



International Coral Reef Initiative (ICRI)

Member's Report | 38th General Meeting

9th – 13th September 2024 Jeddah, – Kingdom of Saudi Arabia

Reporting Period: 2023 & 2024

A. Member Information:

- Name of ICRI member: Suganthi Devadason Marine Research Institute (SDMRI)
- Name of person(s) completing member's report: Dr. J.K. Patterson Edward
- Position / Title: Director
- Email: edwardjkipatterson@sdmri.in
- Are you a designated ICRI Focal Point: Yes No
 - If no, please indicate who you are completing the form on behalf of:

Suganthi Devadason Marine Research Institute (ICRI Member)

- Which was the last General Meeting you attended:
37th ICRI Meeting
- Will you be attending the 38th ICRI General Meeting in Jeddah, Kingdom of Saudi Arabia: Yes No
- Member social media:
 - Twitter/X: @
 - LinkedIn: Yes

B. Reporting on the implementation of the ICRI Plan of Action 2021-2024: turning the tide for coral reefs. *Your responses will help inform the Secretariat about members' contributions toward the current Plan of Action. You can download the ICRI Plan of Action here: <https://icriforum.org/documents/plan-of-action-2021-2024/>*

What are the main contributions you, as an ICRI member, have made to the ICRI Plan of Action?

Theme 1 - Preparing for the Future: Promoting Resilient Coral Reefs

Theme 2 - Coral Reef Science and Oceanography: Advancing and Utilizing the Latest Science and Technology

Theme 3 - Local Threat Reduction: Integrating Response Planning Frameworks

Theme 4 - Diversity and Inclusion: Expanding the Coral Reef Community

Answer:

Theme 1.C - In Gulf of Mannar, Southeast coast of India, SDMRI has been systematically continuing coral restoration using standardized transplantation technique and specially designed artificial substrates since 2002 (addl.doc. India ICRI report, 2006). To support natural recovery, specially designed multipurpose artificial reef modules are deployed as stable substrates in various locations, which not only help in coral recovery but also assist in conserving coral diversity. Government of India (Ministry of Environment, Forest and Climate Change [MoEF&CC]) and Government of Tamil Nadu (Tamil Nadu Forest Department [TNFD]) are providing funding support. SDMRI is associating with Ad Hoc Committee on Reef Restoration.

Theme 2.B - SDMRI Reef Research Team in association with TNFD developed baseline data for corals in Gulf of Mannar and Palk Bay in 2005 and 2007 respectively and thereafter regular annual monitoring has been carried out till date in the permanent monitoring sites fixed for the purpose. The monitoring results are being shared with Governments to take appropriate management action. The data were also shared with GCRMN for the preparation of Status of Coral Reefs in Tsunami Affected Countries 2005 and Status of Coral Reefs of the World 2008 and 2020.

Theme 3 - SDMRI has prepared the Draft of India's Coral Bleaching and Disease Response Plan to help coastal fisheries and livelihood with the support from MOEF&CC.

Theme 4.A - SDMRI has produced a video documentary on "Climate Change and Coral Reefs" for various stakeholders particularly targeting students, administrators, conservation managers and researchers.

- (ICRI) What are your upcoming priorities for coral reefs?

Answer:

Gulf of Mannar, Southeast coast of India:

Continuation of coral restoration in the identified degraded reef areas

Monitoring and maintenance of restored corals

Monitoring to update status and health

Removal of Marine debris in particular ghost nets

Monitoring of algal blooms in coral reef areas

Offshore reefs in Gulf of Mannar

Assessment and documentation for effective management

Palk Bay, Southeast coast of India:

Monitoring to update status and health

The above said activities will be implemented in association with TNFD

C. Reporting on the Restoration of Coral Reefs (Target 2 GBF/Action Point 3 Coral Reef Breakthrough)

- (ICRI) Are you able to estimate the total area(km²) of coral reef under active restoration and the total area you consider to be 'restored', as a result of your organisation/country's in 2023?
 - Total area under active restoration in 2023:km²
 - Total area considered to be restored in 2023:km²
- (ICRI) If available, please provide further information on the total area considered to be restored, and under active restoration for the total period of the restoration programme, including the timeframe:

Answer:

Total area under active restoration in 2023:

7,800 m² of active transplantation area in clusters within 24 acres of identified degraded reef areas in nine locations in Gulf Mannar during 2002-2023 (Major Funding: MoEF&CC & TNFD; other funding sources: GIZ through Tamil Nadu Environment Department).

Total area considered to be restored under active restoration in 2023:

About 44.32 km² of degraded reef areas in Gulf of Mannar

- (ICRI) For the purpose of the above, please provide definitions for how your programme/organisation/country considers coral reefs to be:
 - A) Under active restoration

- B) Restored

Answer:

Under active Restoration:

The degraded reef areas in Gulf of Mannar are identified for potential restoration program. Priorities are based on the status and health of the reefs and also the suitability for restoration. Restoration is also based on the management plan developed for the coral reef areas, which is approved by the MoEF&CC. The availability of funds through various programs / schemes is also considered for the extent of restoration.

