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REGIONAL FORUM ON BUILDING RESILIENT ASIAN DELTAS

16-18 October, Holiday Inn Silom, Bangkok, Thailand

Venue: No. 981 Silom Road, Bang Rak, Bangkok 10500

CONTEXT

Home to over 400 million people and a wealth of biodiversity, Asia's great deltas are critical to the economies, food security, poverty alleviation, gender equality and sustainable development of the continent, as well as to global industrial and financial systems. However, they are all sinking and shrinking due to human activities such as hydropower development, unsustainable sand mining, groundwater extraction, river channelization, land use change led mangrove and wetland removal, among others. As a result, we are seeing the loss of land and infrastructure to erosion, lower water tables, increased exposure to natural disasters (typhoon, floods, droughts), disappearance of habitats for local species, and a growing threat to people and nature. The impact of climate change through sea-level rise and more extreme weather patterns further exacerbate the problem, leading to increased saltwater intrusion that damages the rice and fish bowls of Asia.

Disappearing deltas will lead to loss of unique biodiversity and migration of people and capital, disrupting regional and international economies and security. Countries like Bangladesh, Vietnam and Myanmar, home to Brahmaputra, Mekong and Irrawaddy River deltas respectively, have already put delta resilience as a top government priority. In 2018, Bangladesh produced a 2100 Vision for the Brahmaputra Delta, setting a long-term vision to achieve a safe, climate-resilient and prosperous delta. In 2017, the Prime Minister of Vietnam launched its Strategy (i.e "Resolution") on a Sustainable and Climate-Resilient Development of the Mekong Delta. The Prime Minister called upon all government ministries and development partners to work towards its 2050 goals to ensure the Mekong Delta can be sustained and become a high performing economic region. The World Bank funded "Ayeyarwady Integrated River Basin Management" study, with results launched in 2017, also set the foundation for Myanmar's delta resilience planning and strategy formulation. At the sector level, work has been undertaken by various research bodies examining the links between sand mining, hydropower, groundwater extraction and other sector threats to loss of natural sediment flow and river bank erosion.

Engineered solutions to fix delta issues that seek to constrain natural processes, rather than building with them, are proving too costly and unsustainable, as seen in the case of Mississippi Delta. Innovative, integrated and ambitious ideas are urgently required - ideas that are based on a proper understanding of the dynamic equilibrium of rivers and deltas, centered on working with ecosystems, and support the Asia context and communities.

EVENT OBJECTIVES

WWF with financial support from Stockholm Environment Institute's Strategic Collaboration Fund and in partnership with Raoul Wallenberg Institute is organizing a regional event targeting key public sector decision makers, research and CSO representatives, national and international financiers (public and private), as well as interested development partners from seven Asian deltas¹. The event is designed to build consensus on the need to protect Asian deltas across countries, and will be geared towards discussing innovative approaches and financing strategies to mobilize delta-resilient implementation at policy, programme and project levels. The importance of gender equality and rights-based approaches while building delta resilience is an essential component of the event. In particular, the event will discuss inclusion of the roles and rights of women and vulnerable groups

¹ Bangladesh and India: Ganges-Meghna-Brahmaputra (GMB) delta; China: Yangtze and Pearl deltas; Myanmar: Irrawaddy delta; Pakistan: Indus delta; Thailand: Chao Phraya delta; Vietnam: Mekong delta.

and better understanding of the people and livelihoods who are impacted by delta risks. Last but not least, the event provides an opportunity for countries in the Asia region to share their challenges, learn from each other's experiences, build on existing initiatives and forge partnerships so they can collectively tackle delta threats and improve resilience together.

FORUM OBJECTIVES

- build a common understanding of the major threats to delta stability, particularly the disruption of flow to the delta system, due to unsustainable economic activities.
- present the rationale of improving delta resilience for adapting to changing climate and meeting SDGs and other socio-economic development commitments.
- examine the importance of a well-designed rights-based approaches and gender considerations in delta resilience building.
- build awareness and identify a set of common policy, technical and financial challenges to all deltas and best practice responses.
- forge a partnership to advance on the Resilient Asian Deltas (RAD) Initiative with countries and experts.

AGENDA DAY 1 - 16 OCTOBER 2019

08:00-09:00 **REGISTRATION**

09:00-09:30 **OPENING REMARKS**

- Mr. Sompong Veangkaew, on behalf of the Governor of Bangkok Metropolitan Authority (BMA), Thailand
- Ms. Tiziana Bonapace, Director of Information and Communication Technology and Disaster Risk Reduction Division, UN Economic Commission for Asia and the Pacific (UNESCAP)
- Ms. Kavita Prakash-Mani, Global Conservation Director, WWF
- Dr. Chayanis Krittasudthacheewa, Deputy Director, Stockholm Environment Institute (SEI) Asia

09:30-09:55 **GROUP PHOTO**

A compilation of video messages from stakeholders all over the world on their concerns, expectations and recommendations on saving the Asian deltas.

