

Save Oceans for a Safe Earth: World Oceans Day Webinar Report

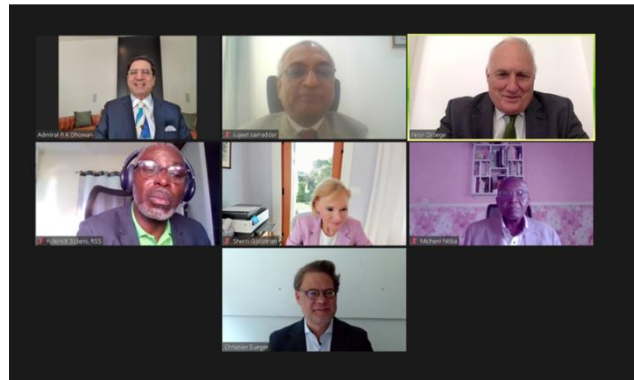
Date: June 8, 2024

Organizers: SAMDeS (Society for Aerospace Maritime and Defense Studies), New Delhi, and Liechtenstein Institute for Strategic Development, (LISD) Liechtenstein

Theme: Save Oceans for a Safe Earth

Introduction

World Oceans Day serves as a critical reminder of the importance of Oceans in regulating the Earth's climate, providing food and livelihood for billions of people, transportation, energy and maintaining biodiversity. On June 8, 2024, the Society for Aerospace Maritime and Defence Studies (SAMDeS), in collaboration with the Liechtenstein Institute for Strategic Development, hosted a webinar to discuss the multifaceted challenges faced by our oceans in the Anthropocene age of high production and consumption. Other Cooperating organisations included:



The International Military Council on Climate and Security (IMCCS), the Commonwealth Security and Resilience Group, the Trebuchet, USA, Regional Security System, Barbados, University of Copenhagen, Denmark, University of Nairobi, Kenya and the SAI University, Chennai. The participants included maritime experts, environment specialists and academia from different parts of the world, as well as young researchers from Universities and IIMUN (India's International Movement to Unite Nations).

The United Nations have called for “[a] need to work together to create a new balance with the ocean that no longer depletes its bounty but instead restores its vibrancy and brings it new life. **“Awaken New Depths”** is the theme for World Oceans Day 2024.” This webinar brought together renowned experts to share their insights and propose solutions for ensuring a sustainable future for our oceans. The event aimed to raise awareness about the critical issues impacting the oceans and highlight the efforts needed to address these challenges effectively.

Speakers and Summary of Remarks

Peter Droege, Chair of the Webinar

Position: Director, Liechtenstein Institute for Strategic Development

Summary of Remarks: Peter Droege began his address by acknowledging the significance of World Oceans Day and emphasizing the focus on the Global Maritime Accord (GMA). He highlighted that oceans are a major policy concern and serve as a staging area for the global economy, encompassing industry, community, security, and environmental issues. Oceans play a pivotal role in regulating the climate, acting as the main carbon store and a major oxygen source for the planet.



Dr Droege noted the bifurcating challenge in the climate space where oceans are becoming wetter while continents are becoming drier. He stressed the importance of controlling CO2 concentration in the atmosphere to manage water vapour and prevent a potential mass extinction event in the ocean caused by pollution, microplastics, and chemicals. He highlighted the critical shift in the Ocean's pH levels, currently at 8.05, and warned against reaching 7.95, which could be a point of no return.

He emphasized the interconnectedness of global concerns, stating that the oceans are central to anthropogenic activities, emissions, and pollution. He pointed out that the security concerns resulting from climate change, termed "threat multipliers" by Sherri Goodman, are at the forefront of their minds. Dr Droege urged a shift in perception, recognizing climate change as a security concern that transcends traditional national security considerations.

He called for a focus on "climate peace diplomacy" instead of an excessive emphasis on naval defense and active warfighting. This approach aims to recognize climate change as a matter of common security concern, necessitating global cooperation. Dr Droege highlighted the role of the GMA, which clusters around this idea and brings together the security community, civil society, academia, government, industry, and the diplomatic community to address this global security issue collaboratively.