Restored:

All the hard corals i.e. Scleractinian coral species are protected under the Wildlife Protection Act, 1972 and listed in Schedule-1 category which prevents collection of live and dead corals. All major coral reef areas in the country have been declared as Protected Areas. Furthermore, the Coastal Regulation Zone Notification 2011 provides protection to coral reefs and associated biodiversity.

There are four identified major coral reef areas in the country and MoEF&CC provides annual financial assistance to the Forest Departments of State / Union Territories and also to research organizations and State / Union Territories Governments for research projects through various programs.

Coral restoration is one of the priority areas and is taken up based on the proposals from the State / Union Territories Governments.

Accordingly, the degraded reef areas in Gulf of Mannar have been restored systematically since 2008 till date and the restored coral sites are also regularly being monitored and maintained.

[Does your country have any restoration policies or regulations?](#)

Many locations have outdated and insufficient regulations for coral reef restoration, resulting in inadequate oversight of restoration efforts. In addition, the absence, limitations, or differences among regulations between countries prevents the development and implementation of effective regional coral reef conservation strategies.

- (ICRI) Please describe the restoration policies or regulations (if any) that are in place in your country.

Answer:

India has a national coral reef conservation and management scheme and guidelines. In addition, all the four major reef areas have their management plan for effective implementation of projects and schemes.

In Gulf of Mannar, the method of “Transplantation of Coral Fragments” using specially designed artificial substrates has been identified by experimentation as a viable and simple technique for coral restoration. Necessary protocols are in place for restoration including site selection, substrate construction, use of donor sites, transplantation, monitoring, maintenance etc.

D. The Global Coral Reef Monitoring Network (GCRMN)

The production of future GCRMN reports, both at the regional and global level, relies on the ongoing support of data contributors who are willing to share their coral reef monitoring data for this purpose. As such, from 2024 to 2026, the GCRMN will undertake the rigorous process of developing the **Status of Coral Reefs of the World: 2025** global report, including an extensive data collation process.

Do you have data to contribute to the upcoming GCRMN global report?

- ✓ *SDMRI will provide comprehensive coral reef monitoring data for Gulf of Mannar and Palk Bay (Southeast coast of India) for the period 2005 to 2023/24.*
- ✓ *Zoological Survey India (ZSI) will have data for the other reef areas such as Gulf of Kachchh, Lakshadweep Islands and Andaman & Nicobar Islands*
- Please provide the contact information for the data providers to allow for the GCRMN data collation team to request data and discuss the process of data contribution.

Please add further contacts as needed.

Answer:

Contact Name: *Dr. J.K. Patterson Edward*
Organisation: *Suganthi Devadason Marine Research Institute*
Email Address: edwardjkpatterson@sdmri.in, director@sdmri.in

Contact Name: *Dr. Dhriti Banerjee*
Organisation: *Zoological Survey of India*
Email Address: dhriti.banerjee@zsi.gov.in, director@zsi.gov.in

Contact Name:
Organisation:
Email Address:

E. Capacity Building & Communications

Have you found the ICRI #ForCoral Webinar Series useful?

Through 2024, ICRI has hosted multiple webinars that aim to share knowledge and foster collaboration across critical topics concerning the conservation, protection, and restoration of coral reefs. These webinars form the #ForCoral webinar series, and topics include the 4th



Global Bleaching Event, impacts of land-based sources of pollution and National Biodiversity Strategies and Action Plans.

The full list of webinars and recordings can be found here: <https://icriforum.org/forcoral-webinar-series/>

- (ICRI) Did you attend any of the series' webinars, and if so which topics have you found the most useful and engaging? If you did not attend the webinars, please explain why, and how what we could have done better.

Answer:

Attended the Webinars on "The status of fourth Global Bleaching Event"

- (ICRI) Do you have any suggestions or request for topics that you wish for ICRI to host as part of this series? If you have a specific topic in mind, and would like to host a webinar, please indicate below.

Answer:

Have you found the ICRI communications useful?

- (ICRI) Do you find the ICRI Monthly Round of News Useful? If yes, what do you like about it and how would you suggest improving ICRI's communications?

Answer:

Found the monthly news useful with update of various activities / programs / best practices around the world.

F. Kunming-Montreal Global Biodiversity Framework

ICRI has continually supported the Convention on Biological Diversity and the Post-2020 process, developing a recommendation for coral reef indicators to be included in the Global Biodiversity Framework and supporting Parties during the negotiation process. Following the Framework's adoption in 2022, ICRI's support now aims to support parties in implementing the framework, especially through National Biodiversity Strategies and Action Plans (NBSAPS) and the Marine and Coastal Work Programme.

