



**The General Organization For Conservation
of Coral Reefs and Turtles In The Red Sea**



Red Sea Coral Reefs Forum: The Red Sea region – a climate refuge for coral reefs

9th September 2023 - 09:00 - 17:30

*Crowne Plaza Jeddah Al Salam
Jeddah, the Kingdom of Saudi Arabia*

Organised by the General Organization for Conservation of Coral Reefs and Turtles in the Red Sea (SHAMS) and the International Coral Reef Initiative (ICRI)

The predicted loss of the world's coral reefs threatens the health and socio-economic well-being of hundreds of millions of people and could substantially disrupt multiple marine ecosystems. Yet, biodiversity hotspots continue to be prevalent throughout the world's reef systems. A critical example of one of these hotspots is the Red Sea and Gulf of Aden. The Red Sea contains the most biologically diverse coral reef communities outside of Southeast Asia's coral triangle and is one of the longest continuous living reefs in the world. Approximately 6% of coral species within the Red Sea are endemic, with other coral reef species, such as fishes, being much higher, making this region one of the most valuable repositories for marine biodiversity.

Coral reefs within the Red Sea and Gulf of Aden region cover 13,605 km², approximately 5.3% of the total global area of coral reefs. The coral reefs of the Red Sea provide food and a source of livelihood to a rapidly growing population of over 28 million people living along its coastline. Fisheries landed value is approximately US \$230 million per year for the region, while annual revenues from tourism are over US \$12 billion. The Red Sea extends to its most northern portion, into the Gulf of Aqaba, which has the potential to be one of the planet's largest marine refuges from climate change due to the unique high thermal resilience of coral species.

In response to the recognition of the value of the region for the world's coral reefs, there has been an increase in attention on the region, with multiple organizations, initiatives, and projects being established. These conservation actions seek to conserve, protect, and restore the region's coral reefs.

Shams is at the forefront of this vital mission. With a mandate encompassing regulation, protection, and restoration, Shams is dedicated to ensuring the sustainability of the Red Sea's coral reefs. By collaborating with local and international experts, Shams spearheads innovative initiatives to monitor, restore, and rehabilitate these essential marine habitats. These efforts not only safeguard biodiversity but also position Saudi Arabia as a global leader in coral reef and sea turtle conservation, setting a benchmark for marine conservation efforts worldwide.

The Forum, preceding the 38th ICRI General Meeting, will highlight the importance of the Red Sea and Gulf of Aden's coral reefs for global coral reef conservation efforts, showcasing the efforts being undertaken to understand and build future coral reef resilience to a rapidly changing ocean. It will emphasize the unique biogeography of the Red Sea, which has resulted in high endemism and heat-tolerant coral species, positioning the region as a potential refugia. It will also present an open forum for the exchange of views and experiences to sustainably manage coral reefs with a central focus on the coral reefs of the Saudi Arabian Red Sea.

At the end of the Forum, the key messages will be presented. These messages will be integrated to the Motion on the Red Region to be table during the 38th ICRI General Meeting.

Agenda

08:00 – 09:00 - Registration

(09:00) Morning Session: Opening and Welcoming Remarks

Moderators:

1. *Dr Jennifer Koss, United States America, Director, NOAA Coral Reef Conservation Program and ICRI Co-Chair*
2. *Dr Ian McLeod, SHAMS, Executive Director Strategy, Science & Partnerships; Adjunct Professor, James Cook University*
3. *Dr Chico Birrell, Deputy General Director of Coral Reef Monitoring and Assessment, SHAMS*
4. *Dr Paul Marshall, Head of Nature Region, NEOM; Adjunct Professor, James Cook University*

(09:00) Introduction of the day

Dr Jennifer Koss, United States America, Director, NOAA Coral Reef Conservation Program and ICRI Co-Chair

(09:05) Welcoming remarks – Saudi Arabia's Commitment to Coral Reefs

Dr Khaled Asfahani, CEO, SHAMS

(09:10) Keynote speech - SHAMS Strategy- Holistic Blueprint for Red Sea Conservation Through Collaborative Stewardship

Dr Abdulaziz Alsuwailem, Chief Conservation & Strategy Officer, SHAMS

(09:30) The SHAMS' Outlook Report: Coral Reefs in the Red Sea, Kingdom of Saudi Arabia

Dr Mohammed Ismail, General Director of Coral Reef Monitoring and Assessment, SHAMS

(09:45) Keynote speech - Deep Blue and the Red Sea – the exciting new conservation frontier of NEOM's Nature Reserve

Dr Paul Marshall, Head of Nature Region, NEOM; Adjunct Professor, James Cook University

(10:00) Coffee Break (40')

(10:40) SHAMS – A leading organisation to oversee the regulation, protection, development, and sustainability of coral reefs in the Red Sea.

