DOALOS and UNNF Alumni Training Programme



UN Photo/Mark Garten



DIVISION FOR OCEAN AFFAIRS AND THE LAW OF THE SEA

Programme

Welcome and introduction	
Ms. Valentina Germani, Senior Legal Officer (Programme Advisor), DOALOS	
Climate change impacts on the ocean and ocean solutions to climate change, including challenges linked to the pandemic	[20 min]
Ms. Dorothée Herr, Manager, Ocean and Climate Change, Global Marine and Polar Programme, IUCN	
Options and opportunities to strengthen synergies under the UNFCCC on ocean and climate change	[20 min]
Ms. Joanna Post, Programme Officer, UNFCCC Secretariat	
Synergies amongst climate action, oceans and disaster risk reduction	[20 min]
Mr. Marco Toscano-Rivalta, Chief, NY Liaison Office, United Nations Office for Disaster Risk Reduction	(UNDRR)
Q&A session	[20 min]
Moderated by Ms. Jessica Howley, Associate Legal Officer, DOALOS	



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Ocean, Climate Change & COVID

Threats and Opportunities towards a Healthy Ocean

Dorothée Herr, IUCN



Climate Change Impacts on the Ocean

- Ocean Warming
 - 93%
- Ocean Acidification
 27%
- Ocean Deoxygenation
 -2%





Other Stressors reducing Ocean Resilience

- Overfishing
 - Almost 30% of fish stocks commercially fished are overfished
 - Over 60% of fish stocks are fully fished
- Plastic
 - Up to 12 million tons of plastic debris enter the ocean every year.
- Coastal development
 - Average mangrove loss rate of 0.21% annually from 1996 to 2016, higher than the average for tropical and subtropical forest losses





Affected Maritime Sectors from COVID

- Coastal and marine tourism
 - Loss of USD 2.1 trillion forecasted loss in 2020
- Marine transport
 - Reduced demand for container ships
- Wild capture fisheries
 - Reduced consumer demands; changes in value chains
- Aquaculture
 - Unsold volumes of framed fish, yet also
 - Increase for frozen preparations
- Ocean-based renewable
 - Increase in offshore wind; yet falling energy demand
- Marine conservation



Marine Conservation - COVID

- Interwoven impacts
- PROS and CONS
- Reduced tourism revenues (-)
- Increased poaching and IUU (-)
- Deregulation to open fishing season (-)
- Roll back on plastic bans, lack of proper disposals (-)
- Reduced physical impacts (+)



Five Priorities for Blue Recovery

SOLUTION: Invest in Sewerage and Wastewater Infrastructure for Coastal Communities

BENEFITS:

Short-term job creation, avoided revenue loss from beach closures, improved societal well-being, reduction in water-borne diseases, improved reef and ecosystem health and reduced greenhouse gas (GHG) emissions SOLUTION: Invest in Coastal and Marine Ecosystem Restoration and

BENEFITS: Short- and long-term job

Protection

creation, improved societal well-being, improved water quality, improved reef and ecosystem health, wild fish stock recovery, increased coastal resilience and cast SOLUTION: Invest in Sustainable Community-Led Non-fed Mariculture

BENEFITS:

Short- and long-term job creation, economic diversification for coastal communities, improved livelihoods (particularly for women), improved water quality, wild fish stock recovery, reduced GHG emissions and carbon sequestration

SOLUTION: Incentivise Sustainable Ocean-based Renewable Energy

BENEFITS Short- and long-term job creation, new economic opportunities for zero-emission fuel generation, improved local air quality, opportunities for water security through desalination and reduced GHG emissions

SOLUTION: Incentivise the Transition to Zero Emission Marine Transport

BENEFITS:

Short- and long-term job creation, indirect long-term job creation in tourism and fisheries sectors, improved local air quality, resilience and reduced GHG emissions and ocean acidification



Northrop, E., et al. 2020. "A Sustainable and Equitable Blue Recovery to the COVID-19 Crisis." Report. Washington, DC: World Resources Institute. Available online at http://www.oceanpanel.org/bluerecovery



