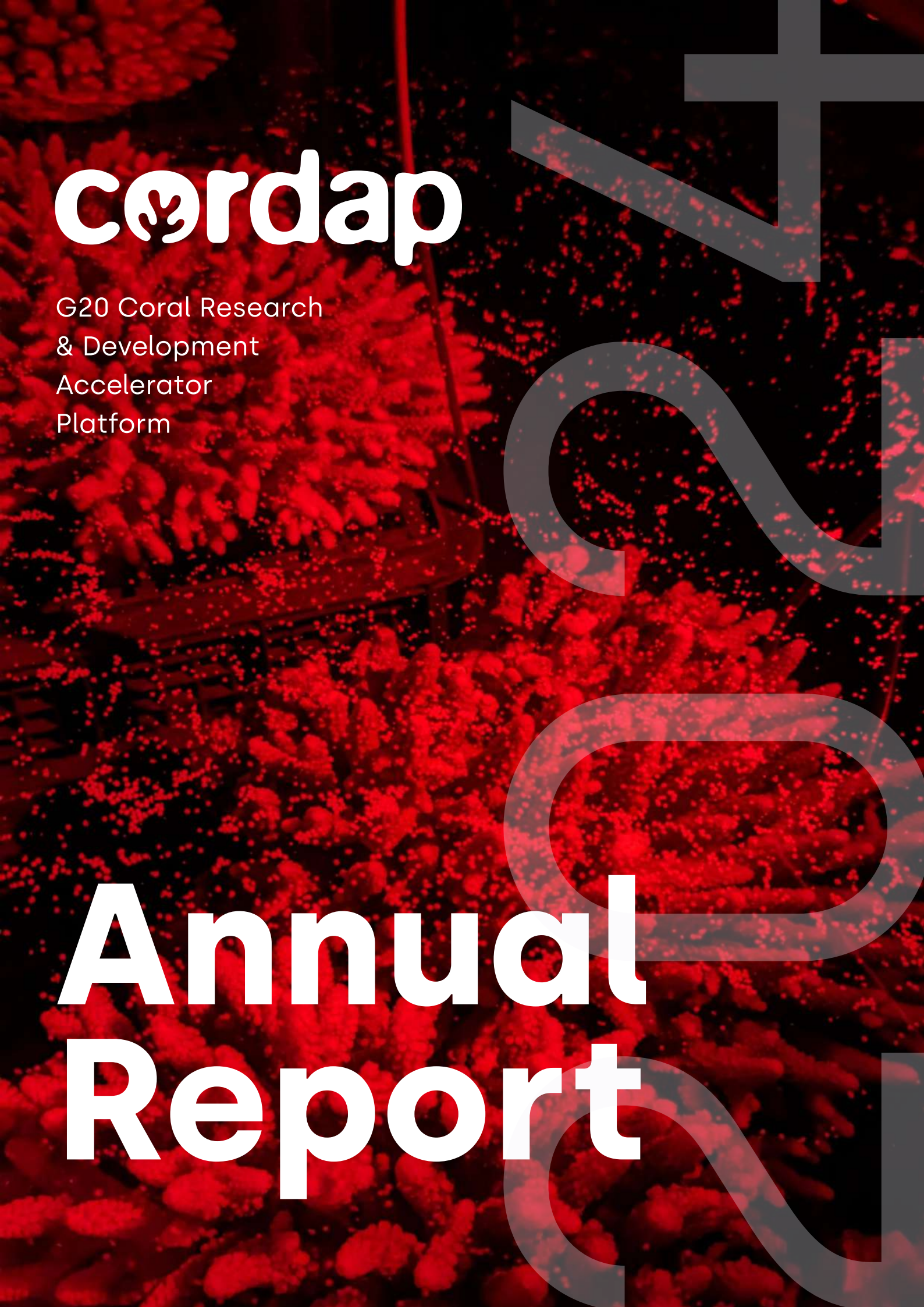
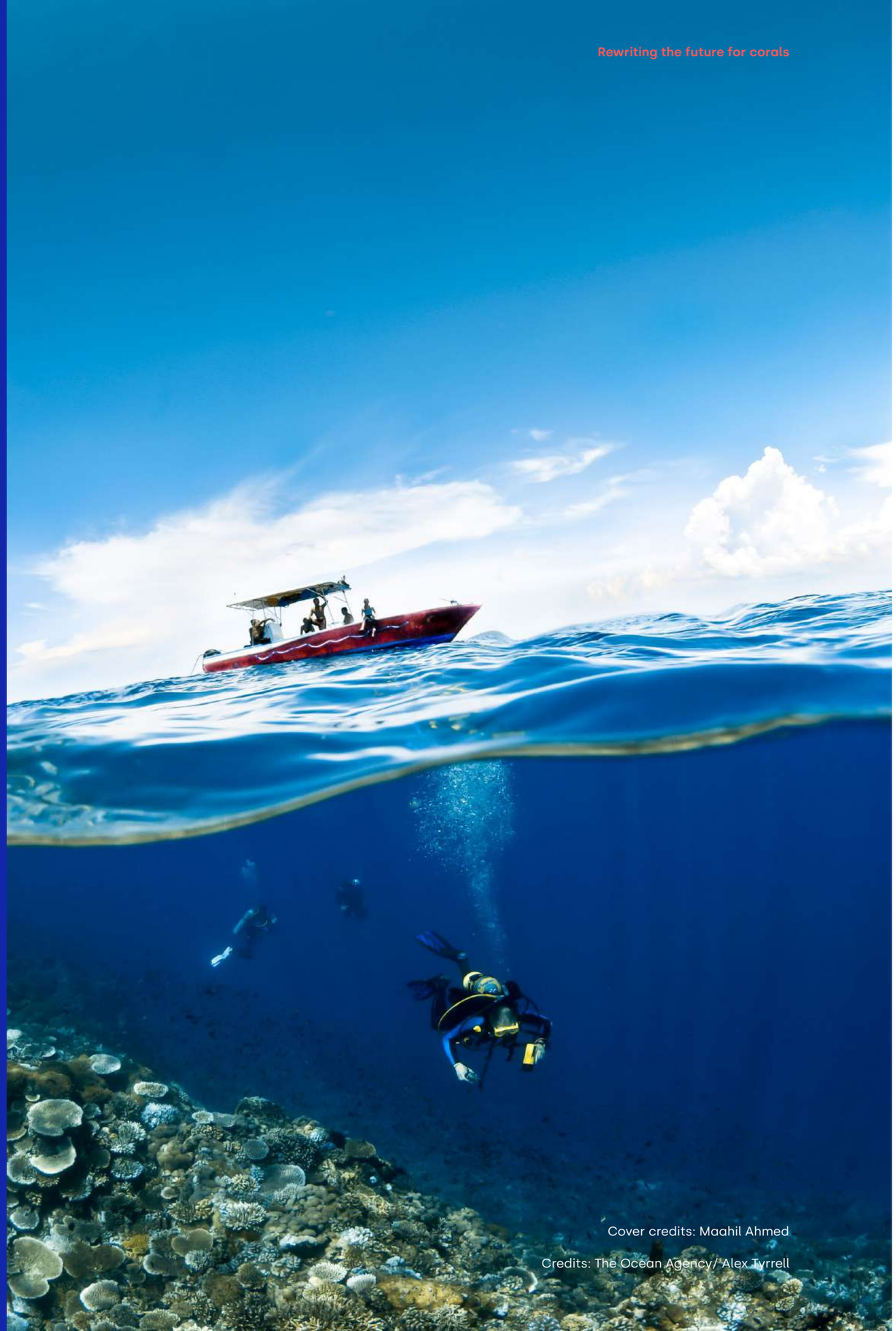


cordap

G20 Coral Research
& Development
Accelerator
Platform

Annual Report

2024



Cover credits: Maahil Ahmed

Credits: The Ocean Agency/ Alex Tyrrell

Rewriting the future for corals

Contents

4 Letter from our Executive Director

5 We are on a mission

13 We strive for positive impact

39 We are building a coral community

45 We are proud of our archivements

49 We look forward to

53 We are rooted in science

61 Funding a better world

66 Closing remarks from the Chair

Contents

CORDAP Annual Report 2024

Letter from our Executive Director

Coral reefs are a lifeline for hundreds of millions of people, supporting food security, livelihoods, and biodiversity. Yet, as we reflect on 2024, it is clear that we are facing a watershed moment for coral conservation. The past two years have witnessed an unprecedented coral crisis, as 77% of the world's coral reefs were exposed to severe bleaching heat stress, driven by record-breaking sea temperatures. With 2024 declared the warmest year on record, and the first one exceeding the safety boundary of +1.5°C above pre-industrial levels. The stakes for coral survival have never been higher, demanding urgent, effective action.

Despite these challenges, hope remains. We are living in an era of scientific breakthroughs and technological advancements that have the potential to transform how we conserve and restore coral reefs. However, for effective solutions to be implemented at scale, we need to invest in research, innovation, and capacity building – particularly in regions most affected by coral decline. That's where CORDAP plays a unique and essential role.

We are extremely proud of what we have collectively accomplished on coral research, innovation and capacity building in 2024. Through the CORDAP funding, awardees established and improved five new coral-rearing facilities in the Caribbean and in the Pacific, trained over 300 people, and contributed to cutting-edge scientific publications. The teams established 70 coral nurseries, grew 2,200 corals and outplanted 500, among many other achievements. We now directly support 22 coral research and restoration projects and 130 principal investigators, along with their teams, worldwide. The new funding call we opened in 2024 will further allow increasing our global impact.

Meanwhile, our Leadership and Capacity Development workshop in Kenya, addressed the challenges faced by coral researchers in low and middle-income countries and provided the insights needed to shape up a brand new funding program specifically designed to meet the needs for researchers from the Global South to advance technologies fit to be applied in their coral ecosystems.

Over the last few years, we have been relentlessly working to strengthen our international impact. This did not pass unnoticed. CORDAP has been recognized as a UN Ocean Decade Action, highlighting how we are driving transformative solutions for coral conservation on a global scale, and our membership has expanded to a number of new nations, with our programs active in 64 nations.

But while we are making progress, it's clear our mission is far from complete. Until the key threats of climate change and human impact are addressed by wider systemic change, we must continue to drive scientific innovation to ensure the survival and resilience of corals for future generations. But we are not alone in our efforts, and in 2024 we have also signed a number of meaningful collaboration agreements and receive the support of many organizations from around the world.

In this report, we are proud to highlight our progress throughout 2024 and how scientists, coral practitioners, partners and donors have devoted their time, energy and resources to help us create a better future for the world's corals. To those who have supported us, I extend my heartfelt gratitude. Together, we're helping to push the boundaries of what is possible for coral conservation and restoration. And to those just learning about CORDAP, I invite you to join our mission. Whether through partnerships, research collaborations, or funding support, we all have a role to play in safeguarding the future of the world's corals.

There is still time to save the corals, but we need to act now.



Prof. Carlos Duarte, Executive Director of G20 Coral Research and Development Accelerator Platform and CEO of CORDAP Foundation

Rewriting the future for corals



Credits: Camilla Floros

CORDAP Annual Report 2024

We accelerate science to save corals

The Coral Research & Development Accelerator Platform (CORDAP) is a G20 initiative and the only international organization fully dedicated to funding global research and development (R&D) for tropical and cold-water coral restoration and conservation.

Our vision and mission

Thriving corals and reefs, fully protected in perpetuity, for the benefit of nature, communities and humanity.

We will unite the world to accelerate global coral research and development, to provide the technologies and innovations needed to safeguard the future of corals and reefs and the benefits people receive from them in a warming ocean.

Credits: Gayle Laird

Objectives and aims

The rapid decline of coral reefs is no longer a distant concern. It is a crisis unfolding before our eyes, which requires immediate and collective action. **That's why we are:**

Focused on Research & Development (R&D)
CORDAP is the only international organization fully dedicated to funding coral conservation and restoration R&D.

Building transdisciplinary collaborations
We bring together the best minds worldwide in collaborative projects to develop effective and scalable solutions for coral conservation practitioners. The projects extend beyond the marine science field, incorporating insights from mechanical engineering, 3D printing, structural engineering, architecture, and other disciplines.

Committed to scalability
CORDAP-funded projects deliver innovative coral restoration solutions suitable for large-scale interventions and remote areas.

Accessible to everyone
Our open-source platform allows any organization to advance and use our freely-available technologies.

