The Source That Gives Us Life

Photo: Algal bloom off Namibia's coast (Photo: NASA)

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Long before humans walked the Earth, life is believed to have first taken root deep in the ocean. According to Damian Schreiber, Field and Research Officer at Ocean Conservation Namibia (OCN) the sea is the very birthplace and backbone of life as we know it.

Now, more than ever, experts are calling for stronger protection of this vital resource.

"Scientists believe the ocean is where life itself first sparked into existence," Schreiber told the Namib Times. He explained that simple organic molecules likely formed at energy-rich underwater sites billions of years ago, setting the stage for all life as we know it. Today, the ocean continues to energise the planet. When sunlight strikes the water surface, the energy is absorbed by water molecules and transported across the globe by ocean currents, shaping weather patterns and regulating climate. Namibia's coastline, especially the nutrient-rich Benguela Current, plays a crucial role in ocean health. "Phytoplankton can grow in abundance, sometimes allowing its green colour to be seen from space," said Schreiber.

These microscopic marine plants perform essential work. They generate about half the oxygen we breathe and form the base of the food chain in Namibian waters. Schreiber noted the double benefit of these organisms, "along with some productive marine habitats including seagrass beds, mangrove forests and salt marshes, they also bind CO_2 from the atmosphere.

The ocean absorbs rough-ly 30% of global CO_2 emissions, helping battle climate change. But the increased carbon load also brings challenges. Too much CO_2 makes the ocean acidic, which reduces minerals needed by marine animals." According to Schreiber, Namibian coastal waters also host another climate hero, giant brown kelp. Growing in thick underwater forests, kelp pro-duces oxygen, stores carbon and shelters marine species. It's also harvested to enrich agricultural soil and feed abalone, contributing to food security and job creation. Meanwhile, guano, nutrient-rich sea-bird droppings continue to support Namibia's green economy. "Collected from artificial platforms and exported, guano is a highly valued fertilizer, rich in nutrients derived from the fish seabirds consume at sea," Schreiber explained. However, the ocean's generosity is at risk. "Producing more emissions means the ocean absorbs more CO_2, making it warmer and more acidic," he warned. This threatens marine ecosystems and, ultimately, human well-being. Schreiber urges collective action, "By reducing carbon emissions in our everyday lives, supporting ocean-friendly policies and protecting marine ecosystems, we can still turn around the current trajectory and allow our children and their children to reap the life-giving benefits of our oceans."