Opportunities for a Blue Transformation

Strong potential Optimized Potential Optimized Minor potential

	SECTOR RELEVANCE	ECONOMIC BENEFITS	SOCIAL BENEFITS	ENVIRONMENTAL BENEFITS	SDGS			
REGULATORY REFORM TO PROVIDE AN ENABLING ENVIRONMENT FOR A SUSTAINABLE OCEAN ECONOMY								
Establish comprehensive integrated ocean management and marine spatial planning processes to balance marine users and spaces, competition for coast- al resources and mitigate permitting and siting issues for sustainable ocean industries.	Fisheries, Tourism, Energy, Shipping, Marine Con- servation, Mariculture	•	•	•	8 12 13 14 17			
Initiate regulatory reform to promote best practice in climate-adaptive fish- eries management, including through incentives for industry adoption in the form of taxes and subsidies.	Fisheries	•	•	•	2 8 12 13 14			
Shift harmful subsidies to more sus- tainable and equitable uses, including supporting small-scale and artisanal fishing, ecotourism opportunities for lo- cal communities and management and monitoring of marine protected areas.	Fisheries, Tourism, Ma- rine Conser- vation	•	•	•	2 8 12 14			
Introduce levies or taxes to reinvest tourism revenue in local restoration and conservation efforts.	Tourism, Fisheries, Marine Con- servation	٠	٠	٠	8 11 12 13 14 15			
Integrate ocean accounts into national accounting frameworks, or develop satellite ocean accounts, to measure and monitor the impact of recovery measures on long-term sustainability of the ocean economy.	Fisheries, Tourism, Transport, Energy, Marine Con- servation, Infrastructure	•	0	•	8 9 12 13 14 17			

Regulatory Reforms

- Public/Private Partnerships
- Research and Development to Spur Innovation and New Technology

Northrop, E., et al. 2020. 'A Sustainable and Equitable Blue Recovery to the COVID-19Crisis.'' Report. Washington, DC: World Resources Institute. Available online at http://www.oceanpanel.org/bluerecovery



NbS from the Ocean and Coasts







Coastal development without NbS



https://bluenaturalcapital.org/our-approach/innovative-bnc-finance-blue-infrastructure/



NbS as part of Blue Infrastructure Finance





TA support for NbS private investment



Marine Protected Areas (MPA)

While Marine Protected Areas (MPA) are spreading globally, only a few have robust compliance and enforcement mechanisms in place while the majority m...

READ MORE



Selva Shrimp Kalimantan

Since 1961 the annual global growth in fish consumption has demonstrating that the fisheries and aquaculture...



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Carbon stored in coastal wetlands has moved up the priority ladder of the global climate change debate. While crucial for mitigation and adaptation, conserving coastal ecosystems such as mangrove forests and seagrass beds is also paramount for protecting biodiversity.



Net-Works

On the current trajectory of plastic pollution and overfishing three tonnes of fish in the ocean by 202...





Indonesia

Forest Carbon is working on a plan to conserve > 15,000ha of mangrove forests in West Kalimantan.

READ M

© Ardiles Rante Photography



Zanzibar

Terra Global is structuring a project to conserve > 16,000ha of mangrove forests on the Zanzibar islands of Pemba and Unguja.





Kenya

The Wildlife Conservation Society is working with Kenya Marine and Fisheries Research Institute in pioneering a project aimed at generating carbon credits from seagrass beds in Kenya.