Promoting participation of the Global South
We actively involve scientists from the Global South, those most impacted by coral loss, across all of our programs, enabling and empowering scientists and researchers to deliver solutions that work for their nations and beyond.

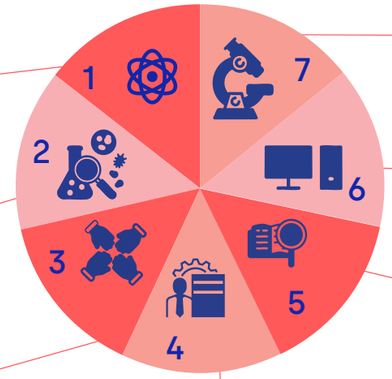
Rooted in inclusivity
We support a gender-diverse, internationally inclusive, transdisciplinary, global community of scientists, technologists, community leaders, and innovators. We are open to the participation of non-G20 nations and organizations committed to coral conservation and restoration.

CORDAP aims to:

1
Deliver novel scientific and technological solutions to conserve and restore corals and reefs through targeted funding programs supporting diverse and inclusive teams.

2
Connect existing national, regional, and international research and development programs.

3
Support a gender-balanced, transdisciplinary community of scientists, technologists, and innovators worldwide in achieving CORDAP's goals.



4
Engage the private sector in using and implementing CORDAP-developed solutions.

5
Provide advanced research and development training to scientists from developing and least-developed countries.

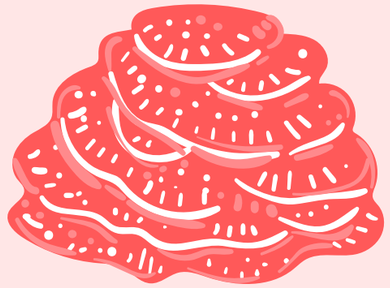
6
Facilitate access to information and research facilities.

7
Develop and share novel scientific tools.

Corals and reefs

There are at least 6,000 species of corals, found everywhere from tropical waters to the deep, cold poles.

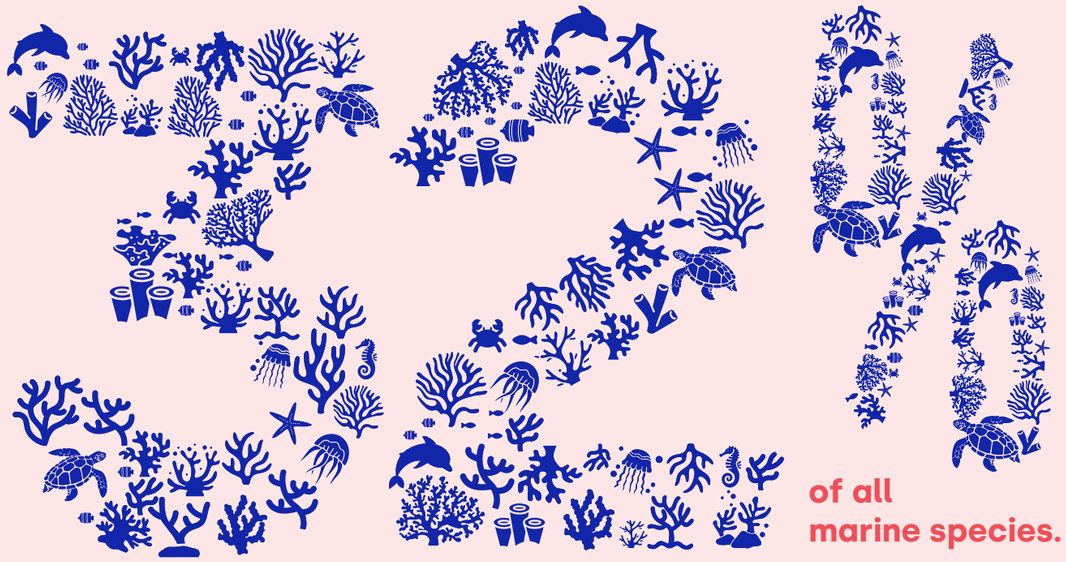
Some are solitary,





while others build huge reefs.

While covering less than **0.1% of the ocean floor**, corals support



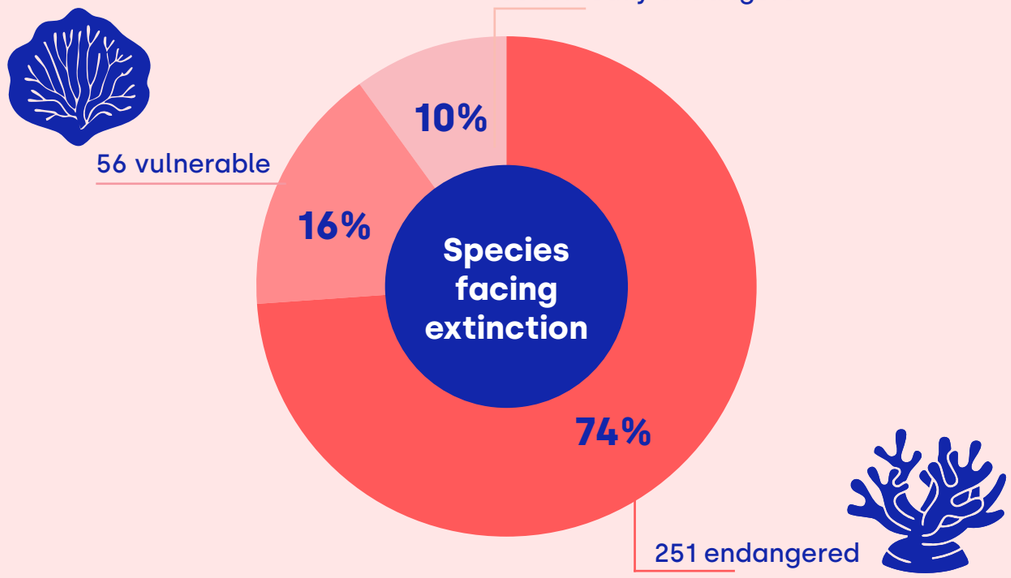
of all marine species.

And they also support the livelihoods of 1 billion people worldwide.

Rewriting the future for corals

around the world

Approximately 44% of reef-building corals face extinction



For the first time, an entire ecosystem that sustains millions of species and people may be lost at the hands of humans.

Let's rewrite the future for corals.

Join us on our mission

We share the same global goals

Addressing the multiple challenges facing coral reefs, as well as the marine life and humans that depend on them, requires a concerted effort. We combine immediate action with innovative research, responsible practices and a global shared team.

Through our work and the projects we fund, we are contributing to the UN Sustainable Development Goals and the Kunming-Montreal Global Biodiversity Framework goals, which set out to halt biodiversity losses by 2050 and restore 30% of degraded habitats by 2030.

By supporting our work, our partners and members are also contributing to:

- Protect and restore marine biodiversity
- Mitigate climate change impacts
- Increase education levels and awareness
- Combat global poverty and hunger, and reduce gender inequalities
- Contribute to social responsibility corporate targets

CORDAP supports the UN Sustainable Development Goals



CORDAP supports the Kunming-Montreal Global Biodiversity Framework

Target 2
30% of degraded areas are under effective restoration by 2030.

Target 3
Conserve 30% of land, waters and seas.

Target 4
Threatened species are recovering, genetic diversity is being maintained and human-wildlife conflict is being managed.

Target 5
Ensure sustainable, safe, and legal harvesting and trade of wild species.

Target 7
Reduce pollution to levels that are not harmful to biodiversity.

Target 8
Minimize impacts of climate change and ocean acidification.

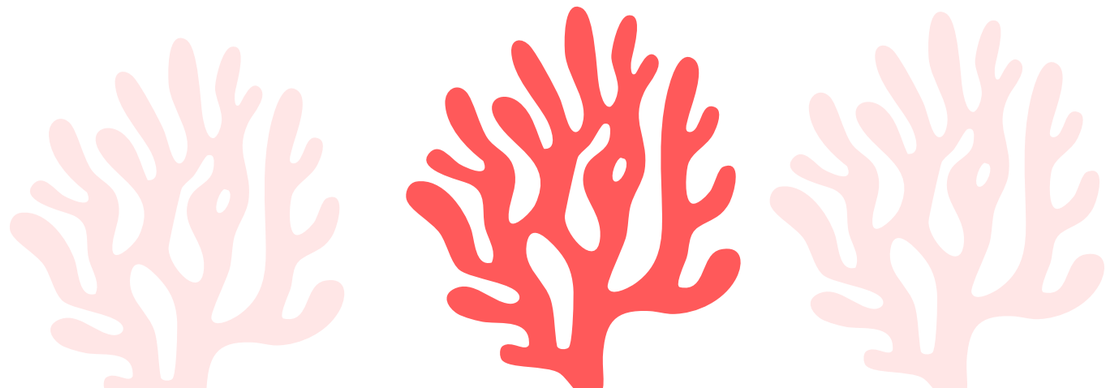
Target 10
Areas under agriculture, aquaculture, fisheries and forestry are managed sustainably.

Target 11
Nature's contributions to people are restored, maintained and enhanced.

Target 19
Mobilize US$200 billion/year for biodiversity from all sources, including US$30 billion through international finance.

Target 20
Capacity-building and development, technology transfer, and technical and scientific cooperation for implementation is strengthened.

Target 21
Ensure that the best available data, information and knowledge are accessible to decision makers, practitioners and the public.



Rewriting the future for corals

We strive for positive impact



Credits: Gayle Laird

We strive for positive impact

CORDAP at a glance

22 projects funded

>300 researchers and research teams supported

6 scoping studies

4 technology roadmaps

>US$ 28 million
committed for coral research and restoration

Rewriting the future for corals

Since 2021, CORDAP collaborated with **234 institutions** from **60 countries**



Since 2021*

2022
35 countries involved
57 institutions involved

2023
14 project funded
188 researchers and research teams supported
3 scoping studies
1 roadmap published
52 countries involved (+17)
165 institutions involved (+108)

2024
22 projects funded (+8)
327 researchers and research teams supported (+139)
6 scoping studies (+3)
4 roadmaps published (+3)
60 countries involved (+8)
234 institutions involved (+69)

*cumulative values

Our programs and impact

The programs and projects that we support are shifting the boundaries of what is possible today, ensuring that our ambitions for the future of corals are not limited by the currently available technology. The urgency of our mission demands that we focus our attention and funding in key priority areas.

Coral Accelerator Program

The Coral Accelerator Program (CAP) is our key approach for supporting international collaborative teams with impactful ideas for coral conservation and restoration worldwide. Currently, our program involves 33 countries and supports 130 researchers.

In 2024, the projects funded by CORDAP made significant progress:

Training
+300
people

Outreach
+800
people

Publications
+1 published
+3 under review

Developments
Coral nutritional supplement
Coral probiotics
Web-based pollution app

Facilities
(deployed or improved)
5

70 nurseries
+2200 grown
+500 outplanted

key priority areas

Preserve and conserve existing corals
Saving and retaining existing corals is preferable to replacing them. We support innovative conservation ideas, from developing disease treatments that can be applied to existing corals to finding ways to improve local water quality.

Credits: The Ocean Agency/ Matt Curnock

Limit early life mortality
High mortality rates among young corals limit the efficiency of existing restoration methods. We fund solutions that promote coral survival at the early stages, such as the development of nutritional supplements.

Credits: The Ocean Agency/ Diane Burko

Intervention planning and monitoring
Achieving bold restoration and adaptation goals requires effective decision making. We place our resources where we can have the highest impact.

Credits: The Ocean Agency

Cold-Water corals
More research is needed on cold-water corals and their geographical distribution, health, biology, reproduction and how best to restore them when damaged.

Credits: NOAA

Blended artificial and natural reefs
Artificial structures, including hybrid reefs, need to be integrated into existing reefs with minimal damage, offering surge protection and actively enhancing recovery of nearby coral and coastal communities.

Credits: The Ocean Agency/ Martin Colognoli

Supporting R&D in developing countries
We support the development of R&D in low and middle-income countries, through projects that scale up restoration efforts in local communities, reduce drivers, enhance ecological functions, and improve the survival of coral colonies.

Credits: CORDAP

Assisted evolution
Our projects focus on assisting coral species adapt to environmental changes more quickly than they would via natural selection.

Credits: Paul A Selvaggio

R&D capacity building
We advance global R&D capability and build marine managers and practitioners capacity to understand and use new methods effectively.

Credits: The Ocean Agency

Aquaculture
Our projects find ways to make the production and planting of coral more efficient and effective.

