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The Pacific environment, sustaining our livelihoods and natural heritage in harmony with our cultures.

Twenty Seventh SPREP Meeting of Officials

Alofi, Niue
19 – 21 September 2016

Agenda Item 9.2.3: New Zealand Pacific Partnership on Ocean Acidification

Purpose

1. To update Members on the New Zealand Pacific Partnership on Ocean Acidification (PPOA) project, including efforts to expand the project into a regional programme with support from the GCF.

Background

2. Atmospheric carbon dioxide (CO_2) levels are rising as a result of increasing greenhouse gas emissions. Since the industrial revolution, the oceans have absorbed ~26% of the anthropogenic CO_2 emissions. The uptake of CO_2 by the oceans is increasing the acidity of seawater, a process known as ocean acidification. Ocean acidification will have significant detrimental impacts on the environment (including ecosystem services provided by areas vulnerable to ocean acidification, such as coral reefs and associated fisheries), on the economic sectors of fisheries (directly through impacts on fish behaviour and indirectly via loss of critical habitat) and tourism (degradation of coral reefs and coastal ecosystems), and, importantly, on community and infrastructure resilience to disasters (via degradation of natural coastal barriers to climate hazards). The Pacific Ocean region, and the small island developing states (SIDS) therein, are particularly vulnerable to these impacts due to their close association and heavy reliance on fisheries and tourism for livelihoods, and their vulnerability to climate and ocean related hazards.

3. Adaptations that minimise ocean acidification effects and maintain opportunities for sustainable development are necessary for Pacific island communities, dependent on ocean resources. The only way to truly prevent ocean acidification on a global scale is to sharply reduce CO_2 emissions. However, actions can be taken to minimise local impacts of ocean acidification and to promote ecosystem resilience. For example, reducing nutrient and organic matter runoff from land can reduce local impacts. Preserving seagrass habitats can increase the local uptake of CO_2 and increase ecosystem health and resilience.

4. In response to the growing threat of ocean acidification, New Zealand initiated the PPOA project, which is a collaborative effort between SPREP, the Pacific Community and the University of the South Pacific. During the 21st UNFCCC COP in Paris, SPREP signed an agreement with the Principality of Monaco for an additional €60,000 per year in support of the PPOA project.

5. The PPOA project is working to build resilience to ocean acidification in Pacific Island countries by:
   a. Identification and Implementation of Practical Adaptation Actions – The project will carry out an Ecosystem and Social Resilience Assessment and Mapping (ESRAM) study that will guide the implementation of adaptation activities at selected pilot site.
   b. Research and Monitoring – As part of the ESRAM study, the project will establish chemical and biological baselines which will be followed up by routine monitoring of key parameters.
   c. Capacity Building and Awareness Raising – During the ESRAM study and throughout the implementation of adaptation activities, the project will seek to build capacity within the local communities and partners to address ocean acidification and to develop effective coastal zone management. Additionally, the project will seek to raise awareness of ocean acidification at all levels.
6. The PPOA project recently (October 2015) hosted a regional ocean acidification workshop in Auckland that was attended by representatives from Pacific island countries and territories and scientific experts. A regional ocean acidification vulnerability assessment has also been produced, and is available in hard-copy upon request and on the SPREP website.
7. The PPOA project is currently establishing ocean acidification adaptation pilot projects at selected sites in Fiji, Kiribati, Tokelau, and Vanuatu.
8. During the 2015 regional ocean acidification workshop obtain participants encourages SPREP to seek additional support to expand the PPOA project to a full regional programme of work. Expression of Interest letters have been sent to Member's GCF National Designated Authorities seeking endorsement for SPREP to begin work on developing a regional Coastal Ecosystem Resilience programme through the GCF's Project Preparation Facility. To date Cook Islands, Solomon Islands, Tonga, and Vanuatu have responded favourably.

Recommendation

9. The Meeting is invited to:
   - **note with appreciation** the support for the PPOA project from New Zealand and the Principality of Monaco;
   - **encourage** SPREP and Member countries and territories to prioritize ocean acidification monitoring and adaptation efforts, and to coordinate their efforts regarding ocean acidification; and
   - **encourage** SPREP to continue to work to develop the PPOA project into a full regional programme of work through support from the GCF and other donors.

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2 September, 2016