He concluded by introducing Admiral RK Dhowan(Retd), the former Chief of the Indian Navy, a highly decorated naval officer and the founding Chairman of the Society for Aerospace Maritime and Defense Studies, under whose initiative, the GMA was established. Droege expressed his delight in having Admiral Dhowan speak about the event and the GMA academy initiative, aimed at communicating the concerns, interests, and research focus areas of the GMA.

Admiral RK Dhowan, PVSM, AVSM, YSM (Retd)

Position: Chairperson, SAMDeS

Summary of Remarks: Admiral RK Dhowan opened his address by expressing gratitude to Dr Peter Droege for coordinating the webinar and warmly welcoming the esteemed speakers and participants. He highlighted the importance of the webinar on World Oceans Day, emphasizing the theme of "Save Oceans for a Safe Earth." Admiral Dhowan outlined the critical issues facing the oceans, including rising sea surface temperatures, bleaching of coral reefs, and the threat to marine ecosystems and biodiversity.



Admiral Dhowan noted that the Indian Ocean Basin is the fastest warming basin in the world and is experiencing extreme climate conditions such as heat waves and cyclones, leading to natural disasters. He stressed the alarming prediction made by Prof Roxy Mathew Koll that, in the future, the increase in ocean heat content could be equivalent to detonating one Hiroshima atom bomb every second, every day, for a decade ! He also discussed the impact of increase in sea surface temperatures resulting in rising sea levels, due to acceleration in the melting of polar ice caps, an enormous iceberg has finally calved from Antarctica's Brunt Ice Shelf and consequential erosion of coastal areas and threats to submerging of low-lying islands.

He highlighted the environmental damage caused by the shipping industry, which emits over a billion tonnes of carbon dioxide annually, and the detrimental effects of deep-seabed mining on marine biodiversity. He pointed out the significant pollution caused by dumping of over 13 million tonnes of plastic and garbage into the oceans each year.

Despite these challenges, Admiral Dhowan emphasized that solutions to the detrimental impacts of global warming and climate change can be found in the oceans themselves.

Admiral Dhowan stressed the essential role of oceans in providing oxygen, absorbing carbon dioxide, and serving as a heat sink to keep our Blue planet, the Earth, cool. He discussed the vast resources available in the oceans, including oil, gas, minerals, seafood, and medicines, which are crucial for humanity's survival and well-being. He noted that the oceans also serve as global economic highways, facilitating over 80% of the world's trade.

However, Admiral Dhowan warned that the oceans are extremely vulnerable to humankind's wants and greed, resulting in exploitation and pollution of the Oceans for decades.

He highlighted that till the recent adoption of the High Seas Treaty in June 2023, by members of the UN, there was no internationally legally binding agreement for conservation, protection and legislation of Areas Beyond National Jurisdiction (ABNJ). He contrasted the two prevalent concepts under the United Nations Convention on Law of the Sea (UNCLOS): the "freedom of the seas" approach, which is a 'finders keepers approach' and has led to overexploitation, overfishing and consequently severe depletion of the fish stocks. Secondly, the "common heritage of mankind" approach, which is a 'shared benefit approach' commonly adopted for deep seabed mining, which has a negative impact on the natural marine habitat and bio-diversity.

Admiral Dhowan emphasized that the issues related to the Oceans were normally looked at from the point of view of maritime interests of Nations. The Global Maritime Accord represents a petition from the oceans to humankind, advocating for a comprehensive action plan to counter the detrimental impact of global warming and climate change by leveraging the Oceans. In order to prevent any further degradation to the health of the oceans, he stressed on urgently conjoining the efforts of various stakeholders to implement the following critical elements of the Action-Plan, including:

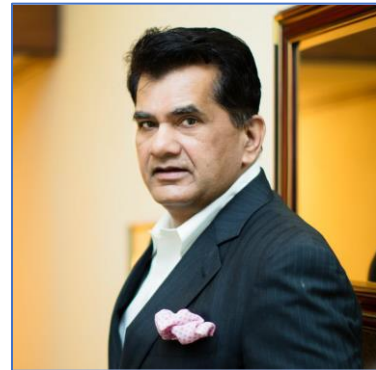
- Shutting the tap of over 13 million tonnes of plastic and garbage flowing into the oceans each year.
- Launching a global initiative to clean the oceans of accumulated plastic and garbage.
- Restricting the shipping industry from emitting over a billion tonnes of Carbon Dioxide annually.
- Designing ships of the future in accordance with the Energy Efficiency Design Index and propelled on environmentally friendly fuels.
- Stopping illegal and overfishing to prevent the depletion of fish stocks.
- Monitoring fishing activities and implementing measures for sustainable fishing in Areas Beyond National Jurisdiction.
- Avoid dangers of deep-seabed mining and carrying out detailed research on its detrimental impact on bio-diversity.
- Carrying out marine spatial planning and demarcating marine protected areas for biodiversity conservation in ABNJ.

Admiral Dhowan concluded by stating that "if we want to save our Blue planet, the Earth, from perishing, humankind would need to unite now, and start reading and responding urgently to the distress signals and messages that the waves from the Oceans bring to our shores, everyday".

Mr. Amitabh Kant

Position: G20 Sherpa, Government of India

Summary of Remarks : Mr. Amitabh Kant began his address by greeting the esteemed panelists and the global audience, acknowledging the significance of World Oceans Day. He emphasized the pivotal role of oceans in regulating the climate, reflecting solar radiation, and distributing heat and humidity around the globe through complex ocean currents and winds. Mr Kant highlighted the immense resource base that oceans provide for the prosperity and preservation of the planet.



He provided key statistics to illustrate the importance of oceans: covering 70% of the Earth's surface, containing 97% of the Earth's water, and representing 99% of the living space on the planet by volume. Oceans absorb about 30% of greenhouse gas emissions, and over 3 billion people depend on marine and coastal biodiversity for their livelihood. Additionally, marine fisheries directly or indirectly employ over 200 million people, and the global market value of marine and coastal resources is estimated at 3 trillion USD per year, about 5% of global GDP.

Kant outlined the challenges faced by the oceans, including pollution, overfishing, and the impacts of climate change. He emphasized that the sustainable ocean economy, or blue economy, depends on effective protection, sustainable production, and equitable prosperity within the global socio-ecological economic system. He noted the increasing demand for maritime space from various sectors such as renewable energy production, hydrocarbon exploration, ports, shipping, fishing, and seabed mining and hence the need for marine spatial planning at a global scale.

He highlighted the critical role of the G20 countries, which together account for about 45% of the world's coastline, over 21% of the exclusive economic zone, 80% of global GDP, 75% of energy consumption, almost 70% of global trade, and 60% of the global population. He emphasized that the G20 has a significant influence on all main ocean-related businesses, including maritime transportation, offshore energy generation, aquaculture, fishing, tourism, and finance.

Mr Kant discussed the progress made by previous G20 presidencies in raising awareness about the importance of healthy oceans and contributing to their conservation and sustainable use. He highlighted the G20 high-level principles for a sustainable and resilient blue economy proposed during the Indian presidency, which focus on prioritizing ocean health, addressing marine pollution, halting and reversing biodiversity loss, promoting social equity, leveraging science and technology, promote the use of Marine Spatial Planning (MSP) for an Integrated Approach to the Blue/Ocean-based Economy and enhancing international cooperation. He underscored the need for the G20 countries to support the ratification and implementation of the High Seas Treaty to ensure the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction. Kant called for a precautionary approach to address environmental, social, and economic risks comprehensively.

In conclusion, Kant urged all participants to raise awareness about the commitments made by the G20 to protect the oceans and to advocate for their realization in the declarations and communiqués adopted by the G20 leaders at the forthcoming Rio de Janeiro summit. He emphasized that the oceans do not belong to us but rather we belong to the oceans, and it is our responsibility to protect this vital resource for the future of our planet. He complimented the organizers, particularly Admiral Dhowan, chairperson of SAMDeS, for formulating the concept of the Global Maritime Accord.

