



THE
PENINSULA
FOUNDATION



Indo-Pacific Confluence
Dialogue 2023



駐印度台北經濟文化中心
Taipei Economic and Cultural Center in India

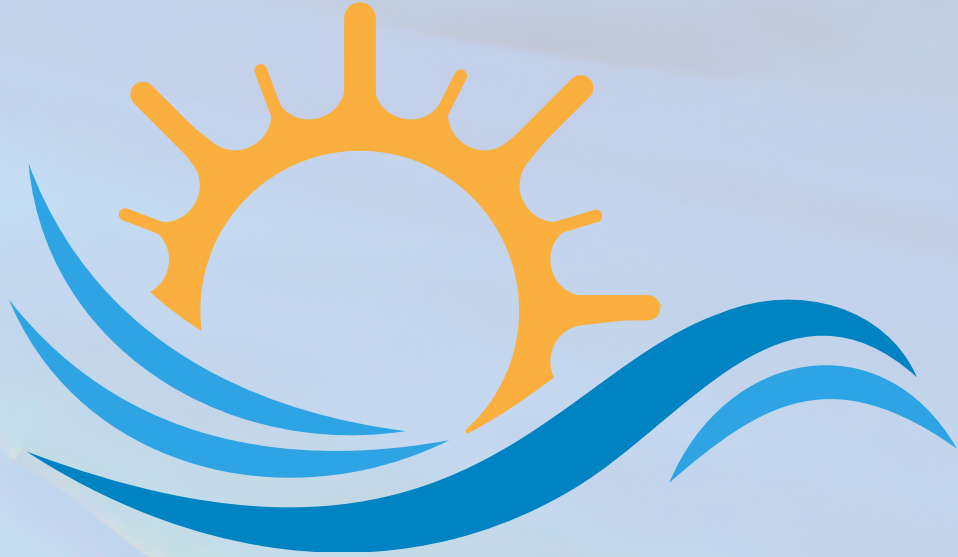
INAUGURAL EDITION OF THE INDO-PACIFIC CONFLUENCE DIALOGUE

India, Island States and the Indo-Pacific

TOWARDS A SUSTAINABLE BLUE ECONOMY

Conference Report

10 - 11 JANUARY 2023 | CHENNAI



Indo-Pacific Confluence Dialogue 2023

India, Island States and the Indo-Pacific TOWARDS A SUSTAINABLE BLUE ECONOMY

The Peninsula Foundation, in partnership with the Taipei Economic and Cultural Center (TECC) in India, seeks to address economic, security and environmental challenges prevalent in the Indo-Pacific region through dialogue and shared experiences. The aim is to forge partnerships amongst the island states and littoral countries in the region, India and Taiwan, working towards sustainable solutions through cooperation and collaboration to the common challenges that the Indo-Pacific region faces.

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Conference Committee

Chair



Air Marshal M Matheswaran AVSM VM PhD (V)
Founder President, The Peninsula Foundation (TPF)

Members



Brigadier Albert Pakianathan VSM and Bar (V)
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Maj Gen Rajiv Narayanan, AVSM VSM (V)
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Dr Neela Ganguly
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About the Conference

The Indo-Pacific is deemed geopolitically, strategically, and economically vital by almost every state. It is also culturally one of the most diverse regions in the world and home to nearly two-thirds of the world's population. The Indo-Pacific is a strategic construct that highlights the confluence of the Indian Ocean, strategically the most vital ocean of the world in the 21st century, and the Western Pacific which has many of the world's powerful and surging economies. From four crucial maritime choke-points to vast unexplored seas, and from shoring the world's fastest growing economies to small island developing states, the Indo-Pacific offers unparalleled diversity in economic and geopolitical spheres. Thus, in recent times, the contestation for influence, if not control, over the resources of the region has seen a rise. Apart from being growing economies with a booming service industry, incredible human capital, and possessing an appetitive market, the countries of the Indo-Pacific are united by their vast coastlines and share a responsibility towards conserving and sustainably using marine resources. They also share an increased vulnerability to climate change.

One of the most important vulnerabilities is the degradation of ecosystems. The marine and coastal ecosystems of countries in the Indo-Pacific are major contributors to their economic growth and provide other environmental and socio-cultural benefits. Marine pollution has led to increased salinisation due to which the quality of land, drinking water, and fish stock have been deeply impacted. Coastal ingress and subsequent inland salinisation have affected the soil quality and the existing ecosystem in the coastal areas. Unsustainable fishing practices and further exploitation through illegal, unreported, and unregulated (IUU) fishing and deep sea trawling have greatly depleted fish stock in the region's oceans, especially the eastern coastline of India and Sri Lanka. Degradation of coastal estuaries, mangroves, lagoons, coral reefs, and kelp forests has destroyed the habitats of many species that support artisanal and commercial fisheries as well.

Along with a shift in rainfall and wind patterns, climate change has slowed down the economic development of the countries in the Indo-Pacific. Frequent floods, droughts and cyclones have affected critical infrastructures such as roads, ports, shipbuilding activities and operations as well as adversely impacting maritime trade routes. Such natural disasters have triggered food insecurity leading to the internal and international migration of the affected population. Such displacement has widened the economic inequality of the people as well. The small island developing states (SIDS), such as Maldives and Mauritius, are the most affected as they face the dual problem of rising sea levels and impact on tourism. The appeal of their beaches, coral reefs, and coastal waters has been impacted due to increased acidification of the waters, consequently bleaching the colourful algae that attract tourists. The rise in sea level simply threatens the existence of the island itself.

In order to mitigate the effects of climate change, intensive cooperation between the countries is important. Transitioning into clean energy is one such activity. Countries in the Indo-Pacific struggle to meet their decarbonisation goals. Low-cost markets, sharing of critical minerals and assistance in the creation and deployment of new technologies are some of the aspects that need to be considered to mitigate climate change. Another important aspect that requires cooperation is the deployment of early warning systems that monitor and predict disasters, assess the severity of the risks, and communicate the same to concerned parties. The countries should also focus on Humanitarian Assistance and Disaster Relief (HADR) measures, ensuring readiness to aid countries that are severely affected due to natural disasters.

Conflicts on land stem from territorialisation and securitization of nation-states and their interests. Spill-over of these concepts over the seas is problematic as marine resources and spaces are increasingly sought to be securitised and then militarised as matters of geopolitical security and finally controlled through technologies of monitoring, surveillance, and resistance. The concept of a sustainable blue economy needs a holistic view from humanity's perspective and necessitates international collaboration to achieve growth while safeguarding nature and the earth.

There exists an opportunity to reverse these trends and work towards ensuring the security of maritime trade and marine resources in international waters as well as the conservation, protection and restoration of these ecosystems. Challenges to cooperation come from geopolitical tensions introduced by both internal and external actors. The critical role of think tanks and academics to overcome these challenges and facilitate cooperation through research and policy recommendations needs to be recognised. In addition, states of the Indian Peninsula are all maritime states and hence, they have much to gain economically and environmentally through the development of relevant policies that enable the growth of a sustainable blue economy.

The Peninsula Foundation, in partnership with the Taipei Economic and Cultural Center (TECC), seeks to address these issues through a conference with the goal to facilitate debate, discussion, and awareness about their importance for the Indo-Pacific as a whole with a specific focus on collaboration amongst the island states, littoral countries, and India. The conference will focus on three themes, directed at addressing the sustainable development of the blue economy in the Indo-Pacific through mutual cooperative measures. The desired outcome of the conference is to come up with policy papers and research articles, including perspectives and recommendations from the participating countries. The larger goal for the conference is to collaborate with think tanks from the participating countries and build a bank of scholars to focus on the proposed themes.

Theme 1: The Blue Economy: Infrastructure Development and Growth

- International Trade, Maritime Infrastructure, and Logistics in the Indo-Pacific
- Energy Security: Clean Energy for a Sustainable Blue Economy
- Impact of Climate Change on Tourism
- Security and Regional Cooperation Perspective for the Blue Economy in the Indo-Pacific

Theme 2: Life Around and Below Water: Rational Exploitation for a Sustainable Blue Economy

- Depletion of Ocean Resources versus Preservation
- Conservation of Coastal Agriculture and Forestry
- Environmental Refugees, Displacement, and Loss of Livelihood
- The BRI and its Impact on a Sustainable Blue Economy
- Managing Ocean Resources in the Indo-Pacific for a Sustainable Blue Economy

Theme 3: Climate Action: Mitigation, Cooperation, and Response Mechanisms

- Maritime Domain Awareness: Surveillance, Monitoring, and Communication
- Technology Cooperation for a Sustainable Blue Economy
- Disaster Mitigation and Management: A Climate Change Perspective
- International Cooperation and Law: UNCLOS, Maritime Disputes and Climate Change

About the Organisers

The Peninsula Foundation (TPF)

The Peninsula Foundation is an important policy research think-tank based in Chennai, Tamil Nadu, India. TPF is an independent, non-profit, non-partisan, public policy research think tank, established to promote innovative thinking and stimulate critical debate on issues related to democracy, governance, international affairs, economy and technology. TPF strongly believes in India's founding principles enunciated in its Constitution: Democracy, Secularism, and the values of Justice, Liberty, Equality, and Fraternity for all. We believe good and effective public policies must be rooted in the above principles. Accordingly, TPF's range of work is covered in four Focus Areas – Democracy and Governance; Science and Technology; International and Transnational Affairs; and Transformational Paradigms. As such, it works to help formulate innovative and robust public policies and serve as a trusted resource for decision makers in government, business, academia, and civil society on issues of India's sovereignty, security, and prosperity.

Taipei Economic and Cultural Center (TECC), India

Taipei Economic and Cultural Center in India (TECC) is the Republic of China (Taiwan) government representative office in India. It is responsible for promoting ROC (Taiwan) and India's bilateral relations in the areas of the economy, trade, investment, the media, tourism, culture, education and science and technology. TECC has several divisions including Consular Division, Economic Division, Education Division, and Science and Technology Division. Each division is responsible for managing related aspects of the bilateral relationship and advancing mutual interests between Taiwan and South Asian countries including India, Bangladesh, Sri Lanka, Bhutan and Nepal.

About the Speakers



Air Marshal M Matheswaran AVSM VM PhD (V)

Founder President, The Peninsula Foundation

Air Marshal M Matheswaran is an Indian Air Force veteran with 39 years of active service. He is the Founder President of The Peninsula Foundation, a policy research think-tank based in Chennai.



Ambassador Baushuan Ger

Representative, Taipei Economic and Cultural Center (TECC)

Ambassador Ger is Taiwan's (ROC) Representative for TECC in India. He previously worked in MOFA's East Asian and Pacific Affairs Department as Deputy Director-General (DDG) from 2009 to 2011 and Director-General (DG) from 2018 to 2020.



Ambassador Tariq Karim (Retd), Bangladesh

Distinguished Visiting Research Fellow, ISAS, NUS, Singapore

Ambassador Karim was formerly an advisor to the World Bank for Regional Integration, South Asian Region. Prior to this, he was Bangladesh's immediate past High Commissioner to India from August 2009 until October 2014.



Mr Hans Raj Verma IAS

Additional Chief Secretary, CMD, TIIC

Mr Hans Raj Verma has over 35 years of experience in the Civil Service. Previously, he has been the Chairman of various organisations such as TITAN, TNEB, TIDCO, TANSIDCO, TNPCB, ELCOT, TNEGA, TANFINET, TNCDW and TASMAG.



Commodore R S Vasan (V)

Director General, Chennai Centre for China Studies (C3S)

Commodore Vasan is an alumnus of the DSSC, the Naval War College and the International Visitor Leadership Programme with a distinguished service of over 34 years in the Indian Navy and the Indian Coast Guard.



Ms Subhashini Abeysinghe

Research Director, Verité Research, Sri Lanka

Subhashini Abeysinghe is currently the Research Director at Verité Research, a think tank in Sri Lanka that undertakes socio-economic research. She is an economist specializing in international trade.



Prof A Subramanyam Raju

Dean, Centre for South Asian Studies, Pondicherry University

Adluri Subramanyam Raju is Dean of International Relations, Professor and the Head of UNESCO Madanjeet Singh Institute of South Asia Regional Cooperation (UMISARC) and Centre for South Asian Studies.



Dr Rasheeda Mohamed Didi

Independent Lecturer, and Researcher, Maldives

Dr Rasheeda Mohamed Didi, a member of the Higher Education Council, and presently works as an independent academic and resource person. She was a lecturer for 8 years at the Maldives National University.



Dr Jyun-yi Lee

Associate Research Fellow, Institute for National Defense and Security Research

Jyun-yi Lee is currently Associate Research Fellow at the Division of National Security Research, Institute for National Defense and Security Research (INDSR).



Dr P Krishnan

Director, Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO)

Dr Krishnan is currently the Director of Bay of Bengal Intergovernmental Organization (BOBP-IGO), a regional fisheries body with Bangladesh, India, Sri Lanka and Maldives as member.



Dr M Shiham Adam

Director for Science and the Maldives, International Pole and Line Foundation (IPNLF), Maldives

Dr Shiham is a founding trustee of the International Pole and Line Foundation and is currently the Chair of IPNLF's Scientific and Technical Advisory Committee (STAC).



Prof Hemanthi Ranasinghe

Senior Technical Expert, Climate Change and Forestry, SLYCAN Trust, Sri Lanka

Dr Hemanthi Ranasinghe is currently a Senior Technical Expert, Climate Change and Forestry at SLYCAN Trust. She is a Senior Professor in Forestry and Environmental Science at the University of Sri Jayewardenepura, Sri Lanka.



Prof Irudaya Rajan

Founder Chair, The International Institute of Migration and Development (IIMAD)

Professor Irudaya Rajan is a former Professor at the Centre for Development Studies (CDS), Kerala with close to four decades of research experience.



Asst Prof Umme Salma Tarin

Dept of IR, Bangladesh University of Professionals, Bangladesh

Ms Umme currently holds a full-time faculty position in the Department of International Relations at Bangladesh University of Professionals. Previously, she worked with the Refugee and Migratory Movements Research Unit (RMMRU).



Prof Ching-Ta Chuang

Professor Emeritus, Institute of Marine Affairs & Resource Management

Prof Ching-Ta Chuang was the Chair Professor of the Department of Marine Leisure and Tourism and Dean of the College of Maritime Industry at the Taipei University of Marine Technology.



Prof Vidya Nadkarni

Distinguished Fellow and Member of Governing Council, TPF, Professor, Dept of Political Science and International Relations, University of San Diego, California

Dr Vidya Nadkarni is a professor of political science and international relations at the University of San Diego.



Vice Admiral M P Muralidharan AVSM & Bar, NM (V)

Former DG Indian Coast Guard (ICG)

Vice Admiral M P Muralidharan is an alumnus of NDA and a Post Graduate of Defence Studies. He has a career of close to four decades in the Indian Navy and the Indian Coast Guard. He has held several key appointments during his tenure.



Prof P M Soundar Rajan

Adjunct Professor, NIAS, Bengaluru, and former Distinguished Scientist, DRDO

Prof PM Soundar Rajan is a renowned expert and a pioneer of indigenization and self-reliance in Combat Aircraft Avionics and Airborne Electronic Warfare in India.



Prof Wen-yen CHANG

Dean, College of Environmental Studies, National Dong-Hwa University (NDHU)

Prof Wen-yen Chang is currently a Distinguished Professor and Dean of the College of Environmental Studies and Oceanography of National Dong-Hwa University (NDHU). He is also part of the policy program "BEST".



ACM Gagan Bulathsinghala RWP RSP VSV USP (V)

Formerly Commander SLAF, and Ambassador to Afghanistan Director, Kelsey Development PLC, Sri Lanka

Air Chief Marshal Gagan Bulathsinghala is a retired air officer and a former Commander of the Sri Lanka Air Force. He held the position of CAS of SLAF and was appointed the Sri Lankan Ambassador to Afghanistan after his retirement.



Mr Mohan Guruswamy

Distinguished Fellow and Member of Governing Council, TPF, former Advisor to the Finance Minister, GOI

Mr Mohan Guruswamy is an alumnus of the John F. Kennedy School of Government, Harvard University. He served as an Advisor to the Finance Minister with the rank of Secretary to the Government of India.



Mr Manoj Kewalramani

Chairperson, Indo-Pacific Research Program, The Takshashila Institution, Bengaluru

Mr Manoj Kewalramani is the chairperson of the Indo-Pacific Research Programme and a China studies fellow at the Takshashila Institution, a Indian public policy education center.



Ms Estela Yu-Chi CHEN

Director of Economic Division, TECC India

Estela Yu-Chi Chen is the Head of the Economic Wing of the Taipei Economic and Cultural Center in India. Ms. CHEN has her foreign economic service in Madrid, Guatemala City for 6.5 years under Ministry for Economic Affairs of Taiwan.



Dr Mumin Chen

Deputy Representative and Councillor (Academics), TECC India

Dr Mumin Chen is currently the Deputy Representative and Councillor (Academics) of TECC, India. Earlier, he was an Associate Professor at the Graduate Institute of International Politics, National Chung Hsing University, and advisor of Taiwan Think Tank, Taiwan.

Program Schedule

10 January 2023 (Tuesday) – Day 1

08:00 AM – 08:45 AM	Registration
08:45 AM – 08:55 AM	Guests to be Seated
08:55 AM – 09:00 AM	Arrival of Chief Guest
09:00 AM – 09:05 AM	Welcome & Lighting of Lamp

Inaugural Session

09:05 AM – 09:10 AM	Introductory Remarks
09:10 AM – 09:20 AM	President's Welcome Address
	Air Marshal M Matheswaran AVSM VM PhD (V) Founder President, The Peninsula Foundation (TPF)
09:20 AM – 09:30 AM	Felicitations
09:30 AM – 09:45 AM	Inaugural Address
	Ambassador Baushuan Ger, Representative Taipei Economic and Cultural Center in India (TECC)
09:45 AM – 10:00 AM	Special Address
	Ambassador Tariq Karim (Retd), Bangladesh Distinguished Visiting Research Fellow, ISAS, NUS, Singapore
10:00 AM – 10:20 AM	Keynote Address
	Addl. Chief Secretary Mr Hans Raj Verma, IAS CMD, Tamil Nadu Industrial Investment Corporation (TIIC)
10:20 AM – 10:30 AM	Vote of Thanks
	Coffee Break

Program Schedule

11:00 AM – 12:30 AM SESSION ONE

The Blue Economy: Infrastructure Development and Growth

01:30 PM – 03:15 PM SESSION TWO

Life Around and Below Water: Rational Exploitation for a Sustainable Blue Economy

03:15 PM – 03:45 PM Coffee Break

03:45 PM – 05:15 PM SESSION THREE

Climate Action: Mitigation, Cooperation, and Response Mechanisms

07:30 PM – 10:00 PM Conference Dinner (By Invitation)

11 January 2023 (Wednesday) – Day 2

09:00 AM – 10:15 AM SESSION FOUR (Strategic Deliberations)

Indo-Pacific: Overcoming Threats to Sustainable Blue Economy

10:15 AM – 10:30 AM Coffee Break

10:30 AM – 12:00 PM ROUND TABLE DISCUSSION

Geopolitical, Economic, Technological, and Security Dimensions of the Indo-Pacific

Program Schedule

Concluding Session

12:00 PM – 12:30 PM	Summary of Conference Discussions Dr Mallika Joseph Senior Fellow, WISCOMP and Adjunct Professor, NIAS
12:30 PM – 12:40 PM	Valedictory Address Ms Estela Yu-Chi CHEN Executive Director, Economic Division Taiwan Economic and Cultural Center (TECC), New Delhi
12:40 PM – 12:50 PM	Closing Address Dr Mumin Chen Deputy Representative & Councillor (Academics) Taiwan Economic and Cultural Center (TECC), New Delhi
12:50 PM – 01:00 PM	Concluding Remarks Air Marshal M Matheswaran AVSM VM PhD (V) Founder President, The Peninsula Foundation (TPF)
01:00 PM – 01:10 PM	Vote of Thanks

Executive Summary

The inaugural edition of the Indo-Pacific Confluence Dialogue, conducted by The Peninsula Foundation (TPF) and co-sponsored by Taipei Economic and Cultural Center (TECC) in India was held on 10th and 11th January 2023 on the theme “India, Island States and the Indo-Pacific: Towards a Sustainable Blue Economy” in Chennai, Tamil Nadu, India.

Objective of the conference

The main objective of the conference was to debate, discuss and create awareness about the challenges in the Indo-Pacific region addressing the sustainable development of the blue economy, with a specific focus on island states, littoral countries, and India. The goal of the conference was to collaborate with think tanks from the region and publish policy papers and provide recommendations to relevant stakeholders in consultation with the participating countries.

Conference participants

The international conference saw participation from six countries – Maldives, Sri Lanka, Bangladesh, India, Taiwan and the US. The conference saw a large number of participants from local think tanks and consulates. The participants, over the course of two days, discussed the shared challenges to the ocean economy of these countries and the way forward for the sustainable development of the blue economy of the Indo-Pacific.

The inaugural session of the conference set the tone for the conference with the inaugural address by Ambassador Baushuan Ger (Representative – TECC, India), a special address by Ambassador Tariq Karim (Former Bangladesh High Commissioner to India) and the keynote address delivered by Additional Chief Secretary Mr. Hans Raj Verma, IAS (CMD – TIIC, Govt. of Tamil Nadu).

Key Takeaways

The conference hosted three sessions on the first day followed by a series of special lectures and a roundtable discussion on the second day.

The inaugural session highlighted the impact of climate change on the livelihoods of the people in the Indo-Pacific emphasising the dangers of overexploitation and the need for equitable distribution of resources in terms of investments for sustainable development. The immense potential within Tamil Nadu and other countries in the region for economic and technological cooperation, especially with Taiwan was also highlighted.