All participants online survey round 1

09:55-10:45 **SESSION 1** – A glance at the failing Asian deltas and their socioeconomic and environmental impacts

This session will provide a regional snapshot of the importance of Asian river deltas, the risks they are facing and the consequences of sinking and shrinking deltas on the economy, society and nature, and countries ability to achieve their SDGs

PRESENTATIONS:

- Presentation 1 - The value of river deltas and overview of the risks of delta sinking and shrinking in the region, Mr. Stuart Orr, Lead, Freshwater Practice, WWF
 - Presentation 2 - The human rights dimension and development consequences of the failure to address delta issues, Dr. Sam Geall, Chinadialogue and Chatham House
 - Presentation 3 - River deltas in the context of regional transboundary river basin management, Dr. Piriya Urai Wong, Mekong River Commission Secretariat
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DAY 1 - 16 OCTOBER 2019

10:45-11:00 **COFFEE BREAK**

11:00-12:30 **SESSION 2** – What are the root causes of delta sinking and shrinking and challenges in tackling these threats?

This session will focus on five Asian mega deltas. Each presenter will zoom into their specific root causes leading to today's delta sinking and shrinking situation, the challenges and barriers they face in tackling these threats, and the consequences which are already being felt in the delta landscapes.

Moderator: Dr. Carl Middleton, Faculty of Political Science, Chulalongkorn University

PRESENTATION

- Presentation 1 – The causes, status and impacts of sinking Bangkok - the heart of the Chao Phraya Delta, Dr. Seri Suptharathit, Center on Climate Change and Disaster, Rangsit University, Thailand
- Presentation 2 – The impacts of urbanization on Pearl River Delta, Prof. Yangbo Chen, Laboratory Director, Sun Yat-Sen University, China
- Presentation 3 – The causes, status and vulnerability of the Irrawaddy Delta, Mr. Sein Htoon Linn, Deputy Director General, Environmental Conservation Department, Ministry of Natural Resources and Environmental Conservation (MONREC), Myanmar
- Presentation 4 – The root causes of sinking and shrinking in the Indian Sundarbans Delta, Dr. Anamitra Anurag Danda, Advisor to WWF India
- Presentation 5 – The causes of crisis in the Indus Delta and impacts on national and regional development, Mr. Riaz Ahmed Wagan, Chief Conservator of Forests, Government of Sindh, Pakistan

Followed by a 15 minutes moderated panel discussion with presenters and Q&A from the floor.

12:30-13:30 **LUNCH BREAK**

13:30-15:30 **SESSION 3** - What actions have been undertaken in response to addressing these delta risks?

This session will present some of the existing efforts ranging from national policy to site specific transformation as ways to provide solutions to improve the resilience of deltas. Each panelist, representing a specific stakeholder type, will share their reflections on the outcome and lessons learned from undertaking these interventions.

Moderator: Dr. Sejal Worah, Programme Director, WWF India

A 10-minutes TED talk by Ms. Kotchakorn Voraakhom, CEO, Porous City Network, Thailand on an inspiring project to improve Bangkok resilience.

PANELISTS

- Representing the delta government setting political commitments to combat delta threats, Mrs. Le Thi Huong, Head of Programme Management, Vietnam National Mekong Committee, Ministry of Natural Resources and Environment, Vietnam
 - Representing the private sector using nature-based solutions to combat delta threats, Ms. Kotchakorn Voraakhom, CEO, Porous City Network, Thailand
 - Representing a local community in the delta and their actions to safeguard their own livelihoods, Ms. Huan Zheng, Programme Manager, Guangdong Harmony Community Foundation, China
 - Representing how financial entities have used different financing options to mitigate the impacts of delta sinking and support communities to adapt to climate change, Ms. Chibesa Pensulo, Water Specialist, Green Climate Fund (GCF)
 - Representing the development community on how development co-operation support has been used to build delta resilience, Mr. Laurent Umans, First Secretary, Embassy of the Netherlands in Vietnam
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DAY 1 - 16 OCTOBER 2019

- Representing the academic community on how they have advanced analytical thinking on interventions to address delta threats, Mr. Fany Wedahuditama, Regional Coordinator, Learning Delta in Asia Initiative, Global Water Partnership

Q&A session

15:30-16:00 **COFFEE BREAK**

16:00-17:30 **SESSION 4** – A future looking exercise

Facilitator: Mr. Ittinat Seeboonruang

While highlighting achievements, this participatory session will capture our diverse views on urgency (threat may be larger and happening faster than we think), limitations and gaps to be addressed in order to improve delta resilience. Participants will be distributed into 6 delta groups, each group with a discussion leader to identify existing political, technological and financial gaps and challenges on delta management.