Hon'ble Ms. Sherri Goodman

Position: Secretary General, International Military Council on Climate and Security

Summary of Remarks: The Hon'ble Ms. Sherri Goodman began by expressing her pleasure at being part of the webinar and sharing her personal connection to the oceans, highlighting her professional background in environmental security. She briefly outlined her career, mentioning her time as the first female professional staff member on the Senate Armed Services Committee and as the first Deputy Undersecretary of Defense for Environmental Security in the United States.



Ms Goodman focused on the concept of climate change as a "threat multiplier," a term she coined in 2007 to describe how climate change exacerbates existing national security threats. She explained that climate change acts as a pivot into maritime security and discussed the convergence of national security, climate, and maritime security. Goodman emphasized the interconnectedness of these areas and how environmental changes directly impact global stability and security.

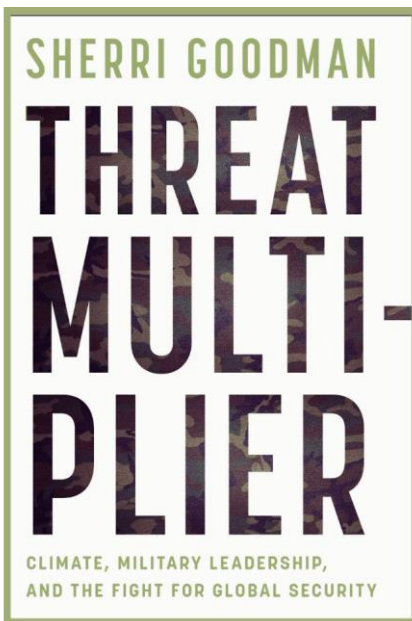
She provided an overview of the climate impacts on national security, noting that climate change is already adding to tensions even in stable regions of the world. She highlighted the connection between climate change, national security, and energy dependence, discussing how carbon emissions, plastics, and maritime fuels are all deeply interconnected.

Goodman pointed out the alarming changes in the oceans, such as the reduction in summer Arctic ice coverage and the increase in ocean acidification. She shared her observations on the impacts of climate change on maritime security, including the increased frequency of storms, flood risks, sea ice retreat, coastal erosion, and shifting ecosystems. These changes have significant human and security impacts, including threats to naval infrastructure, increased demand for humanitarian assistance, maritime competition flashpoints, changing marine territorial boundaries, and contested governance regimes.

She highlighted the importance of understanding the migration of fish stocks due to rising temperatures, which affects both polar and equatorial regions. Goodman discussed the challenges faced by the Arctic region, including permafrost thaw, sea ice retreat, and increased militarization by countries such as Russia and China. She expressed concerns about potential accidents involving nuclear materials in the Arctic.

Goodman then turned her attention to the Atlantic and Mediterranean regions, noting how climate change is reshaping these areas. She discussed the impacts on coastal communities, naval readiness, tourism, fisheries, and human displacement. She emphasized the need for resilience measures to protect naval infrastructure and coastal communities.

Goodman concluded her presentation by focusing on positive solutions, such as improving predictive capabilities through technology, incorporating human domain systems into climate risk modeling, and promoting environmental conservation. She highlighted the role of organizations like NATO in setting standards for greenhouse gas emissions and environmental stewardship. Goodman called for increased



climate security cooperation as a soft power tool to mitigate tensions and invited participants to join the International Military Council on Climate and Security.

She ended by sharing the cover of her upcoming book "Threat Multiplier: Climate Military Leadership and the Fight for Global Security" and noted her upcoming participation in the Environmental Peacebuilding Conference in The Hague, where she would receive a Lifetime Achievement Award. Goodman reaffirmed her commitment to working with the global community to achieve safe oceans and a better future.

