# Pacific Islands Climate Change Insurance Facility
# Concept Paper

**Climate Change Impacts in the Pacific**

Cyclones in recent years in the Pacific have had a devastating effect on the economies of many Pacific Island countries. Scientists now consider that the intensity of cyclones in the region have increased due to global warming. Cyclones can no longer be considered "natural events" as there is a clear signal of human induced climate change in their intensity. Cyclone Pam 2015 and Cyclone Winston 2016 created significant damage and loss of life in a number of Pacific Island countries. The estimated cost of the damage caused by Cyclone Pam to Vanuatu has been calculated to be in the order of USD 449.4 million.[1] According to the World Bank, the estimated cost of Cyclone Pam which continued onto Tuvalu was USD11 million[2]. The current estimated cost of the damage created by Cyclone Winston is in the order of USD 470 million.[3] Cyclone Ian, which caused considerable damage to Tonga in 2014, resulted in an estimated damage bill of USD 50 million. In 2012, Cyclone Evan created a damage bill for Samoa of $210 million.[4]

Climate change has a number of other impacts in the Pacific Island region. These include: severe droughts, floods, more severe thunderstorms, severe storm surges, wildfires, coral bleaching, ocean acidification, health related issues such as heat stress and increased range of disease vectors (such as mosquitoes). Long term effects include sea level rise, loss of territory, changes in fish stocks and possible population displacement. The impacts are different across the different geographic zones of the Pacific. Therefore any risk transfer scheme needs to be responsive to the specific needs of each Pacific Island country

**The Role of Insurance**

One means of reducing the costs of the impacts of climate change damage is to establish arrangements associated with **insurance**. Insurance spreads the losses among people and across time and by doing so insurance reduces the catastrophic impact of climate change disasters and enables a timely recovery. Insurance can and should be linked to risk reducing and preventative activities. It should be emphasized that insurance is not a universal remedy for all types of loss and damage caused by climate change. Other supportive finance will be necessary.

**Climate Change and Insurance.**

The notion of climate change linked to insurance is not new. The 1992 UN Framework Convention on Climate Change includes a reference to insurance in Article 4.8. The Paris Agreement on Climate Change, Article 8 makes reference to risk insurance facilities, climate risk pooling and other insurance solutions. The Warsaw Mechanism on Loss and Damage which serves the Convention and the Paris Agreement has established a clearinghouse for risk transfer. The United Nations Institute for Environment and Human Security in Bonn, Germany has developed a number

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[1] http://reliefweb.int/report/vanuatu/post-disaster-needs-assessment-tropical-cyclone-pam-march-2015

[2] https://www.gfdrr.org/sites/default/files/publication/Infographic_cyclone_pam.pdf

[3] http://reliefweb.int/report/fiji/fiji-severe-tropical-cyclone-winston-situation-report-no-15-9-march-2016

[4] https://www.gfdrr.org/sites/default/files/publication/Samoa.pdf

of processes to develop climate change insurance. Preliminary discussions with the Green Climate Fund suggest that the Fund would be willing to explore a financial arrangement for climate change insurance.

**PCRAFI:**

Currently the Pacific has piloted the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI). This is a joint initiative of SPC, the World Bank and the Asian Development Bank. It has been trialled in six countries, with one of these six (the Solomon Islands) withdrawing from the scheme. Establish under the Sendai Framework for Disaster Risk Reduction, PCRAFI primarily deals with exposure to what is defined as "natural hazards", which include earth quakes, tsunamis and cyclones. As PCRAFI deals with natural hazards it does not have access to climate change funding facilities. It can be argued that PCRAFI is a top down model and that it does not properly respond to the climate change impact needs of Pacific Island countries. There are concerns that the premiums are too high and the payout too low.

Nevertheless, it does have a role in the region, particularly in geologically unstable areas, where earthquakes and tsunamis are likely. Climate change disasters need another approach.

**The Role Pacific Island Climate Change Insurance Facility**

The proposed **Pacific Island Climate Change Insurance Facility** will aim to achieve a number of functions. The concept of PICCI Facility is much broader than one instrument or one product. It is aimed at creating a regional Facility that will be able to investigate and develop risk transfer products to suit the individual needs of Pacific Island countries. The clear message is that one size does not fit all. Various products will be developed so as to be fit for purpose. It is anticipated the **PICCI Facility** will develop the following arrangements as:

a) Index/parametric based risk transfer/insurance scheme
b) Indemnity insurance
c) Clearinghouse for product options
d) Industry monitoring
e) Coordination

**a) Index/parametric based risk transfer/insurance scheme**: This will be a parametric climate change insurance pool. It will be developed around a number of climate change impact triggers. These may include:

i. Cyclones: wind speed, storm surge height, rainfall

ii. Drought: number of days since rain, drought tolerance of different crops

iii. Floods: amount of rain per period of time, flood level limits

iv. Coral Bleaching: number of days with seawater temperatures above a known threshold for coral survival

v. Other factors will be explored and developed

The index or parametric based risk transfer/ insurance scheme is aimed at making an immediate payout to countries once a threshold of climate change index has been reached. It does not give the full cost of repair and rehabilitation. It is aimed at giving a country and immediate injection of funds to cover recovery efforts. These funds could be disbursed not only as direct funds but also material and vital supplies such as food, water, emergency shelter and other immediate needs.