Report back and Q&A

17:30-17:45 **DAY 1 WRAP UP** by event facilitator Mr. Ittinat Seeboonruang

18:00-19:30 **COCKTAIL RECEPTION**

DAY 2 - 17 OCTOBER 2019

08:30-09:00 **REGISTRATION**

09:00-09:15 **DAY 1 RECAP AND DAY 2 OVERVIEW** by event facilitator

All participants online survey round 2

09:15-10:45 **SESSION 5** - Closing the governance gaps on delta management

This session will showcase different levels of governance structures that oversee delta resilience building, with a specific focus on how these different levels of governance can be aligned and better integrated to create the critical mass for more coordinated river basin and delta decision making.

Moderator: Ms. Malin Oud, Head of Office Stockholm / Beijing, Raoul Wallenberg Institute

PRESENTATIONS:

- Presentation 1 - The role of national and provincial government in leading Indus delta management, Mr. Mahmood Nawaz Shah, Member, Hisaar Foundation, Pakistan
- Presentation 2 - Options for better governance to address the threats to the Irrawaddy delta, Mr. Win Myo Thu, Executive Director, ALARM, Myanmar
- Presentation 3 - Integrating communities in delta planning and management in Bangladesh, Mr. Sheikh Rokonzaman, Secretary General, Riverine People

FACILITATED PANEL DISCUSSION:

- Ms. Dharisha Mirando, Water Risk Evaluation Lead, China Water Risk
- Mr. Mahmood Nawaz Shah, Member, Hisaar Foundation, Pakistan
- Mr. Win Myo Thu, Executive Director, ALARM, Myanmar
- Mr. Sheikh Rokonzaman, Secretary General, Riverine People

10:45-11:00 **COFFEE BREAK**

11:00-12:30 **SESSION 6** - The role of nature-based solutions in improving delta resilience

Nature-based solutions can harness nature's capacity to reduce emissions, enhance resilience, and offer a crucial response to climate change and sustainable development at the scale and pace that is needed. This session will be focused on discussing the role, application, results and lessons learned from using nature-based solutions to build delta resilience in different geographies.

Moderator: Dr. Mohsin Hafeez, Country Representative, International Water Management Institute (IWMI) Pakistan

FACILITATED PANEL DISCUSSION:

- Mr. Amrit Cado van der Lelij, Deltares
- Ms. Nguyen Thu Hue, Director, Centre for Marine Life Conservation and Community Development (MCD), Vietnam
- Dr. Andrew Wyatt, Deputy-Head Indo-Burma Group, IUCN
- Mr. Michael Spolum, Regional Director for Business Development, Natel Energy

Q&A session

12:30-13:30 **LUNCH BREAK**

DAY 2 - 17 OCTOBER 2019

13:30-15:00 SESSION 7 - Improving the sustainability and resilience of delta infrastructure
Ports, roads, power, sanitation, sewer, and communications systems are all examples of infrastructure assets at risk in these delta regions. Climate-proofing existing infrastructure and building new infrastructure that is more climate resilient makes sound economic sense—on average, the benefits outweigh costs by 4:1 according to the recent report by the Global Commission on Adaptation. This session will zoom into interventions looking at how existing and future delta infrastructure can be climate-proofed and built more sustainably.

Moderator: Mr. Ittinat Seeboonruang

PRESENTATIONS:

- Presentation 1 - Showcasing lessons learned from the demonstration project Water as Leverage, Mr. Dennis van Peppen, Deputy Special Envoy for International Water Affairs of the Government of the Netherlands
- Presentation 2 - Using decentralized multi-functionality models to promote urban resilient infrastructure, Mr. Jan David Mueller-Vollmer, Managing Director of EnviroNet / Independent Advisor to World Bank
- Presentation 3 - Setting criteria and using tools to assess the sustainability of infrastructure, Ms. Joanne Lee, Specialist, WWF Finance Practice

Q&A session

15:00-15:30 COFFEE BREAK

15:30-17:30 SESSION 8 - Mobilizing resources to invest in delta resilience building
This session will begin with an overview of the different types of financial resources delta countries could tap into for financing resilience investment programmes. The role of the insurance industry will also be presented with concrete examples. The panel members will share their feedback and reflections on how financing can be leveraged to ensure sustainable infrastructure and nature-based solutions can be sufficiently invested in.