Prof. Micheni Ntiba, PhD

Position: Professor of Fisheries, University of Nairobi, Kenya

Summary of Remarks: Prof. Micheni Ntiba began his address by expressing his delight at participating in the webinar and acknowledging the efforts of the organizers. He highlighted his extensive experience in marine biology and fisheries, having worked in various regions, including Lake Victoria, the Indian Ocean, and the North Sea. Prof Ntiba focused on the potential of seaweed aquaculture in tropical oceans to address pressing global issues such as food security, climate change, and ocean health.



Prof Ntiba discussed the transformative potential of seaweed farming, emphasizing its ability to provide a reliable and nutritious food source for coastal communities. He explained that the diverse array of edible seaweed species offers essential nutrients, making it a valuable addition to the global food system, particularly in tropical areas. Prof Ntiba highlighted the role of seaweed cultivation in climate change mitigation, noting that seaweed can produce sustainable products like biodegradable plastics and wild paper, reducing the need for deforestation and cutting down of trees.

He emphasized the importance of seaweed farming in addressing the problem of non-degradable plastics in the oceans. Seaweeds can produce biodegradable plastics, seaweed farming can significantly reduce the environmental impact of plastic pollution, protect marine biodiversity, and improve water quality.

Prof Ntiba also focused on the empowerment of coastal communities through seaweed farming. He explained that seaweed farming can generate sustainable livelihoods and create new economic opportunities for coastal communities. Investing in research, innovative technologies, and training programs can help local communities effectively manage and scale up seaweed farming operations, fostering long-term sustainability.

He highlighted the importance of marine spatial planning to guide the responsible development of seaweed farming, ensuring the protection of marine biodiversity and the sustainable use of ocean resources. Prof Ntiba praised Kenya's efforts in preparing its marine spatial plan and stressed the need to expand ocean literacy to help people understand their relationship with the sea and its critical role in their lives.

Prof Ntiba concluded by emphasizing the need for international partnerships and community involvement in managing and scaling up seaweed farming operations. He called for greater attention to fisheries management and aquaculture in Africa, urging governments to rethink their approaches and work towards sustainable solutions.

Lt Commander Rolerick Sobers

Position: Regional Maritime Officer, Regional Security System Barbados

Summary of Remarks: Commander Sobers began his address by providing a brief background on the Regional Security System (RSS) and its member states in the eastern Caribbean region. He highlighted the significance of the Caribbean Sea area, which includes seven island states and the Cooperative Republic of Guyana. Sobers emphasized the crucial role the ocean plays in food security, economic value, and maritime trade for the region.



Sobers discussed the devastating effects of climate change on maritime security installations in the eastern Caribbean. He noted that the region is highly vulnerable to extreme weather events such as hurricanes, which have caused significant damage to infrastructure in recent years. He cited the year 2017 when multiple major storms wreaked havoc in the region within a short period.

He explained that the continuing development of the blue economy and recreational trade activities has increased the need for modern infrastructure along the coastlines. However, these developments are threatened by climate change-induced sea level rise, storm surges, and other environmental changes. Sobers emphasized the importance of maritime security and law enforcement units such as navies and coast guards in protecting the region's economic resources and infrastructure.

Sobers highlighted recent studies that have indicated significant impacts of climate change on island states, including sea level rise, stronger weather systems, and changes in seasonal patterns. He stressed the need for proactive measures, ongoing assessments, and research to mitigate these risks. Sobers mentioned the Caribbean Island Defense Installation Vulnerability Assessment and Assistance Program, a project in collaboration with U.S. partners, which aims to help small island states adapt to the impacts of sea level rise.

He emphasized the importance of collaboration at national, regional, and international levels to address the challenges posed by climate change. Sobers highlighted the reliance of small island states on the support of partners who have the technology and resources to assist in mitigating these measures. He noted that the RSS takes the matters of climate change and their likely effects very seriously and is engaged in discussions to find solutions.

Sobers concluded by reiterating the importance of treating the oceans' health as a priority, given their vital role in providing food and economic activity for the region. He expressed openness to further discussions on the matter and thanked the audience for their attention.