Credits: Paul A Selvaggio

CAP 2022:
CORDAP's inaugural awardees



Credits: The Ocean Agency/ Martin Cologroli

Using probiotics to fight a lethal coral disease
Nations involved: USA, Colombia
Project Lead: Dr. Valeria Pizarro, Perry Institute for Marine Science
This research team is developing probiotics to protect corals from Stony Coral Tissue Loss Disease (SCTLD)—a highly lethal, fast-spreading disease with no known cure. SCTLD has already affected 34 coral species across 30 countries and territories in the Caribbean. The probiotics aim to halt lesion progression, prevent transmission, and enhance coral resilience. As part of the project, Colombian coral restoration practitioners are receiving training to proactively implement disease mitigation strategies before SCTLD reaches their reefs.

In 2024
- Grown 2,200 corals for outplanting in 2025
- Trained 20 students and researchers
- Trained local communities in coral microfragmentation techniques
- Established the first-ever coral larval rearing facility in San Andrés, Colombia



Credits: James Guest

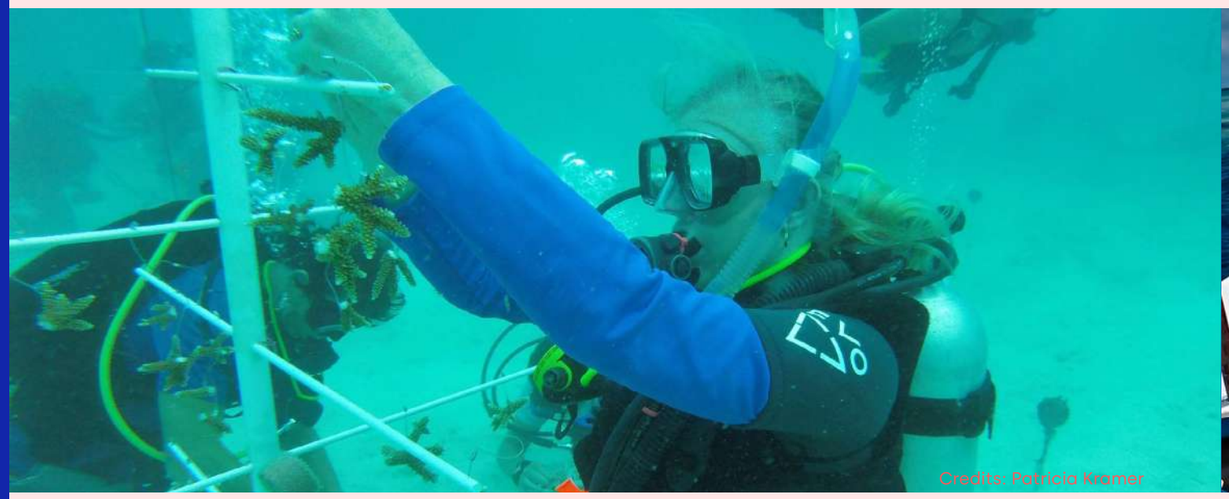
Improving the health, growth, and survival of young corals
Nations involved: USA, Honduras
Project Lead: Dr. Rebecca Albright, California Academy of Sciences
This project is advancing coral research and restoration in the Mesoamerican Reef, the world's second-largest barrier reef. Researchers are testing low-tech, low-cost methods to improve the health, growth, and survival of coral larvae. A key milestone will be the establishment of the first-ever coral-rearing facility in Roatán, Honduras. Training up local communities and partners to take ownership of these projects will help ensure long term buy-in and better survival rates.

In 2024:
- Monitored *Orbicella faveolata* spawning at Bikini Bottom site
- Delivered and began implementing the first-ever coral larval-rearing facility in Honduras
- Monitored growth and survivorship of *Acropora millepora*

CAP 2022: CORDAP's inaugural awardees

Ramping up coral breeding in the Caribbean
Nations involved: USA, Netherlands Antilles, Dominican Republic
Project Lead: Rita Sellares, FUNDEMAR
In the past, this team has successfully seeded half a million larvae to local reefs, the highest number reported in the Caribbean region. Now, researchers are establishing a land-based coral larval rearing facility in the Dominican Republic and designing another one in Bonaire. These facilities will significantly increase coral larvae production, doubling the number of seeding units and enabling the reproduction of more coral species. By engaging local communities—including coral restoration practitioners, students, the tourism industry, dive centers, and fishers—the project is fostering long-term support and ensuring sustainable restoration efforts.

In 2024:
- Renovated and expanded the coral-rearing facility in the Dominican Republic
- Developed blueprints for the Bonaire facility
- Developed individual coral gamete collectors
- Created a new substrate to enhance coral larvae settlement



Credits: Patricia Kramer

Building reef restoration and conservation capacity in the Caribbean
Nations involved: USA, Australia, Honduras, Dominica, Mexico, Turks and Caicos
Project Lead: Dr. Patricia Richards Kramer, Atlantic & Gulf Rapid Reef Assessment
This project unites coral experts and marine resource managers from a network of over 40 marine protected areas across 18 countries. By collaborating with local communities, the team is expanding coral restoration efforts, sharing technical expertise, and implementing science-based restoration roadmaps. The project focuses on enhancing natural coral recruitment through advanced breeding techniques and pioneering new methods to restore key herbivores—like urchins and crabs—critical for coral survival.

In 2024:
- Hosted a webinar for all CORDAP-funded Caribbean projects
- Hosted 30 marine resource managers and restoration practitioners from 16 countries
- Organized 5 workshops and training courses, reaching over 200 participants

Creating a cryogenically preserved 'bio-bank'
Nations involved: USA, Mexico, Australia, Curacao
Project Lead: Dr. Mary Hagerdorn, Smithsonian Institution
This team is establishing a global network of coral cryopreservation facilities—'bio-banks' or 'coral reef fertility clinics' —to safeguard coral genetic diversity. These repositories will deep-freeze coral sperm and larvae, ensuring their availability for future restoration efforts. It will offer a lifeline for global research, conservation, and restoration efforts for years to come. The team is also developing multilingual online courses to train global coral cryopreservation teams and expanding collections of frozen reproductive material to protect endangered species.

In 2024:
- Provided hands-on training on coral larval cryopreservation
- Began development of a virtual training module
- Drafted a scientific article on project findings
- Successfully cryopreserved, thawed, and settled *Dendrogyra cylindrus* coral larvae



Credits: Maahil Ahmed

Using AI and robotic boats to advance reef restoration efforts
Nations involved: Australia, Maldives
Project Lead: Prof. Peter Harrison, Southern Cross University
This project leverages AI, satellite imaging, and robotic technology to enhance coral restoration in the Maldives. Local communities are being trained to collect and cross coral eggs and sperm to produce genetically diverse larvae, which are then transported to degraded reefs for restoration. Advanced imaging tools are used to map reefs, monitor bleaching responses, and assess genetic diversity, while the robotic 'LarvalBot' ensures efficient and targeted coral larvae delivery.

In 2024:
- Monitored coral bleaching impacts in the Maldives
- Trained local partners in coral spawning, larval rearing, and deployment of heat-resistant corals

CAP 2022: CORDAP's inaugural awardees

ReefSeed – delivering a portable aquaculture system
Nations involved: Australia, Maldives
Project Lead: Andrea Severati, Australian Institute of Marine Science (AIMS)
The ReefSeed project introduces a portable coral aquaculture system that accelerates coral reproduction, reducing the process from months to weeks. By increasing fertilization rates and expediting larval settlement and deployment, this system enhances coral survival while eliminating the need for costly diver operations. With the capacity to generate up to 144,000 young corals per year, ReefSeed represents a major leap in scalable coral reef restoration. Training and knowledge transfer to Maldivian coral practitioners will ensure long-term impact and local implementation.

In 2024:
- Completed the ReefSeed mobile lab in Australia
- Trained 9 people in coral aquaculture techniques



Credits: AIMS

Boosting coral resilience with nutritional supplements
Nations involved: Australia, Indonesia, Malaysia, Monaco
Project Lead: Dr. Emma Camp, University of Technology Sydney
This project is developing CoraBoost, a specialized nutritional supplement designed to enhance coral resilience during heat stress. By improving coral health and potentially delaying or mitigating bleaching, CoraBoost could become a key tool for future reef restoration efforts. The supplement will be tested both in Australia's largest aquaculture facility and on wild reefs in Australia, Malaysia, and Indonesia.

In 2024:
- Conducted multiple coral nutrition experiments
- Refined the CoraBoost vitamin mix formula
- Published one scientific article and submitted another



Credits: Sebastian Szereday/ CoralKu

ASSIST: a smart-decision framework for coral restoration
Nations involved: Malaysia, USA, Germany
Project Lead: Sebastian Szereday, Coralku
The ASSIST project is developing a data-driven system to enhance coral restoration efforts by identifying the most climate-resilient corals for transplantation and nursery growth. By pre-screening corals for heat tolerance, the project ensures that only the most robust species are used for restoration. Over 2,500 corals from 12 species will be cultivated across 33 nurseries, and the effectiveness of different restoration techniques will be evaluated to maximize long-term coral survival while minimizing the removal of corals from natural reefs.

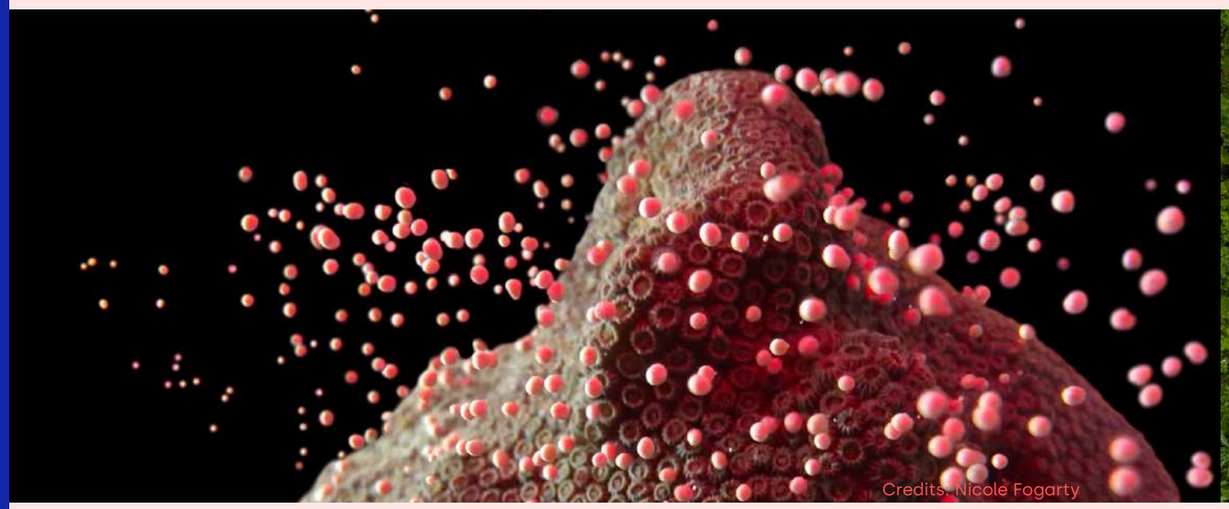
In 2024:
- Screened over 2,000 corals for climate resilience
- One scientific paper under review
- Established 70 nurseries, the largest system in Malaysia
- Provided advanced scientific training for 5 Malaysian team members

Reducing the impact of the wild coral trade
Nations involved: UK, Indonesia
Project Lead: Dr. Rita Rachmawati, National Research and Innovation Agency
To combat the illegal wild coral trade, this project is developing a 'lab in a box' system to reproduce rare and ornamental coral species in controlled environments. The team will grow corals for both the aquarium trade (30%) and reef restoration (70%), thus reducing reliance on wild harvesting while promoting sustainable practices. This approach fosters an economy where conservation and commerce align, supporting local reef protection efforts.

In 2024:
- Designed a coral settlement substrate
- Developed a coral larva collector

Editing genes to build more resilient corals
Nations involved: USA, Philippines
Project Lead: Dr. Nicole Fogarty, University of North Carolina
Using CRISPR gene-editing technology, this project is pioneering the development of heat-tolerant 'super corals' to withstand rising ocean temperatures. Researchers aim to modify coral DNA to enhance resilience while studying how "switchable" genes respond to environmental stressors. This work has the potential to revolutionize coral genomics, offering new solutions for reef conservation in a warming world.