Moderator: Mr. Sam Hilton, WWF HK

PRESENTATIONS:

- Presentation 1 - Overview of the variety of financing options and case examples to leverage resources for delta resilient programmes, Mr. Marcel Dupuis, Senior Advisor on Green Finance, WWF Netherlands
- Presentation 2 - The role of the insurance industry to provide solutions for building delta resilience, Mr. Peter Jackson, Senior Director, Lockton Wattana Insurance Brokers (Thailand) Ltd

FACILITATED PANEL DISCUSSION:

- Ms. Chibesa Pensulo, Water Specialist, Green Climate Fund (GCF)
- Mr. Jan David Mueller-Vollmer, Managing Director, EnviroNet / Independent Advisor to World Bank
- Mr. Marcel Dupuis, Senior Advisor on Green Finance, WWF Netherlands
- Mr. Peter Jackson, Senior Director, Lockton Wattana Insurance Brokers (Thailand) Ltd
- Representative from the Securities and Exchange Commission (SEC), Thailand (tbc)

Q&A session

19:00-21:00 EVENING EVENT at Foreign Correspondents' Club of Thailand
The Delta Dilemma: How Do We Stop Asia's Great River Deltas From Sinking and Shrinking?
Venue: Penthouse, Maneeya Center, 518/5 Ploenchit Road (connected to the BTS Skytrain Chitlom station)

DAY 3 – 18 OCTOBER 2019

08:30-09:00 **REGISTRATION**

09:00-09:20 **DAY 1&2 RECAP AND DAY 3 OVERVIEW** by event facilitator

All participants online survey round 3

9:20-11:00 **SESSION 9** - The need for transformative partnerships to achieve a more resilient future for Asian deltas

The final session will review key messages from the previous two days of discussion, with a focus on how different stakeholders within each delta landscape can come together at the pace and scale required to save the Asian deltas from sinking and shrinking and adapt to projected climate change.

Moderator: Mr. Stuart Orr, Lead, Freshwater Practice, WWF International

FACILITATED PANEL DISCUSSION:

- Mr. Mozaharul Alam, Regional Climate Change Coordinator, UNEP Regional Office for Asia and the Pacific
- Dr. Srikanya Yathip, Deputy Secretary General, Government Pension Fund, Thailand
- Ms. Nguyen Than Thuy Linh, Public Relations Officer, Lens on Mekong
- Dr. Le Anh Tuan, Deputy Director, Institute of Climate Change Studies, Can Tho University, Vietnam
- Ms. Dharisha Mirando, Water Risk Evaluation Lead, China Water Risk
- Md. Abdul Gani, Special Secretary, Department of Sundarbans Affairs, Government of West Bengal, India
- Mr. Isao Endo, Environmental Specialist, Asian Development Bank
- Dr. Thanapon Piman, Senior Research Fellow/Water Cluster Lead, SEI

Q&A session

11:00-11:30 **COFFEE BREAK**

11:30-11:45 **EVENT EVALUATION**

11:45-12:15 **CLOSING SESSION**

- Mr. Sompong Veangkaew, on behalf of the Governor of Bangkok Metropolitan Authority (BMA), Thailand
- Dr. Alistair Monument, Conservation Director, WWF Asia and the Pacific
- Dr. Chayanis Kittasudthacheewa, Deputy Director, SEI Asia

12:15-13:30 **LUNCH BREAK**

ABOUT THE ORGANIZER

For nearly 60 years, the **World Wildlife Fund (WWF)** has been protecting the future of nature. The world's leading conservation organization, WWF works in 100 countries and is supported by more than one million members in the United States and close to five million globally. WWF's unique way of working combines global reach with a foundation in science, involves action at every level from local to global, and ensures the delivery of innovative solutions that meet the needs of both people and nature.

ABOUT THE SUPPORTERS

Stockholm Environment Institute (SEI) is an international non-profit research and policy organization that tackles environment and development challenges. We connect science and decision-making to develop solutions for a sustainable future for all. Our approach is highly collaborative: stakeholder involvement is at the heart of our efforts to build capacity, strengthen institutions, and equip partners for the long term. Our work spans climate, water, air, and land-use issues, and integrates evidence and perspectives on governance, the economy, gender and human health. Across our eight centres in Europe, Asia, Africa and the Americas, we engage with policy processes, development action and business practice throughout the world.

The Raoul Wallenberg Institute (RWI) of Human Rights and Humanitarian Law is named after Raoul Wallenberg, a Swedish diplomat who saved tens of thousands of Jews and other people at risk in Hungary at the end of World War II. We combine evidence-based human rights research with direct engagement in close collaboration with our partners to bring about human rights change for all. We are a research and academic institution with offices, programmes, and convening power covering 40 countries.

and nature.