



Weather index-based parametric insurance for small-scale fishers in the Philippines

Small-scale fisheries in the Philippines: A vital sector vulnerable to shocks

Small-scale fisheries (SSF) are an important sector of the economy, but ineffective management and overfishing have led to a steady decline in fish stocks. In the Philippines alone, more than 1.4 million SSF households (6.5 million Filipinos) rely on local fisheries for income and sustenance.¹ Globally, 113 million people work in small-scale fisheries, with 40% — or 45 million — being women. Fish and fish products make up 11.5% of the average Filipino diet, making fisheries critical for food security. However, wild-caught fish have been in steady decline since the 1970s with fishers now stuck in a negative feedback loop: overfishing reduces habitat quality, degraded habitats support fewer fish, and fishers resort to ever more destructive practices as they race to maintain catches amidst a dwindling resource.



Moreover, worsening weather conditions due to climate change limit fishers' ability to work safely. High windspeed, heavy rainfall, and high waves make fishing treacherous, leading to lost income. With seasonal weather patterns becoming increasingly unpredictable, fishers often overfish during fair weather to buffer against an uncertain future, further depleting resources.

The challenges facing small-scale fishers and the variable nature of fishing are compounded by a fragmented, informal, and marginalized market sector that leaves fisher households vulnerable to external shocks and struggling with debt-induced poverty cycles. The coastal communities that rely on these fisheries are frequently located in remote and under-resourced areas, where both government and private sector support can be challenging to effectively deliver due to various constraints such as resources, capacity, and geographical reach.

Solution: An innovative insurance product

Rare and Willis Towers Watson (WTW), a leading global advisory, broking, and risk solutions company, with support from the government of Canada via the Ocean Risk and Resilience Action Alliance (ORRAA), have designed a first-of-its-kind parametric insurance product to help fishers adapt to climate change by providing protection income protection for lost fishing days due to adverse weather.²

Unlike traditional insurance, parametric insurance provides rapid pay-outs based on pre-defined weather triggers instead of indemnifying actual losses. This ensures that fishers receive financial support within weeks of an extreme weather event, enabling them to recover faster and avoid financial distress, alleviating poverty in the long-term by reducing debt burdens and providing alternatives to credit.

1. Lomboy, C.G., Belinario, F., Pomeroy, R., Pedrajas, J., Tirona, R.S., Box, S., Domondon, P.R., and Balbido-Ramirez, K. Building household economic resilience to secure a future for near shore fisheries in the Philippines. *Marine Policy* 99, (2019). <https://doi.org/10.1016/j.marpol.2018.11.013>.

2. In 2021, support was provided by the United Kingdom's Blue Planet Fund via ORRAA to assess the feasibility of the parametric insurance product.

Overview of the parametric insurance product

Based on experiences of small-scale fishers the product considers the actual weather conditions that result in significant income losses and the maximum pay-out is reflective of a fisher's average monthly income.

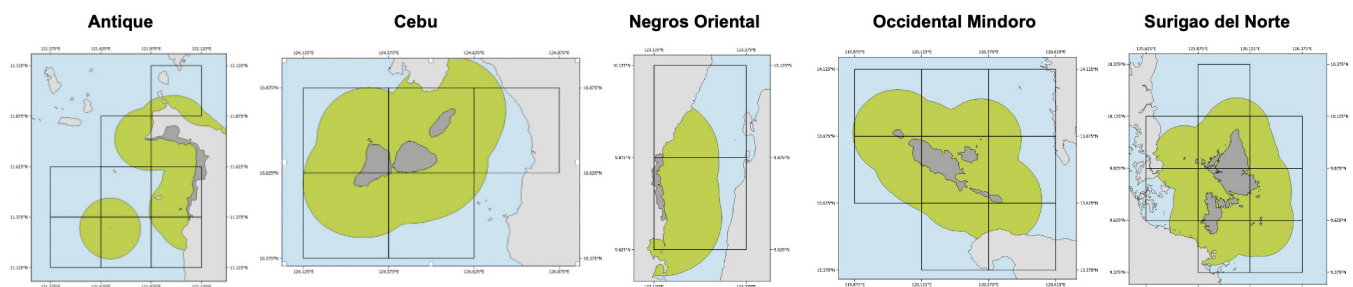


The product index integrates three weather parameters — wind speed, wave height, and rainfall — over a five-day period to determine payout triggers. The ERA5 dataset from the European Centre for Medium-Range Weather Forecasts underpins the index due to its historical accuracy, near-real time updates, and international credibility in the reinsurance market.

The product provides a maximum annual payout of US\$100 per fisher, an amount informed by a 2019 Rare survey of 4,000 fisher households, which found the average fisher monthly income is US\$98 and that adverse weather frequently disrupts their ability to earn a living.

Pilot launch and government commitment

Rare and WTW will launch the parametric insurance product in early 2025, targeting 15,000 registered fishers across 75-90 coastal municipalities in the Philippines. The Department of Agriculture Bureau of Fisheries and Aquatic Resources (DA-BFAR) serves as the policyholder, while the Philippine Crop Insurance Corporation (PCIC), the state insurer, will manage payouts to ensure timely compensation for fishers. BFAR has fully funded the pilot through its national budget, demonstrating strong government commitment, accountability, and sustainability. Offered as part of the standard benefits for registered fishers, the product will drive fisher registration, an action linked to strengthened commitment to sustainable fishing practices.



The five municipalities in the Philippines where the parametric insurance pilot will operate. The green area indicates fisheries under sustainable community-led management. The gray area within the green indicates the no-take reserve where fishing is off limits.

This first-of-its-kind insurance product for small-scale fishers marks a historic shift, ensuring that vulnerable communities are financially protected against climate-related income loss. Once successfully launched, the product will be market-tested, with ART (a division of WTW) serving as the broker. Its success will determine future scaling opportunities and broader national adoption.

By integrating government-backed insurance, real-time weather monitoring, and rapid payouts, this initiative paves the way for a scalable, climate-adaptive financial model that strengthens economic resilience for small-scale fishers.