



DECADE ACTION WORKSHOP 13

COASTPREDICT - CONSTRUCTING A WESTPAC UN-OCEAN DECADE ACTION





CONVENORS

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BREAKOUT SESSION DISCUSSION THEMES FOR BUILDING THE UN DECADE PROJECT

1. Pilot sites and prediction systems.

- What are at present the short-term forecasting capabilities and what is needed next?
- What are at present the climate downscaling scenario capabilities and what is needed next?

2. Observing Systems

- What are the existing capabilities in observing/monitoring systems in the region and what is needed?
- What are the satellite data sets used and what is needed?

3. Scientific and coastal management issues

- What are the hazard/risk assessments and management practices now and what is needed
- What are the emerging issues in coastal hazards and risks?
- What are the identified issues in ocean health and links to human health
- What are the adaptation planning practices now and what is needed?



DISCUSSION OUTCOMES

Needs for forecasting/climate projections

- Enhancing ecosystem modeling and forecasting stands as a crucial objective.
- There' s a pressing need for increased biogeochemical coastal observations.
- It' s imperative to integrate riverine inputs both within models and river estuaries.
- Damming of rivers is important information to have to predict runoff influences on the ocean
- Human monitoring and indigenous knowledge need to be integrated into citizen science efforts
- Lakes should be factored into the integrated system for comprehensive forecasting.
- Access to high-resolution satellite data is necessary for validation purposes.
- There' s a need for HAB forecasting at short time scales ranging from 1 to 5 days.
- Coastal observations play a vital role in the validation and calibration process.
- There is a clear need for coastal climate projections

Other needs

- Determining institutional changes and responsible agencies for operational implementation.
- Ensuring quality control of tide gauges.
- Conducting ad hoc data collection for model development and quality control purposes.
- Emphasizing the importance of high-resolution atmospheric forcing.
- Engaging in citizen science and stakeholder involvement to address issues such as vandalism and theft.

Emerging hazards and risks

- Storm surge which depends on the precision of typhoon path forecast
- Extreme ecosystem responses such as green tides and Harmful Algae Blooms (HABs) require atmospheric seasonal forecasts at high horizontal resolution
- Compound effects leading to oligotrophication and declining oxygen levels.
- Pathogens and water quality for eutrophication and ocean health
- Sea Level Rise (slow rise) has to be better considered as a coastal hazard
- Marine heat waves and the increase in their frequency is important for many coastal hazards
- Expand the Disaster Risk Management practices to other risks
- Hazard mapping should be developed for early warning building on the example of tsunami
- The impacts of ENSO (El Niño-Southern Oscillation) on fisheries and the biogeochemistry of coastal areas.
- Long-term shifts in sedimentation patterns and eutrophication.
- Assessing the risk of plastic pollution and its sources to coastal ecosystems.



CONCLUSIONS

1

Applications for more Pilot Sites can be submitted at the re-opening of the GlobalCoast Survey in July-Sept. 2024

2

A regional WESTPAC coordination for CoastPredict would be desirable to harmonize the contributions and streamline the implementation across the region's Pilot Sites

3

The proposal for a WESTPAC CoastPredict Project could be submitted for the 7th call for decade actions at the UN Ocean Decade (Deadline 31 August 2024)



**Let's build the
WESTPAC
UN Decade Action
for
CoastPredict**

PART II – OCEAN DECADE PROJECTS

At the Project level of the Call, 26 endorsed Decade Programmes – over two-thirds of all existing endorsed Programmes – are inviting **Decade Project submissions**. Please see the Guidance Note for Applicants for the full list.

Click [here](#) to access the online form.
Deadline: **31 August 2024 23:59h UTC.**


2021 United Nations Decade of Ocean Science for Sustainable Development
**CALL FOR DECADE ACTIONS
NO. 07/2024**
join us





SLIDO DISCUSSIONS

1. Where is your coastal area/Pilot area of interest?

China coastal seas

Johor Straits, Singapore

Visayan Sea, Philippines

Sagami Bay, Japan

2. Type the first word that comes to your mind when someone says, coastal/ocean 'Resilience'.

Adaptation

Stability

3. What strategies or actions do you believe are most effective in supporting coastal resilience?

Observation and monitorin

monitoing and adjustment

Community involvement

4. What do you perceive is the importance of coastal resilience for communities?

Community engagement

Livelihood

Seafood produce

stable ecosystem

Risks on the water

Fish production



SLIDO DISCUSSIONS

5. What could be the Priority impact areas for WESTPAC-CoastPredict Project?

Impact Area 1: Capacity in disaster risk reduction - real-time forecasting of extreme events

- 1 vote



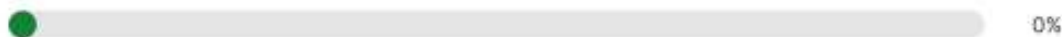
Impact Area 2: Support adaptation to/mitigation of impacts of climate change on coasts incl. indicators of sea level, temperature, biochem, biodiversity - 2 votes



Impact Area 3: Prevention/mitigation of pollution impacts - hazard/risk mapping & forecasting at coastal scales - 1 vote