The keynote speaker brought out the role of women possessing intrinsic knowledge of sustainable practices, which is vital for a sustainable blue economy. The session called for an intensive collaborative and cooperative approach at the community, regional, national, and international levels as the way forward.

The first plenary session of the conference was on the theme “Blue Economy: Infrastructure Growth and Development” focusing on international trade, energy security, tourism, security, and regional cooperation for a sustainable blue economy. A key point made during the session was about the pressing need for all countries to balance their blue economy initiatives with their respective developmental goals.

The speakers pointed out that unchecked infrastructural development and investment in the green and blue economies are unsustainable and expensive and have a debilitating impact on the economically underprivileged and the country's GDP. Within this context, energy security is crucial and an intrinsic feature of every state's foreign policy and domestic politics. Diversification of tourism to adjoining rural areas and commercialisation of the blue economy was discussed as a solution to achieve inclusive economic growth, especially in small island states.

The second plenary session was on the theme “Life Around and Below Water: Rational Exploitation for a Sustainable Blue Economy” focusing on ocean resources, coastal agriculture and forestry, climate refugees, and green infrastructure and development. The session focused on resilience building for countries that have a huge scope in fisheries and tourism. The speakers encouraged countries to build policy measures integrating social protection schemes and incentivising sustainable practices.

The session called for systematic and planned afforestation to preserve the mangroves, coral reefs, and growing of seagrass; necessary legal and policy measures to address climate induced migration; and the importance of international organisations to encourage financing sustainable infrastructure practices considering SDG 14. Some key recommendations realised were spatial planning and the establishment of marine protected areas, facilitating funding for least developed nations to operationalize coastal zone management plans and the declaration of Special Area Management Sites (SAM).

The third plenary session was on the theme “Climate Action: Mitigation, Cooperation, and Response Mechanisms” and addressed maritime domain awareness, technology cooperation, disaster management, and law. The session brought forward the importance of a security grid in maritime domain awareness (MDA) which includes satellites and multi-level sensor platforms at every level for unmanned and underwater threats. A system to track and trace illegal shipping, including all shapes and sizes, is essential by way of utilising existing, emerging, and evolving technologies, providing not just real-time capabilities but near real-time response simultaneously.

The major theme that emerged following the session was that international partnership is essential in understanding earth system sciences as it is challenging for any one country to generate knowledge on it, and by working together, numerical weather prediction models to meet regional and international needs can be developed successfully.

On the second day, the final session was on the theme “Indo-Pacific: Overcoming Threats to Sustainable Blue Economy” and featured special lectures predominantly focusing on China and the international world order. The talk focused on China’s BRI and BeiDou 3, strategic analysis of island states, geoeconomics, and anti-china security construct. The session was followed by a roundtable discussion that discussed the geopolitical, economic, technological, and security dimensions related to the blue economy of the Indo-Pacific.

The lectures and discussions addressed China’s success in using BRI and BeiDou to lay the foundations for gaining geopolitical and geostrategic influence in the region. The inclusion of the BRI in the Constitution of the Communist Party of China during the 19th Party Congress is a clear indication that the BRI will play a central role not only in the country’s economic growth but is set to expand China’s footprint in the Indo-Pacific. The impact of such a strategy on states like Sri Lanka was further discussed, indicating the need to balance their engagement between India and China, and in some instances between India, China, and the US. It was also pointed out how the strength of the dollar ensures the USA’s dominance and is a clear indication that geoeconomics remains the source of conflict and competition. Further, the emerging Indo-Pacific strategies from different countries also shed light on how China looks at the Indo-Pacific and how some of these countries’ engagements with the US and China oscillate between hedging and balancing.

Finally, the overall discussion focused on the opportunity to cooperate and collaborate, while at the same time mitigating the impact of climate change on the littoral states. The session concluded by stating how the financial investment of developed countries in developing and underdeveloped countries in the Indo-Pacific will go a long way in offering solutions and strategies to the environmental challenges faced in this region.



Indo-Pacific Confluence
Dialogue 2023

Inaugural Session



Air Marshal M Matheswaran AVSM VM PhD (V)

Founder President, The Peninsula Foundation (TPF)

President's Welcome Address

Air Marshal M Matheswaran AVSM VM PhD (V) **Founder President, The Peninsula Foundation (TPF)**

Good morning to everybody. Your Excellency Ambassador Baushuan Ger, Representative of Taipei Economic and Cultural Center (TECC), India. Our esteemed Distinguished Guest, Mr. Hans Raj Verma. Additional Chief Secretary and CMD of Tamil Nadu Industrial Investment Corporation (TIIC), Government of Tamil Nadu. Ambassador Tariq Karim, Former Ambassador of Bangladesh of India and currently Distinguished Visiting Research Fellow at the Institute of South Asian Studies (ISAS), the National University of Singapore (NUS), distinguished chairs, panellists, participants, honoured guests, Ladies and Gentlemen, Good Morning and welcome to this international conference, India, Island States, and the Indo-Pacific: Towards a Sustainable Blue Economy.

I would like to begin by expressing my deep appreciation to the Taipei Economic and Cultural Center, India, our co-host of this conference for the valuable support and for being a driving force for this conference. On behalf of The Peninsula Foundation and our co-host TECC, once again, I welcome all of you to this first edition of the larger concept of the conference, which is the Indo-Pacific Confluence Dialogue.

I do hope this will develop as an annual effort from now on. We look at two important catch words in this concept. One is the Indo-Pacific, and the other is the Blue Economy. Before I delve into these two concept words, it's important to take a scan of the current state of affairs of the world. Hence, let me start with a nice quote. And this quote runs like this – “It was the best of times. It was the worst of times. It was the age of wisdom. It was the age of foolishness. It was an epoch of belief. It was an epoch of incredulity. It was a season of light. It was a season of darkness. It was a string of hope. It was a winter of despair”. This is the famous, Charles Dickens' opening lines in his famous book, A Tale of Two Cities, which was written immediately after the French Revolution.

The quote is relevant to today's paradoxical times. The world continues to be animated by the narrow sentiments of power politics, geopolitical competition and conflict that flow from nation-state driven national interests. We have ongoing wars currently in Ukraine and in Syria and in a few other parts of the world. The core of these conflicts, if you study them carefully, is economic interests.

For over three centuries successful economic growth has been propagated as only that which flows from a capitalist model, driven by industrial revolution-driven consumption, and a ravenous pattern of resource extraction.

The result is the development of vastly unequal societies with the concentration of wealth in less than one percent of the world's population.

As a saying goes – “capitalism is the gateway to hell”. What it means is Capitalism inherently leads to monopolisation and oligarchies of power. We need to seriously examine this aspect, as really a threat to the genuine well-being of humanity. The paradox is that the world is facing much bigger threats than those faced by individual nation-states, and these are in the form of climate change impact, natural disasters, sea level rises, ocean warming, and more importantly, massive pollution and environmental degradation triggered by unbridled consumption and profit-oriented, myopic actions.

Humanity is under threat as never before. Dealing with these threats calls for coordinated international cooperation, collaborations, and strategies that conflict with narrow power politics, and therefore, how do we look at each one of them? Let me come back to the two catch words. First the Indo-Pacific, very often discussions revolve around the ‘Indo-Pacific’ as a security construct. Marine spaces are being looked at by translating the Westphalian territorial ownership format into marine spaces as well. We need to treat marine spaces as a common heritage of humanity, just as we declared space as a common heritage of mankind. Two-thirds of the earth is covered by water and the ocean resources provide immense potential for the economic growth of all nations.

"It took all of history for the world to reach 1 billion population strengths. At the beginning of the 19th century, it took another 123 years to touch 2 billion. It took just 33 years more to touch 3 billion. It took us 14 years more to touch 4 billion. It only took 23 years to touch 6 billion. It took 21 years to touch 8 billion".

The Indo-Pacific should be a concept that looks at the blue economy as a domain with great potential for collaboration, cooperation, and development. It provides avenues for massive economic growth, which is constructive and has tremendous potential for safeguarding the environment, preventing pollution, and tremendous potential for growth and employment for vast millions who inhabit this particular region. This is a heavily populated region. This is also about the Indian Ocean, which is a large part of the Indo-Pacific. The Indian Ocean is also the warmest ocean in the world. Its biodiversity and its marine wealth are immense. But if we allow climate change to take effect in this process, you will find that much of the diversity that we hold as a rich

heritage for many millenniums will go away in no time and no state is more under threat than the countries like Maldives, Sri Lanka, and Island states. They face enormous danger from the impact of climate change.

And therefore, this conference is convened fundamentally to look at starting off from the South Asian and the regional context, as to how should we collaborate with each other. How do we see the threats, which are common to all of us? How do we look at innovation and disruptive technology developments that can be constructive in addressing the threats? You all know that we face immense threats from increasing pollution. For example, much of the business that the petroleum industries and its allied industries have focused on has a very narrow approach to profit-making. This sector has fueled the enormous growth of plastic pollution across the world. And these plastics, cannot be destroyed, not even in the entire Earth's lifetime. They can be broken down into micro, and micro modules that will be taken up and eaten by the fishes leading to adverse impact on them, and as it enters our food chain it leads to major health issues as well as the loss of these fisheries.

We, both the TECC and the Peninsula Foundation, are looking at this important domain, the Blue Economy, from a constructive approach. And therefore, in the three sessions that we planned, we take a look at the infrastructure aspects in the first session. We analyse life above water and below water in the context of preserving the ocean resources, both living and, and non-living resources in the second session.

More importantly, we look at clean energy such as solar, and wind farms, which can actually contribute immensely to providing alternatives and moving away from the problems of fossil-based energy, coal, and petroleum, and these are important areas to look at. And finally, in the third session, we discuss the importance of surveillance and security from the angle of common security where the need to monitor and prevent illegal fishing, and the rapid ravenous cleaning up of ocean resources by various countries is stressed upon. The success of this exercise of monitoring illegal activities lies in the collaborative approach of regional and international cooperation in terms of joint strategies and sharing of information. It is particularly significant that we are having this conference in Chennai as India, much like China and a few other ancient civilizations, is a civilizational state. India, the peninsula in particular, was the center of the Indian Ocean region connecting both the Mediterranean world and the East Asian or the Pacific world and much of the trade flowed through the Indian Ocean. This was the lifeline of the known world for 2000 years plus until the Portuguese and the West Europeans began to foray into the region for better trade and competition as an extension of their exploration drive starting from the 15th century.

And with it, slavery, mercantilism, exploitation, and all the associated problems manifested subsequently. What we need to examine is how these cultures dealt with nature. If we go into Tamil literature we find that Tamil society has aligned itself with preserving nature and deriving enormous wealth from natural resources.

I think we need to re-examine our cultural traditions that were so well aligned with nature. Of course, there are other complications. Population growth is one of the biggest problems that has contributed to the immense development of waste and pollution. It took all of history for the world to reach a strength of 1 billion population by the beginning of the 19th century, it took another 123 years to touch 2 billion. It took just 33 years more to cross 3 billion. It took us just 14 years more to cross 4 billion. It took us just 23 years more to reach 6 billion and another 21 years to touch 8 billion. We are facing enormous risk. The population growth will actually give us a tremendous amount of problems unless countries get together and act, and find solutions to actually provide resources, and livelihood without endangering the earth that we live in. Therefore this is an extremely important conference. In the context of this, I would like to quote one important poem from Tamil literature, which is quite famous and is all about looking at the world as one.

And this is Kaniyan Pungundranar from the Sangam age who says,

**“யாதும் ஊரே ; யாவரும் கேளிர்;
தீதும் நன்றும் பிறர்தர வாரா;
நோதலும் தணிதலும் அவற்றோ ரன்ன;
சாதலும் புதுவது அன்றே; வாழ்தல்**

(In English)

**Yaadhum Oore, Yavarum Keleer
Theedhum Nandrum Pirar Thara Vaara
Nodhalum, Thanidhalum Avatroor Anna
Saadhalum Pudhuvadhu Andre!**

It just means the world is one. All the people are my kinsmen and the problem that emerges is one of our own creation and doesn't come from outside. And therefore, solutions to the problems must come from us. We, together, need to find solutions to our problems and challenges. This is 2000 years old. We need to look at this spirit that needs to be spread across the world and in the region.

It is immensely gratifying to see the response to this conference. I thank our chief guest and the distinguished guests at the dais for gracing the occasion. And I look forward to very engaging sessions, throughout the day and an excellent round table discussion for tomorrow. Thank you very much and I thank you for your patience in listening to me.

Thank you!



Ambassador Baushuan Ger, Representative

Taipei Economic and Cultural Center in India (TECC)

Inaugural Address

Ambassador Baushuan Ger, Representative Taipei Economic and Cultural Center in India (TECC)

Air Marshal Matheswaran, Ambassador Karim, and Additional Chief Secretary Verma, and other distinguished guests including Ambassador Gagan Bulathsinghala, Ladies and Gentlemen, Good Morning. It's a great pleasure and privilege for my colleagues and me to come to Chennai from Delhi, so we can stay away from the cold weather for a few days.

"Relocation of the supply chain, especially to South India, is expected to have better implications in the next couple of years. Foxconn looks at extraordinary potential in Tamil Nadu and several other organisations are planning to establish and localise in India. So far, Foxconn employs about 200,000 workers across India, and they are planning to hire another 500,000 to 600,000 more by the end of this year".

I enjoy the warmth here a lot. I would like to thank The Peninsula Foundation and especially Air Marshal Matheswaran for making this event possible. The Air Marshal and I met in Delhi and we discussed the possibility that we can sponsor an event here in Chennai so we can gather the participants in this region to discuss the potential cooperation between Taiwan and this region. And we thank the foundation and also the Air Marshal for making it happen today. You may have this big question mark in your mind, why, does Taiwan, a country a thousand miles away in the Pacific, have anything to do with the Indian Ocean Region?

I would like to start by talking a little bit about the relationship between Taiwan and India because we have been in this country for 26 years. In 2021, India ranked 14th in global trade with a total trade volume of USD 967 billion. And then the same year the figure for us is USD 928 billion. And luckily last week, we got this latest figure for 2022. It was USD 907 billion for Taiwan. So we can see that our trade size is bigger, of course, India is bigger, but we're quite similar. In 1995, the year Taiwan and India set up representations in each other's capital, our trade was only a meagre USD 100 million.

After we exchanged offices in that year, acting as the facilitators providing essential councillor service, etc., then the trade grew steadily. In 2021, we reached USD 7.7 billion, and last year it was a little bit over USD 8 billion.

Okay, this is good. But to be honest, we are not satisfied with these figures because, you know, I just mentioned the size of our trade. So you can see that is less than 1% for India and less than 1% for Taiwan. Right? But luckily it seems that we are going to see some changes this year because, since last August, we have received, in Delhi and also in this part of India, delegation after delegation of Taiwanese investors, and business people coming to India to explore the possibilities of doing business, trade or investment.

And, I just mentioned with Additional Chief Secretary Verma, our businesses are coming to this part of the country seeking to set up clusters. We do hope that in the next two or three years we can make it happen with our cooperation. So this relocation of the supply chain is real, and this is happening, and we hope that it can be something very big in the next two years. I want to talk a little bit about Foxconn here because Foxconn has a very big presence in Tamil Nadu. Foxconn now sees extraordinary potential, especially in India, and is determined to localise. Foxconn is so far the only one, I say only one big company in Taiwan trying to localise in India.

So far, they employ about 200,000 workers across India, and they are planning to hire another 500,000 to 600,000 more by the end of this year. A couple of months ago, the chairman of Foxconn, Mr. Young Leo came to Delhi and we had this discussion and he said, "His plan is to build India as another manufacturing base, hiring 2 million workers". So we hope that in the next 10 years, we can see Foxconn doing that because Foxconn is like a big magnet. It will attract other smaller companies to come to India to form this ecosystem.

Another thing I would like to mention is also about Foxconn because Foxconn came to my office just two, or three weeks ago. They said that they are going to hire Indian graduates who can speak Mandarin. And, they will be sent to Taiwan for training and sent back to India. Because of this expansion of Foxconn, they need a talent pool to help. They want them to be at the management and administrative level. So the first batch would be 400, and when they come back to India, the starting salary is 1.2 lakhs. So it's about 1,400 US dollars. Right? So this is magnificent, and many other Taiwanese companies have heard this and they want to join this program. So far, we have about 26 Taiwan education centers in Indian universities.

We hope that they can become this base to train these young talents because so far. For our business, the difficulty for them to do business in India is that we don't have people who can speak Mandarin as an intermediary. So this pool is very key, very essential for the expansion of our business in India in the future.

Okay, so not just with India, Taiwan's security and prosperity are actually more deeply connected with the Indian Ocean region than realised. Almost all the oil Taiwan consumes relies on imports and almost all of them pass through the Indian Ocean. One-fourth of our long distance fishing fleets operate in this region, and 10% of the cargo's shipped internationally by Taiwan's companies like Evergreen.

So all the above said, shows that peace and prosperity of the Indian Ocean region, or in the broader sense the Indo-Pacific region is in Taiwan's great interest. So we seek to engage more with all the countries in this region. The cooperation between Taiwan and India is picking up with spaces as I just mentioned, but those between Taiwan and other countries in this region remain very, very limited.

So this is lamentable and we need to change it. Through this seminar, we gather here to discuss some of the most pressing issues in the Indian Ocean region and then would like to put forward several related areas of potential collaboration that are worth exploring within us.

When it comes to the blue economy, the fishery is a key area. For decades, Taiwan has been dealing with illegal fishing and sand dredging rendering our Coast Guard highly experienced in how best to handle them professionally. Taiwan also prides itself in high-quality aquaculture, and we have been sharing the know-how with our Island nation allies such as Palau, the Marshall Islands, and some others.

Now, the blue economy is a wide-ranging topic, and I'm grateful that we are joined by the Taiwanese scholars who flew all the way from Taiwan to share with us their perspectives. Dr. Ching-Ta Chuang of the National Taiwan Ocean University (NTOU) and Dr. Lee of the Institute for National Defense and Security Research (INDSR) will each share some light on the blue economy from their specialties.

Like some of your countries, Taiwan is prone to typhoons and earthquakes, and the sea's extreme weather events lately. One of the things that we are doing to cope with them in Taiwan is to apply more technologies to disaster prevention relief. So, Dr. Chang of the National Dong-Hwa University will share with you his take on disaster mitigation and management.

The blue economy is about sustainability and tourism can serve as a way to preserve the environment by supporting the livelihood of rural areas by improving the infrastructure of fishing ports, building clean indoor markets, and encompassing restaurants and shops. Taiwan has successfully transformed quite a number of ports into tourism hotspots, generating revenues for the local community.

Similar measures have been applied to our tea gardens and the fruit yards, in which cases visitors will pay to pick tea leaves and strawberries, for example, so the bond between people and the countryside has been more closer.

As Taiwan grows more ways off, people don't just travel inland. Taiwan is a country of 24 million people, and 17 million Taiwanese travelled overseas before the pandemic. But only roughly 20,000 came to India every year for 10 years, and much fewer went to other countries in this region. So how to promote tourism between Taiwan and the countries in this region is worth looking into.

More than 95% of the businesses in Taiwan are small and medium enterprises. So, these company owners are also tourists. They come to the country as a tourist first, and then they build. Then, if they like the country, they will trade. And when they build up this trust, these companies build these relationships, and then they will do investments.

So these are step-by-step and they are done in this way. They don't jump. You cannot ask the company to come to India with USD 20 million and invest. No, they don't know this place. They don't do it that way. So tourism is extremely important. So we hope that we can do more tourism in the future. So tourism will lead to more trade investment eventually.

Despite affirmative efforts, not all the rural areas in Taiwan that rely on agriculture can develop tourism, and some of the farmers struggle due to labour shortages as Taiwan's population ages. As such, one of the potential areas for cooperation is labour mobility.

Taiwan has worked with Indonesia, Thailand, the Philippines and Vietnam as migrant workers, collaborating for decades. And it is workers from these countries that keep many of our industries moving. The good news is Taiwan will be signing a labour mobility agreement this year with India, and we expect to welcome 100,000 Indian workers to come to Taiwan to work.

So we have all the desire to work with other countries, including this region, to induce migrant workers to Taiwan. We do hope that we can have this opportunity to do this with some of the countries in this region. The Indo-Pacific is the most culturally and economically dynamic region in the world. As I have illustrated above, the potential between Taiwan and this region remains largely untapped and the potential benefits are exponential.

Taiwan is a rules-binding democracy that has a lot to offer and we will never entrap others into debt. Let the event of today and tomorrow, be the harbinger of friendship and cooperation between us.

We should find out together what the confluence can bring to us.

Thank you!



Ambassador Tariq Karim (Retd), Bangladesh

Distinguished Visiting Research Fellow, ISAS, NUS, Singapore

Special Address

Ambassador Tariq Karim (Retd), Bangladesh Distinguished Visiting Research Fellow, ISAS, NUS, Singapore

Good morning everyone and Mallika, thank you very much for the very, very kind words addressed to me and also for being super persuasive to, manage, to make me agree to come for this flying visit.

Air Marshal Matheswaran and Ambassador Ger, Additional Chief Secretary Verma, and distinguished guests present, it is a single honour for me and a privilege to be here, to be addressing you today, and sharing some of my thoughts. I agreed because of the subject with which I have been deeply involved and continue to be so, and I will try to share the Bangladeshi perspective of the importance, opportunities, and potentials for regional cooperation that is where basically my heart lies for a sustainable blue economy. And of course, it is in the context of climate change, ecological threats, technological and economic cooperation, rule of law, all these things and how they interact with each other.

Now, I'll be dwelling on basically five points. One is the oceans. This is an oceanic world. Our planet Earth is a misnomer. It should have been called Oceania because 71% of the surface dominates what happens to us, what it does to us, and what we do to them. I will deal with the blue economy potentials as we see it from the Bangladeshi side, but more importantly, the dangers that I see to it from overexploitation forgetting that we could easily kill the goose that lays the golden egg.