In 2024:
- Established a coral culture facility in the Philippines
- Conducted heat stress experiments
- Hosted a workshop at an international conference with 40 participants



Credits: Nicole Fogarty

CORALADAPT: Identifying heat-resistant corals
Nations involved: UK, Australia, Philippines, Palau
Project Lead: Dr. James Guest, Newcastle University
CORALADAPT is leading the global search for heat-tolerant corals, aiming to understand how some corals pass heat resistance to their offspring. The team is using in vitro fertilization and advanced sampling techniques to understand whether breeding from heat-tolerant parents can help secure healthier coral populations in warming oceans.

In 2024:
- Completed the first major fieldwork season in Palau and the Philippines
- Conducted heat-stress experiments on corals

Enabling quick, non-invasive, data-driven decision making
Nations involved: USA (inc. Guam), Fiji
Project Lead: Dr. Kenneth Hoadley, University of Alabama
This project is advancing non-invasive techniques to study coral heat tolerance by analyzing the algae living inside corals. Using a submersible fluorometer, researchers can quickly and cost-effectively assess algae health without harming corals. The tool helps identify colonies at higher risk of bleaching, guiding data-driven conservation efforts. Heat-tolerant and vulnerable corals are being transplanted and monitored to evaluate long-term resilience.

In 2024:
- Outplanted 500 corals across three nurseries
- Onboarded three students and two post-doc researchers



Credits: Tom Vierus

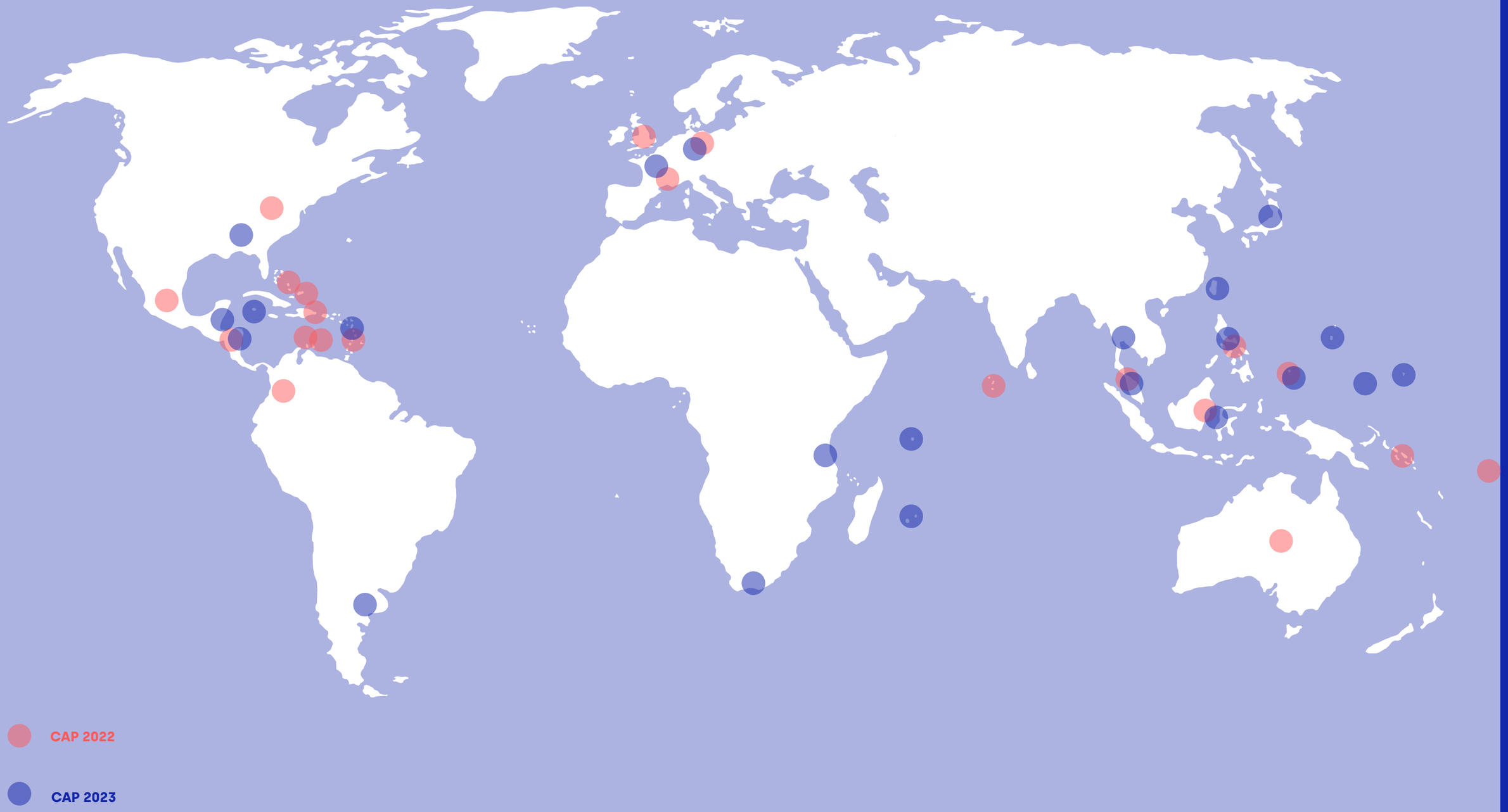
Clean reefs: a pollution mapping and risk assessment tool
Nations involved: Australia, USA, Fiji, Solomon Islands, Bahamas
Project Lead: Dr. Amelia Wenger, University of Queensland
This project is creating an open-access, near real-time pollution mapping and risk assessment tool to track pollution sources, distribution, and impact on reefs. The tool will help decision-makers, practitioners, and citizen scientists in 100+ coral reef regions protect corals, improve restoration efforts, and support communities that rely on reefs.

In 2024:
- Initiated development of the web application tool

Rewriting the future for corals

CORDAP is funding groundbreaking projects all over the globe,

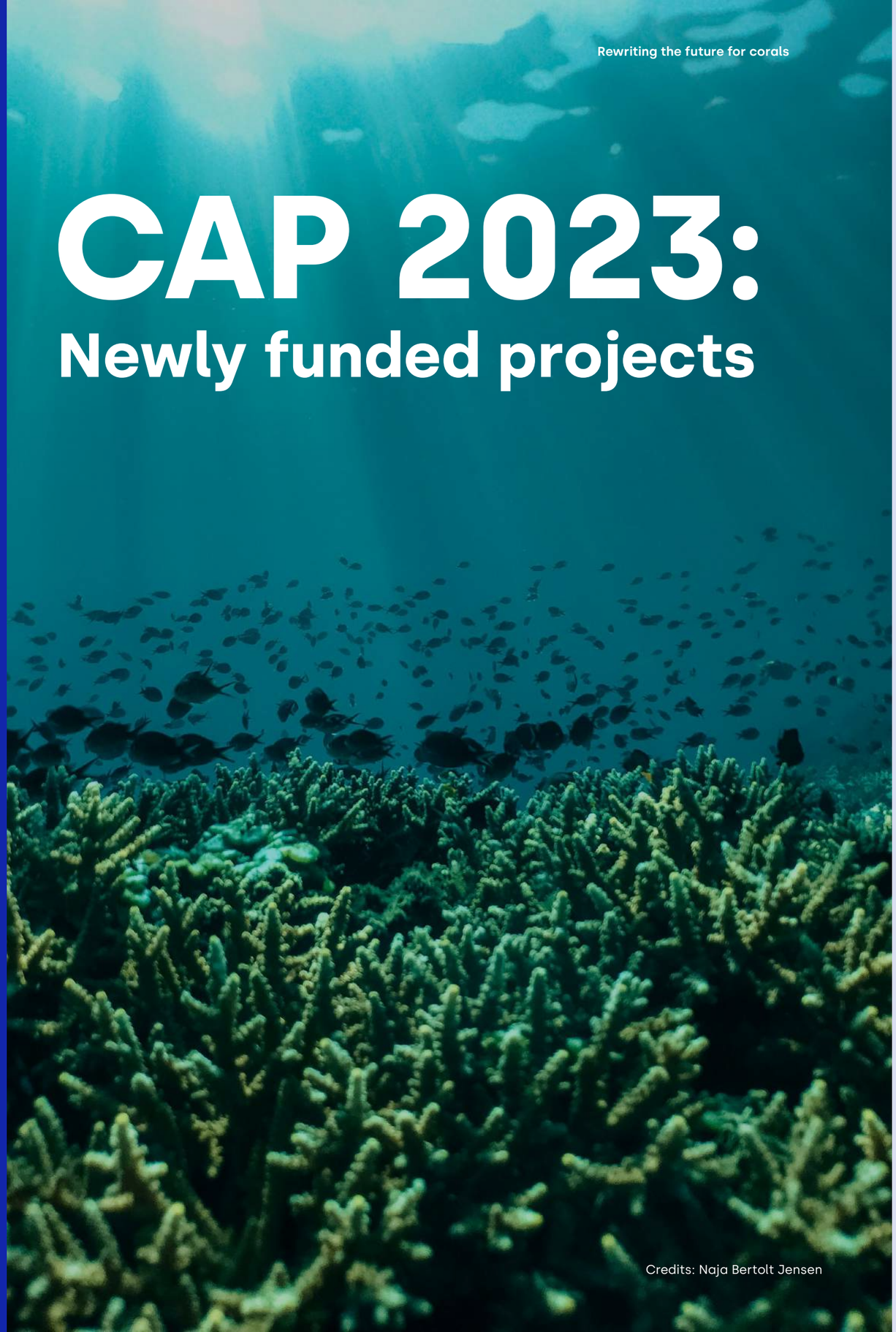
to secure a safe future for corals.



Projects all over the globe

CORDAP Annual Report 2024
27

CAP 2023:
Newly funded projects

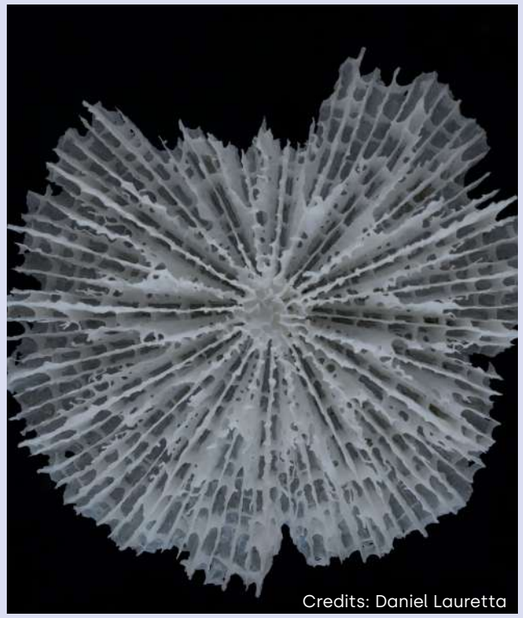

Credits: Naja Bertolt Jensen

Restoring coral reefs in Mnemba Island with local communities
Nations involved: Seychelles, South Africa, Tanzania
Project lead: Dr. Camilla Floros, Wild Impact
The coral reefs around Mnemba Atoll in northern Unguja, Tanzania, are crucial for local communities, supporting artisanal fishing and eco-tourism. This project aims to restore the long-term health of the coral reefs around Mnemba Island, making them more resilient to climate change and restoring their ecological function. The team aims to increase coral cover on degraded reefs by 10% within three years, reduce tourist pressure, and enhance biodiversity and habitat quality. The project also fosters local stewardship by training local rangers and promoting community involvement, ensuring long-term benefits for both the environment and the local economy.


Credits: Camilla Floros


Credits: Katerina Katopis

Establishing a Coral Academy and a network of Coral Restoration Teams in the Pacific
Nations involved: Palau, Marshall Islands, Federated States of Micronesia
Project lead: Dr. Yimnang Golbuu, The Nature Conservancy
As climate change intensifies, the need for effective coral restoration has become crucial. However, most restoration efforts do not focus on using heat-resistant coral species. This project will train local leaders on the integration of heat-tolerance into reef restoration and management. The training will focus on coral identification, heat stress experiments, data collection, and the propagation and outplanting of heat-resistant corals. By building local capacity, the team will create job opportunities for young Pacific Islanders and increase the longevity of reef ecosystems, ensuring they continue to support the communities that rely on them for food security, tourism, and other economic activities.


Credits: Daniel Lauretta

Securing the future of cold-water corals in Argentina's deep sea
Nations involved: Argentina, USA
Project lead: Prof. Erik Cordes, Temple University
Little is known about Argentina's cold-water corals, their population status, and habitats. The lack of data is especially concerning in deep-sea areas targeted for exploration of oil and gas that were set to start by 2024. This project will establish a baseline data for cold-water corals present in those areas, by collecting more than 500 specimens for taxonomic and genetic research. These extensive surveys will most likely lead to the discovery of new species. In parallel, the team aims to deploy 3D-printed structures, launching the first active restoration program for deep-sea corals in the southwestern Atlantic.

Developing tools for coral population management in Belize
Nations involved: Belize, Germany, Honduras, USA
Project lead: Prof. Iliana Baums, Helmholtz Institute for Functional Marine Biodiversity at the University of Oldenburg
Coral restoration projects usually focus on enhancing ecosystem services rather than preventing species extinction. To implement successful species-level management, practitioners need specialized tools that are not currently available for corals. This project will create a science-based tool tailored to manage endangered corals, whose development will be guided by the real needs of practitioners. This tool will leverage 10 years of survey data from Belize to provide relevant management insights based on bleaching resistance, environmental factors, and coral's genetics. Ultimately, the team will contribute to the restoration of coral sites in Honduras, using standardized criteria and species-level practices.


Credits:Fragments of Hope

Rewriting the future for corals


Credits: Alexis Chappuis

COSMARINDO: Enhancing coral restoration in Indonesia through monitoring and education
Nations involved: Indonesia, France, Germany, Japan, USA
Project lead: Dr. Mareike Huhn, Ruhr-University Bochum
Across Indonesia's 86,700 km² of coral reefs, restoration projects have often been conducted without scientific oversight. Many of these projects are poorly maintained, with low transplant survival rates, and limited follow-up. COSMARINDO aims to improve coral restoration efforts in Indonesia by developing a nationwide network of trained students and researchers. The team will deliver 8 local workshops, produce a regional species catalog, and develop coral spawning calendars. Plus, the creation of a citizen science app will allow data exchange between universities and monitoring groups across Indonesia, further enhancing scientifically informed restoration efforts across the country.

Enhancing coral restoration in the western Indian Ocean through larval propagation
Nations involved: Mauritius, USA
Project lead: Dr. Margaret Miller, SECORE International
In Mauritius and other Western Indian Ocean nations, coral restoration efforts are primarily based on coral fragmentation. Coral breeding and larval propagation— more scalable and sustainable approaches— which enhance the adaptive capacity of restored corals, remain largely unexplored in the region. This project will introduce and expand accessible, low-cost, larval propagation methods in Mauritius by adapting proven techniques from the Caribbean. Local stakeholders will be trained and supported throughout the entire duration of the project. The team will also engage nearly 20,000 children through education campaigns, raising awareness about corals among the whole community.

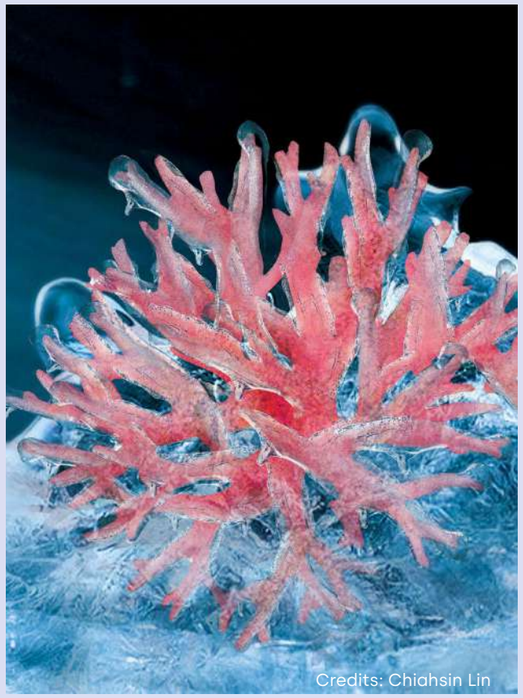

Credits: Paul A Selvaggio

CAP 2023: Newly funded projects

CORDAP Annual Report 2024

Sound on: using acoustic enrichment to boost coral larval settlement
Nations involved: Dominica, Cayman Islands, USA
Project lead: Dr. Aran Mooney, Woods Hole Oceanographic Institution
Successful settlement of coral larvae is key to the survival and recovery of corals. However, many reefs currently face low settlement rates due to declining coral populations and the absence of the natural cues that encourage larvae to settle. This team of researchers will use acoustic enrichment to enhance coral larvae settlement across 3-6 reef-building coral species, by deploying underwater speakers that play healthy coral reef sounds. Ultimately, this project will deliver a robust and user-friendly tool for coral restoration practitioners to use in promoting larval settlement, increasing the success of future restoration projects.


Credits: Aran Mooney, WHOI


Credits: Chiahsin Lin

Building a cryorepository network for coral larvae in the Coral Triangle
Nations involved: Indonesia, Malaysia, Philippines, Taiwan, Thailand
Project lead: Prof. Chiahsin Lin, National Dong Hwa University and National Museum of Marine Biology and Aquarium
Cryopreservation may help protect important coral species from extinction and conserve biological material from thermo-tolerant corals, which could be critical for future reef restoration efforts in the face of climate change. This project will develop new coral cryopreservation protocols and technologies, as well as establish the first Cryorepository Network in the Coral Triangle region. In each participating country, researchers will freeze coral larvae and develop cryobanks, prioritizing the biopreservation of symbiont-bearing larvae. By developing a robust method for preserving and restoring coral species, this project will support the long-term preservation of coral reefs.

CAP 2024:
the next changemakers

In 2024, the CAP funding call received 85 eligible applications, involving 600 researchers, which requested a total of US$109 million.



85 eligible applications

600 researchers

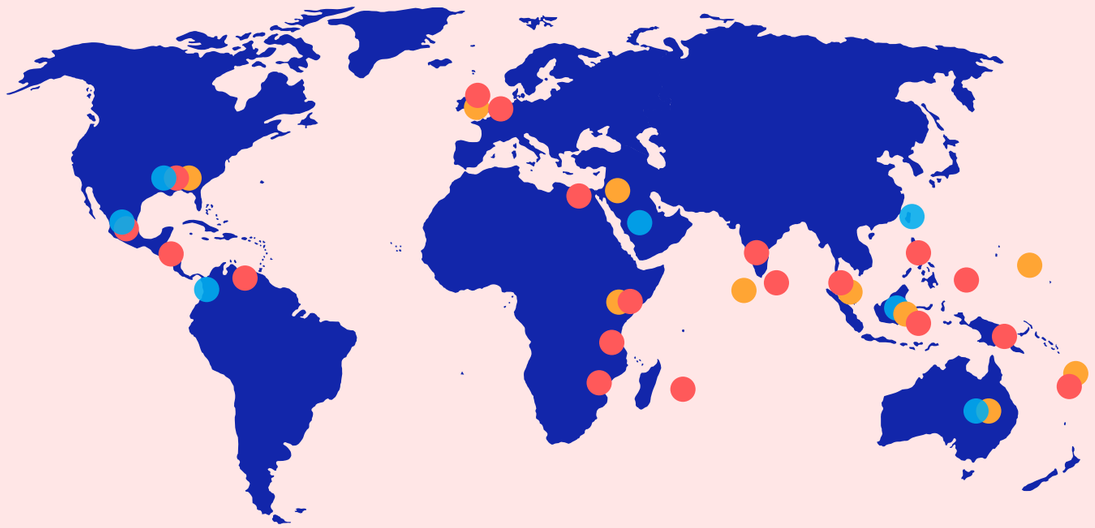
US$109 million

All applications were reviewed by a scientific panel of experts that shortlisted 20 projects to submit full proposals. In 2025, we will reveal the new round of CORDAP's CAP awardees.

Scoping Studies

Throughout 2024, we hosted and co-organized a series of Scoping Studies and workshops, bringing together 101 coral researchers, conservationists and practitioners from around the world, to assess priority R&D investment goals to help save the world's corals. The outputs from these and past studies have been made available on CORDAP's website, to help guide national, regional, and international programs. Others are currently in progress.

Three Scoping Studies took place over the year, addressing the following areas:



Managing ecological risks of coral reef interventions
co-organized with the Australian Institute of Marine Science (AIMS)

Leadership and capacity development in the Global South

Coral diseases
Co-organized with Universidad Nacional Autónoma de Mexico (UNAM)

Additionally, we hosted the *Collaborative Innovation: integrating practitioner insights and needs into coral R&D programs* workshop at Reef Futures 2025.

Rewriting the future for corals

Managing ecological risks of coral reef interventions

Coral reef intervention risks are the negative impacts that might be caused as a result of the research and development or the deployment of these restoration and adaptation interventions. This workshop, which took place in Brisbane, Australia, and involved 25 coral experts, aimed to prioritize research efforts to better understand and manage the ecological risks associated with novel interventions. The attendees discussed the global and regional perspectives on the issue, identified gaps, challenges, and opportunities for research around intervention risks, and took the first steps on drafting a roadmap outlining key findings and actions.



Credits: AIMS

Key recommendations:

- Funding agencies should prioritize research on investigating the ecological risks associated with coral reef intervention
- Development of emergency response plans in face of coral reef interventions

Those interested in more details on the topic of ecological risk in the context of coral reef interventions should consult the R&D and Technology Roadmap on Managing the ecological risks of coral reef interventions

Leadership and capacity development in the Global South

Helping to build the research, development, and technical capacity of the Global South is a core part of CORDAP's mission. Doing so is key to conserve and restore coral reefs on a global scale. That's why CORDAP hosted a capacity development workshop in Mombasa, Kenya. The meeting brought together 34 stakeholders and researchers from around the world, to create an action plan for growing leadership in coral research and development (R&D) in the Global South. The goal of this CORDAP workshop was to discuss the R&D needs of the field and the other challenges faced by coral researchers and practitioners from the Global South and low and middle income countries.



Credits: CORDAP

Key recommendations:

- Provide opportunities to train personnel and access to research technology
- Develop a network of researchers from the Global South to facilitate both local and international coral research, conservation, and restoration programs
- Improve communication and awareness

The roadmap resulting from this workshop will be released in 2025. Feedback and insights from the participants already served to inform CORDAP funding programs and initiatives to take place in the coming years.

Scoping Studies

Coral diseases

Local stressors are known to significantly impact the health of coral reefs. Presently, more than 20 diseases have been described from more than 30 coral species. CORDAP co-hosted a workshop in Puerto Morelos, Mexico, on coral diseases. The meeting brought together students, coral biologists, microbiologists, molecular biologists, and even veterinarians, as one goal of the workshop was to attempt to advance the state of coral disease research by learning from those working at the cutting-edge of adjacent, or even totally different field to create a roadmap and an action plan for reducing the knowledge gap on coral diseases.



Credits: Bárbara Ribeiro

Key recommendations:

- Standardized protocols for common use throughout the coral community
- Science-driven emergency response plans
- Development of effective disease treatments (with lower ecological risks), superior diagnostic tools, and quarantine protocols

The roadmap resulting from this workshop will be published in 2025, and will detail these, and other, recommendations. Insights from this workshop also led to the development of another Scoping Study to take place in 2025 focused on coral rescue and emergency responses.

Collaborative innovation: integrating practitioner insights and needs into coral R&D programs

Are scientists working on the topics that are most critical for coral restoration practitioners? Can practitioners readily and rapidly access the best coral reef research? This workshop took place in Puerto Morales, Mexico, during Reef Futures 2024, and aimed at finding out how to foster better collaborations between coral scientists and reef practitioners. Importantly, the participants highlighted the need to develop better reef management and restoration plans by specifically informing which coral reef interventions are appropriate for given ecological and socio-economic scenarios.



Credits: Martin Colognoli

Key recommendations:

- Provide formal coral conservation and restoration practitioners' training
- Develop a network to match coral research and restoration mentors and mentees and to provide an overview of the different teams working in different topics

Publications

As part of CORDAP's strategic plan, we are producing actionable roadmaps to guide future activities and investments in coral research and restoration. In 2024, a total of three roadmaps and one mapping were published.

CORDAP R&D Technology Roadmap
Conservation and restoration of cold-water corals

This roadmap sets out the knowledge gaps, the key research priorities, and the technological developments needed to ensure effective protection and restoration of the world's cold-water corals. It was written by a team of global deep and cold water corals experts, following the CORDAP cold-water corals workshop that took place in 2023.