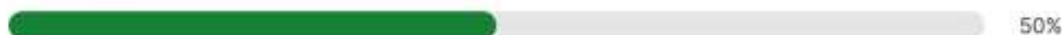
Impact Area 4: Minimise climate & shorter-term impacts on morphodynamics - 0 votes



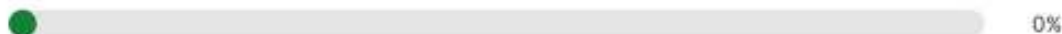
Impact Area 5: Improve urban oceanography science & planning - 0 votes



Impact Area 6: Reduce impact of climate change through blue carbon monitoring, carbon dioxide uptake enhancement, NBS, ecosystem restoration - 1 vote



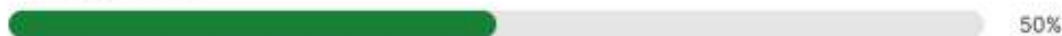
Impact Area 7: Sustainable food production through coastal mariculture support system - 0 votes



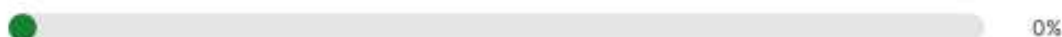
Impact Area 8: Increase capacity on environmental awareness for all operations at sea - maritime safety, Search and Rescue - 0 votes



Impact Area 9: Improvement in Integrated Coastal Zone Management & / or Marine Spatial Planning - 1 vote



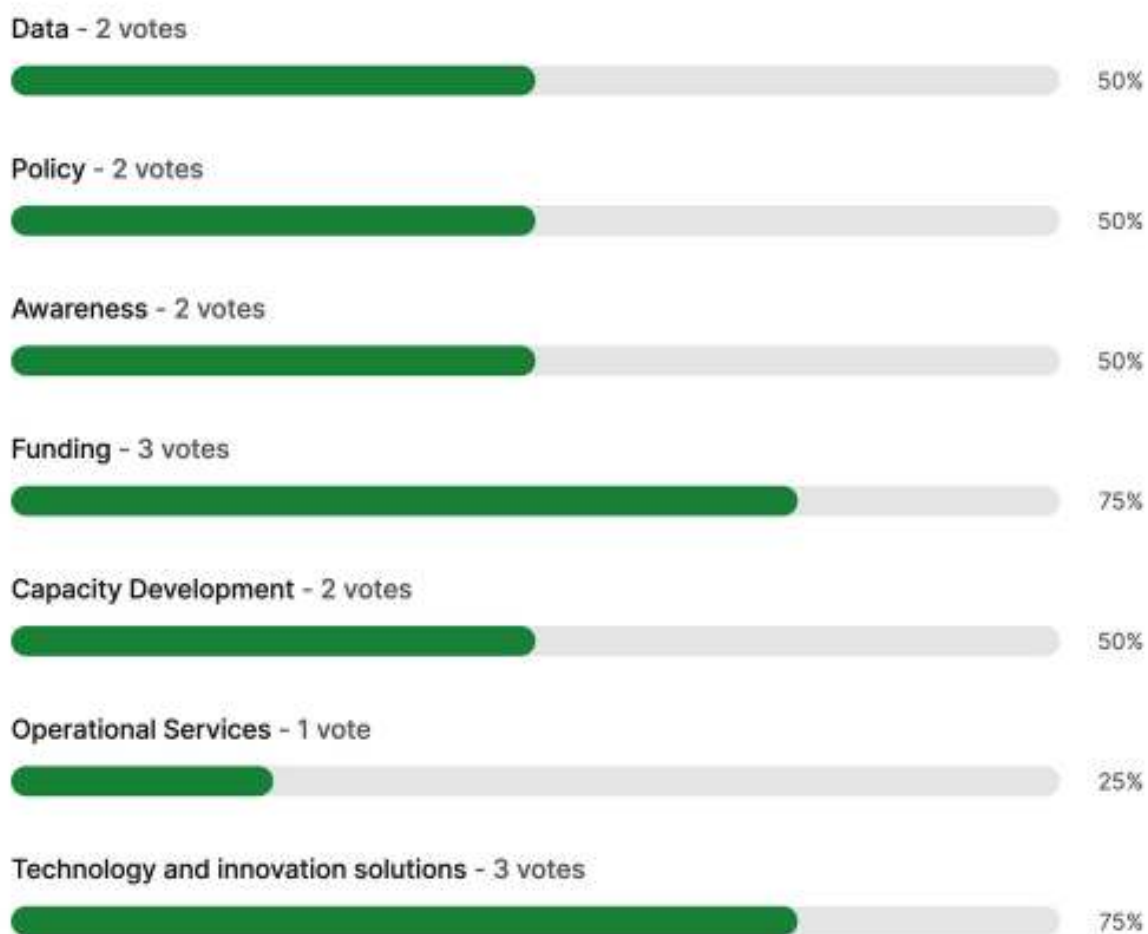
Other - 0 votes





SLIDO DISCUSSIONS

6. What is the major gap/limitation in achieving community resilience?





SLIDO DISCUSSIONS

7. What are your perceptions on these (on a scale of 1 to 5 from Fully Disagree to Fully Agree)