We should not end up, this is our last frontier and we must not end up doing to our blue frontiers, the last frontier, what we have already done so rapaciously to the green and brown frontiers. The oceans are all interlinked and none of them are in splendid isolation. Man does not live in isolation. And what happens in one part of the ocean affects everybody else.

You may think on the other side of the world that happens there, but that's not the case. As, as more scientific knowledge becomes aware, each ocean somehow affects the integrity of the other ocean. Each water body affects it. And I recall the words Air Marshal Matheswaran said, his quotation from Dicken's tale of two cities, the best of times and the worst of times.

In a sense, we are at the best of times technologically, we have reached a level of advancement, which we would not have dreamt of a couple of centuries ago. But we have also brought ourselves to the brink of the precipice, which we would not have

thought a couple of centuries ago. So in that sense, we juxtapose these two within us, and how we will end up will depend on what we do to ourselves.

The Indo-Pacific for me is like a universe. I prefer to focus more on my own galaxy, and that is for me, the Bay of Bengal. There are so many, the population, 8 billion interacting in different ways. Can we, in my sense, do something in the Bay of Bengal, which will act as a module for the others, and can be then applied to other water bodies in the Indian Ocean, the Pacific Ocean, and other oceans?

"The Bay of Bengal is the most densely populated region in the world. The region consists of a quarter of the world's population in the Bay of Bengal. The aggregate GDP is fourth after the U.S., China, and the European Union. It's the fastest-growing region in the world today".

The Indian Ocean is also known as the Great Middle Bay. Geographically it is the third largest ocean, but it's right in the center of the oceanic world. And from there, it is a notion of vast diversity. 2.7 billion, very tightly packed, densely packed. By 2030, the population will increase by another 27%.

And so the consumptive nature of man, I think at the heart of everything is our consumptive nature, our habits are driving us to the brink of that precipice I mentioned earlier. How can we, when you're talking of sustainable growth, and harvest, but also allow the soil to replenish itself to re-nurture itself, to re-nurture you?

And I think we may have overtaken the custody of Mother Earth to renew and heal herself faster than we know, digging deeper into her.

Bay Bengal in turn, if the Indian Ocean is the great Central Bay or Middle Bay, the Bay Bengal is the lesser Central Bay in the Indian Ocean. And so if you're talking of the Indo-Pacific, we are basically right at the epicenter of the Indo-Pacific. And I think if you imagine yourselves, those of us who inhabit the Bay of Bengal, then we need to take a deeper and closer and more reflective view of how we view these water bodies.

The Air Marshal mentioned about the Westphalia.

The commons don't care a twitch for Westphalia. They don't go by the rules and regulations of Westphalia. They have their own laws. There is an equilibrium in the commons, and unless that is respected, we are going to end up destroying it.

There is the blue economy concept, there is the World Bank concept, the sustainable use of ocean resources for economic growth, improved livelihood and jobs, and ocean ecosystem health. Mostly, when people talk about the blue economy, I literally see dollar signs leaping out of their eyes. It makes me very afraid, and that's the point I mentioned, just harvesting and skimming and taking and extracting but there, it's an endangered zone and I will mention some of the challenges. Apart from the traditional challenges, there are three challenges that face us in the Bay of Bengal, and we need to tackle them before we can address the challenges, the larger challenges in the larger oceanic world. There is a growing dead zone in the Bay of Bengal, 60,000 square kilometers or so, discovered rather recently.

The mangrove forests are depleting, and the Sunderbans of which we are very proud, have already decreased by 50% in the last 150 years. And I have said that if we don't tend to them, we'll probably lose the rest of it in less than 75 years. And you mentioned plastic waste, Sunderbans affect us on the northern side of the Bay of Bengal, and plastic waste affects you immediately on the southern side of the Bay of Bengal. And when they degrade to nano plastics (plastics never degrade). They may take a hundred years or a thousand years, but they will never degrade. They will just get ingested by the fish, get absorbed in the tissues of the fish, and we will end up, probably our grandchildren will end up eating plastic fish.

And I think that's what we need to look at, sustainability. These are dangers that no one country, whether we are here in the Bay of Bengal or elsewhere, can tackle it. This is replicated everywhere. Mangroves are disappearing everywhere. Some people are trying to regrow it, but the urge for getting cash crops to replace mangroves is the reason why mangroves disappear.

The mangroves sequester is the largest sequester of carbon dioxide. It also oxygenates the air more than normal trees do, but it's not commercially viable. Indonesians are now discovering that they can extract natural dyes, which can be used by the textile industry and other industries from the leaves, the bark, as well as the fruit. It's called the mangrove apple. And, maybe we need to start thinking about that, that yes, there is money also in the mangroves, but we need to tend and protect it. Because global greenhouse warming can only be addressed by everyone working towards it and we need to restore our mangroves in the Bay of Bengal.

Coral reefs will disappear with greater ocean warming and if a coral reef disappears, maybe they occupy only 0.1% of the ocean floor, but they support 25% of all marine life. There's a whole chain of species dependent on the corals. And if the corals disappear, that keystone species will disappear and then a whole range of species of marine life will disappear. And that is what people don't really understand.

So as I said, let me come to the last part, there is one point I wish to make here before I go to the last part. There are non-traditional security people, a lot of you are people

who have been in areas that deal with traditional security, but non-traditional security can easily translate into traditional security threats. When human populations grow at the rate that we are, and it's a consumptive species on planet Earth, if they eat into the resources and the resources are not able to then manage to replenish themselves, it can lead to conflicts. The conflicts may be local, but they will never remain local. They will spread in different ways, in different forms, and when that happens, at any point, it can tip into a traditional conflict.

Can that happen in the Bay of Bengal? It is the most densely populated region in the world. If you are not careful, it could very well happen. And therefore we need to address these challenges which threaten our normal security. The only way we can do it is to adopt a regional cooperative approach. It cannot be these problems which I've mentioned, and there are many more than that, cannot be tackled by one country alone. And if we imagine, and we don't have that sense of imagination yet, the Bay countries do not have a sense of being together yet. They are a quarter of the world's population in the Bay of Bengal. The aggregate GDP is fourth after the U.S., China, and the European Union.

It's the fastest-growing region in the world today. Despite all the problems, if we can get our acts together, learn how to cooperate, and conserve the Bay, then perhaps that's the way for the future for us.

Thank you!



Addl. Chief Secretary Mr Hans Raj Verma, IAS

CMD, Tamil Nadu Industrial Investment Corporation (TIIC)

Keynote Address

Addl. Chief Secretary Mr Hans Raj Verma, IAS CMD, Tamil Nadu Industrial Investment Corporation (TIIC)

Air Marshal Matheswaran, Ambassador Ger, Ambassador Karim, delegates of the Taipei Economic and Cultural Centre, India. Friends, Air Marshall set the context and the tone in his opening remarks with a quote from Charles Dickens. There is the best of times, and the worst of times. Friends, we live in a VUCA world (Volatile, Uncertain, Complex, and Ambiguous) which calls for deeper engagement, and deeper participation by all the stakeholders.

With these words, I wish you all a very warm welcome. I will divide my address in two parts. First on the industrial economic potential of Tamil Nadu since Ambassador Ger is here. And the second part is on the marine economy and the blue economy. Since I have worked very closely as part of my career in the bureaucracy, I worked with the Director of Fisheries in the Bay of Bengal program. I was with the TNEB and worked very closely with the alternate forms of energy, RE energy, offshore wind and tidal energy. I was the Forest Secretary and I was part of the delegate at the COP 15 Paris talks where I made a presentation on sinking islands in the Gulf of Mannar. And finally, as the Rural Development Secretary, I have handled the post-tsunami livelihood project, which is funded by IFAD and FAO to the sustainable livelihood of the marine communities.

Friends, the first part. Presently I am the CEO of the Tamil Nadu Industrial Investment Corporation (TIIC), which is the growth catalyst of the Tamil Nadu economy. It is guided by the twin principles of making India self-reliant, the clarion call of the Honourable Prime Minister of India. And the second principle is, the clarion call again of the Honourable Chief Minister of Tamil Nadu to make the Tamil Nadu economy a 1 trillion dollar economy by 2030.

Tamil Nadu's economy is the growth engine of the Indian economy. We have the most established and diversified industrial base in the Indian Union. The urbanisation of Tamil Nadu is 51%, the most urbanised state. We have urban industrial clusters across the length and breadth of Tamil Nadu, right from Tuticorin to Krishnagiri, from Coimbatore to Kadalur and Chennai. No other state has got this kind of dispersal of its urban centres and industrial clusters.

Ambassador Ger was mentioning partnerships. For Taiwan investments, Tamil Nadu is a natural choice. We are hosting our flagship event, the ELCINA, the Electronics Industry Association of India in Chennai in February.

About 60 to 70% of the electronics output of India is from Tamil Nadu. Tamil Nadu is the right destination for all investments in the electronic sector.

Foxconn is already there. I request Ambassador Ger to please send a delegation for this ELCINA event. Huge business opportunities will open for Taiwanese companies. We have several mega clusters. One cluster is in Chennai, which is the auto, the EV cluster, and electronics. The second cluster is opening in Hosur, again, electronics, EV, defence, and engineering clusters.

So this kind of opportunity, this kind of ecosystem is unmatched anywhere. Let's leverage the visionary leadership of the Honourable Chief Minister of Tamil Nadu and maximise the returns. The key strength of Tamil Nadu is its throughput. Tamil Nadu provides two kinds of leadership, thought leadership and troop leadership.

"With respect to renewable energy, Tamil Nadu is also blessed by nature. The state has the highest potential wind, both onshore and offshore. The western ghats produce the highest per megawatt installation output and the Power Load Factor (PLF) with high wind velocity. Wind installations are being set up in the Tuticorin coast and the Ramnad coast".

The per capita investment of your capital's maximum returns will be in Tamil Nadu in view of its entire dimension of ecosystems of its law and order situation, call for the workforce and well-developed industrial base. So ideally, Tamil Nadu is the destination for all investments. I once again request Ambassador Ger and the team to please participate in the ELCINA event in February and also in further events and make Tamil Nadu your partner state, your ideal destination for investments.

Friends, the next part, the blue economy, and the Indo-Pacific. The key challenge for us today is climate change. Climate change is a clear and present danger staring at us, and all the stakeholders have to come on board. It just cannot be an effort of the government agencies or a few other institutions. All stakeholders have to come on board to mitigate and fight this clear danger.

As Ambassador Karim was mentioning, the Bay of Bengal is the epicentre of the Indo-Pacific region. A majority of the world's population is based here. The key developments will happen here, but they are threatened by the impact of climate change.

As the Commissioner of Fisheries, Government of Tamil Nadu. I worked very closely with the Bay of Bengal program and the 10 member states. The key challenge is equity, sustainability, and partnerships. These resources are limited, so how do we ensure that we have an equitable distribution of the resources among the member states in a sustainable manner?

Friends here, the role of women is very, very important. Any development that is not engendered, any development that is not engendered is endangered. We have to give the leading role to women. Their innate wisdom is in harmony with nature, is in harmony with the dynamics of nature for preserving nature in a sustainable manner. Tamil Nadu is the leading state where the self-help movement originated here and today, Tamil Nadu provides thought leadership and guidance to other states in establishing self-help groups.

It is no surprise that seeing the importance of women in the rural economy, and in sustainability, our Honourable Chief Minister has made Thiru Udhayanidhi Stalin in charge of women empowerment and women development as part of his portfolio. This is the kind of importance Tamil Nadu gives to women's empowerment and women development. As part of the post-tsunami livelihood project, as the Rural Development Secretary of Tamil Nadu, we helped the local communities.

The key is how do we enhance the livelihoods? How do we give them alternative occupations? They are all being impacted by rising sea levels, depletion of the catches, depletion of the mangroves, and the traditional livelihood are threatened. So how do we give them low interventions and altered options where they have sustainable livelihood options in which women, through the self-help groups, through the community-based organisations play a very, very crucial role? I also work very closely with the National Institute of Ocean Technology (NIOT) based in Chennai. We have mapped the entire coast of Tamil Nadu.

Tamil Nadu has got the second largest coastline after Gujarat in India. It is a major maritime state. We have mapped the entire coastline. Mapped those cells which are prone to sea erosion, which is prone to rise sea levels, and we have to set up corrective mechanisms in place by taking the community on board.

Ambassador Karim mentioned very specifically that the blue economy, the oceans are the last frontiers. We have already exploited our green, the forests, the land frontiers. If we want to leave a bright future for our future generations, then we have to be very, very careful in how we engage with this last frontier, the blue frontier. Sustainability is the key. Mangroves were the traditional systems that sustained these coastal zones and coastlines. Sadly they've been depleting and mangroves are the best carbon sinks per capita. They're also the best source of oxygen. As Ambassador Karim mentioned, Sunderbans is crying out for attention, for a strategy for its management and sustainability.

So the coastal economy and in particular the role of the communities is very, very crucial.

There is a lot of native intelligence. There is a lot of native wisdom in the communities, and we all collectively must participate with them and harness that wisdom. In the Paris COP 15, I made a presentation about how to save sinking islands in the Gulf of Mannar. There are about 25 to 30 islands that are sinking. And with leading NGOs, we have found an option in which we can intervene and save those sinking islands from sinking further. The little islands of the Indo-Pacific, the island states, we are all at risk of rising sea levels is something which collectively we have to share our experience, our knowledge, and our technical options with us for saving these islands. The government of Tamil Nadu, the Department of Fisheries will be very happy to share with the member states and the participants what interventions they have done for saving these islands.

Ambassador Ger mentioned tourism. Tourism has to be encouraged and sustainable tourism in which we have to go for immersive tourism. Today's tourists don't want to stay in big capital cities, in concrete five-star hotels. He wants to have an immersive experience with tourism, live with the communities, sees their lifestyles, and participate in their daily activities. He wants to go back and tell a story of immersive tourism. This is where the coastal communities can come together in terms of low-cost home-state tourism.

What do the tourists want? Clean water and hygienic food, and through self-help groups along the entire Bay of Bengal nation states, collectively we can promote this immersive tourism, which will be a good source of income. It will increase the awareness of the communities and the tourists towards the message of conservation and sustainability.

Friends, coming to renewable energy. This is part of my experience as a bureaucrat in Tamil Nadu. I was fortunate to have served for nearly 36 years. This is my 37th year as the chairman of the electricity board, the power utility. We used to work very closely with a lot of technocrats. Can we harness the power of tidal, harness the temporal differential, and go for low solutions? A lot of thought is going on.

Tamil Nadu is blessed by nature. We have India's highest potential for wind, both onshore and offshore. Onshore along the western ghats, the wind velocity, the per megawatt installation output, and the PLF (Power Load Factor) is highest here. Now, a lot of work is also started offshore.

Wind installations are coming along the Tuticorin coast and the Ramnad coast. Tamil Nadu is also very blessed by nature for the solar. So this combination of solar, and wind, it's also got very good potential pump storage along the western ghats. So these unique advantages of the state will make Tamil Nadu a leader in renewable energy.

India has committed during the Glasgow COP to net zero by 2070. Collectively, all have to come on board with this and make small contributions that we can make. Green hydrogen is going to be a big thing in the days to come. India definitely is going to be positioned as the leader in RE space, and green energy will mean a big contribution to mitigating climate change efforts.

For saving our coastlines, our island states, and our communities, and preserving these blue oceans for our generations in their pristine glory. Ambassador Karim and Air Marshal Matheswaran mentioned plastics. It's a huge danger. What we've seen, are those images where plastic waste the size of nations is floating on the oceans. How do you dispose of that? Small contributions by us in being sensitive enough to plastics usage is a big step. Any small measure is not a small measure. Any small contribution by any individual is not a small measure. These small steps will go a long way in a collective effort for our efforts for mitigating change. Tamil Nadu has got a state action plan on climate change. It's got a green climate fund, one of the pioneering states.

So these kinds of thought leaderships of Tamil Nadu are very pioneering steps. What Tamil Nadu does today, the rest of India follows tomorrow. So, Friends, it is indeed a pleasure to be part of this deliberation. In fact, our distinguished Ambassador Karim mentioned it in more depth, and tremendous wisdom and knowledge were there in his presentation. I hope he's there the rest of the day and he shares his knowledge with all of you here. Once again, I thank the organisers for inviting me to this event, and I request all the delegates here. Let's leverage the visionary leadership of the Chief Minister of Tamil Nadu. Let's leverage his thought leadership, his title leadership, and his troop leadership in providing a platform in which Tamil Nadu as a key state, the state with the second largest coastline as a key maritime and marine state of India provides leadership, takes productive steps in the Bay of Bengal program and those lessons for the community, earning power of community, for RE, for saving sinking islands and mangrove conservation.

Tamil Nadu has also been at the forefront of Olive Ridley conservation. Olive Ridley, again, is a very important species of this Indo-Pacific region. We have several nesting sites in Tamil Nadu. We've taken several proactive steps in ensuring that the fishing technology of the fishing communities does not harm them. And as long as Olive Ridley turtles are there in this ocean, the ecology of the oceans is in a safe zone, in a comfort zone. It's a very important species.

Perhaps, Ambassador Karim was mentioning corals. The Great Barrier Reef, they're dying out. One of the reasons is the acidification of the oceans. We also have corals in the Gulf of Mannar. We have India's only marine biosphere in the Gulf of Mannar, where we take steps to protect the corals, the sea grass and the dugongs. So, these are very small steps that Tamil Nadu has taken. So friends, let's leverage the visionary leadership of Tamil Nadu.

Tamil Nadu is here to partner with you and as the representative, I seek your partnership, and all the stakeholders' engagement for the collective good of preserving this very crucial last frontier, the Indo-Pacific region.

Thank you!



Indo-Pacific Confluence
Dialogue 2023

Session I



Session I Chair

Commodore R S Vasan (V)

Director General, Chennai Centre for China Studies (C3S), Chennai

The Blue Economy: Infrastructure Development and Growth

The ocean economies of the Indo-Pacific countries are among the most rapidly developing in the world and provide benefits to several sectors of great value – trade, port infrastructure, transportation, energy production, fisheries, and tourism. According to the UNDP, the global market value of marine and coastal resources and industries stand at US\$3 trillion per year or about 5% of the global gross domestic product. However, increasing GHG emissions, rising sea levels and extreme weather events pose a threat to these activities and impact the growth of the blue economies of these countries. This session looks at the importance of infrastructure development and growth for the blue economy and the rising challenges to it from various factors such as climate change, rising sea levels, marine pollution, detrimental human activity, and the territorial mindset towards maritime spaces. It seeks to present the way forward for the sustainable development of the blue economy in the Indo-Pacific region.

Chairperson

- Commodore R S Vasani (V)
Director General, Chennai Centre for China Studies (C3S), Chennai

Speakers

- Ms Subhashini Abeysinghe,
Research Director,
Verité Research, Sri Lanka
- Prof A Subramanyam Raju,
Centre for South Asian Studies,
Pondicherry University
- Dr Rasheeda Mohamed Didi,
Independent Lecturer, and Researcher,
Maldives
- Dr Jyun-yi Lee,
Associate Research Fellow,
Institute for National Defense and Security Research (INDSR)



Ms Subhashini Abeysinghe

Research Director, Verite Research, Sri Lanka

International Trade, Maritime Infrastructure, and Logistics in the Indo-Pacific

Ms Subhashini Abeysinghe

Research Director, Verite Research, Sri Lanka

Over 80% of global trade is transported by ship, with 60% passing through the Pacific. Shipping has relatively low emissions when compared to other modes of transportation; however, the most concerning aspect is that shipping emissions are rising and could reach 50% by 2050. Governments and international organisations are putting more and more pressure on shipping companies to use energy-efficient methods, promoting switching from conventional to alternative fuels. Thus, it is significant for nations, for example, Sri Lanka to take part in conversations zeroed in on sustainable maritime transport in light of the fact that the island country depends on a considerable amount on the port and logistics sector.

Countries are taking steps to meet the COP 26 declaration to create a green corridor for maritime transportation with zero emissions. Inter-governmental cooperation on technology and investments in necessary infrastructure can create efficient green corridors. However, industries are reluctant to actually adopt these technologies and transform the port into a sustainable one due to the expenses incurred in the process. For instance, the industry may incur five times more costs when switching to alternative fuels from conventional fuels. Governments and customers alike are exerting a significant amount of pressure on the sectors. Due to increasing public pressure, it is anticipated that the majority of manufacturing companies in developed nations will comply with environmental regulations. Companies must demonstrate that they are reducing the carbon footprint of their entire supply chain, particularly those with a geographically diverse supply chain. Ports are affected by this cycle of direct pressure from governments and indirect pressure from multinational corporations and clients. The ports must make an investment in a bulk supply of alternative fuels, including LNG, electricity, and any other technology that will reduce greenhouse gas emissions. This investment is necessary when the shipping industry switches to ships that use alternative fuels. For ports to be included in the green corridors, these investments in energy infrastructure are necessary.

The next challenge, particularly for nations like Sri Lanka, is the capacity and consistency to keep up the ventures. It is challenging to contribute to climate goals while recognizing the dependence on shipping and port trade. Sri Lanka must decide whether to act immediately or wait for everyone to finish. Sri Lanka has four international ports and the world's 25th-largest container port, through which 75% of regional trade is carried out.

Out of that, 80% is transshipment in cargo. Colombo Port must recognize this in order to become the preferred destination for the transshipment of cargo from other countries in the region. Additionally, it is crucial for Sri Lanka's transformation from a transitional to a maritime logistics hub. Companies should link Colombo in their supply chain but that is only possible when industries consider the pressure from the government and the clients.

"In order for Sri Lanka to take advantage of the opportunities presented by the sustainable transitions, it must address and overcome two of the most significant obstacles: poor governance and resource mismanagement. These opportunities lead to new infrastructure, increase in capacities, and investments in the right technologies".

The government of Sri Lanka is building one terminal, and Adani from India is building another. These ventures have not gone through aggressive bidding and until this point in time, Sri Lanka continues to not recognise green procurement. The nation does have a pro-procurement guideline (2006), which only considers economic efficiency and effectiveness and not total cost-effectiveness. From a broader perspective, environmental-friendly procurement and green procurement still receive very little attention. When these kinds of terminals and infrastructure are built without a competitive bidding process, it is very worrying. This makes things less transparent, and it's also a concern that the government doesn't list the terms and conditions of these investments. Aside from this, there are malpractices, misuse, and abuse of power because of weak institutions and regulatory mechanisms. These investments become questionable in this scenario, resulting in poor government planning. In order for Sri Lanka to take advantage of the opportunities presented by sustainable transitions, it must address and overcome two of the most significant obstacles: poor governance and resource mismanagement. These opportunities lead to new infrastructure, an increase in capacities, and investments in the right technologies.



Dr. A Subramanyam Raju

Professor, Centre for South Asian Studies, Pondicherry University

Energy Security: Clean Energy for a Sustainable Blue Economy

Dr. A Subramanyam Raju

Professor, Centre for South Asian Studies, Pondicherry University

To comprehend the significance of creating a blue economy, it is necessary to comprehend the significance of the ocean. Waterways connect 95% of trade, implying that it brings people, states, civilizations, and cultures together and contributes to globalisation. One could say that any state's development is closely linked to water and that the blue economy becomes the state's economic frontier. States have explored ocean resources in order to boost GDP and economic prosperity.

Due to rising concerns like sea level rise, resource exploration should be viewed from a sustainable perspective. Now, developing nations must focus on being a part of the solution rather than looking for the developed nations, who largely contribute to climate change, to be responsible. Although energy security is primarily a domestic issue, it frequently becomes a component of foreign policy. Presently, energy is obtained from insufficient resources at affordable prices. Countries that rely heavily on fossil fuels and ultimately import them now face difficulties as a nation's prosperity is directly linked to energy production. The concern arises when the dependency increases and the majority of the developing countries are dependent on coal-based energy resources which contributes to GHGs.

"Initiatives like the International Solar Alliance (ISA) and clean energy like marine, wind, tidal, and solar are crucial to a country's survival. Clean energy infrastructure investment and development can help communities grow and make energy more accessible to those in the most remote parts of the country".

When looking at the energy situation from the perspective of GDP, countries typically provide access to energy regardless of the cost—both now and in the future. In contrast, nations discuss reducing GHG emissions which will have diverse impacts. For instance, a recently released report on India claims that poverty will rise by 17% and GDP will rise by 2% if the country reduces its emissions by 20% to 30%.

A nation faces a dilemma when poverty rises while emissions decrease simultaneously.

Clean energy, in my opinion, has the potential to boost economic growth and chances of survival for nations. Initiatives like the International Solar Alliance (ISA) and clean energy like marine, wind, tidal, and solar are crucial to a country's survival. Clean energy infrastructure investment and development can help communities grow and make energy more accessible to those in the most remote parts of the country. It is important for countries to come together, especially small island developing states, in order to produce marine energy, map the resources available and make it sustainable. It is important for developed countries to provide technological assistance and invest appropriately.



Dr Rasheeda Mohamed Didi

Independent Lecturer and Researcher, Maldives

Impact of Climate Change on Tourism Economy

Dr Rasheeda Mohamed Didi

Independent Lecturer and Researcher, Maldives

When it comes to the effects that climate change has on small island developing states (SIDs), in some instances it has visible and observable effects, but the vast majority of the time, this is not the case. The SIDS have a large population of 65 million people, and hurricanes are their most common climate threat. Hurricanes Irma, Maria, and Nate in 2017 caused extensive damage to communications, energy, transportation, homes, medical facilities, and schools in the Caribbean and North Atlantic SIDs.

"The Maldives' largest industry is tourism, which contributes about 40% to the country's GDP. Any impact on the tourism sector has a negative impact on the revenue it generates, resulting in a national economic crisis".

The most significant environmental issue that the Maldives face is climate change as it affects the economy. The Maldives are largely dependent on tourism as a country. Naturally, livelihoods, habitat, water supply, and food security will all suffer as a result of climate change. In a statement that emphasised Maldives' suffering, the foreign minister summarised the severity of its effects – the small island has been ravaged by climate change for years, the beaches are being eroded, coral reefs are being destroyed, fresh water is being contaminated by sea water, which has a negative impact on fish stocks, and so on – but the most significant consequence is the loss of homes. There is difficulty in determining whether or not a hazard is connected to climate change.

The Maldives have not been able to carry out the extensive research necessary to establish with any degree of certainty that a specific risk is connected to climate change. The same holds true worldwide. However, based on observations and conversations with locals, it is becoming increasingly believed that climate change is to blame for shifts in rainfall patterns and seasonal timing. People who live on the outer islands are also noticing a significant rise in beach erosion. Even though it is not obvious to the naked eye, rising sea levels are warming the sea and reducing underwater biodiversity.

The Maldives' largest industry is tourism, which contributes about 40% to the country's GDP. Any impact on the tourism sector has a negative impact on the revenue it generates, resulting in a national economic crisis. The country that relies on tourism faces an increasing threat from coral bleaching, where the corals become white rather than their healthy and vibrant natural state as a result of the rising sea level and subsequent warming. The bleaching is harmful because these corals are a popular snorkelling attraction for tourists. In 2020, flooding was reported on a number of Maldives islands that had never happened before. The roughness of the sea and tidal waves that submerge boats are two additional climate risks. Another problem that SIDs face is coastal flooding rather than rain flooding.

Artificial coral reefs have been constructed by individuals and tourist resorts to alleviate some of these issues. They introduce little corals in the ocean that are later placed on a natural coral once they have developed in a natural setting. Although sea level rise and climate change are not currently visible threats, they will eventually have a negative impact on the nation.



Dr Jyun-yi Lee

Associate Research Fellow,
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Security and Regional Cooperation Perspective for the Blue Economy in the Indo-Pacific

Dr Jyun-yi Lee

**Associate Research Fellow, Institute for National
Defense and Security Research**

(Reflecting on a personal experience) In a briefing with several European officials regarding how Chinese illegal fishing and sand dredgers affected the environment, economy, and infrastructure around one of Taiwan's outlying islands, and how these illegal activities may be weaponized as a prelude to a military assault; the audience's reaction was lukewarm at best. However, interest picked up when it came to cybersecurity and the implications if Taiwan suffered from cyber-attacks. This experience showcased the reality of interstate exchange and cooperation. If an issue is thought of as important for one country, but not for the other, then there is little space for the countries to engage in dialogue, let alone cooperate. But if an issue is perceived to be related, common, and relevant, then dialogue becomes possible. The same holds true for the blue economy.

The blue economy is taught and practised differently across the Indo-Pacific and between India and Taiwan. For instance, insofar as the policy is concerned, Taiwan is a little late to the concept with numerous challenges to be addressed although this trend has shifted in recent years. Unlike SIDS, in the Maldives, where the blue economy is a necessity as it addresses issues like food security, nutrition, employment, tourism, and the environment, the idea of a blue economy does not seem to be well received in Taiwan. While many scholars, activists, and NGOs do talk about the blue economy, at the government level, it has not been made a political agenda.

In 2004, and when APAC embraced the term 'blue economy' in 2011, scholars and NGOs also introduced the concept to Taiwan. While proponents for the blue economy suggest that there are certain strengths or advantages in developing it, attention from the government and the public remained insufficient. There is insufficient investment in terms of resources and talent. And in areas like offshore wind power, new energy maritime environmental protection, and sustainable coastal and marine tourism, Taiwan still lags behind other maritime countries. Climate resilient infrastructure is also an area that remains unexplored beyond talk of how military bases can be better prepared for climate change.

To advance the course on the blue economy systemic change is required – a foundation for regional cooperation. There are three conditions that can assist both

Taiwan and other countries in advancing our interests in the blue economy. The first condition relates to identity and environment. There is an urgent need for environmental issues to be politicised or even securitized so that resources can be allocated in this regard. The maritime domain has been securitised in Taiwan because of China's growing military strands and also its illegal fishing and sand dredging activities. China's actions are creating environmental and ecological problems. The depletion of fish stock and vulnerability to infrastructure, i.e., undersea cables by Chinese fishing vessels have prepared people to think that the maritime domain is important, not only in terms of economics, not only in terms of social security, or social activities but also national security. Safeguarding the maritime space is taken to be a crucial part of the defence and security of Taiwan. Rising maritime domain awareness has had a spill-over effect on securitization in the military and environmental sectors. While it is usually argued that the territoriality of maritime spaces is counterproductive for sustainable development as it hinders interstate cooperation, it, however, may have a positive effect on increasing maritime domain awareness. It is important to acknowledge protecting our maritime domain and seek international cooperation to challenges that rise.

"The Taiwan government, now, also wants to reduce dependency on the Chinese market. As a result, there needs to be a new model for growth. And it has come to be accepted that sustainability is a precondition for economic development. In the current government's five plus two industrial plans, or in the so-called six core strategic industries, the government has tried to introduce the idea of sustainable development in its policies".

The second condition relates to interest. The blue economy requires restructuring the relationship between the environment, society, and the economy. It is, therefore, necessary to reconcile the tension between sustainability on the one hand, and economic growth. But it is an entirely different issue when it comes to policy and allocation of resources. In recent years, there have been some changes because economically pursuing a developmental state model has proven to be not viable politically given the threat from China. The Taiwan government, now, also wants to reduce dependency on the Chinese market. As a result, there needs to be a new model for growth. And it has come to be accepted that sustainability is a precondition for economic development.

In the current government's five plus two industrial plans, or in the so-called six core strategic industries, the government has tried to introduce the idea of sustainable development in its policies. Environmental sustainability and economic growth are now accepted as complimentary with each other, mutually reinforcing the other at the policy level.

The third condition concerns power. Even if countries have common interests and common understanding, they may find cooperation difficult because of a lack of channels or platforms. This applies to cooperation between Taiwan as well as South Asian countries. It is more so for Taiwan given its isolation in international politics. In this regard, global and regional power politics helps shape the course of the blue economy in Taiwan at the interstate level to counter a more aggressive China and to acknowledge the achievement of a democratic Taiwan.

The US, Taiwan, and Japan have established this platform called the Global Cooperation and Training Framework (GCTF) as a platform to utilise Taiwan's strengths and expertise to address global issues including the blue economy. This is important because the problems each faces are always co-dependent. The difficulty of understanding local issues in a far away country or region can be mitigated by sharing common ground in the sense that all these issues require people and talent to resolve. A talent training workshop is a viable mechanism on which countries can cooperate as a first step.

The 'Building Economic Inclusion via the Blue Economy' project was launched with the US last October with the idea to strengthen and empower women in the Pacific Island states. At the business level, there exists an opportunity for businesses to keep momentum in the blue economy. Taiwan's transformation of its port into an eco or green port reflects how the governance system can be changed. The role of the European Union is important in this regard since it introduced the concept of the eco port. It is important to embrace regional powers like the EU, their standards, and guidelines in advancing the course of the blue economy of the Indo-Pacific apart from the cooperation between Taiwan and South Asia and Southeast Asian countries.

Session I: Discussion Summary

The transition towards green or eco ports requires technical know-how. A question was raised about Taiwan's ability to acquire knowledge and experience, and at the same time extend this experience to other countries in the region. Other questions included the regulation of fishing on Taiwan's coast, sustainability, and the practicality of artificial islands. Ports remain under the jurisdiction of governmental agencies, and the management of terminals, transportation, and infrastructure are privatised, which gives the impetus for competition. Profits and competition motivate the companies to turn ports into green or eco ports, seeking verification from established organisations. Regarding illegal fishing by China, the activities take place outside Taiwan's jurisdiction. Even if it comes under the jurisdiction, it becomes politically sensitive and is handled by the coast guard.

"However, the lack of an extensive study on the environmental impact of the artificial islands makes it difficult to determine their potential even if UNCLOS allows the construction of artificial islands within maritime zones of the country provided certain rules are met".

The concept of legal warfare is followed, especially by bringing it to the attention of international audiences. It is important to understand that when any situation relates to politics, it becomes very difficult and complicated. It is important to internalise the law and implement it. Further, between India and Sri Lanka, when the joint task force on illegal fishing broke down, fishing was unregulated. The fish stock is depleted in the region. It was a political issue in Sri Lanka and hence nothing much could be done through international intervention. Regarding the artificial islands, Maldives and other SIDS have been building artificial islands such as crossroads. Studies regarding artificial islands have been carried out by the government. These artificial islands are colourful but it also impacts the fish stock in the areas. For example, there is a lagoon near crossroads which is special for tuna fish. Since that has been converted into a lagoon for divers, the tuna fish have migrated.

However, the lack of an extensive study on the environmental impact of the artificial islands makes it difficult to determine their potential even if UNCLOS allows the construction of artificial islands within maritime zones of the country provided certain rules are met. China has violated these rules and has built islands in disputed areas. There is no progress after condemning such violations. Hence, legal measures should be tightened before the situation further deteriorates for all island nations.

Following this, the discussion moved toward human rights violations in the shipping industry and technology and international conventions regarding the ship breaking industry in South Asian countries.

The South Asian economies attract ship breaking industries despite it being the largest contributor of carbon dioxide emissions. The industry brings employment opportunities and there are no stringent policies regulating these industries. But in Sri Lanka, it boils down to Western interest groups and the influence these groups have in lobbying the government not to act. Unfortunately, western interests win at the expense of the public interest and the country's interests. The problem regarding human rights violations in Taiwan in the shipping industry is structural. It involves the entire fishing industry and the development of the sector. In order to profit, the Taiwanese shipping industry reduces costs and takes cheap labour. It is best to review and restructure the entire industry in order to eliminate these violations.



Indo-Pacific Confluence
Dialogue 2023

Session II



Session II Chair

Dr P Krishnan

Director, Bay of Bengal Programme
Inter-Governmental Organisation (BOBP-IGO)

Life Around and Below Water: Rational Exploitation for a Sustainable Blue Economy

Marine and coastal ecosystems are under threat from anthropocene activities. Over the last two decades, the number of Marine Protected Areas (MPAs) has increased to conserve marine biodiversity. According to the UNEP, as of November 2019, MPAs cover 7.5% of the oceans. Critical marine habitats such as natural deltas, coral reefs, sea grass, mangroves, and estuaries have been destroyed by local and global stressors. This includes large infrastructure projects such as the Belt and Road Initiative (BRI), contributing to the exploitation of marine resources, pollution, and disruption of terrestrial biodiversity. The frequent extreme and erratic weather events are also having a detrimental effect on agriculture, and marine and coastal biodiversity, leading to the creation of climate refugees. This session seeks to examine these issues and look toward developing policies for the region that can help restore the ocean's health and lead to the sustainable development of blue economies in the Indo-Pacific.

Chairperson

- Dr P Krishnan
Director, Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO)

Speakers

- Dr M Shiham Adam,
Director for Science and the Maldives,
International Pole and Line Foundation (IPNLF), Maldives
- Dr Hemanthi Ranasinghe,
Senior Technical Expert, Climate Change & Forestry, SLYCAN Trust, Sri Lanka
- Dr Irudaya Rajan,
Founder Chair, The International Institute of Migration and Development (IIMAD)
- Asst Prof Umme Salma Tarin,
Dept of International Relations,, Bangladesh University of Professionals, Bangladesh
- Dr Ching-Ta CHUANG,
Professor Emeritus, Institute of Marine Affairs and Resource
Management, National Taiwan Ocean University (NTOU)



Dr. Shiham Adam

Director for Science and the Maldives,
International Pole and Line Foundation (IPNLF), Maldives

The Depletion of Ocean Resources versus Conservation and Management

Dr. Shiham Adam

Director for Science and the Maldives, International Pole and Line Foundation (IPNLF), Maldives

Fisheries is an important economic activity in the Indo-Pacific region. A large proportion of small-scale fisheries (artisan and subsistence) work in the Indo-Pacific region. It is estimated that there are 120 million people directly engaged in small-scale fisheries and 20 million in aquaculture. In considering all the workers who are associated indirectly, the number comes up to 177 million people. With this, FAO estimates that about roughly 600 to 820 million people's livelihoods are associated with small-scale fisheries, both artisan and subsistence.

Unfortunately, 30% of the formally assessed fisheries have exceeded the maximum sustainable yield due to overexploitation and overfishing. The FAO estimates 60% of the stocks are currently at the long-term maximum sustainable yields, and that 75% of the global catch volume comes from stocks that are without any reliable data or information. The depletion of fish stock negatively affects the livelihood of fishing communities and fisheries – reduced catch and economic dislocation of fisheries. The Maldives, renowned for catching tuna, was heavily impacted by Covid. Fisheries reliant on the export of fresh yellowfin tuna were unable to export to Europe and collapsed due to the lockdown. The depletion of fish stocks also impacts the overall viability of the fishery sector. The other negative environmental impact of overfishing, of reduced stock productivity is bycatch. Other components of the ecosystem like the endangered and protected species are also affected. In the process, marine pollution like the fish aggregating device users in tuna fisheries is released.

To maintain biologically sustainable stocks, fishing capacity must be regulated, although it is difficult as there is a lack of fisheries data. Fisheries scientists state that one never knows unless the highest production of the production function that you have passed at the maximum sustainable level. Regulating fishing capacity and fishing gear can help maintain sustainable stocks. Apart from that, the establishment of marine protected areas (MPAs) for the maintenance and protection of resources is popular with scientists. The local ecological knowledge appearing in scientific literature these days is also important. There is immense value in the experiences and wisdom of fishing communities to be used. Adaptive management can be used to enhance research and monitoring to promote fish stock management. A more recent development is the use of management strategy evaluations which utilises a computer

simulation approach. The population is simulated and harvest strategies are measured against predefined management objectives. Through a consultative process with stakeholders, a management objective is set. Scientists simulate the objective and develop a strategy to manage it. This approach was being used in the Ocean Tuna Commission for managing Tuna stocks as well as in some countries to manage small-scale fisheries.

"For instance, there is scientific consensus that to manage the high seas fisheries (tuna and other tuna-like species), approximately 30% of the high seas would have to be closed to be able to effectively manage. It is consistently observed that Regional Fisheries Management Organisations (RFMOs) do not do a satisfactory job, thus leading to the advocacy for MPAs".

In recommending technologies and the debate regarding capital-intensive technologies versus labour-intensive technologies, capital-intensive technology would increase overall efficiency, larger catches, and potential to increase profits. But there are certain disadvantages. High costs may create barriers to entry for small-scale fisheries as they are competing against large-scale fisheries. Often, these are the same stock that both large-scale fisheries and small-scale fisheries are competing for. The Maldives has a traditional foreign line fishery and a handline fishery that roughly employs 11,000 workers on about 700 vessels. It is estimated that if Maldives were to replace this for modern fishing, it would take only 2 or 3 percent of workers to catch the same amount of fish. However, these labour-intensive technologies work to Maldives' advantage since it has islands spread out over 800 kilometers. While not as efficient as industrial vessels and unsuitable for large-scale fishing operations, the pole and line vessels that the Maldives currently uses catches about 50 tons a day, thus making it efficient.

In outlining policy measures to manage fishery resources, the key is to have policies directed to ensuring long-term sustainability and that promote monitoring and research. Often, when a fishery develops, a lot of the management authorities neglect regular monitoring. Spatial planning is another such measure that is gaining momentum. For instance, there is scientific consensus that to manage the high seas fisheries (tuna and other tuna-like species), approximately 30% of the high seas would have to be closed to be able to effectively manage..

It is consistently observed that Regional Fisheries Management Organisations (RFMOs) do not do a satisfactory job, thus leading to the advocacy for MPAs. Another important policy recommendation for small-scale fisheries is connecting social protection and fishery management for sustainability. Natural systems and the social ecosystem feed into ecological risks that again perpetuate social issues. Usually, a regular fisheries management authority would have policies to support them. However, a particular study, the 'IIED Policy and Technical Note – May 2020: Connecting Social Protection and Fisheries Management for Sustainability: A Conceptual Framework', found that one would have to be able to support them when these policies remain in place effectively.

The final recommendation outlined was to promote climate change adaptation. The pole and line and handline fishery depend on live bait and several live bait fisheries have been eliminated due to a lack of availability. The International Pole and Line Foundation is working to see if external stimuli like lead lights, flashing lights, or sounds underwater can elicit a feeding response when live bait is thrown into a pole and line fishing.



Dr. Hemanthi Ranasinghe

Senior Technical Expert, Climate Change and Forestry,
SLYCAN Trust, Sri Lanka

Conservation of Coastal Agriculture and Forestry

Dr. Hemanthi Ranasinghe

**Senior Technical Expert, Climate Change and Forestry,
SLYCAN Trust, Sri Lanka**

"The fact that approximately 90% of all goods traded internationally are shipped by sea demonstrates the significance of the blue economy to the global economy. The estimated annual market value of marine and coastal industries and resources is \$3 trillion, or roughly 5% of global GDP".

The term "blue economy" refers to an industry or system of economics that aims to preserve freshwater and marine environments while utilising them sustainably for economic growth and the production of resources like food and energy. The fact that approximately 90% of all goods traded internationally are shipped by sea demonstrates the significance of the blue economy to the global economy. The estimated annual market value of marine and coastal industries and resources is \$3 trillion, or roughly 5% of global GDP.

Due to its geography, coastal agriculture is prevalent, particularly in India. Agriculture, which has been practised for thousands of years and contributes significantly to the economy of coastal areas, frequently finds excellent soil and climate conditions in the coastal areas. India's extensive coastline plays a significant role in this. Fishing, aquaculture, and forestry (mangroves) are all parts of coastal agriculture. Good fisheries and aquaculture depend on mangroves.