READ MO

© James Kairo



Blue NbS in NDCs



- Nationally Determined Contributions
- Existing Blue NbS can inform and inspire the design and the implementation of NDCs





https://news.bluesolutions.info/blue-naturebased-solutions-innationally-determined-contributions



Blue NbS in NDCs



- Building blocks
- Activities
- Results and impact
- NDC relevant
- Additional benefits
- SDGs

21 VALUATING CLIMATE ADAPTATION OPTIONS ON PLACENCIA PENINSULA

COUNTRY	Belize			
LOCATION	Placencia Peninsula			
LEAD ORGANIZATION	WWF			
CONTEXT	Coastal communities highly dependent on tourism activities and natural resources face significant clumate related vulnerabilities mainly related to clearing land down to the shoreline practices. Communities have limited understanding on the cost and benefits of adaptation solutions.			
OBJECTIVE(S)	To conduct a cost benefit analysis on adapatation solutions to facilitate decision making, raise awareness and engage all stakeholders to foster collaboration with policy makers and ultitmately, reduce the Peninsula's vulnerability and erosion risks.			
BUILDING BLOCKS	 Characterisation of ecosystem services (BB 1) Climate impact hypotheses (BB 2) Climate adaptation scenarios (BB 3) Cost-benefit analysis (BB 4) Transparent sharing of information (BB 5) 			
ACTIVITIES	 Engagement of stakeholders in the early design of an Integrated Coastal Zone Management Plan; Data collection and inclusion on the natural/marine capital investment analysis tool; Consultation of stakeholders on vulnerabilities; Climate impact hypotheses translation into quantitative relationships; Selection of adaptation strategies on the basis of outcomes for ecosystem service provisioning; Analysis of alternative adaptation options on the basis of costs and benefits; Development of a technical report; Information shared with local communities, land developers, the private sector and government authorities to build capacity and raise awareness. 			

Climate Change and Sea Level Rise in United Nations Ocean Processes



Ms. Valentina Germani, Senior Legal Officer (Programme Advisor) Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs, UN



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NITED NATIONS

Overview of the impacts

- Main effects of climate change and GHG emissions on the oceans: <u>ocean warming, ocean acidification</u>
- Related physical and ecological impacts, such as: <u>sea level</u> <u>rise, changes in ecosystems and biodiversity loss (e.g.</u> coral bleaching), <u>deoxygenation</u>, <u>stratification</u>, <u>extreme weather</u> <u>events</u>, <u>and the loss of polar ice</u>
- Significant socioeconomic consequences, such as: loss of life, displacement of communities, loss of territory, destruction of property and infrastructure; decline of and regional shifts in fish stocks; food and water security, livelihoods and sustainable development in developing States, especially in least developed countries and small island developing States, and low-lying communities, are increasingly affected and their vulnerabilities accentuated *(Source: Secretary General's report A/72/70 and A/75/70)*





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Legal framework - UNCLOS

Sets out the legal framework within which all activities in the oceans and seas must be carried out and is of strategic importance as the basis for national, regional and global action and cooperation in the marine sector, and its integrity needs to be maintained

(GA annual resolutions on Oceans and the Law of the Sea)







ision for Ocean Affairs and the Law of the Sea Office of Legal Affairs United Nations









United Nations General Assembly resolution on Oceans and the Law of the Sea – climate change

- Encouraged States to enhance scientific activity to better understand and raise awareness of the effects of climate change on the marine environment and marine biodiversity and develop ways and means of adaptation
- Stressed the importance of scientific understanding of oceans/atmosphere interface
- Recognized the importance of raising awareness of the adverse impact of climate change on the marine environment and marine biodiversity
- Called for improved efforts to address coral bleaching





United Nations General Assembly resolution on Oceans and the Law of the Sea – ocean acidification

- Expressed concern over the substantial risks to marine ecosystems, especially polar ecosystems and coral reefs, and the potentially detrimental consequences for fisheries and livelihoods
- Encouraged the urgent pursue of further research on ocean acidification; and increase national, regional and global efforts to address levels of ocean acidity and its negative impact; and the sharing of relevant information
- Urged to make significant efforts to tackle the causes of ocean acidification

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NITED NATIONS



United Nations General Assembly resolution on Sustainable Fisheries

- Expressed its serious concern regarding the impacts of global climate change and ocean acidification on coral reefs and other ecosystems relevant to fisheries
- Urged States, either directly or through appropriate subregional, regional or global organizations or arrangements, to intensify efforts to assess and address, as appropriate, the impacts of global climate change and ocean acidification on the sustainability of fish stocks and the habitats that support them, in particular the most affected ones





UN Photo/Milton Grant

United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea

- Forum for exchange of opinions among multiple stakeholders and coordination among competent agencies, and enhancing awareness of topics, including emerging issues, while promoting the three pillars of sustainable development
- Relevant areas of focus:
 - ICP-13 (2012): Marine renewable energies
 - ICP-14 (2013): Ocean acidification
 - ICP-18 (2017): The effects of climate change on oceans
 - ICP-21 (2020/21): Sea-level rise and its impacts



Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects

First World Ocean Assessment:

Climate change and related changes in the atmosphere have serious implications for the ocean, resulting in rises in sea level, higher levels of acidity in the ocean, stratification and reduced mixing of ocean water, and increasing deoxygenation.

Second World Ocean Assessment:

Chapters to be devoted to issues related to climate change and oceans, including on trends in the physical and chemical state of the ocean; and pressures from changes in climate and atmosphere



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The First Global Integrated Marine Assessment

WORLD OCEAN ASSESSMENT I



General Assembly - marine biological diversity beyond areas of national jurisdiction



📃 🖽 Z 📃 High Seas

Legend: hypothetical overview of repartition of oceans among high seas areas and EEZ if all EEZ had been declared up to 200M

- Ad Hoc Open-ended Informal Working Group to study issues related to marine BBNJ (2006 - 2015)
- Preparatory Committee (2016-2017)
- Intergovernmental Conference on an
 international legally binding instrument
 under UNCLOS on the conservation and
 sustainable use of marine biological
 diversity of areas beyond national
 jurisdiction on (2018-present)



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Options and opportunities to strengthen synergies under the UNFCCC on ocean and climate change

DOALOS/UNNF online training sessions



Joanna Post, Programme Management Officer UNFCCC secretariat

UNFCCC Convention (1992)

- <u>Article 2</u> The ultimate objective of UNFCCC: "...to achieve stabilization of greenhouse gas concentrations in the atmosphere at a level that would **prevent dangerous anthropogenic interference with the climate system**."
- <u>Article 1.3</u> Definitions: "Climate system" is defined as "the totality of the atmosphere, hydrosphere, biosphere and geosphere and their interactions."
- <u>Article 4.1</u> Commitments: "all Parties shall promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases, including biomass, forests and **oceans** as well as other terrestrial, coastal and marine ecosystems." Including ocean and ice



Cancun Agreement Decision 1/CP.16 and the Cancun Adaptation Framework (2010)

- The conference inter alia established the Adaptation Committee and the National Adaptation Plan (NAP) process. (See NAPs below).
- The COP also recognized "need to strengthen international cooperation and expertise in order to understand and reduce loss and damage associated with the adverse effects of climate change, including impacts related to extreme weather events and slow onset events (including sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation, loss of biodiversity and desertification)"



Paris Agreement

"Recognizing the need for an effective and progressive response to the urgent threat of climate change on the basis of **the best available science**"

"Noting the importance of **ensuring the integrity of all ecosystems, including** <u>oceans</u>, and the protection of biodiversity...".



The ocean and coastal zones play a direct and/or indirect role in the Articles and goals under the PA







Ocean - an integral part of commitments, action, reporting and stocktake

- IPCC 43 mandated the <u>IPCC Special Report</u> <u>Climate change, oceans and the cryosphere</u> <u>(SROCC)</u>.
- The special report is under the joint scientific leadership of Working Groups I, II and III with support from the WGII TSU. The report will be finalized and adopted in September 2019 and it is expected to inform the UNFCCC processes.





IPCC-SBSTA special event on SROCC at COP 25, 5 Dec 2019.

https://unfccc.int/event/sroccspecial-event



National Adaptation Plans process



- Objectives of the process to formulate and implement NAPs:
- Most of the 20 NAPs submitted to the secretariat have priority projects on ocean/coastal zone
- Supplementary guidelines to the NAPs
 - CBD: linking NAPs and national biodiversity strategies and action plans,
 - FAO: integrating genetic diversity into adaptation planning and on addressing agriculture, forestry and fisheries.



