



© The Ocean Agency / Ocean Image Bank



PACIFIC ISLANDS OCEAN ACIDIFICATION CENTRE (PIOAC)

The oceans absorb approximately 30% of the anthropogenic CO₂ released into the atmosphere. The reaction of CO₂ with water forms carbonic acid, which increases acidity of seawater in a process known as ocean acidification.

Globally, seawater pH has already decreased by about 0.1 pH units and is expected to decrease an additional 0.3 pH units by 2100. Surface seawater is already 30% more acidic than it was 50 years ago.



© Nicolas Job / Ocean Image Bank



Ocean acidification is threatening the well-being and livelihoods of Pacific Island people

The increasing seawater acidity is reducing the amount of free carbonate in seawater. This makes it more difficult for coral, shellfish, and other calcifying organisms to build and maintain their shells and skeletons.

With their vast marine area and large number of reef-dependent communities, Pacific Island Countries and Territories are especially vulnerable to ocean acidification. There is increasing evidence that coral in the South Pacific are already experiencing decreased calcification due to ocean acidification.



The Pacific Islands Ocean Acidification Centre (PIOAC) was created to support ocean acidification capacity development throughout the Pacific

Established in 2021, PIOAC is a SPC-led partnership to support Pacific Island researchers, government officials, and community members through ocean acidification training and technical assistance.



The Pacific Islands Ocean Acidification Centre is a joint partnership between:



Pacific Community
Communauté du Pacifique





© Gregory Piper / Ocean Image Bank



Pacific Islands Ocean Acidification Centre is working with Pacific partners to find Pacific solutions to address the impacts of ocean acidification

To address the impacts of ocean acidification, regions must understand local ocean acidification conditions, identify effective and sustainable adaptation and mitigation approaches, and develop strategies to address the changes to the ecosystems, communities, and economies.

PIOAC supports these efforts through:

- Training to increase regional expertise in ocean acidification monitoring
- Advice on the application of monitoring to support adaptation and mitigation approaches
- Access to international networks that support monitoring, action, and policy efforts
- Assistance with ocean acidification data management and accessibility



What you can do to support PIOAC and Pacific efforts to address ocean acidification.

- Ensure continued support of ocean acidification monitoring efforts, which are critical to evaluating the effectiveness of adaptation and mitigation approaches.
- Support ocean acidification monitoring programmes that provide information about current and future regional ocean acidification conditions, allowing climate-smart solutions
- Increase investment in ocean acidification capabilities and the establishment of infrastructure, tools and technologies for oceans acidification monitoring to better understand its impacts on the ocean
- Stay connected, notably through the NZOAC and PI-TOA newsletter <http://nzoac.nz/newsletters>.



CONTACT US:

The Pacific Islands Ocean Acidification Centre,
 Lotus Building, Ratu Mara Road,
 Private Mail Bag, Suva, Fiji
 Email: katys@spc.int