In addition to providing a means of subsistence, planters' culture is increasingly being recognized as an important source of carbon sequestration, which reduces emissions of carbon dioxide. Traditional rice-based farming systems, jute-based cultivation systems, integrated cropping systems, lowland rice cultivation, and improved Cauvery river management, the coastal fishing system, mixed cropping systems, coconut-based cropping systems in Kerala and Sri Lanka, commercial cash cropping systems, and homestead farming systems are all examples of these. Countries with a majority of coastlines, like island states, rely heavily on the coastal economy for their livelihoods.

Sea animals like fish, crustaceans, turtles, dugongs, and salt marshes are fed by coastal and marine ecosystems like coral reefs and seagrass beds. Sustainable livelihoods from crops and fisheries, ecosystem services for fish and aquatic fauna, food for aquatic fauna, protection of the coastline from tsunamis through mangroves, sand dunes, and other coastal vegetation, carbon sequestration, shade, pharmaceuticals, and industrial products are all advantages of conserving coastal agriculture and forestry.

Increased flooding, shoreline erosion, salinity intrusion, and rising temperatures are among the obstacles facing coastal agriculture and aquaculture. Development efforts compete for land, water, and other resources due to a lack of comprehensive zoning in the regions. Every nation has plans for managing its coastal zones, but when it comes to development, short-term growth takes precedence. Settlements, aquaculture, fisheries, infrastructure, industrial development, and tourism are all impacted as a result. While beneficial to agriculture, and habitat alteration, the addition of pesticides and agrochemicals have negative effects on fish. Despite the MARPOL agreement, coastal agriculture is affected by toxicity in the ocean, ship accidents, and oil spills.

The ecosystems of the forest face similar challenges. The lack of proper inventories – the amount of coral in possession and their status, number of seagrass beds and salt marshes – could lead to suboptimal conservation with a high probability of sacrifice for short-term economic benefits, adverse impacts from pollution, and increased sedimentation from shoreline structures. Another major challenge is ocean acidification which is detrimental to life under the sea and exacerbated by greenhouse gas emissions from the air as well as from ships.

Zoning of coastal areas, identification of sustainable and protective development activities along every coastline, strengthening existing international agreements, and assisting less developed nations in putting their protected area management plans and coastal resource management plans into action are among the recommendations. At the national, regional, and global levels of policy planning, regulation, technology transfer, education, and monitoring, gaps must be filled.



Professor Irudaya Rajan

Founder Chair,
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Environmental Refugees, Displacement and Loss of Livelihood

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Climate induced migration is mostly understood as the movement of people from one place to another due to the impact of climate change. Climate induced migration is also referred to as environmental refugee migration as they are driven by environmental concerns. When migrants cross international borders they become environmental refugees or climate change refugees though their legal refugee status continues to be in question. Sometimes they are also internally displaced. When this occurs in India, migration scholars look at migration caused by climate change as environmental migration even though environmental migration exists outside of climate induced migration. The evidence of climate induced migration can be found in a book titled “Climate Change Vulnerability and Migration”, which traces the migration pattern post the Kerala floods in 2018. Climate induced disasters in peninsular India such as floods have led to the migration of fishermen in the coastal belt in search of better fish stock and livelihood. Most of such migration can be categorised as internally displaced.

"Social, economic, and political dimensions all bear witness to the consequences of such a displacement problem. Migration and displacement must be monitored because they can disrupt the region's economy".

The Intergovernmental Panel on Climate Change (IPCC) released some interesting figures in 1990, estimating that climate-induced migration will reach 200 million by 2050. By 2050, 34 million more people are expected to migrate from Southeast Asia, sub-Saharan Africa, and Latin America. It is anticipated that vulnerable nations such as Nigeria and Tanzania have the highest numbers of climate migrants, both domestically and internationally. Disasters caused by climate change, like floods, not only disrupt the livelihoods of various coastal communities but also disrupt the supply of resources, like livestock deaths and a lack of fertile land for agriculture. In 2022, Pakistan experienced unprecedented floods that nearly killed 2000 people. In a similar vein, in 2022, extreme weather events in India resulted in the deaths of nearly 700,000 livestock, the destruction of 1.8 million hectares of land, and the deaths of 3000 people.

Social, economic, and political dimensions all bear witness to the consequences of such a displacement problem. Migration and displacement must be monitored because they can disrupt the region's economy. Foreign security and diplomatic issues can arise as a result of international migration, particularly when visas and residency status are involved. The loss of habitat, rising health concerns, unemployment, poverty, and economic inequality are all socioeconomic effects. There is currently no framework for policies to address the issue of climate-induced migration. The issue of climate-induced migration is not addressed in the majority of state and city plans for disaster management and mitigation.

It is essential for the states to collect data on migration prior to developing any economy or national migration policy. Real-time data on internal and international displacement and migration can provide a clear picture of the impact of climate change on the population. In order to develop a regional policy that addresses climate-induced migration, it is essential to comprehend the challenges faced by communities.



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BRI and its Impact on Sustainable Blue Economy

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The blue economy and the ocean economy are vastly different. Ocean economy, for instance, focuses on economic factors like the dependence of SIDS on fisheries and marine resources. The blue economy, on the other hand, includes sustainability itself. Everything, from a sustainable ecosystem to community engagement to policymaking to technical capacity to institutional integration, is included in the "blue economy." It is a process in which governments and communities are interconnected and everyone is involved. In addition to traditional ocean-use activities like fishing, tourism, and maritime transportation, newer activities like offshore renewable energy, aquaculture, and the construction of port facilities have emerged in recent years. Such exercises have adverse consequences and are acquiring significance under SDG 14.

According to data from the Asian Development Bank, it is necessary to invest approximately 26 trillion in energy, renewable energy, power generation, transportation, and other areas. Unfortunately, the Asian continent lacks financial resources, despite its potential. As a result, nations took advantage of BRI as a chance to address development needs. The World Bank says that BRI also gave two lakh people jobs in different countries. While BRI's emphasis on various forms of development has had a positive impact on the economy, it has also had a negative impact on the environment. Pollution and waste result from poor infrastructure and industrialization planning that disregards sustainability.

Green BRI is a concept that has been vigorously promoted by China. The first is baseline environmental protection provided by the host nation's environmental laws and regulations can serve as the first line of defence against environmental consequences. This means that whenever a BRI project is started in a country, that country should take care of everything that has to do with the environment. Second, China claims that BRI projects meet the 2030 SDG objectives. China also came up with the concept of ecological civilization, and President Xi Jinping has used the term "ecological civilization" frequently to talk about making China more beautiful, being environment friendly, and making industrialization in a way that is better for the environment. China has been attempting to shift its policies toward greater environmental sustainability ever since the Paris Agreement was signed. However, none of these things can be found outside of China. Thirdly, it is important to promote environmentally friendly development practices by China in BRI-participating nations because China has numerous opportunities to offer investments and technology for

for renewable energy to other nations.

"Instead of working on environmental issues, nations are attempting to take advantage of such circumstances and gain influence in the region. Consequently, it very well may be normal that China will prioritise geopolitical supremacy over ecological issues in the BRI nexus".

Fourthly, China guarantees a green BRI through a number of bilateral investment treaties and multilateral environmental agreements. even though such assertions are regarded as false. Bangladesh and Pakistan, for instance, lack an authority for environmental impact assessment to monitor and evaluate development projects like the BRI. Last but not least, geopolitical issues in the Asia-Pacific region like the Russian-Ukraine war. Instead of working on environmental issues, nations are attempting to take advantage of such circumstances and gain influence in the region. Consequently, it very well may be normal that China will prioritise geopolitical supremacy over ecological issues in the BRI nexus. It is critical that nations implement specific, individualised green BRI policies. China can utilise the BRI nexus's interconnectedness by providing incentives such as renewable energy infrastructure that will also benefit the nexus. Some of the things that could be done include sharing resources and information within the nexus, arbitrating cases in which the investor violates environmental regulations, and so on.

A country might be able to have a green BRI in a few different ways, like strictly implementing green BRI policies. Because the policies are so broad and general, they require very specific policies. Since BRI is not a project of just one nation, it affects and connects many nations. As a result, they must implement the BRI policies, and China can provide various nations with incentives such as renewable energy. In terms of pollution and the environment, Bangladesh is confronted with numerous difficulties. It is possible to attribute Bangladesh's engagement with China to a development objective that has the potential to rescue the nation from an economic crisis. The country faces refugee issues caused by climate change and the environment that necessitate concrete policy and practice. Bangladesh is offered growth and economic opportunities by BRI, despite the green policies it implements. BRI is like a zero-sum game for developing nations, which promotes economic growth at the expense of environmental degradation. It can be mapped as an inverted U-shaped model in which economic decline occurs during the initial phase of development. After a certain period of time, there is economic solvency, and then countries such as Bangladesh can focus on environmental issues.



Dr. Ching-Ta Chuang

Professor Emeritus,
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Managing Ocean Resources in the Indo-Pacific for a Sustainable Blue Economy

Dr. Ching-Ta Chuang

Professor Emeritus, Institute of Marine Affairs & Resource Management

"With just 0.2 percent of the earth, Taiwan has one-tenth of marine creatures in Taiwans' oceans. When it comes to fishery industry development, Taiwan is in the top six for deep-sea fisheries and India is in the top six for total fishery production in the world".

Taiwan is surrounded by the ocean, with rich resources. The ocean provides food, transportation, and energy. Taiwan is very strong in shipping and transportation with over 2000 coastal lines.

With just 0.2 percent of the earth, Taiwan has one-tenth of marine creatures in Taiwan's oceans. When it comes to fishery industry development, Taiwan is in the top six for deep-sea fisheries and India is in the top six for total fishery production in the world. Taiwan's marine fishery is in the top 26, aquaculture is in the top 21 in the world.

With rich oceans, the green ocean is one of the major policies conducted by the Environmental Protection Agency. Another policy is the one conducted by the Ocean Affairs Council where all the ministry levels are in charge to clean up the ocean, especially plastic. In April 2018, under SDG 14, Taiwan decided to have a cabinet-level agency and established the Ocean Affairs Council located in Kaohsiung, an ocean city in the southern parts of Taiwan.

Under the council, the Coast Guard Administration takes care of marine security and safety, the Ocean Conservation Administration for marine conservation and ecology via sustainable management, and the National Academy of Marine Research. The Ocean Affairs Council is in charge of marine debris, especially focusing on microplastic. According to a study in 2018, the marine industrial contribution is about 3.3 percent of Taiwan's GDP and is expected to go up to 4 percent by 2030.

The National Academy of Marine Research has AI technologies to detect marine debris. The organisation also collaborates with NGOs and locals for waste management and disposal. The agency marks fishing gears to monitor lost gears. This policy was initially used in Selong and Taipei City but has been implemented by local governments. Most of the waste is recycled and reproduced. For example, old fishing boats are transferred to recreational fishing boats or multi-functional boats.

Taiwan is aiming to build new fishing vessels and also focus on agriculture. Hence, AI was applied to increase biological productivity and biodiversity through human interaction. Taiwan is combating IUU by monitoring and surveillance through which the vessels are tracked for 24 hours. Taiwan is also dedicated to taking more action in protecting the rights of foreign crews, which is around 10 percent of the 3,40,000 crews currently present in Taiwan. To combat IUU, Taiwan has several action plans and legal institutions. In conclusion, Taiwan will continue to develop marine fisheries and aquaculture, especially the marine industry with its economic ability, keeping in mind environmental sustainability and social equity.

Session II: Discussion Summary

The blue economy consists of multiple sectors such as fishing, shipping, navigation, security, mining, etc. around 30 to 35 sectors. Each sector has some positive or negative influence on the other sectors. With sustainability at the center, it is important to understand these influences and measures to conserve ocean resources.

The discussion began by understanding the yardstick used by Taiwan to measure overfishing and efforts to control it. Taiwan has recently launched the concept of a blue economy. In the fisheries sector, they recently raised the quota of loans for aquaculture, providing diversified breeding loans and weather index insurance. But Taiwan was careful with respect to subsidising marine fisheries. More financing could destroy marine fisheries. This is why Taiwan's initial focus was on aquaculture and not marine fishery. Last year, the WTO passed a consensus about the subsidy for fisheries agreement. Under the Ocean Affairs Council, Taiwan has a law called the Law of marine industry development and this law is already in cabinet and under evaluation. It is expected to be passed soon. In the future, all these financial approaches will be followed by this law.

"The idea of green BRI is something that China is trying to promote and the BRI countries are willing to comply with the environmental protection mechanisms. The countries know that there is a lack of accountability from China and hence the point on baseline protection mechanisms".

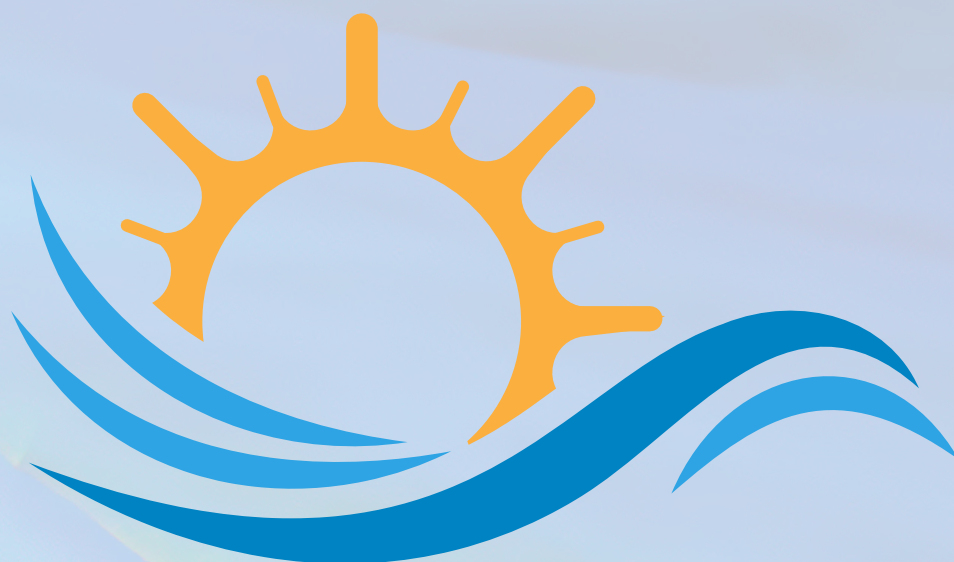
Another discussion was initiated to understand the baseline exercise of individual legislation. The baseline legislation may trigger some kind of a race to the bottom because states use certain economic conditions to attract investment. States might race to the bottom by not creating conditions for labour welfare, and wage conditions, in order to attract investments. This is because of a lack of environmental policies or adherence to existing policies. Similarly, China emphasises on the environmental sustainability of BRI but there is less accountability of China to implement green projects or accountability of BRI countries. The idea of green BRI is something that China is trying to promote and the BRI countries are willing to comply with the environmental protection mechanisms. The countries know that there is a lack of accountability from China and hence the point on baseline protection mechanisms. Through green BRI, China is trying to protect its international image in its race for a superpower.

Baseline protection was proposed by China for countries to comply with environmental policies. Most of the countries that are recipients of BRI infrastructure investments and other facilities are in need of money, for development projects. The environment is the least concern they have in the case of such initiatives. Hence, China comes with environmental policies on the pretext of being sustainable. Although, there is no pressure from China or even the host countries and hence, baseline protection mechanisms can work and individual countries should revise their policies. And if China is really willing to bring a green BRI they have to make sure that these policies are very specific, binding, and compensatory and the nature of the policies should be robust. These policy suggestions can work in particular environments where there is transparency, where there is no desperate need for money, and where there is no corruption.

Looking at existing aspects of international law such as the principles of non-refoulment which allow states not to refuse entry of refugees. There is a need for different vocabulary to deal with climate induced refugees. The discussion further looked into the solutions to climate induced migration. With the implementation of the Citizenship Amendment Act (2019) in India, the regulation of illegal migration becomes questionable. India has several refugee groups: Jews, Tibetans, Afghans, Sri Lankan, and Rohingya refugees. The government treats each category of refugee differently.

Climate refugees have to be dealt with on a need basis and each country should create legal provisions to accommodate such refugees.

On migration and mobility issues– the demography is affected by three factors: birth, death, and movement of the people. It is necessary to integrate migration into developmental policies and offices need to be created in major areas in order to measure and understand the pattern of migration. Human Migration Advisory Officers can be appointed to address these patterns and provide policy recommendations.



Indo-Pacific Confluence
Dialogue 2023

Session III



Session III Chair
Prof Vidya Nadkarni

Distinguished Fellow, Mem. of Governing Council, TPF,
Professor, Dept of Political Science and International Relations,
University of San Diego, California

Climate Action: Mitigation, Cooperation, and Response Mechanisms

Owing to the effects of climate change, the frequency with which countries in the Indo-Pacific are facing natural disasters has seen a steep rise. These changes are having a very real geopolitical consequence as maritime boundaries are altered, and new shipping lanes are discovered. At this juncture, it is imperative that nations in the region establish cooperative mechanisms to address grey areas in international law, share information and technology, such as early warning mechanisms, monitoring and surveillance, to improve overall Maritime Domain Awareness (MDA) and establish a rapid response to emerging HADR situations. This session will seek to address these issues in terms of regional and international cooperation.

Chairperson

- Prof Vidya Nadkarni
Dept of Political Science and International Relations, University of San Diego, California

Speakers

- Vice Admiral M P Muralidharan AVSM & Bar, NM (V),
Former Director General,
Indian Coast Guard (ICG)
Maritime Domain Awareness; Surveillance, Monitoring and Communications
- Prof P M Soundar Rajan,
Adjunct Professor, NIAS, Bengaluru
Former Distinguished Scientist, DRDO
Technology Cooperation for a Sustainable Blue Economy
- Dr Wen-Yen CHANG,
Dean, College of Environmental Studies,
National Dong-Hwa University (NDHU)
Disaster Mitigation and Management: A Climate Change Perspective



Vice Admiral Muralidharan AVSM & Bar, NM (V)

Former DG, Indian Coast Guard (ICG)

Maritime Domain Awareness: Surveillance, Monitoring and Communications

Vice Admiral Muralidharan AVSM & Bar, NM (V) Former DG, Indian Coast Guard (ICG)

The ocean is key in the 21st century. In the words of Admiral Alfred Thayer Mahan, whoever controls the Indian Ocean, controls Asia. The concept of Indo-Pacific was succinctly put across by Prime Minister Narendra Modi at the Shangri La Dialogue (2018) when he said that the 21st century destiny of the world will be deeply influenced by the course of developments in the Indo-Pacific region. He further brought out that India's own engagement in the Indo-Pacific region from the shores of Africa to the Americas will be inclusive, promoting a democratic and rule-based international order, cooperating to keep the seas, space, and airways free and open, and keeping nations secure from terrorism.

The geostrategic significance of the maritime domain is quite evident. As interdependence between nations grows, imports increase because shipping still remains the cheapest form of transportation of cargo. Global maritime trade accounts for nearly 80% of the world trade by volume and 70% by value. It is estimated that there are about 54,000 ships costing about \$450 billion, ply the ocean routes and generate about 14 million jobs. The total trade, imports, and exports combined is almost \$35,000 billion. Apart from transportation, oceans are also a major source of resources, marine, and coastal industries earn about 3 trillion per year. Indo-Pacific is a multicultural, multipolar region with nearly 60% of the world's GDP and 65% of the population. The maritime trade transiting through this area is close to 60% of the global trade. Due to the geostrategic value of the area, countries such as the US, the UK, France, China, and many other European powers look for bases. China, over the past two decades, increased its presence and engagements in the region. It's a very complex region with traditional as well as non-traditional threats with transnational linkages.

With respect to the island nations of the Indo-Pacific– the islands played an important role, such as providing warning and surveillance posts, and logistics basis for deeper ocean deployment. The islands provide the countries with baselines, which gives them jurisdiction over certain waters. After the UNCLOS came into being, one can go up to 200 nautical miles into the sea from the island's baseline. So it's a very important area for exploitation of the maritime resources, which provides a defence strategy as seen from the power projection perspective. It is clear as to the reason for creating artificial islands. This is an overview of the strategic security perspective.

Regarding maritime challenges and threats– towards the end of the 20th century, it became evident that there was a shift from the traditional naval confrontation (World War II) to non-conventional challenges or low-intensity maritime operations. It includes maritime terrorism, piracy, drug and human trafficking, gun running, poaching and IUU,z and illegal gathering of sensitive data. Many of the threats could come from non-state entities, well funded by states which chose to remain silent. These challenges cut across political boundaries and hence, the introduction of maritime domain awareness (MDA).

MDA has been defined by the IMO as an effective understanding of anything associated with the maritime domain that could impact security, safety, the economy, or the environment. In simpler terms, it amounts to improving situational awareness in order to initiate speedy responses to any kind of scenario in the maritime.

In recent times, countries have implemented monitoring activities– coastal regions, under the sea, in the air and space, as well as through cyber surveillance. Many nations have limited surveillance capabilities to monitor such large areas. Therefore closer cooperation between nations is required for complete surveillance and identification of threats, manmade or natural. The underwater domain, which is disregarded often, is a new focus in terms of security perspective– to safeguard sea lines of communication. Security of chokepoints is not only a military requirement but also a scientific one, in order to prevent other countries from monitoring resources and extracting information.

"In keeping with the collaborative vision, India started the Indo-Pacific Oceans Initiative, which is essentially creating partnerships with like-minded countries. The initiative includes seven pillars- maritime security, maritime ecology, resources, capacity building and resource sharing, disaster and risk management, science and technology, academic cooperation, trade connectivity, and maritime transport".

MDA is complex and challenging as the seamless nature of the maritime domain enables a steady flow of threats and challenges. A state needs to gather intelligence, surveillance, and reconnaissance. Hence, the combined efforts of multiple agencies are required to monitor, through patrolling by ships, aircraft, UAVs, space, and underwater surveillance.