Ocean and coastal zone related supplementary technical guidelines for NAPs?

The framework takes an integrated approach towards countrydriven and country-specific descriptions of systems that should be managed to achieve adaptation and contribute towards achieving SDG targets (inc. SDG14)

- Combination of SDGs and climate risk factors help in selection of systems, e.g. for food security, the systems would include crop production, distribution, affordability, strategic food reserves over time as well as nutritional value;
- These component systems can be assessed for sensitivity to climate change, taking into account interlinkages to other "sectors/SDGs", and adaptation actions can then be developed, prioritized and implemented;
- After implementation, outcomes would accrue adaptation benefits as well as sustainable development benefits – both of which can be monitored and documented in reporting



 Warsaw International Mechanism on loss and damage (WIM) - Five year rolling work plan

slow onset events (sea level rise and ocean acidification in collaboration with SBSTA/RSO) **non-economic losses and irreversible impacts** (e.g., coral bleaching).

 WIM Excom and the Technology Executive Committee (TEC) have prepared a policy brief on technology to avert, minimize and address loss and damage in coastal zones.





- Focus area 2019-2020: Oceans, coastal areas and ecosystems, including mega deltas, coral reefs and mangroves. FCCC/SBSTA/2017/7 paragraph 21.
- Theme 1: Governance and Participation
- Theme 2: Data and methods
- Theme 3: Restoration and Protection
- Theme 4: Support (Technology and innovation; finance and funding; capacity building and education)



**Find more information about the 13th focal



Mitigation

Overall effect of NDCs

 State of GHG emissions and removals and mitigation efforts undertaken by Parties

Adaptation

• State of adaptation efforts, support, experiences and priorities

Finance flows and means of Implementation and support

- Finance flows and financial support
- Technology
- Capacity-Building

Efforts on:

- Social and economic consequences of response measures (under mitigation)
- Adverting, minimizing and addressing loss and damage (under adaptation?)

Inputs on equity

Fairness consideration including equity as communicated by Parties in their NDCs







Adaptation Committee (AC) Adaptation Fund Board (AFB) Climate Technology Centre & Network (CTCN) **Compliance Committee (CC)** Consultative Group of Experts (CGE) **Executive Board of the Clean Development Mechanism (CDM EB)** Executive Committee of the Warsaw International Mechanism for Loss and Damage (WIM excom) Facilitative Working Group of the LCIPP Joint Implementation Supervisory Committee (JISC) Katowice Committee of Experts on Impact of Implementation of Response Measures Least Developed Countries Expert Group (LEG) Paris Committee on Capacity-building (PCCB) Standing Committee on Finance (SCF) **Technology Executive Committee (TEC)**



Ocean and Climate Change Dialogue to consider how to strengthen adaptation and mitigation action





United Nations Framework Convention on Climate Change



2 December 2020 21:30-24:00 CET / 08:30-11:00 (next day) Fiji time

3 December 2020 21:30-24:00 CET / 08:30-11:00 (next day) Fiji time

https://unfccc.int/event/ocean-and-climate-change-dialogue







- Elevate existing ocean presence under UNFCCC
- Action at national level needed for ambitious
 NDCs
- Consider Ocean in assessing collective progress
 & Global Stocktake
- Recognition of dialogue relevance within UNFCCC: **constituted bodies and NWP** consider:
 - Opportunities for strengthening engagement
 - Reporting relevant outcomes
- Consider gaps/needs from NDCs, NAPs, National Communications and LTS when identifying areas of work
- Importance of finance and NbS
- This dialogue is a first step for continued action to and beyond COP26

- Recognize and amplify synergies
- Support **mainstreaming** of the ocean-climate nexus

