FORUM: Environmental Commission

QUESTION OF: Measures to Mitigate Coral Bleaching and Marine Ecosystem Collapse in Southeast Asia

MAIN SUBMITTER: Republic of Maldives

CO SUBMITTERS: Republic of Korea, Federative Republic of Brazil, Arab Republic of Egypt, Republic of Ecuador, Federal Republic of Nigeria, United Mexican States, Republic of Chile Federal Republic of Germany, Russian Federation, Ukraine

THE ENVIRONMENT COMMISSION,

Recognizing bleached coral would lead to a loss of habitat and resources for the ecosystem, affecting the food webs and biodiversity,

Alarmed that throughout 2023 to mid-2025 mass coral bleaching has been confirmed throughout the tropical areas on Earth,

Recognizing environmental causes, including heat stress, pollution, and overexposure to sunlight are essential causes that leads to coral bleaching,

Concerned about coral bleaching leading to the collapse of marine ecosystems,

Deeply concerned that 70 percent of corals might die if the global temperature rises over 1.5°C,

Deeply alarmed by the fact that since 2024, a startling sixty percent of the global coral reefs have been exposed to extreme heat stress,

Acutely grieved by the study results of merely the Western Indian reefs, with seven three percent of the reefs reflecting severe bleaching,

Deeply alarmed that throughout the past 20 years, 91 percent of the coral reefs in the Great Barrier Reef have experienced coral bleaching,

1. Urges countries to partner with the Maldivian Marine Research Center (MRC), National Oceanic and Atmospheric Administration (NOAA), the Global Coral Reef Alliance (GCRA), and other coral reef restoration organizations to implement early warning system for identifying and preventing coral bleaching events to achieve an organized and prepared plan for future coral bleaching events in ways such as but not limited to:
    a. Utilizing climate forecasting to predict the probability of coral bleaching events during bleaching season to be prepared months in advance with advanced technological tools such as,
        i. MIA, an AI tool used by enterprises and large businesses,

ii. FISH ECO3, a tool designed explicitly for marine research,

b. Applying comprehensive technologies to monitor temperature stress throughout bleaching season to ensure the wellbeing of coral reefs,

c. Employing networks of communication concerning latest information surrounding coral reef health to:
    i. Ensure that aid can be deployed promptly to support the health of the reefs,
    ii. Guarantee that information can be shared quickly and efficiently,

d. Operating sight inspections upon receiving reports of bleaching in order to:
    i. Verify the reports to correct misinformation,
    ii. Determine how to best treat the affected reef;

2. Encourages nations to formulate detailed, straightforward, and swift incident response plans that can be deployed at a moment's notice with direction and aid from the MRC, NOAA, GCRA, and other coral reef restoration organizations, funded by coral reef conservation charities such as Blue Ventures, Rare, and Coral Ark to ensure that reefs have the support and care required to remain healthy through ways such as but not limited to:
    a. Crafting teams of ten qualified experts to identify and validate cases of bleaching among local coral reefs to:
        i. Circumvent cases of misinformation,
        ii. Determine the severity of the bleaching cases in order to elect the intensity of care required to restore the affected reefs to health,
    b. Formulating clear and direct response plans corresponding to the severity of the bleaching case;

3. Urges member states to reduce carbon emissions, in accordance with the Paris Agreement of 2015, in order to reduce the effects of global warming, which directly influence the warmth of the ocean, therefore causing coral bleaching, by doing the following:
    a. Reducing the usage of fossil fuels, responsible for a quarter of the greenhouse gas emissions by:
        i. Limiting the use of oil rigs and coal mines through a fossil fuel phase-out,
        ii. Improving energy efficiency through energy policies such as minimum energy performance standards, public financing mechanisms, etc.,
    b. Investing in renewable energy sources and utilizing these technologies to phase out of fossil fuels for a more sustainable and safer future by:
        i. Building and investing in hydro energy, wind turbines, thermal energy, and/or solar energy,
        ii. Sharing technologies with allies to promote worldwide reduced carbon emissions,

c. Converting to sustainable transportation to reduce pollutions such as air pollution, noise pollution, and others by:
    i. Reducing the use of petroleum cars through a pre-discussed fossil fuel phase out, and replacing with electric cars,
    ii. Riding public transportation, such as electric subway trains and galvanic public buses,
d. Conserving energy to produce an energy efficient and aware society through:
    i. Raising awareness in regards to the efficient and frugal use of energy,
    ii. Hosting workshops and conferences focusing on the conservation of energy;