India took the initiative of setting up an Information Fusion Center at Gurugram near Delhi in 2018, to enhance maritime awareness of the Indian Ocean as well as the adjoining Pacific areas. The cooperation extends to 21 partner countries and 22 multinational agencies across the world, virtually monitoring the Indo-Pacific. The center has been monitoring, recording, and reporting incidents across the world. The agency monitored around 3,411 incidents in the IOR which includes cases of piracy, armed robbery, contraband smuggling, IUU fishing, irregular human migration, and other maritime incidents. Cybersecurity, environmental pollution, and climate change are the other maritime security threats.

In keeping with a collaborative vision, India started the Indo-Pacific Oceans Initiative, which is essentially creating partnerships with like-minded countries. The initiative includes seven pillars- maritime security, maritime ecology, resources, capacity building and resource sharing, disaster and risk management, science and technology, academic cooperation, trade connectivity, and maritime transport.

The maritime forces between nations, navies, and coast guards, have always played a significant role in increasing cooperation between countries whether it's port visits in regular intervals, institutionalised bilateral exercises, coordinated patrol around modern boundaries, anti-piracy patrols, search and rescue, and humanitarian and assistant disaster relief. Symposiums such as the Indian Ocean Naval Symposium, which is started to help increase cooperation between nations.

In conclusion, in the 21st century, there are fewer areas of greater strategic importance than the maritime domain. MDA is one way of effectively understanding anything associated with the maritime domain that could impact security, safety, the economy, or even the environment. Without understanding the domain, achieved through data collection, monitoring, and analysis of inputs from multiple sources to have near real-time awareness of what's happening, countries will lose vital opportunities to react in time. Initiatives such as The Indo-Pacific Ocean Initiative is a major step towards cooperation, looking beyond narrow geopolitics.



Professor Soundar Rajan

Adjunct Professor, NIAS, Bengaluru, and
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Technology Cooperation for Sustainable Blue Economy

Professor Soundar Rajan

**Adjunct Professor, NIAS, Bengaluru, and
Former Distinguished Scientist, DRDO**

Two important perspectives of technology are using technology and transferring technology. Technology sharing is important among coastal countries, especially for the efficient use of resources. Under the fisheries sector, India has worked on satellite based advisories for catching fish depending upon the availability of food. This technology has been used since the start of the 21st century.

India is quite advanced in such technology with some reliance on its own or other satellites. Similarly, the location of placer materials, indigenous mining techniques, deep sea water technologies for commercial utilisation and low cost effective vehicles have been developed. These technologies have progressed and the most advanced technology called MATSYA is under development. Such technologies require data about weather, climate, and yield. Computer simulations and applications have been developed in order to understand the climate. Such technologies have predicted cyclones crossing the coast, especially cyclone Hudhud in Orissa which has proved effective in saving lives and disaster management. India also has established a tsunami warning system with its own technology, network, plan, and design. Supporting the blue economy requires acoustics, optics, radars, operating underwater vehicles, satellite oceanography, sonar, and animal telemetry, including instruments, whales, other fishes, etc., locating them and studying their migration pattern.

The National Institute of Advanced Studies (NIAS) has worked on space situational awareness and MDA. Although, India needs contributions from other countries. For example, the US's satellites are capable of monitoring oceans 26,000 km away but are unable to see 500 km away at lower orbits. This is because the satellites are supposed to measure the surface wind on the ocean, the sensors on these satellites have certain sensitivities, and measurement accuracies, which will be limited because of the diameter. But at such a lower distance, countries can benefit from local data collected and improve measurement accuracies. Hence it is clear that countries need to cooperate in order to gain maximum out of computer prediction models and use it for the blue economy. It is important to understand the recommendations of our maritime neighbours. This war focused assistance can be offered for capacity development through the supply of hardware training, joint operations, data gathering, and sharing for better marine domain awareness and disaster relief. Such cooperation should be extended from developed countries to developing and least developed.

"It's very difficult for a single country to generate knowledge on earth system science, not just oceans, but for other earth objects also for example, earthquake prediction".

The Indian Ocean and its vastness in all aspects have been understood by the West, conducting expeditions from 2015 to 2025 for data collection. The small states in the region can also contribute to this process by sharing local data available and extending cooperation. It's very difficult for a single country to generate knowledge on earth system science, not just oceans, but for other earth objects also, for example, earthquake prediction. International partnership to improve understanding of the earth system process is very essential to convert knowledge into products and services for weather, climate, and ocean for the country and neighbouring regions like BIMSTEC.

To build effective observational systems, data standards, exchange predictions, systems, and networking is required. So the key word here is 'networking'. Networking is not just about connecting one place to another, but the kind of data sent in them and how to interpret the data. For example, a group on earth observations with international efforts, that is a global earth observation system, integrated observing systems and sharing data by connecting existing infrastructures. Now, countries will have to integrate into their network in order to bear fruit.

There are several levels of technologies for the purpose of search and rescue such as GPS and Automatic Identification Systems. Although GPS can be a problem as witnessed in the Russia-Ukraine war. For example, AIS can simply spoof the rest of the crowd, confusing the entire monitoring system by transmitting wrong information. These systems can complicate things by spreading misinformation. Some nation-states are themselves doing this. Hence it is very important to cooperate in this area. The MDA by JAXA, or the QUAD, can acquire data from multiple sources such as coastal radar ships, aircraft, and satellites that can be pooled and analysed in a single platform in real-time.

The Information Fusion Center which works on using all this data relies on an automatic identifying system, which is good for keeping track of white shipping, illegal fisheries, drug smugglers, etc. They can just turn off the AI system where they don't need to jam them. Many of the fishing boats won't have AI systems. Questioning the ability to track- through QUAD, the Indo-Pacific Partnership for Maritime Domain Awareness, countries can get additional data, and an enhanced version of the Sea Vision platform, which is meant for MDA is being made available as well.

Sea Vision can be enhanced by including electro-optics imagery, Synthetic Aperture Radar data to build a 3D picture of targeted vessels, helping to identify drug smuggling through ship data from the visible infrared region, etc. This is a great help, in terms of being able to identify the maritime domain awareness, because once India does not have access to this awareness, it'll affect everything like shipping, fishing, and the blue economy. When they turn off the beacons of AIS, countries will use electronic warfare technology during combat, which is being used here by systems satellites called Hawkeye 360. So three of these satellites spread by 300 kilometers, go around and pick up signals from the vessels. Even if the population uses their mobile phone or any emissions they can pick up signals across the big vast frequency range and can locate them to help in completing the monitoring and domain awareness. These are the benefits that we get when we go for a cooperation model. Every nation including India should cooperate with others in order to improve domain awareness.

On the topic of pollution and plastic elimination, the National Marine Litter policy became imperative. Plastics are produced by human beings and hence it is our duty to clean the ocean. The actual method of collecting plastic from the surface is impossible and there is a likely chance of spending additional fuel on developing technology, further polluting the environment. A disregarded topic is electronic pollution which is mainly improper disposal of gadgets. Through additive manufacturing and metal printing, every part of the gadgets is reused, thereby eliminating electronic waste.



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Disaster Mitigation and Management: A Climate Change Perspective

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Taiwan has been actively implementing policies on disaster mitigation and management in the APEC region. During the last decade, the National Science and Technology Council (NSTC) has been actively supporting and promoting the APEC agenda about Disaster management and mitigation and disaster risk reduction (DRR).

In the APEC, about the DRR, NSTC has a strong constitution to the EPWG- Emergency Prepared Working Group and PPTSTI- The Policy, the Partnership, and Science Technology and Innovation. NSTC has expressed its greater ambition in sharing the DRR technology with other APEC members and enhancing the corporation at the bilateral and multilateral levels. Another important program is Bridging Earth, Science, and Technology (BEST). Taiwan launched the policy as an integrated program for 'Intelligent Prevention of Natural Disaster' and 'International Cooperative Researcher of Earth Sciences in Southeast Asia'. The budget is about 15 million US dollars and the programme has been there for four years. This connects and promotes the corporation with many South Asian countries.

"According to statistics, the annual average loss by natural disasters in Taiwan is nearly 70% because of typhoons".

Taiwan is one of the high-risk disasters and hot spots caused by different hazard types like earthquakes, and landslides. So Taiwan is at a higher risk of death by natural disasters. According to statistics, the annual average loss by natural disasters in Taiwan is nearly 70% because of typhoons. Taiwan has a national-level program for disaster reduction and prevention. Until 2008, the program didn't work well. In 2009, a compound disaster affected by extreme weather resulted in the deaths of several people. The rainfall was up to 3000 millimeters, which caused landslides and damaged the dam located in a village which caused several deaths.

In that year, Taiwan was in the top three natural disasters by the number of deaths because of Typhoon Morakot. The Western part of Taiwan is called Western Pacific Ocean Fire Ring which has many volcanoes and is prone to earthquakes.

Taiwan proposed another national-level program, called the National Science and Technology Applied program. In the past 20 years, Taiwanese scientists have joined many international Science Programs like the CIA, ACT in SEA, and CAOB. The main purpose was cultivating academia. In the past four years, Taiwan also promoted international corporations through APEC, EPWG, and IRDR and joined the global square model.

With the BEST program, Taiwan collaborated with many countries, and in the past four years, Taiwan signed more than 30 MOU or MOAs with these countries. With the Philippines, Taiwan had a 'Vote program'– Volcano, Ocean, Typhoon, and Earthquake, a two-side ministry-level collaboration program. The BEST program has three major missions, First one is to enhance the international scientific platform, the second is to promote science and technology collaboration to global excellence and the third is to develop intelligent prevention and application to national disaster. Taiwan installed many instruments and technologies in Southeast Asian countries. For example, in Vietnam, establishments and maintenance on integrated disaster decision-supporting systems and intelligent technology applications and training for other countries. Taiwan installed more than 70 systems in more than 10 countries like Bhutan, Nepal, and Thailand depending on these countries' demands.

In Vietnam, Taiwan established a joint center and research laboratories two years ago. Taiwan also introduced National Applied Research Laboratories with 11 different centers and 1 preparatory office. It includes the National Nano Device laboratories, the National Chip implementation center, National Center for Research on Earthquake Engineering, National Center for High-Performance Computing, the Taiwan Ocean Research Institute, National Space Organization which was reorganised into Taiwan Space Agency (TASA) recently. This year Taiwan will launch FORMOSAT-8 which will provide satellite images with a resolution of less than 70 centimeters.

Earth science and environmental disaster mitigation technology in Taiwan can provide instruments and can develop EWS. It is important to install EWS, for natural disasters. This has three key points. Firstly, countries must install high density sensors. Taiwan has installed more than 1500 systems across Southeast Asia. In 2022, Taiwan launched the FORMOSAT-5. FORMOSAT-5 will provide the satellite image for environmental and natural disasters. Previous technologies have tracked the 2004 Southern Asia Tsunami, the 2008 Wilkins Ice Shelf corruption, the 2008 Sichuan earthquake, the Shinmoedake volcano, 2011 Japan earthquake. Japan's earthquake also impacts Taiwan and hence, Taiwan also has a high risk of tsunamis. So authorities in Taiwan rechecked the new power plant. Now the State can use this technology to simulate the tsunami run-up to make sure that Taiwan's new nuclear power is safe. To ensure the safety of the electric system, Taiwan installed many systems around the South China Sea. Similar technology can aid countries in the region especially during and after the occurrence of a natural disaster of hazard. Through cooperation, countries can protect infrastructure essential for the functioning of the economy.

Session III: Discussion Summary

The discussion started by discussing the AIS which has been made compulsory for vessels above 20 metres. The scope of manipulation, etc., IMO has made it very clear that these need to be kept on, especially for merchant vessels, which is applicable, for tracking and updating MDA. India's problem is not so much with the big ships, but with the fishing vessels, which are less than 20 metres. The effectiveness of MDA becomes questionable. Similarly, the effectiveness and strategies to gain underwater domain awareness were questioned. When it was pointed out that MDA's effectiveness and efficiency required international cooperation, the topic of national security concerns with respect to data and information sharing was brought forward.

It was brought to the attention that technology alternatives to the AIS need to be implemented. The fishing vessels can be tracked based on data merged with AI technologies such as electronic emissions and Hawkeye satellites to track the approximate locations. Spoofing the system is another way. It can be handled by multiple sensors integrated including AI and robotics. Robotics because several underwater vehicles are developed for underwater tracking. AIS can be implemented on fishing boats as well but more importantly, fishermen need to be educated on safety and security concerning the application. The application was proven to be costly but eventually, the government sponsored cheaper version was made available to the fishermen. The effectiveness of the MDA can be increased through international cooperation. Countries can join the Indo-Pacific Ocean Initiative and post a liaison officer in the Indian Ocean Fusion Centre. Through this, information exchange can be carried out which would eventually help the countries in the region.

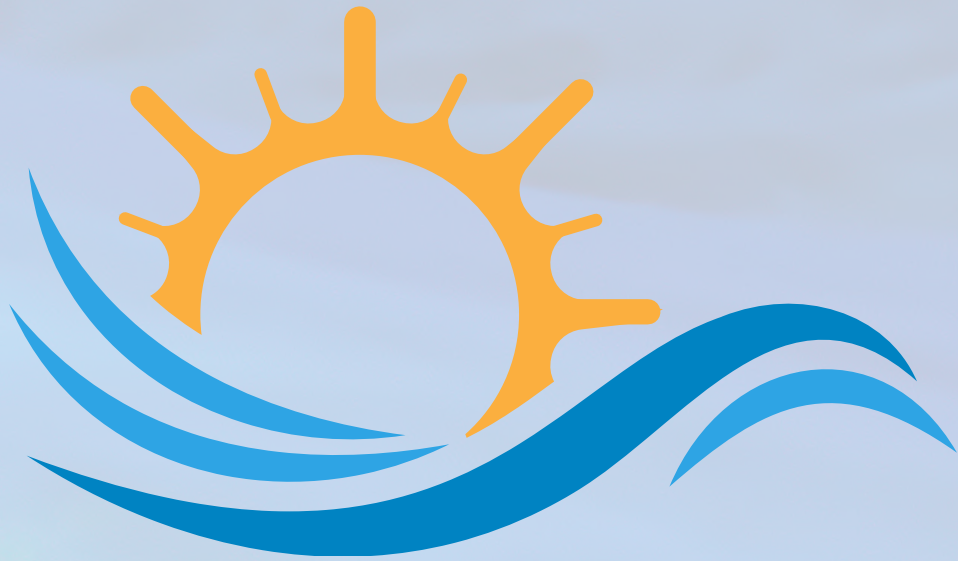
"Although territorialisation of maritime spaces and other spaces continue to animate how a country shares data. Countries need to look at merging for civil requirements in the context of a larger threat faced by humanity rather than for military use".

Monitoring through aircraft and underwater sensors is converted to data and shared among partner countries. Even if the AIS system is switched off, nearby stations can be informed to monitor certain vessels. India has monitored illegal migrants stranded in mid sea and the maritime forces help them out. Underwater monitoring has evolved over time with robotics and unmanned vehicles. Technologies similar to drones monitor the vehicle's movement underwater and transmit data back to the host country. Data from such UAVs are also used for military purposes. In case of emergencies and in general, countries need the support of neighbouring countries.

Partnering with other countries, for example on climate action response mechanisms, might mirror the geopolitical competition. Creating standardised technologies might replicate the same competition and undo some of the gains that we normally associate with such response mechanisms. Although technologies from developed countries are extremely useful for both military and non-military uses. At the same time, it is very important to build our own technologies and cooperate with other countries. Better indigenous systems can be helpful for other countries as well. Cybersecurity is important as we build technologies and complement the data available.

Although territorialisation of maritime spaces and other spaces continue to animate how a country shares data. Countries need to look at merging for civil requirements in the context of a larger threat faced by humanity rather than for military use. Many systems that are developed for the US have subsequently been used for commercial purposes with a profit motive. Similarly, EWS can be passed to neighbouring countries protecting the region from non-traditional security threats such as illegal immigration or drug smuggling.

It is important to understand the cause of natural disasters which includes the rise in intensity of the same. For example, the increase in the number of earthquakes in Indonesia which once was the cause of the 2004 Tsunami in the Indian subcontinent. The rain patterns have become erratic creating massive amounts of destruction as well. For Tsunamis, there are early warning systems in place such as the Pacific Tsunami Warning Center in Hawaii. These systems warn countries about the intensity of Tsunami's by measuring the subfunction zone geometry and by defining earthquake parameters. Once the intensity is understood, mitigation plans will be carried out.



Indo-Pacific Confluence
Dialogue 2023

Special Lectures



Chair

Air Marshal M Matheswaran AVSM VM PhD (V)

Founder President, The Peninsula Foundation (TPF)

Indo-Pacific: Overcoming Threats to Sustainable Blue Economy

The Indo-Pacific is a globally interconnected region where the maritime interests of many players, both within and beyond, are at stake. This strategic hotbed accounts for nearly 62% of the global GDP and almost 50% of the world's trade sails through these waters. Being a warm ocean, the economic potential of India and the Pacific is vast. Along with a culturally diverse and burgeoning population, the geopolitical significance of the Indo-Pacific region cannot be understated. As a consequence, it also faces greater challenges in the form of rising traditional and non-traditional security threats – terrorism, maritime and boundary disputes, exploitative resource extractions such as IUU fishing, deep-sea trawling, and seabed mining, coercive economic practices, large-scale infrastructure projects such as the BRI, climate change, energy insecurity, technology, and information warfare, etc. This open roundtable discussion will discuss some of the most pressing challenges in the region and the way toward an equitable, rational, prosperous, secure, stable, and sustainable Indo-Pacific.

Chairperson

- Air Marshal M Matheswaran AVSM VM PhD (V)
Founder President, The Peninsula Foundation (TPF)

Speakers

- Prof Vidya Nadkarni,
Distinguished Fellow and Member of Governing Council, TPF, Professor,
Dept of Political Science and International Relations,
University of San Diego, California
- Air Chief Marshal Gagan Bulathsinghala RWP RSP VSV USP (V),
Former Commander SLAF and Ambassador to Afghanistan,
Director, Kelsey Development PLC, Sri Lanka
- Mr Mohan Guruswamy,
Distinguished Fellow and Member of Governing Council, TPF,
Former Advisor to the Finance Minister, Govt. of India
- Mr Manoj Kewalramani,
Chairperson, Indo-Pacific Research Program,
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Prof Vidya Nadkarni

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China's BRI and BeiDou 3: Tools to Dominate the Indo-Pacific

Prof Vidya Nadkarni

**Distinguished Fellow, Mem. of Governing Council, TPF,
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Internationally, the transition of power from the United States to China is unfolding frame by frame. The most recent US National Strategy Assessment identified China as a near-peer competitor. China's aspiration for regional hegemony in multipolar Asia is complicated by the near-simultaneous rise of India, the US's alliance with Japan and South Korea, and Washington's relationship with Taiwan. Hence, there is a dual power transition that is ongoing. One is in Asia and another in Central America. China's aspiration for hegemony is complicated in both regions. In East Asia, the alliances of the United States with Japan and South Korea and its relationship with Taiwan. In South Asia, China's inability to co-opt India. In the Middle East and in West Asia, China's making inroads in its relations with Iran and Saudi Arabia but it's less likely for China to emerge as an unchallenged hegemon because the Middle East itself has aspiring hegemonies such as Iran, Turkey, and to some extent Saudi Arabia. In Central Asia, there is competition with Russia.

With respect to China's geopolitical objectives, establishing unchallenged primacy in East Asia and expanding its economic and strategic footprint on all continents is one of China's geopolitical objectives. China wants to create a Sino-centric Asia and a multipolar world. China would like a unipolar Asia and a multipolar world, whereas the United States would like a multipolar Asia and a unipolar world. Hence, the geopolitical competition. Additionally, China would like to replace Pax Americana with Pax Sinica by selectively engaging with and revising the extent of the global multilateral order, and BRI and Beidou 3 are important instruments in China's quest for influence in Asia and around the world.

In terms of the historical context within China itself, the Chinese Communist Party's social contract with its citizens changed in the late 1970s with the adoption of state capitalism and the jettisoning of a very rigid interpretation of Marxism, Leninism, and communism. By the end of that decade, the repressive crackdown on the Tiananmen Square protests, calling for political liberalisation, demonstrated the limits of China's willingness to reform and belied Western expectations of China to get integrated into the global economy and democratise. Unsettled by the prolonged political protests, the leadership of the CCP introduced a program of patriotic education to inculcate a strong sense of nationalism among its citizens.

The ultimate security calculation for all Chinese leaders, including President Xi Jinping, is to eliminate or at least manage all threats to the legitimacy of the Communist Party. In other words, Beijing's primary core interest is regime stability. It's not just national interest, but national interest refracted in terms of regime stability, which means the right of the party to govern, the legitimacy of the party to govern, and suppression of domestic dissent is important in achieving this goal. Hence, China expands a great deal of resources in suppressing domestic dissent and building a firewall to insulate the country from perceived threats posed by liberal ideas.

China's foreign policy has undergone a sea change from the end of Maoist international isolation in the late 1970s to today under Xi Jinping's leadership. The Chinese people have been primed to see their country in nationalist, even jingoist terms, and wolf warrior diplomacy is celebrated. In the 1980s, Deng Xiaoping had counselled a low-profile strategy of hide your strength, bide your time. Since 2010, however, Chinese leaders have jettisoned such reticence and adopted an assertive, even aggressive Chinese foreign policy. This shift has undermined US's faith in China as a responsible global stakeholder.

"China has skillfully used economic diplomacy as a tool of statecraft drawing on a deep treasure chest of funds, even after the sharpest monthly drop in the value of its foreign exchange reserves in August, 2008".