CORDAP R&D Technology Roadmap
Exploring the frontier of coral aquaculture

CORDAP has released a roadmap with recommendations on priority research and development areas to enable transformative, cost-effective coral aquaculture practices and outplanting at scale. It includes contributions and insights from an international group of ecologists, coral reef biologists, and specialists in marine restoration, engineering, and aquaculture, following a CORDAP workshop co-organized with the KAUST Coral Restoration Initiative (KCRI) in 2023.

CORDAP R&D Technology Roadmap
Managing the ecological risks of coral reef interventions

Focusing on coral reef ecosystems, the roadmap identifies five priority areas where investment in research and development is required to enable large-scale coral restoration and adaptation that considers and mitigates ecological risks. The document was led by a team of coral scientists and experts from the Australian Institute of Marine Science (AIMS) and the Centre for Environment, Fisheries and Aquaculture Science (CEFAS), following a CORDAP workshop held in Australia in January 2024.

Engaging Industry in coral restoration:
A global landscape

CORDAP's industry mapping aims to assist coral practitioners by providing a list of companies that have the potential to help them boost local coral conservation efforts through technological transfer. These companies, while not coral-based, may have designed tools and products that accelerate coral conservation and restoration, or may provide novel, yet affordable, approaches for conserving corals or restoring reefs across large spatial scales. The report is the first of its kind in the coral restoration field, and a long needed resource for coral restoration practitioners.

As a result of CORDAP funding and activities two articles were published:

The scientific article **"Desert dust improves the photophysiology of heat-stressed corals beyond iron"** by **Dr. Katherine Amorim and colleagues**, published in Scientific Reports, in November 2024.

The scientific article **"Cost-efficiency and effectiveness of coral restoration pathways"** by **Dr. Sebastian Schmidt-Roach and colleagues**, published in Restoration Ecology, in November 2024.

Rewriting the future for corals

We are building a coral community

We are building a coral community

Credits: Camilla Floros

Events, outreach and communications

In 2024, we strategically focused our communication efforts on broadening partnerships and elevating CORDAP's profile beyond the academic sphere, reinforcing the urgent need to protect and restore coral ecosystems. We expanded international media coverage of CORDAP's activities, projects, partners, and awardees, while also amplifying the voices of coral researchers from the Global South.

Communication is central to CORDAP's mission. Throughout the year, it played a critical role in magnifying the impact of our programs and bringing visibility to the groundbreaking work of the researchers and practitioners we support worldwide. This focus became even more urgent following the announcement of the 4th global coral bleaching event and the devastating coral losses reported globally.

In 2024, CORDAP strengthened its presence at international and high-level events, advanced the global coral research agenda, and expanded its audience and outreach through social media and digital platforms. As we continue positioning CORDAP as a global leader in coral research, conservation, and restoration, we are increasingly recognized by researchers, decision-makers, influencers, and environmental leaders as a key force in safeguarding the future of coral reefs.

Advancing the international coral agenda

In 2024, CORDAP's participation in key international events proved vital in raising the global profile of coral ecosystems, research and restoration. High-level gatherings facilitated stronger connections with current and potential partners and donors, fostering collaboration while amplifying CORDAP's mission.

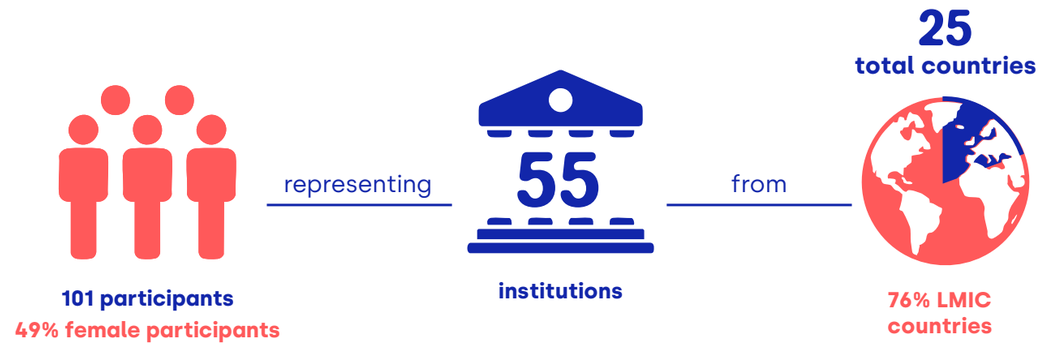
The UN Ocean Decade Conference was of particular relevance for CORDAP. We hosted two events and participated in two more. These events highlighted the need to ramp up ocean exploration to build knowledge around deep and cold-water corals, and focused on unpicking the science needed to protect reefs and boost marine biodiversity in line with Kunming-Montreal Global Biodiversity Framework targets.



Credits: Carla Lourenço

Scaling up coral science

The four scoping studies and workshops totalled



Activating strategic partnerships

In June 2024, CORDAP hosted the "Champions for Coral Innovation Accelerator Gala" held at the Science Museum, in London, to gather and celebrate current and prospective partners. The event set the stage to signing a Memorandum of Understanding with the Khaled bin Sultan Living Oceans Foundation (KSLOF), helping solidify this strategic partnership. This agreement marks the beginning of a strategic partnership between the two organizations to upskill the next generation of coral restoration professionals. The collaboration focuses on building capacity and enhancing educational initiatives for coral reef restoration. By sharing best practices and training practitioners, the partnership aims to improve the effectiveness of coral reef restoration efforts around the world.


Credits: CORDAP

Advocating for corals worldwide

In 2024 we hosted the "CORDAP Young Coral Champion Internship". This was a one-month pilot program specifically developed to involve young people in coral leadership and research through a combination of science and technology. The pilot program was a collaborative effort by CORDAP and the Tarek Ahmed Juffali Research Chair (TAJRC) at King Abdullah University of Science and Technology (KAUST).

In a collaborative effort, CORDAP and the Mirpuri Foundation held an educational workshop aimed to raise awareness among young sailors of the Mirpuri Sailing Academy about the vital importance of protecting coral reefs. The young sailors also learned about conservation techniques and the importance of sustainable practices, inspiring them to take responsibility for the environment and make a positive impact in their communities.



Credits: Mirpuri Foundation

Educating the masses

"To The Rescue of Corals" is a short web series produced by CORDAP to showcase the 14 groundbreaking international research projects supported through the Coral Accelerator Program (CAP), each led by passionate scientists dedicated to saving corals and coral reefs.
From the vibrant reefs of the Caribbean to the hidden gems of the Indo-Pacific, the stories inspire, educate, and ignite a passion for saving corals from functional extinction.



Credits: Gayle Laird

CORDAP online audience

Total Followers and Growth

7762 followers (+1.5%)

Average monthly engagement
2.7 % (good)

instagram

4400 followers (+94%)

Average monthly engagement
7.1% (very good)

linkedin

4422 followers (+129%)

Average monthly engagement
14.6% (very good)

Website

18 500 visitors
from 195 nations and territories

54 000 views

135 articles featured CORDAP in the media

totalled 35,084 people with 1.5M impressions and 36,765 engagements

Rewriting the future for corals
We are proud of our achivements

We are proud of our achievements

Credits: KAUST

CORDAP Annual Report 2024
45

Key achievements

In 2024, CORDAP reached several milestones that strengthened our global impact on coral research, innovation, and conservation. We forged key partnerships with leading organizations, and designed new funding programs to unlock greater financial and technical resources for researchers in the Global South, ensuring more inclusive and scalable solutions. Our fundraising efforts also took a major step forward with the launch of a global fundraising campaign, and we have been recognized as a key player in the UN Ocean Decade.

Forging strategic partnerships

Collaboration is essential to scaling our impact and accelerating solutions for coral conservation. In 2024, CORDAP increased its global network by forming key partnerships with Khaled bin Sultan Living Oceans Foundation and ACWA Power, expanding our reach and shaping up new opportunities to support coral research, innovation, and restoration. These alliances bring valuable resources and expertise, which reinforce our mission to protect the world's corals.

Khaled bin Sultan Living Oceans Foundation

The Khaled bin Sultan Living Oceans Foundation (KSLOF) is a non-profit environmental organization dedicated to the conservation and restoration of ocean ecosystems. Through research, education, and outreach, the Foundation aims to preserve the health of the world's oceans. CORDAP signed a Memorandum of Understanding with KSLOF marking the beginning of a strategic partnership between the two organizations to upskill the next generation of coral restoration professionals. The collaboration focuses on building capacity and improving the effectiveness of coral restoration efforts around the world by sharing best practices and training practitioners.

"By working together across borders and boundaries, we can build the capacity needed in the places where coral reefs are most vital to the communities they support. The Khaled bin Sultan Living Oceans Foundation is immensely proud to be working with CORDAP on this endeavor and looks forward to the remarkable achievements we can accomplish together in the years to come."

HRH Princess Hala, President of the Khaled bin Sultan Living Oceans Foundation



Credits: CORDAP

ACWA Power

ACWA Power is the world's largest private water desalination company, the first mover into green hydrogen, and a leader in energy transition. The new partnership between CORDAP and ACWA Power aims at reversing the coral crisis by channeling resources and funds into research and innovation projects and programs that actively contribute to coral restoration, conservation and education. This partnership marks the launch of the ACWA Power Coral Spark Collaboration – a 3+ year commitment underscored by over US$3 million to support CORDAP's mission to restore and revive the world's corals for future generations.

"As a leader in sustainable water and power solutions, ACWA Power recognises the critical importance of preserving our planet's ecosystems and supporting local communities. This initiative aligns with our broader mission of sustainable development and showcases how private-sector engagement can drive positive environmental and social change at multiple levels. Our partnership with CORDAP underscores our dedication to harnessing innovation and collaboration to restore and protect the world's coral reefs."

Dr. Rusha Alrawaf, Chief Corporate Affairs & Sustainability Officer at ACWA Power



Credits: ACWA Power

A new funding program unlocked

The mid-term review of CORDAP's Strategic Plan provided an opportunity to assess our progress, refine our approach, and set the course for even greater impact. In response to the unfolding global coral bleaching event of 2023-2024, we recognized the urgent need to quickly accelerate solutions. This led to the development of a new funding program designed to mobilize greater resources for researchers in the Global South and drive faster, more effective interventions to combat the coral crisis.


Credits: CORDAP

Coral Local Innovation Program (CLIP)

The Coral Local Innovation Program (CLIP) aims to support innovative research and development (R&D) projects focused on local, affordable solutions to coral conservation and restoration challenges in developing countries. This program offers grants of up to US$100,000 for up to two years to eligible applicants from low and middle-income countries (LMICs). The program will encourage local technology development and innovative approaches to coral conservation and restoration in developing countries, enhance the capacity of local scientists, researchers, and organizations to conduct coral and reef research and development activities, and address critical knowledge gaps in local coral conservation and restoration.



Credits: Maahil AHmed

In 2024, we have also...

...seen the launching of THE CORAL COLLECTIVE, a fundraising campaign by Project Zero that will raise and disburse funds to CORDAP, Global Fund for Coral Reefs and International Coral Reef Initiative to benefit coral reef protection and restoration projects.

... developed a CORDAP Communication Strategy (2025-2027) aimed to elevate CORDAP's profile beyond the academic sphere, engaging a broader audience that includes potential donors, philanthropists, and the general public.

... been endorsed as a Decade Action by the Executive Secretary of the Intergovernmental Oceanographic Commission (IOC), as part of the UN Ocean Decade.

2021 2030 United Nations Decade of Ocean Science for Sustainable Development



Credits: Björn Svensson

What lies ahead

As we look ahead to 2025, CORDAP is well-positioned to build on the momentum of a highly productive 2024. Our focus on developing transformational change for corals is more urgent than ever, given the escalating climate and human-induced challenges.
In 2025, we will further enhance our scientific funding programs, pushing step-change innovation in coral conservation and restoration. This includes refining tools to enable affordable, large-scale implementation of resilience-building strategies and restoration initiatives globally.

Two more CORDAP Scoping Studies

In 2025, we will co-organize two additional CORDAP Scoping Studies, building on insights from past workshops and guidance from our Scientific and Advisory Committee. These studies—"Emergency response planning for coral reefs" and "Water quality: Impacts and mitigation"—will provide critical research directions to enhance global coral conservation efforts.

Two new CORDAP R&D Roadmaps

We will publish two new CORDAP R&D Technology Roadmaps, emerging from our 2024 workshops on" Leadership and Capacity Development in the Global South" and "Coral Diseases". These roadmaps will highlight critical knowledge gaps and R&D opportunities, ensuring that CORDAP's funding is strategically allocated for maximum impact.

