

# PACIFIC OCEAN FINANCE PROGRAM - INSURANCE

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Under the insurance workstream of the Pacific Ocean Finance Program, WTW is exploring the feasibility of insurance instruments to support Pacific ocean health and thereby increase the resilience of Pacific communities.

Ocean health is crucial to communities across the small island states of the Pacific Ocean. Coastal and island communities are particularly susceptible to climate pressures, and dependence on the blue economy means they are on the frontline dealing with the impacts of climate change and other negative anthropogenic effects on the marine environment.

Healthy oceans and coastal ecosystems provide prosperity and protection to coastal communities. Natural infrastructure such as reefs and mangroves provide coastal protection from storm impacts by absorbing wave energy and reducing storm surge inundation. They are the hatcheries and nurseries for fish populations, which provide a key source of nutrition for small islands. And they generate and protect the coastal land- and seascapes on which tourism revenue is dependent.

As more intense storms, floods, droughts, sea level rise, higher temperatures, and ocean acidification increase the vulnerability of coastal communities, threatening both lives and livelihoods, it is a key priority to strengthen the resilience of the ocean environment which supports them.

## Why Insurance

Insurance is a tool to finance risk and build resilience to shock events, mitigating the impacts by arranging finance in advance. It can be more cost-efficient than other financial mechanisms, especially credit arranged after-the-fact, particularly for extreme risks. Pay-outs provide funding for recovery quickly after an event, and this predictability of funding allows for the development and implementation of contingency plans, which can further minimise negative impacts.

## Incentivising Risk Reduction and Environmental Stewardship

Insurance can incentivise risk-smart behaviour and stewardship of the environment. Risk transfer generates greater risk awareness and recognises the real financial consequences of risk. Putting a price on risk creates the real incentive of potential reduced insurance cost, retained market value, and maintained access and use. Insurance mechanisms can be truly beneficial when they not only provide protection against the impacts of catastrophic events, but also incentivise local stewardship of the environment and the sustainable growth of the blue economy by providing a financial mechanism by which risk reduction activities are recognised.

**Insurance can provide coverage and liquidity to respond to threats to ocean health and natural infrastructure. It can also de-risk investments in coastal ecosystems and their conservation.**

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## The Pacific Ocean Finance Program – Insurance (POFPI) aims to develop insurance products to:

- Protect investments in conservation;
- Provide immediate liquidity for early post-event response; and
- Increase the financial resilience of communities reliant on the blue economy and natural infrastructure assets.

### Parametric Insurance of Blue Infrastructure

Coral reefs are severely impacted by wave action during hurricanes, and sediment, trees and other detritus cause even greater damage in the days and weeks after a storm. Reef recovery is greatly speeded and enhanced by rapid clean-up.

**Parametric insurance** is a financial mechanism that provides pay-outs based on the occurrence of an event rather than an actual loss. This allows rapid liquidity post-event, since there is no loss-adjustment process and events are defined by verifiable independent agencies.

This type of cover could protect coral reefs and mangroves, providing rapid funding to respond to damaging events such as cyclones and heavy rain through:

- Rapid reef clean-up (funding early response that increases reef recovery after cyclones, which in turn can incentivise planning for response)
- Rapid liquidity for waste and water infrastructure response to address impacts of run-off on ocean health
- Pay-outs could be used to give cash payments to fisherfolk to not fish or provide other social benefit support to ease post-cyclone stress on reefs (or mangroves)
- Could be a more general hedge against revenue interruption for MMA-type conservation business model – diving and visiting reefs will not be as attractive if a reef has severe impacts from a storm

### Fisheries Support

Fisheries play a vital role in food security for the world's population and provide livelihoods to some of the poorest and most vulnerable communities. Yet fishing is a high-risk activity, with injury and loss of life all too common. Physical risks threaten assets such as boats, and volatile catch quantity and prices create high inter-annual income variability.

Destructive or damaging fishing activities also threaten the very resource these communities rely on. Supporting a resilient and sustainable fisheries sector is a key pillar for prosperity and long-term ocean health.

Preferential access to insurance products can be provided as a reward for registration and tagging and / or in exchange for adherence to responsible fisheries management. This can incentivise environmental stewardship, support sustainable fisheries, and increase the financial resilience of fishing communities.

Coverage could be through a microinsurance initiative or sovereign level insurance scheme, and could include:

- Life and health insurance;
- Vessel coverage; and / or
- Livelihood protection.

### Early Climate Change Impact Finance

Coasts and islands are particularly susceptible to the impacts of climate change and resulting increases in ocean risk, many of the effects of which will be chronic and slow-onset, rather than acute and immediate. While insurance is typically most effective to mitigate the financial impacts of shock events, it can also protect against timing risk, in a life insurance-like model.

Coral reefs are particularly susceptible to changes in ocean temperature and acidification. Insurance that can mitigate the financial impact of damage to reefs can unlock sustainable investment on the coasts. It can also provide liquidity during a bleaching event, which can be used to fund activities to reduce pressure on reefs, allowing them to recover. An insurance programme could also serve as a mechanism to pool the risk of severe bleaching events to a range of stakeholders / across a wide geographical zone.

The rate of ocean warming or sea level rise can be measured and represented as an index, and, therefore, parametric insurance can be designed, triggering pay-outs if rates exceed pre-agreed thresholds.