Moderator: *Dr Ian McLeod, SHAMS, Executive Director Strategy, Science & Partnerships; Adjunct Professor, James Cook University*

(10:45) Reef resilience reimagined

Dr David Feary, General Director, Coral Reef Conservation, SHAMS

(10:55) Monitoring and assessment in the modern world: aligning SHAMS' red sea coral reef vision with the global coral reef monitoring network

Dr Chico Birrell, Deputy General Director of Coral Reef Monitoring and Assessment, SHAMS

(11:05) SHAMS' vision to transform the red sea into a national icon through eco-tourism and citizen science

Vincent Kneefel, Program Director, Citizen Science, Communication & Outreach, SHAMS

(11:15) Meeting 30% of degraded ecosystems under effective restoration by 2030 challenge: SHAMS road map using best-practice, innovative technologies, and stakeholder engagement

Dr Simon Reeves, Associate Director of Reef Restoration, SHAMS

(11:25) Moderated questions & answers

(11:45) Group Photo

(12:00) Lunch

Panel Sessions

(13:15) Panel Session 1: Monitoring efforts in the Red Sea in response to climate change

Moderator: Dr Chico Birrel, Deputy General Director of Coral Reef Monitoring and Assessment, SHAMS

Panellist Speakers:

(13:20) PERSGA's mission and regional initiatives in regard to conservation of coral reefs of the Red Sea & Gulf of Aden

Dr Maher A Amer, Regional coordinator of Biodiversity, the Regional Organization for the Conservation of the Environment of the Red Sea & Gulf of Aden (PERSGA)

(13:30) Assessment of Saudi Arabia's Red Sea coral reefs: coral bleaching and recovery

Dr Emily Fobert, Senior Conservation and Communications Specialist, SHAMS

(13:40) How does the past shape the future of coral thermal resistance in the northern Red Sea?

Dr Eslam Osman, Marine Science, Biological and Environmental Science and Engineering Division, King Abdullah University of Science and Technology (KAUST)

(13:50) Carrying capacity as a tool for sustainable coral reef-based ecotourism

Dr Mark Ziembicki, Senior Conservation and Data Specialist, SHAMS

(14:00) Moderated questions & answers

(14:20) Panel Session 2: Safeguarding Red Sea coral reefs: conservation strategies and the importance for regional collaboration

Moderator: Dr Jennifer Koss, United States America, Director, NOAA Coral Reef Conservation Program and ICRI Co-Chair

Panellist Speakers:

(14:25) Conserving the Gulf of Aqaba: An area of Outstanding Universal Value (OUV) of coral reefs in the Red Sea (recorded presentation)

Dr Fanny Douvère, Head, World Heritage Programme, UNESCO

(14:35) Understanding Red Sea reef connectivity: a cornerstone for conservation planning

Professor Ibrahim Hoteit, Professor of Earth Sciences and Engineering, King Abdulla University of Science and Technology (KAUST)

(14:45) Reef fish diversity and small-scale fisheries of the Red Sea status and outlook

Dr Peter Mous, General Director of Fisheries, SHAMS

(14:55) Moderated questions & answers

(15:15) Coffee Break

(15:45) Panel Session 3: Citizen science, sustainable tourism, and blue natural capital: elevating, and investing in, the Red Sea as a coral refugia and national treasure

Moderator: Dr Paul Marshall, Head of Nature Region, NEOM; Adjunct Professor, James Cook University

Panellist Speakers:

(15:50) Bringing marine tourism into the conservation journey through Green Fins

Chloe Harvey, Executive Director, The Reef-World Foundation

(16:00) The evolution of Saudi Arabia's Red Sea tourism and its role in Red Sea sustainability

Mohammed Al Naser, Chief Executive Officer, Saudi Red Sea Authority

(16:10) The Red Sea: Investing in blue natural capital to secure a future for the Red Sea ecosystems

Dr Simon Reeves, Associate Director of Reef Restoration, SHAMS

(16:20) Questions & answers

(16:40) Short break

(16:50) Key messages from each panel session

Moderator: Dr Ian McLeod, SHAMS, Executive Director Strategy, Science & Partnerships, Adjunct Professor, James Cook University

(17:20) Closing Remarks

- Christine Dawson, Director, United States of America, Department of State and ICRI Co-Chair
- Dr Abdulaziz Alsuwailem, Chief Conservation & Strategy Officer, SHAMS

(17:30) End of the day