hoped that China and ASEAN countries will continue to strengthen cooperation, actively participate in the establishment of mangrove conservation cooperation partnership, promote cooperation dialogue and exchanges in related fields, and actively implement the relevant contents of mangrove conservation in the Framework of ASEAN-China Environmental Cooperation Strategy and Action Plan 2021-2025, to jointly enhance regional mangrove conservation and sustainable utilization, strengthen knowledge dissemination of regional mangrove conservation cooperation, and actively explore the application of Nature-based Solutions in sustainable production and consumption and other fields.



### ZHU Chunquan Head of Nature Initiatives & TFA, China WEF Beijing Representative Office

As the three major socio-economic systems, the utilization of food, land and ocean , infrastructure and construction environment, energy and mining affect 80% of the world's endangered species. The successful transformation of the three major socio-economic systems are likely to greatly reduce their impact on biodiversity. In terms of the utilization of food, land and ocean, we should avoid land use and ocean space conversion through ecological restoration, develop high-yield and renewable agriculture, maintain a healthy and productive ocean, implement sustainable forest management, reduce the consumption and waste of biological resources as well as create a transparent and sustainable supply chain. In terms of infrastructure and construction environment, we should form a compact construction environment and transportation infrastructure that benefit the nature. In terms of energy and mineral mining, we should use various resources in a recyclable and economical way, carry out ecological restoration after exploration and mining, reduce land encroachment and ecosystem damage during mining, as well as form a transparent and traceable supply chain of raw materials.



#### LIAO Xiawei Water Resource Specialist of World Bank

From small-scale green roofs, rain gardens to relatively large-scale constructed wetlands, Nature-based Solutions are adopted to better utilize urban water resources. While evaluating integrated urban management of rains and floods based on Nature-based Solutions, we should take cultural and ecological values other than economic value into comprehensive consideration. Public resources utilization should be gradually shifting from post-disaster response to more efficient pre-disaster defense, and provide multiple synergistic benefits. We can use resources from community and private sector to supplement public investment through different forms of mixed financing. For example, we can attract the private sector investment through different financing tools such as bonds, funds, insurance and trading markets.



## Clarissa Arida Program Development and Implementation Director ASEAN Center for Biodiversity

Biodiversity plays an important role in resisting natural disasters and enhancing climate adaptability and resilience. As providing more green space for cities is a way to improve human well-being with Nature-based Solutions, the ASEAN Center for Biodiversity and the ASEAN Secretariat jointly launched the ASEAN Green Initiative (AGI) to plant 10 million trees within 10 years. It is hoped that this initiative can increase the awareness of biodiversity as well as ecosystem services and values, contribute to the health and well-being of regional residents, promote investment in biodiversity, and improve the management of mangrove wetland. The goal of biodiversity in the ASEAN-China region cannot be achieved without participation of all stakeholders.

#### Satya Faturakhmat Fisheries & Aquaculture Coordinator Conservation International Indonesia



The establishment of climate-friendly shrimp ponds through the combination of green and gray infrastructure allows the coexistence of mangroves and shrimp ponds on the premise of no or little damage to mangroves, which can not only ensure the quality and yield of aquaculture, but also give multiple play to the role of mangrove ecosystem in resisting natural disasters, reducing coastal erosion, preserving biodiversity, and purifying water. In such ways as signing purchase contracts with farmers, it will enhance the farmers' enthusiasm for establishing climate-friendly shrimp ponds and accelerate the promotion of climate-friendly shrimp ponds in the region.



#### XU Wansu Project Director Shenzhen Mangrove Wetlands Conservation Foundation

Different from the protection of some remote ecosystems, mangroves conservation requires not only the government's marco overall planning, but also considers the local communities and residents living in surrounding areas that have direct demands for the ecological functions of mangroves. Affected by climate change and biodiversity loss, many private sectors that rely heavily on mangroves and the services they create face high risk costs. As mangroves grow in a very complex land-sea interlaced zone, and there are many complicated problems in conservation and restoration, effective conservation and restoration must be based on science. Through joint actions, we can connect the government, scientific research institutions, the private sector, the public and other stakeholders on a regional scale to promote a science-based model of mangrove conservation and restoration that also takes into account conservation and development, so that more people can benefit from it.