China's heel is the Malacca Straits which is a choke point. Most of the oil imports that China receives from the Middle East go through the Malacca Straits. And in order to achieve primacy in East Asia, China has to overcome its Malacca Strait dilemma. Similarly, India's heel is the autonomous Indian Ocean and its ability to harness the potential because of its geostrategic position. With the US base in Diego Garcia, US allies and India have a significant capability to choke the Malacca Straits.

China has aspirations for power projection in the Indian Ocean including extending oil shipping lanes and building ports for access in an effort to overcome its Malacca Straits dilemma. So in order to increase its strategic and economic footprints and to insulate China from reliance on US-based communications satellites, Beijing has launched two signature projects, the Belt Road Initiative and Biedou, China's Indigenous Global Navigation Satellite System or GNSS. Interestingly, the belt refers to the land route China which connects to Europe and beyond Europe, much of the infrastructure is already in place. China's projects are designed to address gaps in the belt between China, Europe, and onward.

The ocean lanes are part of China's vision control over ports, such as Hambantota, Sittwe in Burma, and so forth, trying to get access to port facilities in order to project power in the Indian Ocean. China has skillfully used economic diplomacy as a tool of statecraft drawing on a deep treasure chest of funds, even after the sharpest monthly drop in the value of its foreign exchange reserves in August, 2008. China boasted a sum of \$3 trillion that it could spend, which allowed China to invest in a vast infrastructure building program in countries around the world. Channelled through the Asian Infrastructure Investment Bank and the Belt and Road Initiative, which was announced in 2013, China hopes to ameliorate tensions with its Asian neighbours and improve its image and status in Asia and other regions that rival that of the United States.

China's success in this endeavour, however, is not entirely assured as its military assertiveness in the South China Sea, border skirmishes with India and Bhutan, and the growing wariness associated with rising debt related to BRI projects is likely to undercut the effectiveness of its economic diplomacy over time.

Slowing economic growth in China has generated incentives to find new markets for its exports and fund projects to absorb excess industrial capacity and as a means to project China's global power. So under BRI, all roads lead to Beijing. It is important to note that no country provides economic aid completely devoid of aspirations for political influence and so China is not new in attempting to gain geopolitical influence through economic assistance. BRI investments are offered as low-interest loans, some of which require the use of Chinese firms. The bidding process is not transparent with contractors often inflating costs. For example, China funded the building of the Sri Lankan Port of Hambantota in 2018. The total debt payment on this project amounted to 13 billion dollars– A payment schedule that the Sri Lankan President Maithripala Sirisena tried to renegotiate, China instead offered a 99-year lease in return for debt forgiveness. Another project is the China-Pakistan Economic Corridor, which traverses a region in Kashmir contested by India. In addition to saddling Pakistan with huge debt, the project is vulnerable to sabotage by insurgents, and of course, China requires Pakistan to foot the cost of providing security for this corridor. The question arises– whether BRI is a debt trap.

China's second initiative is Beidou. In total, four countries have deployed global navigation satellite systems. The United States was the first to do so with a GPS or Global Positioning System. It is almost synonymous with GPS because the United States was the pioneer here. It was created in the early 1970s by the Department of Defense and with the launch of 24 satellites, the system was fully operational in 1993. GPS offers two levels of service, Standard positioning service, which is available to all users on a continuous worldwide basis, free of any direct user charges, and Precise positioning service whose access is restricted to the United States Armed Forces, US Federal agencies and selected Allied Armed forces and governments.

Other global navigation satellite systems include Russia's GLONASS, the EU's Galileo, and China's GNSS is Beidou. China decided to develop Beidou in the mid-1990s after an unexpected disruption in GPS, which the Chinese claim was a deliberate US intervention. It caused the PLA to lose track of ballistic satellites fired over the Taiwan Strait during the 1995–96 Taiwan state crisis.

China completed Beidou in June, 2020 with plans for the system's integration with BRI. It marketed Beidou to countries that are participating in BRI. Beidou is currently on its third generation of satellites. Beidou 1 was completed in 2000 and began to provide P&T services, which is Positioning Navigation Timing services to China. Beidou 2 was completed in 2012 and began to provide service to the Asia-Pacific region.

Beidou 3 began to offer services globally in 2018, and it was completed in 2020 with the launch of 35 satellites. Comparing it with GPS– GPS has 31 Satellites, and Beidou has 35. Beidou uses two types of service, radio navigation satellite service and radio determination satellite service. The former is common to all global navigation satellite systems. In the latter, a ground station using signals from Beidou satellites calculates a user's position. Any use of Beidou where ground stations are allocated allows the Chinese government to monitor the user's location. Beidou 3 has been integrated into the Chinese military since 2014, and the Chinese military has used SMS messaging to communicate between units located in remote areas and headquarters and the military has integrated Beidou 3 into its precision-guided munitions, including ballistic and cruise missiles.

"Beidou is a significant component in the digital architecture of BRI. To promote greater use of the technology, China has sought to incentivize countries with loans and free services much like Google does with its package of services".

China has promoted Beidou, especially within the Asia-Pacific region and BRI countries. Beijing's deepest Beidou relationship is with Pakistan. Since December, 2018 as part of a military cooperation agreement with China, Pakistan was the only country permitted to use Beidou's restrictive service. Pakistan also signed an agreement for the installation of five ground augmentation stations. In 2020, China and Saudi Arabia signed a memorandum of understanding to cooperate on the military use of Beidou. China has aggressively marketed Beidou 3 to the private sector, especially in BRI participating countries. In 2013, Samsung and Qualcomm collaborated to sell smartphones, including Beidou. Agreements to use Beidou under China's expansive BRI have already been signed with 120 partners.

Beidou is a significant component in the digital architecture of BRI. To promote greater use of the technology, China has sought to incentivize countries with loans and free services much like Google does with its package of services. Beijing signed a roughly 2 billion yuan or \$297 million agreement with Thailand in 2013, making the country the first overseas client of Beidou. China has since reached agreements with Brunei, Laos, and Pakistan to provide Beidou-equipped infrastructure for government and military users also at heavily subsidised. These agreements have included provisions allowing China to build differential ground stations in each country to increase the system's accuracy on the ground. So both BRI and Beidou 3 are driven by geopolitical and economic objectives. It's a pursuit of power and profit.

China sees Beidou 3 as providing China with international status and influence befitting a great power. Beidou allows users to send SMS texts, allowing Chinese fishing vessels to sound alarms to fishing departments in emergencies and to avail of vessel management systems to request assistance from nearby vessels. This feature is particularly relevant to ongoing disputes in the South China Sea, where fishing rights are at stake and where China's maritime militia, which is a quasi-military force of fishermen tasked by and reporting to the PLA, plays a key role in advancing Beijing's claims. There are both positives and negatives to Beidou. In October, 2021, reports surfaced about China, the Chinese People's Liberation Army had abruptly restricted the use of its navigation system, Beidou along the border with India, fearing that their movement might be tracked.

In conclusion, the defining feature of international politics in the 21st century is the US-China rivalry and the outcome of this competition is as yet undetermined. Concern over increasing Chinese aggressiveness in East Asia, in the South China Sea and along the India-China-Bhutan border has led the United States to reactivate the QUAD and AUKUS. Interestingly, India also supported AUKUS at the IAEA conference. India is a swing state and New Delhi's foreign policy allegiance is an important factor in the unfolding dual regional global power transition. In this conjecture, it is important to raise certain questions. We live in a state-centric world and our problems are transnational. How do we overcome state-centric geopolitical competition in order to deal effectively with transnational challenges? The other question is how do we address the dilemma that all states face- between the pursuit of national interest and the concern with human security as opposed to national security because concern with human security is going to require a consciousness that transcends national identity. It is the core part of the problem, because, in most countries, the primary political identity of people is their national identity, and transcending national identity, thinking in terms of a cosmopolitan consciousness is one of the biggest challenges of the 21st century.



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Island States and Blue Economy: A Strategic Analysis

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The Indian Ocean region consists of 36 countries, with the exception of Australia, all developing economies and have undoubtedly dominated the economic and political affairs of the region. The obvious reason for this is the availability of vast amounts of natural resources and major energy lifelines at present. Hence, any minor turmoil within this region can cause major changes in the security and geopolitical architecture of the nations around.

Further, Sri Lanka's geographical location which stands closer to some of the world's most important sea lines of communication renounces the need to facilitate and maintain a tighter and stronger maritime security domain as an island nation with a hub port. Other than the land, let alone the whole Indian Ocean region, Sri Lanka possesses a territorial sea of 21,500 square kilometres with EEZ of 51,700 square kilometres up to 200 nautical miles from the coastal line where the total land area of the island remains only at 65,610 square kilometres.

The delimitation of the Continental Shelf as provided by the United Nations Convention on the Law of Sea was initiated by Sri Lanka in 1999 and was completed in 2009. This unique feature spans an area of 3000 kilometres in length and 800 to 1,430 kilometres in width. Sri Lanka's scheme of the extended continental shelf is about 20 times of its land area. This is indeed a huge area for a smaller country like Sri Lanka. Conducting scientific research, infrastructure expansion, etc., among the many important aspects that Sri Lanka will need to look through a broader maritime strategic plan. Interest in the potential of the blue economy is growing, but many financial institutions, regardless of focus, size or breadth, oceans and maritime ecosystems are uncharted territory.

Destruction of the maritime ecosystems, pollution, climate change and as well as poverty and maritime insecurities caused by terrorism and piracy, are some of the challenges of the blue economy faced by Sri Lanka. The possibility to offer livelihoods and boost economic growth in Sri Lanka's coastal belt without harming the environment is questionable. The fisheries sector, for example, could be optimised and expanded in many ways. Currently, 50 to 60% of the overall harvest is discarded every year as trash fish, fisheries waste, crab shell and other fisheries related waste. Where else this waste could be collected and turned into value-added products, for example, animal feed, fertiliser, fish oil, and many more to be listed.

"Being an island nation of the Indian Ocean, adapting a blue economic strategy is not optional, but mandatory for Sri Lanka. Sri Lanka has advantages but also faces challenges due to its position".

Other opportunities to announce suitable sustainable coastal livelihood include seaweed farming, which offers a considerable core benefit in climate change mitigation and pollution cleanup, captive breeding mariculture to replace the fish population conservation, and use of coastal ecosystems such as mangroves and sealing up sustainable natural tourism and also ecotourism. Awareness creation, capacity building, promotion of expert and technology expertise and technology, integrator coastal zone management and control of land-based waste and pollution, and the enabling of the legal framework are also crucial elements for us to transform towards a blue economy.

However, the country is also threatened by the impacts of climate change, the Covid 19 pandemic, maritime pollution, and the ongoing economic down trend. Centering the blue economy and exploring new avenues of coastal livelihoods and sustainable development could offer a solution with powerful core benefits and synergies for people, the environment, and economic growth.

Being an island nation in the Indian Ocean, adopting a blue economic strategy is not optional, but mandatory for Sri Lanka. Sri Lanka has advantages but also faces challenges due to its position. One of the major disadvantages of a blue economy includes unequal geographical pressure, being highly accessible to the ocean resources from a lengthy coastline around the country, closeness to major sea lanes, and sovereignty over a significant area of sea compared with the country's land resources. A diverse range of coastal and maritime ecosystems and a high potential for tourism and recreational industries.

The Indian Ocean hosts one of the most important global maritime roads connecting the Far East and Europe and carries the majority of ultra-large container ships. The ocean's maritime roads are pivotal for a worldwide supply of energy. It is estimated that about 40% of the energy is transported to the Persian Gulf to Europe as well as Asia through its waterways. However, these opportunities also have challenges tagged along with them. The ocean around the country is highly contested by global powers.

Being a small player in the global political arena, Sri Lanka has to take a cautious path. Quoting the Sri Lankan President, a statement on 15th of September 2022 at the graduation ceremony of the first NDC course, he assured that Sri Lanka will never compromise on the security of the Indians state, which is next to us.

He called Hambantota the punching bag of Sri Lanka, where we get punches and blows from many quarters, as said today. It is to be noted that the government of Sri Lanka continues to consider Hambantota as a commercial port. Although the current maritime situation of Sri Lanka's territory overall appears to be politically peaceful, and stable, despite a few occurrences related to poaching in the Northwestern Seas, the government of Sri Lanka is taking every effort to sort out the matters diplomatically. Existing transnational security threats keep reemerging at a subnational level. Maritime piracy, drugs, arms smuggling, human traffick, unregulated fishing activities, and other transnational crimes have become more and more prominent.

"The rich marine, biological, chemical, and physical resources in Sri Lanka coupled with the strategic location in the Indian Ocean provides us promising expectations of development as a recuperation nation into the Indo-Pacific in the context of a blue economy".

Since 2007, maritime piracy, which was more significant than disruptive, incurring huge losses to global sea trade due to the unstable condition in Somalia pirate attacks have increased since then during the past and the high seas of the Western Indian Ocean and the Mozambique Channel. After more than a decade of effective piracy operations, the shipping industry has removed the Indian Ocean of high-risk areas, which is known as HRA notifications of this removal with effect from 0001 UTC 1st Jan, 2023, which is a great relief to all the shipping community in this area.

On a strategic note, ensuring the security within our EEZ has a direct impact on the development of our region. It is to be noted, the responsible marine area is almost nine times the size of Sri Lanka. Considerably the future prosperity of Sri Lanka lies in the sea, around it as we discussed earlier as well the land is over, and now we are conquering the sea for our economic development, along with other countries of the world. The rich marine, biological, chemical, and physical resources in Sri Lanka coupled with the strategic location in the Indian Ocean provides us with promising expectations of development as a recuperation nation into the Indo-Pacific in the context of a blue economy.

On a basic analysis, one could argue to attain a higher degree of dominance over EEC, which becomes more of a responsibility if expanded. It might be unable in the future due to a lack of resources and assets. Nevertheless, the lack of resources to face challenges has never been an obstacle for Sri Lanka which is capable of developing out-of-the-box strategies to overcome the challenges.

Let alone the interoperability between the armed forces in Sri Lanka, but the robust relationship and cooperation amongst relevant authorities and other regional nations also play a crucial role in this voyage.

The blue economy and its sustainability have emerged as one of the key research issues in recent decades and have become a buzzword among policy makers in this field. Although a reasonable number of studies have made attempts to assess the blue economy from different perspectives to the best of our knowledge, no study has empirically examined and focused on the drive, and the size of the blue economy.

The role of the Indian Ocean governance is often described as an important factor behind the blue economic activities. It has further revealed the importance of more investment in fisheries and the agricultural sector, better access to electricity, and better export opportunities as a major determinant for our increase in fish output. The research further reveals that the world income relative price depreciation in the normal exchange rate between the domestic currency and the US dollar along with policy and financial crisis management positively affects the size of our tourism sector. Thus, the size of the blue economy has positively responded to these sustainable ocean management policies. In addition, the need for effective implementation of sustainable ocean governance policies in the Asia Pacific region is considered very important for the further strengthening of the growth of these island countries.

Sri Lanka has been potential to implement the concept of a blue economy through the usage of our resources, a better understanding of the ocean and the dynamic selection of sustainable individuals and careful consideration of decision making as well as honest political leadership are all needed to execute such a program accurately and efficiently as we expect.



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Geoeconomics, World Order Turbulence and the Indo-Pacific

Mr Mohan Guruswamy

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The world 20 years from now is going to be very different as the transition is quite rapid. In 2009, the United States was the world's biggest economy, with 14 trillion dollars, GDP measured In PPP terms, followed by China, Japan, India, Germany, Russia, and the UK. In 2015, the rankings suddenly changed, but the size of the GDPs changed rapidly. China has 59 trillion dollars, India has \$43 trillion, the United States has 37 trillion. Rest all are below 10 trillion dollars. Therefore, there is a tripolar world emerging.

The top three are in a different league by themselves, although in per capita terms, China and India will be way behind the United States. The power of a government rests in- one in the GDP, and the second is in the tax revenues. So obviously, the higher the GDP, the better tax rates, and tax collection are good. Hence, the economic power both domestically and internationally. Due to the power transition, a new bunch of fast-growing nations is emerging like Vietnam and Nigeria which have the ability to supersede the present economic giants. Britain will only be growing at 2.3%, and Japan may remain stagnant or even recede.

In terms of population- China has reached the peak of its population and is now in a descending mode. China's population will reduce by about 20% by 2050, Europe will reduce by 25%, and Russia will reduce by 40%. The only two countries in the world to be growing at that time are the United States, which has a young population and a lot of migrants, and India. The economies of these two countries are going to grow faster. This transition through this growth will be quite dynamic and the world will enter an interesting period of geoeconomics and geopolitics.

The center of gravity is shifting back to the East from the time world economies began to be measured and began to be understood. Also, at that time, the Indian Ocean region was the world's greatest economic trading zone. All foreign trade took place between China and the Middle East, China being a great exporter. Chinese sailboats would stop in the port of Cochin to wait for the winds to change, to catch the next February monsoon to go to the Middle East. They would stop again in Cochin, teaching the locals how to make fishing nets, and then proceed on with the trade. India started following this path and Indian ships also began running between Cochin and South India to the west, to the East Indies, and towards China. This was a trading zone before and now we can witness the center of gravity shifting again by 2050. Asia will be bigger than the West combined.

"Since then, the dominance of the dollar from 1941 has continued and will likely continue for the foreseeable future. 70% of the world's reserves are in dollars followed by Euro".

This poses a paradoxical situation – who is driving this change? The US is the biggest importer with a trade deficit of trillion dollars every year. If this trade deficit is not maintained, developing countries such as India and China are pretty much sunk because 60 percent of the world's reserves are in American dollars. 93 percent of the world trade is conducted in dollar-designated terms. China might say that they trade in Yuan but most of the countries seek dollars in order to maintain their own reserves. As long as the dollar remains the dominant currency irrespective of the geopolitical situation, the United States will continue to remain powerful.

The United States dominance in the world is built on a fundamental anomaly and a fundamental flaw that countries don't balance our trade. The decision was taken in 1941 at Bretton Woods where the United States refused to link the dollar to anything. Lord Keynes suggested a global currency called Bancor, but that suggestion was disregarded. Since then, the dominance of the dollar from 1941 has continued and will likely continue for the foreseeable future. 70% of the world's reserves are in dollars followed by Euro. Euro is the second important currency because of the trade between themselves. Due to the importance of the dollar, the US constantly prints money, with five printing presses. Due to the process of money creation, the money deposited is lent to the citizens. This has led to mounting household debt in America. The average American household is in debt to about 60 percent of its annual income. Credit card debt alone is \$57 trillion in America. The US also has extensive trade deficits with other countries except for a few smaller nations.

America requires to be constantly challenged. 7% of the US GDP is the defence economy, and the US has been a war time economy since 1940. It needs military products to be economically well off. The US channels technological advancement and military production towards a crisis and one such crisis is the growing dominance of China. The United States annually contributes to China in terms of a trade deficit lastly was \$354 billion. The Chinese owes its growth to the US and vice versa, the US perceives China as a threat. As long as the dollar maintains its dominance, there is innovation and there is extensive migration of young talents to the US, the USA's dominance will continue and other geopolitical transitions are notional.

The United States has designated names, switching from Asia Pacific to Indo-Pacific. India's inclusion in the following dialogues was solely to balance the rise of China. Unfortunately, India is a cautious state and intends to maintain strategic autonomy.

India intends to have autonomy as several multilateral alliances are either overlapping or warring with each other. The United States is partial to countries that are completely pro-US. For example, the US offered nuclear-powered submarines to Australia when the Australia-France deal fell through. The same was not offered to India because India is a nuclear state.

"Apart from currency swap agreements, China cleverly converts reserves into debt. BRI is one of the strategies to increase its reserves by raising interest rates on debts, for example, Pakistan, Sri Lanka, Kazakhstan, and Malaysia".

Despite the iteration of US dominance, contribution to world growth has to be taken into consideration. China contributes one-quarter of world GDP growth. The United States has 12.8%, the European Union 10%, and India 9.9% which has grown up to 13% now. The European Union's contributions have been decreasing in the past few years. As China's contribution to world growth is high, China also aims to reduce its dependency on the US reserves by implementing agreements such as currency swap agreements. Apart from currency swap agreements, China cleverly converts reserves into debt. BRI is one of the strategies to increase its reserves by raising interest rates on debts, for example, Pakistan, Sri Lanka, Kazakhstan, and Malaysia. Most of the capital deployed is from China instead of sourcing cheap materials from the host BRI network. This creates zero value addition for the host countries and they eventually fall into the debt trap.

The Chinese miracle is expected to continue for some time. Although, the Chinese miracle depends on its demography. The dependency ratio has been increasing during the past decade which implies fewer youth in the workforce. The young generation stimulates economic activity by producing, saving, and consuming. In China, 64% of people are dependent on 36%. The GDP growth rates will start coming down in the upcoming years and there is a possibility of the Chinese economy becoming New Japan. Due to the high percentage of women above 80 years of age, Japan's growth is now stagnant as consumption expenditure is low. India's dependency ratio is pretty good as 51% will be young and 49% are dependent. The population reached a ratio of 2:1 which ensures balanced growth. Hence, India is expected to grow for a longer period of time compared to China.



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Indo-Pacific: Anti-China Security Construct or Multilateral Cooperation for Development and Safe Global Commons?

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The shifting geo-economic gravity, and the rise of China in terms of economics, and politics, including the exercise of power, abuse of rules, and the reassessment of American policy– were the three primary reasons that lead to the emergence of the Indo-Pacific. During the presidency of Donald Trump, there was a call for reciprocity, burden sharing, greater transactionalism and implementation of an alliance system. There was a certain withdrawal, especially from the Trans-Pacific Partnership and fundamentally dealt with China aggressively across all domains, from economics to politics to diplomacy to military domain. Despite frictions in the US alliance system, there was a steady forward movement in the Indo-US partnership and QUAD.