Prof. Christian Bueger, PhD

Position: Professor of International Relations, University of Copenhagen

Summary of Remarks: Prof. Dr. Christian Bueger opened his presentation by wishing everyone a happy World Ocean Day and expressing his pleasure in celebrating it together, albeit virtually. He emphasized the importance of reflecting on the state of our oceans and the direction in which we are heading. Prof Bueger acknowledged the mixed picture presented by the previous speakers, noting the vast challenges but also the progress being



made. He highlighted the upcoming UN Ocean Summit as an opportunity to take stock of these developments.

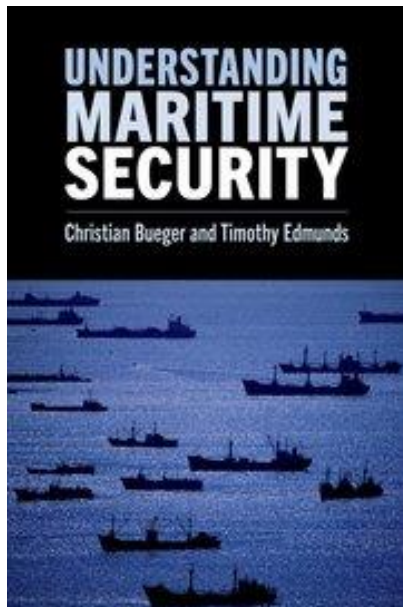
Prof Bueger introduced his research on maritime security, which is detailed in his new book *Understanding Maritime Security*, published by Oxford University Press. He explained that the book consolidates ten years of research and aims to provide a comprehensive overview of the current state of maritime security, identifying problems and proposing solutions.

Prof Bueger outlined four key directions for understanding and addressing ocean problems:

- **Ocean Health:** The primary concern is protecting and restoring biodiversity in the ocean, often associated with environmental risks.
- **Blue Economy:** This involves sustainably exploiting ocean resources to ensure human security, food security, and economic growth. Bueger emphasized the challenge of balancing ocean health with sustainable economic use.
- **Blue Justice:** This dimension focuses on the equitable distribution of benefits from ocean resources, addressing who gains and who loses from the way we manage the oceans. Bueger highlighted the importance of including coastal communities in these discussions.
- **Maritime Security:** This includes ensuring compliance with marine protection regulations and addressing crimes at sea such as piracy and smuggling. Bueger emphasized the need for a robust law enforcement presence to protect marine protected areas and manage ocean resources effectively.

Prof Bueger explained that maritime security connects different debates, such as the blue economy, ocean health, and blue justice. He noted that maritime security draws on earlier discussions about sea power and marine safety, highlighting the importance of integrating these issues. He pointed out the lack of a dedicated UN office or process for maritime security, arguing that this gap should be addressed to prevent maritime security issues from defaulting to the UN Security Council.

Prof Bueger discussed the significant shift in our relationship with the sea, characterized by climate change and the build-up of infrastructures. He explained that today's oceans are densely populated with fisheries, energy installations, subsea data cables, pipelines, and marine heritage sites. This dense infrastructure environment presents new governance challenges that require innovative approaches.



He emphasized the relevance of this shift for various regions, including the North Sea, the Mediterranean, Southern India, Sri Lanka, the Vietnamese coast, and the South China Sea. Prof Bueger highlighted the rapid investments in offshore green wind and other ocean infrastructure projects in these areas.

Prof Bueger concluded by stressing the importance of managing ocean infrastructures effectively. He called for a holistic approach that reconnects economic justice, environmental, and security concerns under a vision of caring for and protecting ocean infrastructures. He identified this as a critical task for the future, emphasizing the need for international cooperation and robust governance frameworks to ensure the sustainability and security of our oceans.