## WU Qiong Programme Manager World Wide Fund for Nature Beijing Office



Under the circumstance of a certain global protected zone target, the delineation of priority protection areas at the regional, biome and national scale can be comprehensively considered to improve conservation efficiency and use limited protected areas to protect more biodiversity. The requirements for delimiting priority protection areas according to the importance of regions and biomes do vary from country to country. Some countries may have a much larger area to be conserved than other countries, so that new regional cooperation and funding mechanisms need to be explored to promote the delineation of priority protection areas at a regional scale. By delineating priority protection areas with synergy between biodiversity and carbon sinks, we can lower protection costs, gain multiple benefits and achieve a win-win outcome between biodiversity conservation and climate change response by fully utilizing limited funds and resources.



HUANG Zhen Program Director The Asia Foundation

Protecting biodiversity and addressing climate change require the participation of multiple stakeholders. Biodiversity protection is closely related to climate change mitigation and adaptation. Mangrove conservation is a typical case of Nature-based Solution to address climate change and protect biodiversity.



## MENG Guangzhi Counselor the Department of Ecology and Environment of Yunnan Province

Yunnan Province is located in a global biodiversity hotspot, and its diversified landforms and climatic characteristics have created its rich biodiversity. Yunnan's ecosystem has several characteristics such as high abundance, large number of endemic species, and fragile ecosystems. Yunnan Province has adopted measures such as industrial restructuring and green energy development to reduce greenhouse gas emissions, and by 2020, carbon dioxide emissions per unit of regional GDP have dropped by 25%. Yunnan Province and relevant international organizations are actively carrying out researches on carbon capture, utilization and storage, as well as cooperation projects such as pilot projects of village adaptation to climate change, and exploring regional biodiversity protection and climate change solutions.

### JIANG Boya Climate and Nature Lawyer ClientEarth Beijing Representative Office



The Opinions on Further Strengthening Biodiversity Conservation issued by the general office of the CPC Central Committee and the general office of the State Council clearly stated that the social participation mechanism should be improved, and information disclosure and public participation in biodiversity protection should be strengthened. From the perspective of international practices, social participation, information disclosure, and judicial means are also major trends in global biodiversity protection. It's hoped that there will be more ecosystem protection practices represented by mangrove forests based on social participation, information disclosure, and judicial means in the future.



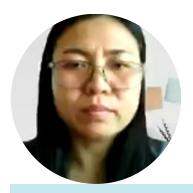
### ZHANG Kai GREENPEACE Deputy Program Director

Nature-based Solutions play a coordinative role in balancing the process of addressing climate change and protecting biodiversity, so it is necessary to find the tipping point through scientific research. Meanwhile, efforts are needed to encourage active public participation and protect the interests of the public in this process.

Sonjai Havanond
Mangrove Conservation Expert
Department of Marine and Coastal Resources
Ministry of Natural Resources and Environment
Thailand



Mangroves are very important to the ecosystem protection and livelihoods of coastal residents in the Asia-Pacific region. The Thai government has mobilized local communities to carry out mangrove conservation projects. In the future, it is hoped that Thailand and other ASEAN countries will strengthen cooperation in mangrove conservation with China and vigorously develop community-based mangrove ecosystem management projects such as mangroves planting and eco-tourism.



## Hak Danet Researcher the Institute of Technology of Cambodia

Community-based mangrove conservation can generate extra income for local communities to support their livelihoods. Cambodia has learned from its mangrove management practices: first, to enhance the protection consensus among communities; second, to adhere to the principle of fair benefit distribution; third, to strengthen cooperation between government departments at all levels; four, to actively develop mangrove conservation partnerships, broaden sources of fund to ensure stable capital inflows.

LV Shuguo Researcher Hainan Research Institute of Environmental Science



The mangrove forest in Hainan Province has the characteristics of high quality and rich biodiversity. However, mangrove conservation is currently facing human activities such as reclamation and pollution and it is necessary to strengthen the return of ponds to forests as well as conservation and restoration based on the principle of natural restoration as the main method and human intervention as a supplement. As part of the plan for national ecological civilization reform, Hainan has carried out blue carbon pilot demonstration research and overall design work to give full play to the synergy between mangrove ecosystem carbon sinks and biodiversity protection. We also attach importance to the role of mangrove ecosystems in mitigating and adapting to climate change so as to enhance the climatic resilience of Hainan Island.