This index based risk insurance could offer different indices for different regions of the Pacific. Some regions close to the Equator may not be so prone to cyclones but have more problems with droughts or coral bleaching. Others within the cyclone belt would need to be covered for this threat. Others larger Pacific Island countries may have particular concerns with respect to flooding damage.

**b) Indemnity insurance:** At a second level, indemnity insurance will cover full damage costs after a climate change event. Assessors will decide on the cost of repair relative to the original replacement value of the infrastructure that is damaged. This is likely to cover major government infrastructure including: schools, hospitals, roads, airports, communications equipment, water supply facilities, other public buildings and infrastructure. More tailored indemnity insurance arrangements could be developed for particular sectors including: tourist resorts, shipping, fishing industry, agriculture,

c) **Clearinghouse for product options:** There are many options for climate change insurance and risk transfer that Pacific Island countries may wish to consider. These can range from micro-insurance for farmers or fishers through to sector indemnity insurance for the tourism industry. The **PICCI Facility** would play a facilitative role in assisting Pacific Island countries, the private sector and communities within these countries to identify the best insurance or risk transfer options to suit their needs. It should undertake research to find products that will be suitable for the various climate change impacts in the region and match these with needs.

d) **Industry monitoring:** Pacific Island countries are the most vulnerable in the world to the impacts of climate change, therefore the Pacific should play a significant role in ensuring that the global energy economy moves rapidly towards renewable energy and energy efficiency approaches. The insurance and reinsurance industry tends to have major investments in fossil fuel-related assets. Those investments face an unprecedented series of emerging risks, including those related to regulatory changes that are necessary to promote climate change stabilization and that may reduce the market value of fossil fuel assets. Others include ; unfavorable economics for extraction firms, particularly related to unconventional shale and tar sands oil; and innovations relating to renewable energy, energy storage, electric vehicles and others that have considerable potential to negatively affect the longer term value of carbon-based assets.9 These challenges, collectively referred to as carbon asset risk, raise fundamental questions for investors regarding the potential stranding of fossil fuel assets and related devaluations. It is important that there is close public scrutiny of these investments in fossil fuel assets. Therefore it is envisage that **PICCI Facility** could play a role in monitoring and reporting on the global insurance and re-insurance industry and the extent to which it holds fossil fuel assets. In doing so **PICCI Facility** could play a role in assisting the insurance and reinsurance industry invest in the renewable energy and energy efficiency industry. This would create a better investment portfolio for the industry and help create a global energy sector with greater focus on renewable energy and energy efficiency.

A considerable amount of this monitoring role is already being undertaken by NGOs and elements of the industry itself. PICCI Facilities role would be to give a higher profile to this monitoring, particularly as it would be coming from the most vulnerable countries in the world to the impacts of climate change.

e) **Coordination:** Linked to its role as a clearinghouse, **PICCI Facility** could also assist in regional efforts to improve climate change risk management and adaptation efforts in the region.

**Pacific Regional Dialogue on Financial Management of Climate Risks**

The Pacific Regional Dialogue on Financial Management of Climate Risks was held in Apia, Samoa from 26 to 28 June, 2017. It was attended by various Pacific Island country representatives, regional and international agencies and international insurance and finance experts. The dialogue was organised by the Government of Tuvalu, the United Nations Development Program (UNDP) and the Secretariat of the Pacific Regional Environment Program (SPREP), with generous financial assistance from the Government of Australia and UNDP.

The purpose of the dialogue was to discuss the need for additional financial management of climate change induced risks in the Pacific island countries. It helped increase understanding of the options, gaps and challenges in managing and mitigating risks and to explore the potential for a Pacific Island Climate Change Insurance Facility. It also explored funding a PICCI Facility.

The Dialogue was a valuable process for understanding what options were possible. It gave a good overview of the **Pacific Island Climate Change Insurance Facility**. Representatives who attended the meeting gave a positive response to this proposal and encouraged further collaboration. There were numerous recommendations on how the concept of PICCI Facility could be advanced.

**Next Steps:**

**PICCI Facility Development Task Force**

One of the recommendations from the Pacific Regional Dialogue on Financial Management of Climate Risks was to establish a small group of people who could advance the concept of PICCI Facility. Others could be brought in to give specific technical advice, as needed. It is therefore recommended to establish a PICCI Facility Development Task Force. This could be constituted by representatives from regional government (with at least one from a SIS), relevant regional organisations, the private sector, NGOs and the insurance/re-insurance industry.

It is critical that the Task Force focus on the developing the institutional arrangement for the PICCI Facility so that they can develop a concrete proposal for endorsement by the Forum Economic Ministers Meeting in 2018.

Part of the mandate for the Task Force will be to determine how PICCI Facility will relate to PCRAFI. It is important not to develop overlaps.

**Funding for PICCI Facility Development Task Force**

Funding to support the Task Force could come from a variety of sources, including.

- The European Union
- Green Climate Fund
- UN Agencies
- Bilateral donors

**Administrative Arrangements:**

The PICCI Facility Development Task Force would need to explore the best administrative arrangements for the PICCI Facility. