



2021 United Nations Decade of Ocean Science for Sustainable Development 2030

# Mega-Delta Decade Programme

## Lead Institution

**State Key Laboratory of Estuarine and Coastal Research  
East China Normal University**

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### KEY PARTNERS

- Faculty of Civil Engineering and Geoscience, Delft University of Technology, Netherlands
- Faculty of Science, Kafrelsheikh University, Egypt
- College of the Coast & Environment, College of Science, and School of Renewable Natural Resources, Louisiana State University, USA
- National Institute of Oceanography (NIO), Pakistan
- National Institute for Research and Development of Marine Geology and Geoecology (GeoEcoMar), Romania

### DECADE CHALLENGES ADDRESSED

**CHALLENGE 2:** Protect and restore ecosystems and biodiversity

**CHALLENGE 6:** Increase community resilience to ocean hazards

**CHALLENGE 9:** Skills, knowledge and technology for all

### OCEAN BASINS

North Atlantic	Indian
South Atlantic	Arctic
North Pacific	



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## Summary

River deltas are a critical coastal habitat, however, they are facing continuous threats such as increased erosion, flooding risk, and shrinking salt marshes and mangroves. This has become a global problem which requires international cooperation to find solutions. The **Mega-Delta Programme** will study the present status and threats facing 25 globally representative deltas, create methodologies for new blueprints including critical characteristics and the sustainability of the delta system and its capacity to support regional development for deltas having different physical processes and ecological and economic value. The overall objective of the programme is to support sustainable development in delta regions.

Duration: 01/01/2021 - 12/31/2030

## Priority Activities (first 2 years)

- Stimulate interactions with experts and collect information from 15 representative deltas to establish a baseline inventory on the status and threats
- Share knowledge on the results through special publications
- Organize an International Conference on Estuaries and Coasts (ICEC-2021)
- Organize an International Conference on Physics of Estuaries and Coastal Seas (PECS2022)
- Create an eventual road map for sustainable delta development which considers climate change, geoscience, engineering, ecology, and society at the global and centennial scales

*"We are excited to be part of UN Ocean Decade, an invaluable international collaborative effort we should keep on cultivating."*

*Prof. Nina Lam, E.L. Abraham Distinguished Professor of Louisiana Environmental Studies, Louisiana State University, USA*

*"Through the Ocean Decade, I look forward to helping address the many threats facing our deltas and encouraging sustainable actions and solutions across the globe."*

*Alaa Salem, Professor of Kafrelsheikh University, Egypt*



## MEGA-DELTA

Deltas associated with large rivers: Seeking solutions to the problem of sustainability