Group 2: Strengthening action across the UN

- Across relevant institutions.
- Across conventions. e.g. CBD Post 2020
 Framework
- Strengthen cooperation across relevant frameworks and agreements e.g, Regional Seas Conventions and BBNJ
- Establish strong linkages to and between
 relevant efforts e.g. UN Decade of Ocean
 Science, Decade of Ecosystem Restoration, UN
 Ocean Conference and UN Food Systems Summit
- National coordination can simplify UN Coordination.
- Cross-sectoral capacity building
- Global regulatory framework to secure a level playing field so no one is left behind
- Engage stakeholders, including traditional knowledge, innovations, and practices of
- Indigenous Peoples and local communities



Discussion Group 3: Strengthening action at national level

- Climate action equals ocean actions and vice versa, specially in coastal and small island states
- **Invest** in science, capacity building to increase understanding, knowledge and skills
- "Blue" the NDCs
- Develop national policies / set targets / increase blue ambition – mitigation / adaptation / NbS / blue carbon / pollution from land
- Leadership national and regional
 - National link ocean and climate solutions
 - Unique challenges faced in each region practical work must be owned and lead by those within each region
- Address gap in the UNFCCC ocean-climate
 work generate roadmap for moving forward
 - SCF work inc. forum on NbS
 - Options for regular dialogue
 - Strengthening ocean consideration by constituted bodies
 - This dialogue is a springboard not an endpoint
 - Bring the outcomes to COP26
 - Build forward bluer

Discussion Group 4: Strengthening crosscutting support for action

- Align global finance with conservation objectives which have multiple benefits – from biodiversity, protection of assets along coastlines, to food security, national security, etc.
- Climate investment biodiversity neutral / positive
- Address knowledge gaps, to create coherent policies across subject-matters, and invest in reforms at different geographic scales
- Request the COP to develop technical guidelines and criteria for investment into NbS and coastal and marine environments to guide GCF and GEF
- Public sector needs to make more concessional finance available to de-risk opportunities for private sector engagement and this requires a joined up PPP approach.
- Develop a practical "Guide to ocean and climate financing"
- GCF secretariat should develop approaches for innovative financing structures and instruments, as requested by SIDS; and develop approaches for engagement with micro-, small- and medium-sized enterprises operating in constrained environments such as SIDS. Such approaches could include intermediary models that combine lines of credit with technical assistance
- **Private sector perspective** adaptation is integral to reduce risk and protect costal assets and insurance can be used to protect ecosystems





Thank you jpost@unfccc.int



Oceans and Disaster Risk Reduction

Seminar on climate change, compound impacts and resilience, including in the context of the COVID-19 recovery

Marco Toscano-Rivalta, Chief New York Liaison Office, UNDRR 15 December 2020



SENDAL FRAMEWORK FOR DISASTER RISK REDUCTION 2015-2030

The essence of the Sendai Framework

Purpose	Aims to guide the multi-hazard management of disaster risk in development at all levels as well as within and across all sectors. (Para 15)
Scope	Applies to the risk of small-scale and large-scale, frequent and infrequent, sudden and slow-onset disasters, caused by natural or manmade hazards as well as related environmental, technological and biological hazards and risks. (Para 15)
Outcom e	The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries. (Para 16)
Goal	Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience. (Para 17)

The global targets of the Sendai Framework

SUBSTANTIALLY REDUCE

(A) A. Global disaster mortality

- -) B. Number of affected people
- (\$) c. Economic loss in relation to GDP

D. Damage to critical infrastructure and services disruption

SEVEN TARGETS TO ACHIEVE BY 2030

> SENDAI FRAMEWORK FOR DISASTER RISK REDUCTION 2015-2030

E. Number of countries with national and local DRR strategies by 2020

F. International cooperation to developing countries

 G. Availability and access to early warning systems and DRR information

SUBSTANTIALLY INCREASE

The Sendai Framework's definition of disaster risk

Disaster Risk The potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time. It is a function of:

Hazard

A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation. **Exposure** The situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard-prone areas.

Vulnerability The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.