Tripling our partnerships

Expanding our global network is essential to accelerating solutions for coral conservation. In 2025, we aim to triple our partnerships from 2024, forging new collaborations across research institutions, NGOs, governments, and private sector leaders to advance coral R&D and restoration.

Rewriting the future for corals

US$1.5 million extra for researchers from low and middle-income countries

Insights from previous CORDAP workshops and programs underscore the need for smaller, more accessible grants tailored to researchers in the Global South. To address this, we will launch the Coral Local Innovation Program (CLIP), a small grants initiative offering up to US$100,000 per project. This program will support LMIC researchers, focusing on capacity building, strengthening R&D capabilities, and fostering local innovation in coral conservation and restoration.

Commit US$8.5 million for coral R&D:

A key initiative for 2025 will be the announcement of the awards of our annual research funding call (CAP). Each new awardee will receive up to US$1.5 million to deliver impactful ideas for coral conservation and restoration worldwide.

Raise more funds for corals:

We will expand our fundraising efforts, leveraging existing campaigns and developing new ones to secure the resources needed to support and expand our projects and initiatives. Additionally, we will focus on diversifying our donor base and engaging new partners from philanthropic foundations, corporate sponsors, and high-net-worth individuals with a strong interest in environmental sustainability.

Leveling up coral restoration training:

Effective coral conservation and restoration require a global network of well-trained practitioners. While many organizations already offer training, the Coral Academy seeks to standardize and expand these efforts. In 2025, at least one pilot course and an online platform for foundational knowledge will be launched. The academy will integrate insights from CORDAP-funded projects and provide fellowships for LMIC practitioners to learn directly from leading scientists, strengthening expertise and capacity for large-scale reef restoration.

Reaching thousands through awareness campaigns:

CORDAP will amplify its voice through new strategic partnerships and high-impact awareness campaigns. By engaging influential public figures and thought leaders, we aim to broaden global awareness of the urgency of coral conservation and drive action at all levels.

What lies ahead



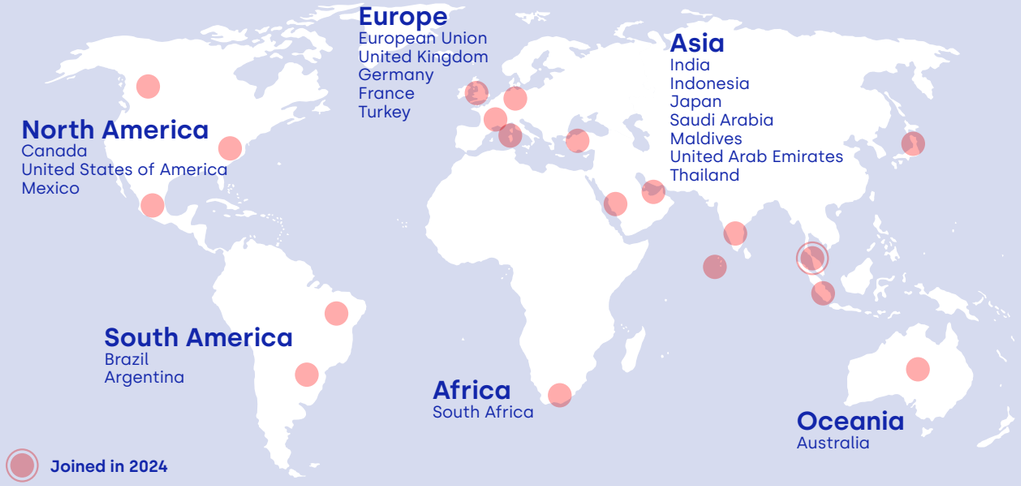
We are rooted in science

We are rooted on science

CORDAP's governance structure

Initiative Governing Committee (IGC)

This international committee consists of G20 nations, non-G20 nations, and international organizations that support CORDAP in an advisory role. It approves CORDAP's strategic plans and operating procedures and approves funding allocations to research projects recommended by the Scientific and Advisory Committee.



The CORDAP IGC is chaired by



Dr. Osama Faqeeha,
Deputy Minister of Environment, Ministry of Environment, Water and Agriculture, Saudi Arabia.



Vice-chaired by
Ms. Jennifer Koss,
Director, NOAA Coral Reef Conservation Program, United States.



Prof. Carlos M. Duarte
CORDAP Executive Director and CORDAP Foundation CEO.

Advisory Members to the IGC

Coral Restoration Consortium (CRC)
Dr. R. Scott Winters

Global Fund for Coral Reefs (GFCR)
Mr. Yabanex Batista

Great Barrier Reef Foundation (GBRF)
Dr. Theresa Fyffe
Ms. Margot Andersen

International Coral Reef Initiative (ICRI)
Mr. Francis Staub

International Coral Reef Society (ICRS)
Prof. Christian Voolstra

Khaled bin Sultan Living Oceans Foundation (KSLOF)
Dr. Alexandra Dempsey

Japanese Coral Reef Society (JCRS)
Dr. Atsushi Watanabe

The Commonwealth Secretariet
Dr. Nicholas Hardman-Mountford

UN Environment Programme (UNEP)
Mr. Hally Blanchard
Ms. Sinikinesh Jimma
Dr. Leticia Carvalho
Mr. Gabriel Grimsditch

XPRIZE
Mr. Peter Houlihan

MIRPURI Foundation
Ms. Ana Agostinho

Coral Triangle Initiative-Coral Reef Food and Fisheries
Dr. Frank Griffin,
Mr. Christovel Rotinsulu

Rewriting the future for corals

Scientific and Advisory Committee (SAC)

The Scientific and Advisory Committee (SAC) comprises renowned international coral scientists, managers, and engineers. It assists the Initiative Governing Committee by providing guidance and recommendations on CORDAP's overall strategy, funding program priorities, resource allocation and deliverables. The SAC monitors project performance, reviews the results of the overall CORDAP's programs and delivers its evaluation and recommendations to the IGC.



Credits: CORDAP

The SAC is



Chaired by
Mr. David Mead,
Executive Director of Strategic Development at the Australian Institute of Marine Science.



Vice-Chaired by
Prof. Anastazia Banaszak,
Research Professor at the Institute of Ocean Sciences & Limnology, National Autonomous University, Mexico.

CORDAP's governance structure

The Scientific and Advisory Committee

In 2024, we welcomed one new member to the Scientific and Advisory Committee



Prof. Hajime Kayane
University of Tokyo

who joined 20 other coral experts

Prof. Anastazia Banaszak (Vice Chair)
Institute of Ocean Sciences & Limnology at the National Autonomous University of Mexico

Prof. Callum Roberts
University of Exeter, United Kingdom

Prof. Carlos Duarte
CORDAP Executive Director and Distinguished Professor at King Abdullah University of Science and Technology (KAUST)

Dr. Daniel Lauretta
National Scientific and Technical Research Council (CONICET-Argentina)

Mr. David Mead (Chair)
Australian Institute of Marine Science (AIMS)

Dr. Elizabeth McLeod
The Nature Conservancy, United States

Dr. Ian McLeod
The General Organization for Coral and Sea Turtles in the Red Sea (SHAMS)

Dr. Joanie Kleypas
Climate & Global Dynamics Lab at the National Center for Atmospheric Research (NCAR)

Dr. Mark Gibbs
Australian Institute of Marine Science (AIMS)

Dr. Michelle Taylor
University of Essex, School of Life Sciences

Prof. Michelle Devlin
Centre for Environment, Fisheries and Aquaculture Science and Collaborative Center for Sustainable Use of the Seas (CCSUS) at University of East Anglia, United Kingdom

Mr. Muhammad Abrar
Research Center for Oceanography - National Research and Innovation Agency

Dr. Nathalie Hilmi
Monaco Scientific Centre

Prof. Nur Eda Topcu Eryalcin
Istanbul University, Faculty of Aquatic Sciences Turkish Marine Research Foundation

Prof. Ramesh Ramachandran
National Centre for Sustainable Coastal Management, Ministry of Environment, Forest and Climate Change, Government of India

Dr. Rachel Pears
Australian Institute of Marine Science (AIMS)

Dr. Raquel Peixoto
King Abdullah University of Science and Technology (KAUST)

Dr. Sean Porter
Oceanographic Research Institute, South African Association for Marine Biological Research

Prof. Serge Planes
Centre of Island Research and Environmental Observatory (CRIOBE), French Polynesia

Dr. Tali Vardi Coral Restoration Consortium, United States

CORDAP Foundation & the Platform Central Node

The Global Coral R&D Accelerator Platform Foundation (CORDAP Foundation) is the nonprofit organization that serves as the financial arm of CORDAP. Headquartered at King Abdullah University of Science and Technology (KAUST), the CORDAP Foundation distributes the Platform's financial resources to aid CORDAP's restoration objectives. A central hub, the Platform Central Node, administers the overall Platform, supporting the IGC, SAC, Foundation. and Awardees, and is also based at and fully financially supported by KAUST.



Prof. Carlos M. Duarte
Executive Director



Dr. Rory Jordan
Deputy Director



Hiroko Davis
Executive Secretary



Dr. Maheshwar Reddy Gummalla
Funding Program Manager



Dr. Anderson Mayfield
Funding Program Manager



Christine Rueping
Business Manager



Ebtisam Bakhsh
Strategist



Dr. Carla Lourenço
Communications Specialist

The CORDAP Foundation is guided by a team of passionate leaders dedicated to safeguarding the future of our oceans.



Dr. Osama Faqeeha
Chairman Board of Directors



Prof. Carlos M. Duarte
CEO CORDAP Foundation



Eng. Hani Ashqar
Managing Director



Hetal Ganatra
International Director of Development



Sadiqa Siddique
Market Research Analyst

Key policies

The core of CORDAP's mission remains the advancement of innovative, practical, and scalable solutions that can be effectively applied in coral research, conservation and restoration efforts worldwide. In 2025, we will build on our existing policies to enhance transparency, accountability, and impact, ensuring that CORDAP-funded research delivers significant benefits for coral ecosystems and the communities that depend on them. As we expand our programs and partnerships, we remain committed to fostering open access to knowledge, promoting equitable research opportunities, and strengthening our governance framework to drive long-term success.

Intellectual property policy

CORDAP is committed to ensuring that the knowledge and innovations generated through our funding are accessible and widely applicable to coral restoration efforts worldwide. To maximize impact, we manage intellectual property (IP) to facilitate its use in conservation initiatives, particularly in disadvantaged regions where many of the world's tropical coral reefs are located.

As a condition of funding, awardees and their institutions must grant a public license (non-exclusive, royalty-free) to any IP resulting from CORDAP-supported projects, ensuring its availability for not-for-profit or affordable coral restoration applications. This includes any essential background IP—pre-existing intellectual property that is necessary for the successful and legal implementation of the funded project.

CORDAP upholds the principle that funded developments and technologies should remain accessible and affordable to all coral restoration initiatives. While we expect all funding recipients to act in good faith regarding this commitment, we will actively monitor project outputs and implementation to ensure compliance and maximize the global benefits of our research investments.


Credits: Barbara Ribeiro

Open Access Policy

All CORDAP-funded publications, data, and underlying research materials will be made openly available as soon as possible, with no barriers to reuse or dissemination. Additionally, all research data and software must adhere to the FAIR principles—ensuring they are Findable, Accessible, Interoperable, and Reusable—to promote transparency, collaboration, and scientific advancement. We are committed to ensuring that all knowledge, data, and publications generated through our funded activities are freely available and accessible. Our open-access policy is designed to maximize the impact of research, allowing scientists, conservation practitioners, and decision-makers to build upon and apply these insights to coral restoration efforts worldwide.


Credits: Camilla Floros

Risk management

Transformational progress in coral research, conservation and restoration requires a bold, high-risk, high-reward approach. As we push the boundaries of scientific innovation, we also acknowledge the inherent uncertainties that come with pioneering research and emerging technologies.

To balance ambition with accountability, we integrate a risk management framework into all project proposals, ensuring that researchers can pursue groundbreaking solutions while proactively addressing potential challenges. By fostering a culture of calculated risk-taking, we empower the R&D community to explore new frontiers in coral conservation while maintaining robust oversight and adaptability.

At an institutional level, we continue to strengthen our risk management systems to identify and mitigate strategic, operational, financial, and compliance risks, ensuring the long-term sustainability and effectiveness of CORDAP's initiatives. In 2024, only a very reduced number of CORDAP-funded projects faced challenges that temporarily delayed their progress. These were financial and administrative hurdles linked to funding transfer complications due to local restrictions on international transactions, and a leadership transition in the project's management.