## LAN Wenlu Deputy Head Marine Environmental Monitoring Center Guangxi Zhuang Autonomous Region The People's Republic of China

The mangrove ecosystem can not only prevent and reduce disasters, but also play an important role in protecting biodiversity and increasing carbon sinks. The current mangrove ecosystem is facing old and new threats, especially the potential harm of microplastics pollution to mangroves. China and ASEAN have carried out investigations and studies on microplastics pollution in mangroves. In the future, we should further strengthen the monitoring and research on the impact of (micro)plastic waste on mangroves, jointly develop technical standard and evaluation guidelines of monitoring microplastics pollution in mangroves, actively promote the sharing of research results from various countries, and provide data support for prevention and control of (micro)plastics pollution.

### Patrick Yeung Marine Program Senior Specialist World Wide Fund for Nature Beijing Office



Marine plastic waste has a negative impact on different types of ecological environment and biodiversity, and at the same time affects human livelihoods due to insufficient management capabilities. Mangroves are more severely affected by ocean plastics due to their geographical growth location and own characteristics. At present, due to the lack of understanding of marine (micro)plastics pollution in Southeast Asian countries, a unified monitoring system has not been formed and professional technical support is absent. China and ASEAN countries should work hard to form a regional consensus and conduct cooperation to form a unified monitoring method and digital evaluation model to guide and innovate actions on global ocean plastics management in the future.



#### ZENG Nan Nature-based Solutions Scientist The Nature Conservancy

Nature-based Solutions (NbS) have two "new" meanings: one is to combine protection, restoration and sustainable management, and the other is to use NbS to address a variety of social challenges. NbS provides an opportunity to promote the synergy between biodiversity conservation and climate change management. At the same time, we must also pay attention to the net benefits of NbS in ensuring biodiversity and ecosystem integrity, weigh up the priorities among multiple goals, and promote criteria of adaptive management. As an important path to realize the value of ecological products, NbS requires the joint participation of multiple stakeholders, including the government, NGOs, and businesses, and also requires diversified investment and financing mechanisms as supports.

#### XIE Hua Vice President of Research Academy of Environmental Science of Guangxi Zhuang Autonomous Region



Mangrove ecosystem conservation is the most typical case of Nature-based Solutions and plays an important role in mitigating climate change. The mangrove ecosystem is currently facing severe challenges of functional degradation. Both China and ASEAN countries have carried out a large number of nature-based actions to address climate change and these practices can be used as Nature-based Solutions to share with more developing countries through South-South Cooperation, so as to maximize the power of nature in addressing climate change.



#### MA Dingping Secretary General Chongqing Renewable Energy Society

The key to mangrove conservation is to coordinate the relationship between its development and conservation. Industrial production is the main source of pollution. As a local organization, the Chongqing Renewable Energy Society promotes green manufacturing to reduce pollutant emissions from the perspective of business and public practices. It is hoped that renewable energy can play a role in promoting the green and sustainable development of developing countries, improving energy structure and reducing carbon emissions.

## ZHANG Jing Marine Program Manager Beijing Entrepreneur Environmental Protection Foundation (SEE)



There are many threats in front of mangrove ecosystems. The conservation of mangrove ecosystems is a complex and systemic issue that needs to be carried out jointly by various stakeholders under scientific guidance and requires continuous investment. Alxa SEE Foundation will use the characteristics and resources of its own social platform to mobilize enterprises, the public and market-oriented resources to complement the government and other social resources, and actively carry out the conservation and restoration of the mangrove ecosystem. We hope to jointly support the ASEAN-China Regional Mangrove Conservation Partnership with related institutions.

#### **Contact Us**

China-ASEAN Environmental Cooperation Center Foreign Environmental Cooperation Center Ministry of Ecology and Environment, PRC 5 Houyingfang Hutong, Xicheng District, Beijing

Postal Code:100035
Tel: +86-010-82268810
Fax: +86-010-82200579
E-mail: caec@fecomee.org.cn

Website: http://www.chinaaseanenv.org WeChat: China-ASEAN Environmental Cooperation Center





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