Capacity The combination of all the strengths, attributes and resources available within an organization, community or society to manage and reduce disaster risks and strengthen resilience.

Risk is Systemic and Crises are Cascading



Disaster Risk Reduction and COVID-19

- The current COVID-19 disaster demonstrates that which UNDRR outlined in the <u>Global</u>
 <u>Assessment on Risk</u>
 <u>2019</u>: risk is systemic, and crises are cascading.
- Risk governance gaps have been highlighted by the COVID-19 pandemic, including those that cross borders and hazards.



The Disaster Risk-Informed Development Imperative



- Development is never disaster risk neutral; it creates, exacerbates, or reduces systemic risk.
- The Sendai Framework

 contains essential provisions at
 that can guide risk-informed
 development, including ocean
 action.
- Interconnected systems mean that actions must consider interlinkages, trade-offs, and co-benefits.

The 2030 Agenda, Paris Agreement, and Sendai Framework for Disaster Risk Reduction 2015-2030

- Coherence in the implementation of the Sendai Framework, the Paris Agreement and the Sustainable Development Goals is anchored in understanding and addressing risks.
- Synergies between national and local DRR strategies, National Adaptation Plans, and National Sustainable Development strategies are an opportunity to promote this in action.



Synergies between the Paris Agreement and Sendai Framework



- Both disaster risk reduction (DRR)
 and climate change adaptation
 (CCA) aim to reduce the adverse
 impacts of hazards by addressing
 drivers of vulnerability and
 exposure.
- The link between climate action and disaster risk reduction necessitates
 integrated policy approaches for targeted and coordinated action

The Nexus of DRR, Climate and Ocean Action

- The political declaration of the 2017 UN Oceans Conference, "Our Oceans, our Future: Call to Action," recognizes that **policy coherence is** critical to achieve SDG 14, including addressing risk in the marine environment.
- Changes in ocean systems, including those caused by climate change, have implications for the creation or reduction of disaster risk and the resilience of socio-economic and environmental systems.
- The frequency and intensity of natural hazards, including those related to El Niño and La Niña, is impacted by climate change and ocean systems such as changing currents and sea surface temperatures



Selected SDG Trade-offs, Interactions, and Disaster Risk Creation

- If waste management systems (SDG 12) do not take disaster risk into account (ex. flood risk), it can result in the displacement of waste into oceans, affecting ocean health.
- Wave energy systems (SDG 7) may place stress on maritime ecological systems that must be understood and mitigated.
- Conservation measures for coastal zones and oceans can put limitations on economic growth and expansion (SDG 8), and in some cases increase economic vulnerability (SDG 1) and impact food security (SDG 2), but often have important co-benefits for climate action (SDG 13).
- Improper upstream water management systems (SDG 6) can lead to pollution and contamination, including due to runoff from agricultural activities (SDG 15).

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Nature-Based Solutions for Disaster Risk Reduction

- Healthy coastal ecosystems have benefits for disaster prevention, weakening the impact of natural hazards.
- UNDRR has released a 'Words' into Action' Guide on "Ecosystems and Nature-Based **Solutions**" to advance coherence with and support the implementation of SDG 14, including promoting blue and green infrastructure and healthy marine © UNDRR – United NaCOSISTEMS - Risk Reduction



Science and Technology for Ocean Action and DRR



- There is a need for increased understanding of oceanicatmospheric systems and their relationship with disaster risk.
- Multi-hazard early warning systems, Sendai Framework
 Target G, is a shared priority recognized in the outcome of the 2017 UN Oceans
 Conference.

International Law and Disaster Risk Reduction

- Ongoing disasters and the increase of disaster risk highlight the need to:
 - Strengthen disaster risk governance (Sendai Framework Priority 2).
 - Establish a clear legal obligation to reduce disaster risk at the national and international levels.
- The adoption of a convention based on the ILC's draft articles on the Protection of Persons in the Event of Disasters would be a significant step forward in managing disaster risk and fill a gap in international law

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Moderated by Ms. Jessica Howley Associate Legal Officer, DOALOS