As part of CORDAP's risk mitigation strategy in place, we took proactive measures to support awardees, ensuring that projects stayed on track despite the unforeseen disruptions. Moving forward, we will enhance our risk management framework, allowing applicants to identify and address a broader range of risks, including ecological risks. While we actively support high-risk, high-reward innovation, applicants must also demonstrate a clear strategy to mitigate potential challenges that could impact project success.

Rewriting the future for corals

Funding a better world

Funding a better world

Credits: The Ocean Agency/ Fabrice Dudenhofer

CORDAP Annual Report 2024
61

Financial overview

At its inception during the G20 Summit in 2020, the Kingdom of Saudi Arabia committed US$98 million to CORDAP for the direct funding of research projects over a 10-year period. In 2024, we received a new US$10 million installment from the Kingdom of Saudi Arabia, further strengthening our ability to support groundbreaking coral research.

With a net income of US$10,013,574 from 2023 carried over into 2024—plus interest earnings from 2024 and after deducting US$10,010,814 committed to research programs—the remaining funds will transition into 2025 to support commitments for the upcoming third round of awards (CAP 2024), set to be announced in 2025.

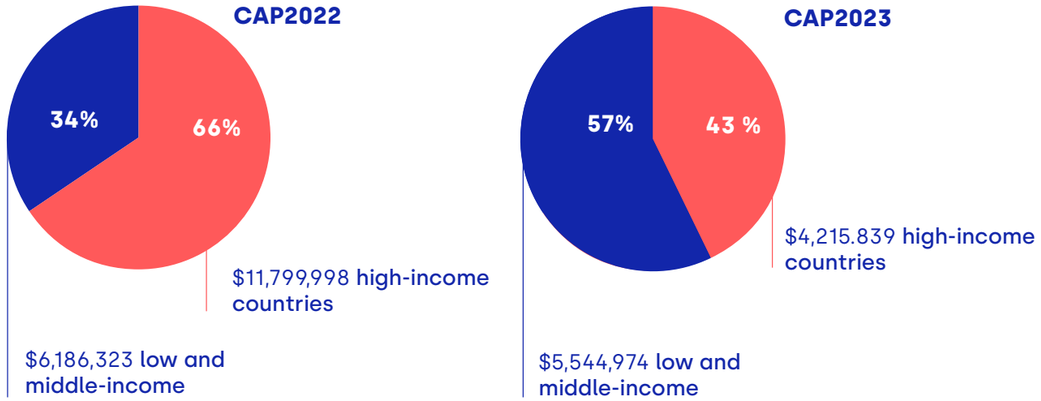
		2023**	2024
REVENUE	Balance from previous year Contributions Interest earnings	28,000,001	10,013,574 10,000,000 402,942
TOTAL		28,000,001	20,416,516
FUNDS COMMITED	Programs Administration & Support	17,986,427	10,010,814 see note*
TOTAL		17,986,427	10,010,814
NET INCOME AFTER COMMITMENTS		10,013,574	10,405,702

* Generously provided in-kind by King Abdullah University of Science and Technology (KAUST)
** Partial accounting year following launch of CORDAP Foundation
All reporting data in USD. Operating currency SAR. Rate of Exchange 1 USD= 3,75

Funds committed

CAP2022 - $ 17,986,427 total grant commitment
of which $ 6,151,775 was disbursed in 2024
CAP2023 - $ 9,760,815 total grant commitment
of which $ 3.069,808 was disbursed in 2024
Scoping studies (Coral diseases & Emergency response)
$250,000 commitment of which $150,000 was disbursed in 2024.

Reducing the funding gap in coral research and restoration between the Global North and the Global South



Operational costs

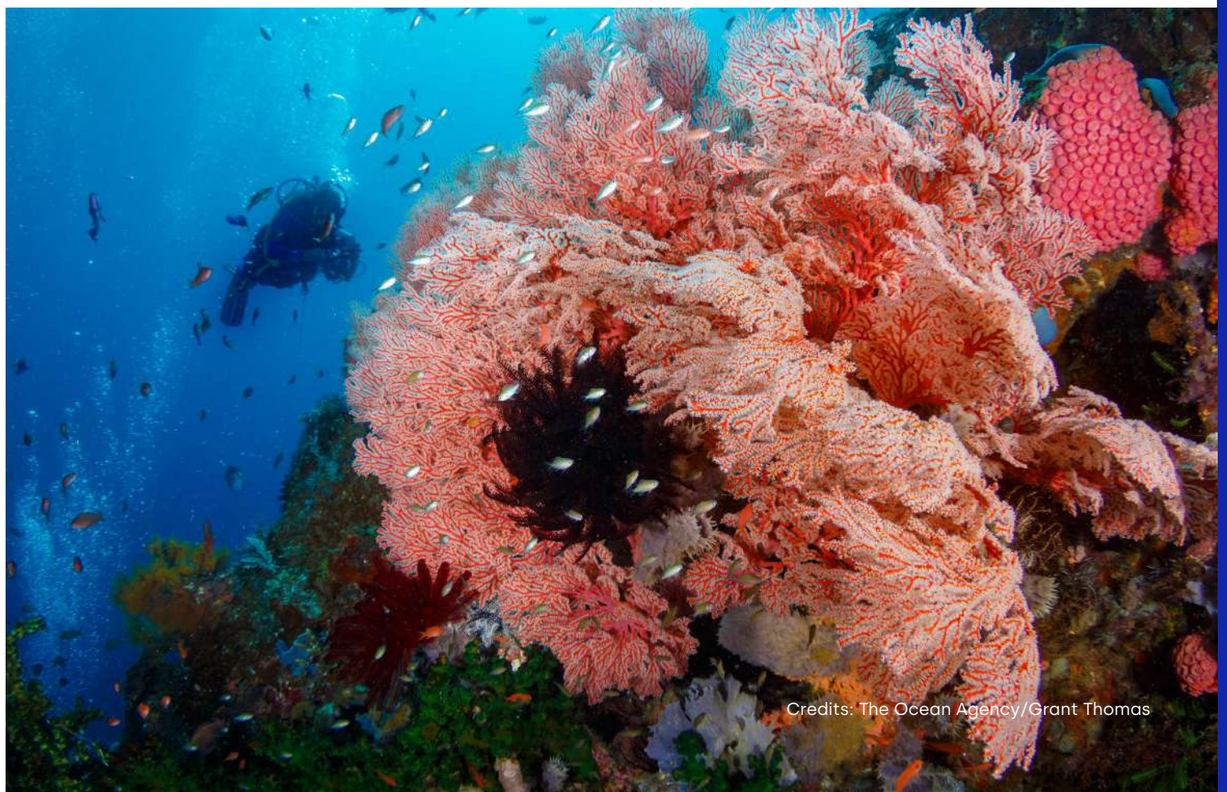
Since 2021, King Abdullah University of Science and Technology (KAUST) has funded and supported the entirety of CORDAP's administrative costs. KAUST has provided resources for CORDAP operational costs, including high-level international and awareness events, and promoting and hosting Scoping Studies to identify strategic research areas for investment. In 2024, KAUST also provided additional financial support and resources for the operation of the CORDAP Foundation. This generous support means all funds raised from donors go directly towards the research and development programs.

جامعة الملك عبدالله للعلوم والتقنية
King Abdullah University of Science and Technology

Future funding

We are profoundly grateful for the Kingdom of Saudi Arabia's generous pledge of approximately US$10 million per annum for the period 2020-2030, along with in-kind contributions from KAUST that support our administration and operational tasks. This foundational support has enabled us to commence delivering on our mission, ensuring that all additional funds raised can be directed entirely to our programs. The three year-partnership with ACWA Power brought additional US$3 million to support CORDAP's mission to restore and revive the world's corals for future generations.

The ingenuity, talent, and drive to develop new approaches to saving corals and reefs for humanity are out there—we just need the resources required to make it happen.

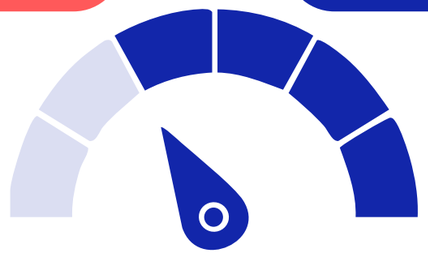

Credits: The Ocean Agency/Grant Thomas

Ways of supporting our work

This year brought us the first non-governmental multi-year contribution of over US$3 million. To continue our mission and be able to fund groundbreaking scientific innovations that help secure a safe future for corals, we require at least US$30 million annually over the next decade. However, we currently face a funding gap of US$20 million.

We require at least US$30 million

but we face a funding gap of US$20 million



The CORDAP Foundation is intensifying its fundraising efforts to mobilize resources from governments, philanthropists, foundations, corporations, and individuals. Our efforts are crucial not only for restoring some of the most diverse marine ecosystems but also for protecting coastal communities from the devastating impacts of storms and floods, ensuring that corals and coral reefs can be enjoyed by future generations.

We are incredibly grateful for the diverse ways our supporters contribute to our mission of securing a future for corals and reefs worldwide. WIth over 20 projects taking place all over the globe, research teams are making strikes that would be impossible without our donors' involvement. Your contributions drive innovation that creates a meaningful global impact, critical to restore and preserve entire ecosystems for the benefit of both people and nature for generations to come.

Structured funding opportunities:

We are actively pursuing partnerships with the following groups to secure grants, and other funding mechanisms with:

Government agencies

Foundations

Corporations and institutions

There's never been a more critical time to invest in our ocean's future. You can make this possible through these various options:

Donate in-kind services

Encourage matching donations

Make a one-time donation

Sponsor a project of your choice

Become a monthly donor

Add CORDAP to a legacy plan

Introduce CORDAP to potential donors

Make a charitable gift for your loved ones

Host a fundraising event

Turn your birthday into a fundraising action

Closing remarks from the Chair

The year 2024 was marked by both significant progress and stark reminders of the threats corals face. While the world experienced record-breaking ocean temperatures and witnessed corals turning white across the globe, CORDAP continued to accelerate innovation and expand global collaboration to tackle these challenges head-on. Spread across 33 countries, 22 CORDAP-funded projects and research teams are pushing the boundaries of current science to secure a safe future for corals.

Ocean warming, combined with local stressors such as pollution, overfishing, and habitat destruction, continues to drive reef decline at an alarming rate. This reinforces the need for bold, science-driven action to safeguard these critical ecosystems.
Although human activity is the primary driver of coral decline, our experience shows that people also hold the solutions. Funding coral research and restoration is an investment in a better future, not only for the ocean but for humanity as well. That's why, in 2024, through the CORDAP funding programs, an additional US$10 million was committed to a new round of projects developing innovative solutions for coral conservation worldwide. This will not only benefit corals, but the coastal communities that rely on them.

Another major milestone for CORDAP in 2024 was securing the first non-governmental funding commitment of over US$3 million to support coral research, restoration and awareness. We are deeply grateful to our donors and partners who enable us to deliver on our mission.
The G20 nations recognized the urgency of saving corals when they established CORDAP in 2020, uniting the world's leading experts to accelerate R&D in coral conservation and restoration. In 2024, CORDAP was delighted to welcome Thailand to the Initiative Governing Committee, further strengthening our global collaboration. With growing international support, new funding, and expanding partnerships, we are well-positioned to scale up groundbreaking science into real-world solutions.

There is still much work to be done. Protecting and restoring 30% of the world's marine ecosystems by 2030—a clear target of the Kunming-Montreal Global Biodiversity Framework—requires ambitious, unified international action and even greater financial investment. Now more than ever, CORDAP's work is critical, and the global community, including governments, must step up to meet this challenge.

This report highlights the progress we have made, but it also serves as a reminder of what is at stake. If we are to reverse coral decline and build a more resilient future, we must continue to foster collaboration, invest in innovation, and act decisively. CORDAP counts on your support.



Dr. Osama Faqeeha, G20 CORDAP Initiative Governing Committee Chair, Global Coral R&D Accelerator Platform Foundation Chair, and Deputy Minister of Environment, Ministry of Environment, Water and Agriculture, Saudi Arabia.

Rewriting the future for corals



Credits: The Ocean Agency/ Cinzia Osele Bismarck

Closing remarks from the Chair

Join **#TeamCoral**

cordap.org

cordap

G20 Coral Research & Development Accelerator Platform