Under the Biden administration, there was a reevaluation of strategic policies. Under Trump, Indo-Pacific was secondary and confronting China was the primary idea. Under Biden, the Indo-Pacific was looked at from the prism of competitiveness, partnership, and development. In 2022, the Indo-Pacific strategy was released which contains five main objectives. China was present implicitly. This shows that China continues to be one of the objectives but is not viewed solely as a systemic competitor. The US started to explore the degree of cooperation with China, for example, in combating regional threats like climate change. The State sought a balance between competitiveness, confrontation, and cooperation. It is not entirely anti-China.

From Beijing's point of view, the evolution of the Indo-Pacific strategy was from the defence department driven by a security prism– to contain China. The US articulates a certain vision for the Indo-Pacific in which it has defined a role for China. Beijing disagrees with that role. It is important to look at such strategies issued by the West which may not directly address China as a threat but have implicit roles defined within the idea. Other countries have issued Indo-Pacific strategies as well. The framework of the European Union fundamentally talks about all issues including security and there is no point in being restrictive to China. So are the strategies published by Japan and South Korea. Looking at the strategies, each country has a set of objectives in which China plays an important role. These objectives check the activities and dominance of China in the region. Implementation of the objectives is also a way to engage with China constructively.

"Beijing is articulating that the US is approaching the world from a Cold War framework and therefore any country partnering with the US is understood as being against China. Paradoxically, China has been continuing with the Cold War mentality as well".

The perspective of Chinese analysts about the Indo-Pacific was different. The Indo-Pacific was first mentioned in the US elite policy community by Hillary Clinton in 2010 followed by Pivot to Asia. The Chinese found the Indo-Pacific as an immature concept, extremely ambiguous and vague. There was also a concern that the strategies were fundamentally targeting China. Omaha, a scholar from China had put together references and discussions about the Indo-Pacific. The paper documented the 2017 Trump visit to Asia and spoke about the Indo-Pacific region as a construct. This saw a rise in Indo-Pacific studies funded by the government of China. Before an assessment was made, the China-US relations worsened under Trump and the pandemic hit, there was a rise in systemic threat from the US solidifying in the imagination of the Chinese political elite.

The director of the Foreign Affairs Commission and Foreign Minister Wong Ye talked about the five four three two one formation. At the outside is the circle of the Five Eyes Alliance, inside is the QUAD, then the Triangle of Theus, then US Alliance Networks, and the heart of it is containing China. This is the worldview that Beijing is articulating without talking about the public goods component of the Indo-Pacific. When the QUAD announced the Indo-Pacific Partnership from Maritime Domain Awareness (IPMDA), the Chinese scholars called it the first real measure by QUAD to contain China. Primarily the Chinese scholars predicted that the IPMDA will start laying the blame on Chinese fishing vessels engaged in IUU. It was also looked at as an attempt to try and dissuade other countries from participating, engaging with, and creating frameworks that can also be used for public goods.

In the last few weeks, there have been a lot of reports about the waning of wolf warrior diplomacy because Qin Gang became the foreign minister and Zhao Lijian shifted away from the spokesperson's desk. This is a structural view evolving from the Chinese leadership perspective. Unfortunately, the US-China competition exists but neither China nor the US would pull the floor from underneath for the other, as neither side wants confrontation.

To summarise, the Chinese response has been constant, discrediting and undermining the US alliance and partnership system. Beijing is articulating that the US is approaching the world from a Cold War framework and therefore any country

partnering with the US is understood as being against China. Paradoxically, China has been continuing with the Cold War mentality as well. China offered a carrot and stick approach, BRI being a part of it. But along with BRI, two initiatives have been included – the Global Development Initiative and the Global Security Initiative. The Global Development Initiative is a much more consultative initiative where recommendations/ideas are made by other countries. There are significant positive measures that countries in the Indo-Pacific region can consider.

The Global Security Initiative, on the other hand, is a vague idea launched in April 2022. It has six principles with very broad ideas, which include sanction proof Chinese economy, sanction proof China's trade, and enhancing local currency. Deepening security cooperation is one of the agendas but it is difficult to rally the developing world. This would take the form of incorporating existing military partnership agreements, new military training agreements, the building of military facilities in other countries along with policing cooperation.

Chinese cooperation with the developing world, apart from the BRI, is around digital technologies such as global data security initiatives, and human rights, such as the south-south human rights dialogue, which essentially made the case that human rights are particular and not universal. Finally, China is trying to build new regional institutions including governance frameworks in the Indo-Pacific. These frameworks create space for regional countries to be a part of the dialogue and try to bring them to their side. Recently, there was an attempt to initiate Indian Ocean dialogues as well.

The question arises about what should the countries in the Indo-Pacific region do about the rise of China. Firstly, it would be unwise to not engage with the largest economy in the region. It is important for countries to diversify their investments and other stakes. Secondly, hedging and balancing the two biggest competitors in the world can create several opportunities for South Asian countries. When it comes to technology, countries need to think about the strategic challenges of buying into certain systems such as the Beidou or others. Eventually, countries need to understand the trade-offs that they are willing to undertake before striking a deal with either of the competitors. It's important for countries in the region to reinforce to Beijing that it must desist from the Cold War thinking that it must not view its partnerships with other countries or with the United States from the prism of its own competition with the United States.

Finally, it's important to engage in limiting potential abuse of the global commons. So whether it's with regard to marine pollution, piracy, or fishing, it's important for the region and actors in the region to come up with solutions. This is important because as competition within the Indo-Pacific worsens and deepens, countries will have a framework with solutions and rules with which they can be held accountable.



Indo-Pacific Confluence
Dialogue 2023

Roundtable Discussion

Geopolitical, Economic, Technological, and Security Dimensions of the Indo-Pacific

The Indo-Pacific has gained strategic, political, and economic salience in recent years. It has its roots in the US's 'Pivot to Asia' in 2011, which did not materialize due to a lack of deterrent capacity. However, many countries have come on board with an Indo-Pacific strategy, including Germany, the European Union, Canada, and France. Countries outside the region are worried about the potential of the Indo-Pacific and have come out with different strategies to secure it. The announcement of the Global Development and Security Initiative (GDI) and the Global Security Initiative (GSI) has caused concern among countries such as India, Japan, Australia, the US, Canada, and Europe. The GDI mirrors the Agenda 2030 and the SDGs, making it more difficult to monitor strategic outcomes.

In 2022, the idea of the Indo-Pacific has moved beyond an ideational proportion and countries have come up with their own strategies. Almost every country with a stake in the region has a strategy on how to deal with the Indo-Pacific. The key focus areas are the need for cooperation within countries in the region to understand the Indo-Pacific construct and how to shape the narrative.

The roundtable discussion focused on key questions such as what we want from an Indo-Pacific construct and how will each country benefit from it. The most important details are the challenges to the Indo-Pacific construct, the potential for economic cooperation, and how countries can benefit from the growing international attention on the Indo-Pacific.

Navigating trust among players in the region and balancing the dichotomy between bilateral and multilateralism in the Indo-Pacific to arrive at the conclusion about Indo-Pacific as a regional entity is difficult. There is both equal opportunity and threat. An important fact to note is that India's trade with China has continued to grow despite its proximity to the US and participation in other institutions. It is important to engage in mutually gainful partnerships with China. Additionally, it is equally crucial that we create frameworks to reduce vulnerabilities.

In discussing India, it was stated that the country must identify areas where there are vulnerabilities and try to limit the exposure as much as possible. China has a global data security framework, but it has the potential to be weaponized. This is not about not wanting to work with the Chinese, but rather about not trusting their intentions and their demonstrated capability of weaponizing tools. Other countries should also make similar decisions.

"India's concept of the Indo-Pacific begins from the coasts of Africa and stretches all the way to America. The Indo-Pacific Oceans Initiative is a way for India to engage with like-minded countries as it talks of maritime security, ecology, maritime resources, capacity building and resource sharing, disaster and risk reduction and management, science, and technology, academic cooperation, trade connectivity, and maritime transport".

In speaking of Sri Lanka's challenges in the Indo-Pacific, the biggest is managing India, the USA, and China in the current geopolitical climate. India is the elephant in the room when it comes to leadership in the Indo-Pacific. But is it willing to adopt a foreign policy that will build confidence and reduce the trust deficit within the countries in the region is a question that bears further thinking. However, the discussant concluded that, like all major powers, India will always prioritise its own interests and will take steps not necessarily in the interests of smaller countries in the region.

To understand our expectations out of the Indo-Pacific, it is essential to define this 'we'. Is it just the four countries leading the discussion on the Indo-Pacific or the rest in the region? China is a major player in the region that cannot be ignored. Therefore, a new way needs to be devised to get the smaller nations in the region on board without complicating their ties with China. This needs to be addressed first if we are to navigate the concept of the Indo-Pacific.

Before we talk of cooperation, it is crucial to understand the fact that India's concept of the Indo-Pacific begins from the coasts of Africa and stretches all the way to America. The Indo-Pacific Oceans Initiative is a way for India to engage with like-minded countries as it talks of maritime security, ecology, maritime resources, capacity building and resource sharing, disaster and risk reduction and management, science, and technology, academic cooperation, trade connectivity, and maritime transport.

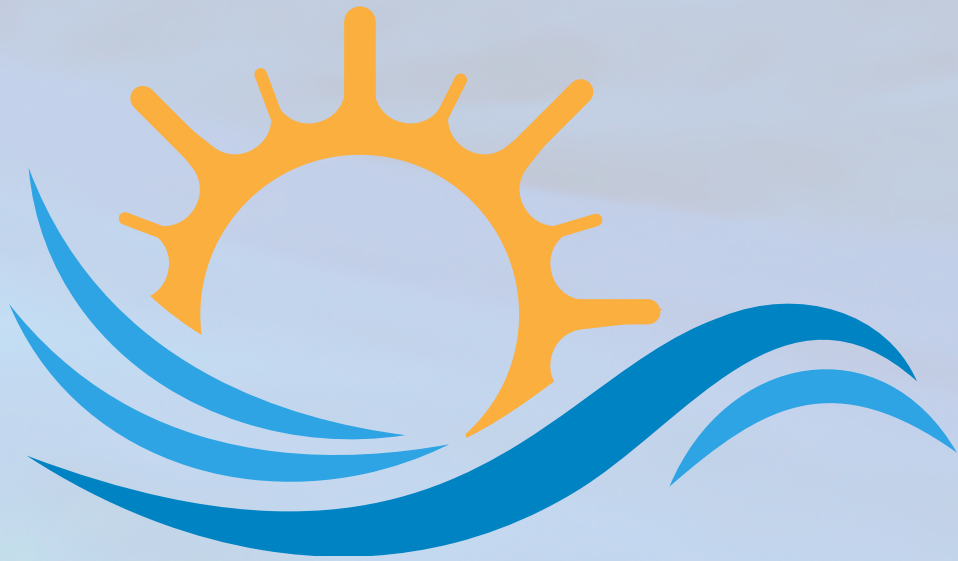
In discussing Bangladesh's perspective, the discussant drew attention to why Bangladesh has not been able to devise a coherent response to what is happening in the Indo-Pacific despite being at the epicenter of it. While Bangladesh is still hostage to the colonial legacies, which divided them, when Bangladesh emerged, its primary concern was survival.

It adopted Sheikh Mujibur Rahman's principles of 'friendship to all and malice to none', a strategy that continues to this day. Bangladesh's priority is economic development and it is determined to build regional capacity through cooperation to withstand the competing influences.

Speaking on Taiwan, the discussant highlighted how Taiwan is not good at engaging with China but understands them better than the rest of the world due to sharing the same language and culture. The engagement has become more difficult under Xi Jinping as he is caught in what the speaker calls a 'dictator's dilemma' and is concerned with how many Chinese people support him. Therefore, Taiwan should abandon the quest for a common vision or identity and instead take whatever suits them and cooperate with each other. The speaker discussed the concept of 'Countries Capable and Willing' in the Indo-Pacific, and two examples of projects such as 'Vote' and 'Blue Economy'. They discussed pragmatism and project-based engagement instead of looking for a grand vision and suggested that each country should have its own idea of what it wants out of the construct and how it wants to secure its interest. This offers an opportunity for the others to work together.

The next discussant focused on cooperation in order to achieve the best out of the blue oceans. They referenced the Cold War era when the Americans and Russians cooperated in space. International corporations are launching many satellites and facilities, and they should be used to benefit everyone. Examples include dock shipping, where elite satellites can pick up emissions from boats and help locate them. Additionally, the Chinese have Yaogan satellites, which can collect military data and other data. The speaker concluded that there was no enemy, foe, or friend in the blue economy and that everyone gains if the climate model is more accurate. Another speaker highlighted China's attractiveness as a donor to smaller nations due to its lax conditions, unlike institutions like the IMF and World Bank.

Concluding remarks by speakers in the roundtable discussion included how to bridge the gap in understanding and balancing the interests of big and small nations, particularly island countries, and understanding the legal position of climate refugees in a discussion on the blue economy. The key message brought out during the discussion was building cooperation among countries in the region by finding common ground.



Indo-Pacific Confluence
Dialogue 2023

Concluding Session



Ms Estella Yu-chi Chen

Executive Director, Economic Division
Taiwan Economic and Cultural Center (TECC), New Delhi

Valedictory Address

India – Taiwan Relations

Ms Estella Yu-chi Chen

**Executive Director, Economic Division,
Taiwan Economic and Cultural Center (TECC),
New Delhi**

I would like to thank The Peninsula Foundation for organising such an informative seminar and four discussions from different angles of the blue economy. And now, I'll briefly introduce the economic relationship between India and Taiwan for your reference and will cover trade investment industry corporations, SME startups, and others.

The first part is the trade promotion from 2006 to 2021. The total trade volume increased by one hundred and forty-one hundred eighty 4%. It reached a record height in 2021 of 7.7 billion US dollars. And last year, from January to November, it already reached 7.8 billion US dollars. Therefore, we are expecting a new record high of more than 8 billion US dollars in 2022.

The main imports from India to Taiwan are many raw materials and the main exports from Taiwan to India, are mostly machinery and semi-finished trade. As you can see mutual trade is complimentary for the needs of the industry. Therefore, we can see the trade tie between India and Taiwan will be closer and closer from time to time.

Let's take a look at the investment. There are about 120 to 150 Taiwanese companies in India and the accumulated investment amount is around 1.5 billion US dollars and mostly the investment is in sectors like machinery, auto components, logistics, petrochemical, and EMS. The EMS means electronic manufacturer services, which offer the service of design, manufacture, testing, distribution, and repair for electronic components. Also the assembling for a regional equipment manufacturer. So geographically speaking, uh, those companies of EMS and ICT components machines mainly in Southern India. We still have petrochemical auto components and textile companies in Northern India. Noida and Gurugram are the first choices for Taiwanese companies, but the company's scale is relatively smaller than those in southern India. So those Taiwanese companies have already created 124,000 job opportunities and these figures will increase this year because existing companies such as Foxconn will expand their production lines in India.

Also, there will be more new investments will realize. So I just showed some Taiwanese brand names. So in the central part, you can see Foxconn with Strong. Those are the leading EMS companies for Apple products, Evergreen, and Wan Hai—they are container shipping companies.

We can see how strong the Taiwanese companies are. We have the abilities for the technologies and also for the manufacturing of parts. You can see there's continental carbon. It produces carbon black and is the third largest company in India. Delta India has a very long history in India, established in 2003, they offered renewable energy solutions, EV charging stations and UBS. I think those companies would take India as a hub to expand their business in Southern Asia. And now let's go to the industrial corporations.

Last November, the Federation of Indian Chamber of Commerce and Industry and the CNFI, the Chinese National Federation of Industry. They co-organised the sixth edition of the Industrial Corporation Summit. This is a very good example of a public and private partnership because our industry, both country's industrial representatives, have discussed these topics.

"Engaging with Taiwan can be strategically, economically, and socially beneficial. It can strengthen the global supply chain and avoid disruption. And with Taiwan's investment, we will build India's manufacturing capacity and also create job opportunities and the social sector".

That's a subgroup so they can talk face-to-face. And then the government also joined this event. From the picture, you can see Ambassador Ger, the minister of commerce and Industry, and our deputy minister and a representative from Taipei.

The association also joined this event, and this one is another newly launched event last year. It's called CEO Roundtable. This is the governmental initiative conducted by the FICCI and TAITRA. There were 26 CEOs participating from both countries and the outcome of the meeting was a joint statement.

It provides a policy recommendation to the government from the business perspective. Next is the SME Start-up. Because in Taiwan, almost 98% of businesses are SMEs. So to strengthen the corporation for SME and startup Industrial Technology Research Institute in Taiwan and invest in India.

We established a startup Connect hub in 2021, and for the next year, they have decided on focus areas such as aerospace, healthcare, and medical. And all these areas could be discussed and expanded only if it's mutually agreed. That means there's a very wide range of cooperation in SME Corporations and for the startup, there were more than 60 Indian startups who have applied to our soft lending program.

Four of them were invited to Taiwan to stay for one month and we think within this one month we will help them to engage with Taiwanese Enterprise and access the supply chain ecosystem in Taiwan. Also matching the strategic partner investors and potential customers to help them to expand their business in Taiwan, even in East Asia.

Next is the part about the government to government cooperation. In recent years, we have signed many different MOU with the East Bank Corporation area, such as the Bilateral investment agreement and the authorized economic operator. It's for the trade facilitation purpose and mutual recognition of organic certification, intellectual property rights cooperation, mutual recognition of standardized and conformity assessment, and traditional medicine corporation. Now both sides are also discussing the migrant worker, FinTech, public finance used here, etc, and we hope to finalize these pending uses in the near future. From here, you can see there's a very wide range of cooperation.

Now to summarize, engaging with Taiwan can be strategically, economically, and socially beneficial. It can strengthen the global supply chain and avoid disruption. And with Taiwan's investment, we will build India's manufacturing capacity and also create job opportunities and the social sector.

Now I've talked a lot about economic issues. With respect to the blue economy, the color blue represents both sky and the sea, and it is associated with open spaces, freedom, open-minded imagination, and inspiration. So we hope that those blue elements could be the spirit of our economic corporation.

Let's work hand in hand to create a win-win situation for Taiwan and your country. Thank you.



Dr Mumin Chen

Deputy Representative & Councillor (Academics)
Taiwan Economic and Cultural Center (TECC), New Delhi

Closing Address

Dr Mumin Chen

Deputy Representative & Councillor (Academics)

Taiwan Economic and Cultural Center (TECC),

New Delhi

"We hope that this platform we created today, the dialogue that we have today, will continue and perhaps later this year or next year, we will have the second run of this Indo-Pacific Confluence, either in India or in another Indian Ocean State".

Thank you, Air Marshal, Ambassador, and all the distinguished guests. On behalf of TECC Taipei Economic and Cultural Center in India, I'd like to thank all of you for coming here and participating in this conference. I would like to talk a little bit about how we had this idea. It was initially my idea

I remember roughly one year ago when the Air Marshal came to Delhi, we discussed having some kind of a forum about India because in Delhi, we met a lot of Indian friends and everyone wanted to talk to us about the semiconductor industry. It looks like Indians are only interested in semiconductor investment from Taiwan. But actually, there are more things that we could discuss for cooperation with Taiwan. For those who have not been to Taiwan before, Taiwan is an island. We are an ocean state but for a long time, we didn't realise that we have a connection with the Indian Ocean.

Taiwan is in the Western Pacific, we have closer connections with neighbouring countries such as the Philippines, China, Japan, and even the US, but not with the Indian Ocean. Most people in Taiwan never travel but we have business interests over here. But the concept of the Indo-Pacific changed all that.

The concept of the Indo-Pacific is being developed. Now the Taiwanese government and the strategic communities have started to think big and broadly. Actually, there are connections with the Indian Ocean. When I first came to Chennai, it was 10-12 years ago. The first time coming here, I already noticed that there are Taiwanese investments and companies over here at the time in Delhi. A Taiwanese company has already come to Dhaka and Sri Lanka.

The Formosa business was set up in Dhaka and became popular in Bangladesh before it became popular in India. People in Delhi now drink bubble tea which is originally from Taiwan. Although many think it is a Korean drink. So we saw that we should do something in South India and get the people, you know, from neighboring countries. So we had this idea, and it took us some time, to identify the right topic and the right approach. So we have not just Taiwan, not just India, but also the Indian oceans that we get together. Getting together is one thing. One important thing is the question, how do we identify the common interest for dialogue? So I think that for me and also for my colleagues from the peninsula foundation.

This is the beginning for us to have a dialogue and dialogue for what, of course, for cooperation. In the presentations yesterday and today, we found that actually we have a lot of things in common. Fishing, climate change, and disaster prevention and all these things that these countries are facing in the region.

In Taiwan, we also have the same issues. And Taiwan does not just want to share experiences but we also want to force a partnership. We need a forum. We need a platform. So I think that conferences like this could start as we could build some kind of platform.

And this platform will not just have scholars, it will have experts, even government officials, depending on how far we can go. I particularly would like to thank the Peninsula Foundation and the team for organising such a wonderful conference.

And also the old friends we know in Chennai and also some new ones– from India and also from the neighboring countries. We hope that this platform we created today, the dialogue that we have today, will continue and perhaps later this year or next year, we will have the second run of this Indo-Pacific Confluence, either in India or in another Indian Ocean State. Thank you very much.



Indo-Pacific Confluence Dialogue 2023



Dignitaries and Participants
Indo-Pacific Confluence Dialogue 2023



Top: Inaugural Session
Bottom: Round Table Discussion



From Top to Bottom: Session I, Session II & Session III



THE
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Indo-Pacific Confluence
Dialogue 2023



駐印度台北經濟文化中心
Taipei Economic and Cultural Center in India

INAUGURAL EDITION OF THE INDO-PACIFIC CONFLUENCE DIALOGUE

India, Island States and the Indo-Pacific

TOWARDS A SUSTAINABLE BLUE ECONOMY