Recommendations

The webinar sought views of the young scholars on their 'take' of the proceedings. These are summarized below:-

1. Prioritize Climate Peace Diplomacy. Professor Peter Droege emphasized the importance of shifting focus from naval defense to climate peace diplomacy. This approach advocates for recognizing climate change as a common security concern that requires global cooperation. Young people must champion this shift, promoting dialogue and collaboration over conflict and competition.

2. Combat Ocean Pollution. Admiral RK Dhowan highlighted the critical need to address ocean pollution, particularly the influx of over 13 million tons of plastic and garbage each year. Young voices can lead initiatives to reduce plastic use, support clean-up efforts, and advocate for stricter regulations on waste management to ensure plastics are recovered and recycled and do not flow into oceans.

3. Promote Sustainable Blue Economy. Mr. Amitabh Kant underscored the importance of a sustainable blue economy that balances protection, production, and prosperity. Young entrepreneurs and innovators can develop and promote sustainable technologies, businesses and practices in sectors like renewable energy, sustainable fishing, and eco-friendly tourism.

4. Enhance Maritime Security. Prof. Dr. Christian Bueger stressed the need for robust maritime security to protect ocean resources and enforce marine protection regulations. Youth can support and participate in efforts to enhance law enforcement at sea, combat illegal fishing, safeguard marine biodiversity and livelihoods of indigenous coastal populations

5. Support International Agreements. The Hon'ble Dr Sherri Goodman and Mr Amitabh Kant both emphasized the need for international cooperation and agreements, such as the High Seas Treaty. Young activists can raise awareness and advocate for the ratification and implementation of such treaties to ensure the conservation and sustainable use of marine resources.

6. Foster Ocean Literacy and Community Engagement. Prof. Micheni Ntiba highlighted the importance of marine spatial planning and ocean literacy. Young people can lead educational campaigns and community programs to increase understanding of the ocean's critical role and foster a sense of stewardship among local communities.

7. Innovate for Ocean Health. The Hon'ble Dr Goodman pointed out the alarming changes in ocean conditions and the need for innovative solutions. Youth can engage in scientific research, technological innovation, and policy advocacy to address issues like ocean acidification, rising temperatures, and pollution.

8. Promote Equitable Access to Ocean Resources. Professor Bueger's concept of "Blue Justice" emphasizes fair distribution of ocean benefits. Young leaders can advocate for policies that ensure equitable access to ocean resources for all, particularly for marginalized and coastal communities.

9. Address the Impact of Climate Change on Maritime Infrastructure. Commander Sobers discussed the vulnerability of maritime infrastructure to climate change. Young

engineers and planners can work on designing resilient infrastructure and adaptive strategies to protect coastal areas from sea-level rise and extreme weather events.

10. Engage in Global Governance. Professor Bueger called for a holistic approach to ocean governance. Young global citizens must engage in international platforms, contribute to policy-making processes, and hold leaders accountable for sustainable ocean management.

As the future custodians of the planet, young people have a critical role to play in addressing the challenges facing our oceans. By taking these recommendations to heart, they can drive positive change and ensure the health and sustainability of our oceans for generations to come. Young scholars and researchers must be informed and encouraged to ‘awaken new depths’ in protecting and preserving the oceans and its biodiversity from pollution and pillaging.

Conclusion

The World Oceans Day webinar organized by SAMDeS and the Liechtenstein Institute for Strategic Development was a significant platform for discussing the critical issues facing our oceans. The event brought together experts from various fields to share their insights and propose solutions for ensuring the sustainability of ocean resources. The speakers highlighted the interconnectedness of climate change, maritime security, and the blue economy, emphasizing the need for integrated approaches and international cooperation.

The discussions underscored the importance of protecting ocean health, addressing marine pollution, and promoting sustainable economic activities. The webinar also highlighted the need for increased awareness and action at all levels, from local communities to international organizations, to ensure the long-term health and resilience of the oceans.

The event concluded with a call to action for the G20 countries to take a leading role in preserving the oceans and addressing the challenges posed by climate change and human activities. The participants were urged to continue raising awareness and advocating for the protection of the oceans, recognizing that the well being of our planet depends on the health of its oceans.