In 2024, ICRI released [**A Guide for Integrating Coral Reefs and Associated Ecosystems into National Biodiversity Strategies and Action Plans**](#) to support coral reef countries to integrate coral reefs and associated ecosystems into their NBSAPs.

- (ICRI) Did you read, use, and/or apply the Guide on integrating coral reefs and associated ecosystems into National Biodiversity Strategies and Action Plans (NBSAPs) useful? *Where possible, indicate specific elements that were useful or alternatively provide information if you did not find the guide useful.*

Answer:

- (ICRI) Did you revise your current National Biodiversity Strategies and Action Plans (NBSAP) to include coral reefs? ***N.B.** if you are not a country representative, are you working with national focal points to help update their NBSAPs? Please provide further details.*

Answer:

- (ICRI) How are you planning to implement the Kunming-Montreal Global Biodiversity Framework? Please list the target(s) and decisions that your work attributes to.

Answer:

G. Upcoming events

Please tick the most any events that you will be, or are planning to attend:

- September 10th – 24th: 79th Session of the UN General Assembly (UNGA 79)
- September 23rd – 26th: GEF International Waters Conference
- October 13th – 18th: 7th International Marine Conservation Congress (IMCC7)
- October 21st – November 1st: CBD COP16
- November 4th – 8th: 77th Annual meeting of the Gulf and Caribbean Fisheries Institute (GCFI77)
- December 10th – 12th: The International Mangrove Conservation and Restoration Conference

- December 9th – 13th: Reef Futures
- June 9th – 13th 2025: United Nations Ocean Conference
- October 9th – 15th 2025: IUCN World Conservation Congress
- Other

Please list any upcoming regional / international events relevant to ICRI that your organisation plans to attend:

Answer:

United Nations Ocean Conference, 09th-15th 2025

H. Publications. Please list relevant publications/reports you have released recently (+ add a link if possible)

Publication	URL
<i>Patterson Edward, J.K., Naganathan, V., Mathews, G., Diraviya Raj, K., Gladwin Gnana Asir, N., Deepak S. Bilgi, Ashok Kumar, T.K. & Bakan Jagdish Sudhakar, (2023). Coral reefs of the Gulf of Mannar, Tamil Nadu, India: Decadal changes in status and management paradigms (Greta S. Aeby, Biju Kumar A., Jayanthi M., and Dan Wilhelmsson Eds.). Environment, Climate Change and Forests Department, Government of Tamil Nadu in partnership with Suganthi Devadason Marine Research Institute, Tuticorin, India, 356pp</i>	https://sdmri.in/coral-reefs-of-the-gulf-of-mannar-tamil-nadu-india-decadal-changes-in-status-and-management-paradigms/
<i>Diraviya Raj, K., Emmett, J.S. and Mathews, G. (2023). Report on an outbreak of coral-killing sponge <i>Clathria (Microciona) aceratoobtusa</i> in an unprotected reef of the Gulf of Mannar, India. <i>Journal of Tropical Ecology</i>, 39, e8. https://doi.org/10.1017/S0266467422000487</i>	https://sdmri.in/researchpapers/2023/
<i>Arasamuthu, A., Laju, R. L., Diraviya Raj, K., Ashok Kumar, T. K., Leewis, R. J., Edward, J.K.P. (2023). Invasive red alga <i>Kappaphycus alvarezii</i> on the reefs of the Gulf of Mannar, India—a persistent threat to the corals. <i>BioInvasions Records</i>, 12(1): 151-166. https://doi.org/10.3391/bir.2023.12.1.13</i>	https://sdmri.in/researchpapers/2023/

I. ICRI Member Feedback. What do you find most valuable about being a member of ICRI as well as completing the ICRI member reports? If you have any ideas to improve the Member Reports, please list below:

Answer:

Offers an opportunity to meet reef researchers, administrators and representatives of funding organizations around the world, to discuss and get updated on the current issues and helps to implement appropriate remedial measures.

J. Contact information & member information. (Note that this information will be posted on the ICRI website on your member page: <https://icriforum.org/members/>).

Please use the table below to provide us updates to your member's focal points as well as the blank cells to indicate changes to information (please add more rows, as needed):

Focal Point 1:	
<i>Name:</i>	Dr. J.K. Patterson Edward
<i>Title/Organisation:</i>	Director / Suganthi Devadason Marine Research Institute
<i>Email:</i>	edwardjkpatterson@sdmri.in , director@sdmri.in
Focal Point 2:	
<i>Name:</i>	
<i>Title/Organisation:</i>	
<i>Email:</i>	
Focal Point 3:	
<i>Name:</i>	
<i>Title/Organisation:</i>	
<i>Email:</i>	
Member page updates:	
<i>Section</i>	<i>Update</i>

Thank you very much for sharing your valuable experiences and information with ICRI. Members reports, meeting outputs and resources will be uploaded to: <https://icriforum.org/events/37th-icri-general-meeting/>