

# Parametric Insurance

**A comprehensive approach through insurance programmes to protecting small-scale fisheries and fisherfolk from the increasing risks that result from climate change**

The World Risk Report 2020 identifies the Pacific as a hotspot for climate change and disaster risk. Vanuatu, Tonga, Solomon Islands, Papua New Guinea, Fiji and Kiribati are listed in the 20 countries most at risk and vulnerable to disasters. Pacific Small Island Developing States (PSIDS) have limited capacity to effectively manage risks and overcome significant economic losses after a disaster. Up to 60-80 per cent of Pacific islanders rely on agriculture and fisheries for their income and food security. Communities dependant on farming and fishing are often the most affected by extreme weather events such as storms or heavy rainfall. Yet farmers and fishers have little or no access to disaster risk financing options to deal with the effects of climate-related disasters.

There are limited ex-ante financial instruments and the ex-poste financial instruments deployed are usually reallocated from government budgets, external and internal borrowing or donor assistance and international humanitarian aid.

For instance, in 2016, Fiji was hit by a Category 5 tropical cyclone Winston that impacted about 63 per cent of the country's total population; the Fiji government estimated the loss and damage at US \$1.3 billion. The government had to take out a \$50 million loan from the World Bank. Another example is of Tonga in 2022; the Tongan undersea volcanic eruption and tsunami affected over 80 per cent of the people engaged in subsistence reef fishing; fishing vessels were damaged. The government had requested \$240 million to Tonga's development partners for recovery, including to improve food security. As per the World Bank, the highest adaptation costs for Pacific island countries by 2040 will

be coastal protection, with a sea level rise of 126 cm by 2100 and increased cyclones' intensity.

In light of the above, the Pacific Insurance and Climate Adaptation Programme (PICAP) was launched in December 2020 with an objective to improve the financial preparedness and resilience of vulnerable communities such as fishers, farmers,

**The solutions launched cover a total of 17,963 households across all the countries by end of 2023, protecting almost 90,000 individuals which includes fishers and farmers. 40 per cent of those covered are women, 6 per cent are persons with disabilities**

MSMEs, with specific focus on women and persons with disabilities, against impact of climate change and natural hazards. The Pacific Insurance and Climate Adaptation Programme is jointly implemented by the UN Capital Development Fund (UNCDF), UN Development Programme (UNDP) and UN University-Institute for Environment and Human Security (UNU-EHS). Market-based parametric meso and micro insurance schemes, which provide immediate liquidity after disaster, were developed and launched by the programme. Parametric insurance is based on predefined parameters and unlike indemnity-based insurance, the payout is done rapidly, usually within a fortnight after an extreme weather event.

## The market-ecosystem approach

PICAP directly works with private sector insurers and re-insurers to design, test and scale risk financing and insurance solutions. The programme leverages digital solutions and uses

*This article is by Krishnan Narasimhan, Programme Manager, Climate Disaster Risk Financing and Insurance, UNCDF and Shriya Sundaram-Partnerships Coordinator, Climate Disaster Risk Financing and Insurance, UNCDF*

UNCDF, 2019 JOHN RAE



92

Fisherwomen at work. The products are tailored to the country context and each country has its own distinct climate risk insurance product and the premium rates are set at 7-10 per cent of the sum assured considering affordability, and factoring risk exposure and vulnerability

localized aggregation model, such as partnerships with co-operatives and development banks, to drive adoption and achieve scale. The programme also collaborates with governments to support innovative policy dialogues and industry dialogues through national- and international-level working groups.

**Based on our experience in Fiji, Tonga, Vanuatu, Samoa and PNG, there is an expansion planned to other Pacific island countries such as Solomon Islands, Kiribati and Tuvalu where the products will be specifically focused on fishers**

There is also a strong focus on using digital solutions to reach the last mile and the programme has partnered with digital solution providers to create a customer onboarding platform as well as partnered with mobile network operators for payments directly into customers' mobile wallets.

The programme has launched micro- and meso-level parametric insurance in Fiji, Tonga, Vanuatu, Samoa and Papua New Guinea; it will soon expand to the Solomon Islands, Tuvalu and Kiribati. The improved and new climate disaster risk financing and insurance products range from a stand-alone wind speed cover to a multi-peril cover that includes wind speed, rainfall, earthquake and drought. There are also macro to micro insurance products for social welfare beneficiaries and a meso-level insurance product in Fiji called Anticipatory Action Insurance.

The products are tailored to the country context following a demand and supply side study, hence each country has its own distinct climate risk insurance product and the premium rates are set at 7-10 per cent of the sum assured considering affordability, and factoring risk exposure and vulnerability. The solutions are also improvised based on stakeholder consultations and feedback. For example, in Fiji, discussions with

fishers and farmers revealed that they faced economic loss in case of continuous heavy rainfall despite the event not turning up as a cyclone or catastrophic event. Thus, a stand-alone rainfall product was launched.

### Impact on the fisheries

The solutions launched cover a total of 17,963 households across all the countries by end of 2023, protecting almost 90,000 individuals, including fishers and farmers. About 40 per cent of those covered are women; 6 per cent are persons with disabilities. The solutions have had a significant impact on the fisheries sector with the payouts helping them to build back better and faster after a disaster strikes. For instance, since 2021, close to 1,500 households have received claims payout ranging from \$200 to \$1,000.

Interviews with fishers have shown how the payouts have helped them. A case in point is a beneficiary who mentioned that before being covered by parametric insurance, after events of heavy rain, they would usually resort to whatever money that they had left from the boat business as well as the shares from the *qoliqoli* (traditional fishing grounds) to meet their household expenses. However, after receiving the payout, for the first time, it helped him to cater for household expenses since his income was affected and he did not have to dig into his savings.

Based on our experience in Fiji, Tonga, Vanuatu, Samoa and PNG, there is an expansion planned to other Pacific island countries such as the Solomon Islands, Kiribati and Tuvalu where the products will be specifically focused on fishers. King tides, a phenomenon that is seen in Tuvalu, happens every year. However, earlier this year, there was massive destruction when the king tides grew up to 3.41 metres through heavy rainfall, strong winds and waves. Thus, measures to enhance resilience in the fishing sector are vital for mitigating financial losses during adverse weather conditions and ensuring the sustainability of local fishing communities.

UNCDF, along with the local partners in each country of intervention, plans to introduce insurance for observers

on fishing vessels, recognizing their vulnerability at sea. Fishers' insurance covering life and equipment underscores the risks to livelihoods from hazards related to climate change. As in the current countries of implementation, there will be targeted insurance awareness campaigns with aggregators and insurance companies spearheading it.

The project contributes to the overall 2050 Blue Pacific Strategy, that is developed by the Pacific Islands Forum, particularly to the thematic area of climate change and disasters, by building the capacity and resilience of communities to effectively address the impacts of climate change and disasters through climate risk transfer instruments. Starting next year, the solutions will also be expanded to countries beyond the Pacific to Africa, Asia and the Caribbean, thus protecting the livelihoods of the fishing communities at large.

The programme will continue to collaborate with development banks, fisheries cooperatives and national provident funds for group aggregation in new countries of expansion. There will also be a specific focus on conducting advocacy campaigns through ministries of fisheries officials and the programme will continue to expand on co-creating solutions with stakeholders following deep dive studies. 3

*Disclaimer: These are the authors' personal opinions not those of UNCDF or its donors.*

#### For more



#### Disaster Risk Financing Solutions for farmers and fishers in Fiji and their preferences

<https://www.preventionweb.net/publication/disaster-risk-financing-solutions-farmers-and-fishers-fiji-and-their-preferences>