4. Encourages all member countries to utilize modern research and advances in order to support and restore damaged and bleached coral reefs to support a healthy and vibrant ecosystem through ways such as:
    a. Sending researchers and scientists to research and implement innovative solutions involving planting live coral fragments near bleached coral to help the coral recover:
        i. Funded by charities such as Blue Ventures, Coral Ark, Coral Guardian, Coral Reef Alliance, etc.,
        ii. Collaborating on research to effective employ these methods,
    b. Employing solutions such as algae nurseries in order to sustain coral and offer new food sources:
        i. Funded by NGOs such as but not limited to Blue Ventures, Coral Ark, Coral Guardian, Coral Reef Alliance, etc,
        ii. Asking these charities to fund coral planting in bleached coral reefs,
        iii. Urges member states to also help fund planting when the charities are busy and do not have time;

5. Calls upon all member states to use social networking services to support regional partnerships and public education, and to promote reef-friendly marine practices, including restrictions on destructive fishing and marine pollution including, but not limited to:
    a. Establishing a dedicated fund for coastal States to reduce emissions and mitigate ocean warming, including, but not limited to:
        i. Provide financial subsidies to support the governments of coastal countries in upgrading low-carbon infrastructure and reducing emissions,
        ii. Fund local marine monitoring projects to conduct special detection of seawater temperature changes and issue early warnings,
    b. Integrating coral reef conservation education into school curricula;

6. Suggesting people help the ocean by recommending people to do some daily actions to make less coral reef bleaching, as anyone can contribute to protect the coral reef bleaching, which makes us to have habits that support a cleaner environment for marine life in ways such as but not limited to:
    a. Helping oceans by practicing simple things at home, around town, on the water, or anywhere through:
        i. Volunteering for cleanups at the beach and in communities:
        ii. Conserving water,
        iii. Respecting habitats,
    b. Reducing things that people use do a lot in daily life and to prevent coral bleaching by decreasing single-use plastics such as buying less, using less and seeking long-lasting alternatives,
    c. Organizing monthly beach cleanups and collaborating with Gozerowaste, which support individuals, companies, municipalities and educational centers on the journey towards a circular economy and organize a beach cleanup by selecting an accessible and safe beach, checking the weather forecast and tide schedule;

7. Communicating with others in order to share ideas and figure out a solution to coral bleaching through ways such as:
    a. Workshops, in order to reach many people,
        i. Making posters and advertisements which will have information about the workshop,
        ii. Bringing in researchers and scientists to speak about the issue of coral bleaching,
    b. Organizing volunteer work to pick up marine plastics and debris in order to keep reefs clean and safe for corals,
    c. Making advertisements about the reason why coral bleaching is happening and how people can help this problem in order to educate people about how we should treat the environment,
        i. Uploading on the internet to ensure many people see the advertisement
        ii. Using billboards to display the cause of coral bleaching and the effect of it happening and how people can fix this issue;

8. Creating an internet community to make sure everyone communicates with others and about their research, and sharing global knowledge which can help to monitor coral effectively such as but not limited to:
    a. Encouraging young people to participate in the internet discussion about the coral reef bleaching, to learn how importance climate changes the coral bleaching:

i. Researchers condense the information on the internet to generate accurate data that businesses use for making, learning and educational purpose,
ii. Protecting personal information by never sharing sensitive details like home addresses, phone numbers, and passwords on public platforms,

b. Spreading and sharing information about coral beaching on the internet and social media to bring more awareness to the public;

9. Encouraging developed countries to provide financial assistance to developing countries for coral reef bleaching and supporting funds for the coral reef bleaching project:
    a. Protecting coral reefs by practicing simple steps such as carpooling to work or using mass transit can help reduce carbon footprint and protect these vibrant ecosystems,
    b. Donating to help create and maintain an international monitoring system to protect coral bleaching and for the education and participation at the activities for the students:
        i. Donations,
        ii. Use of funds.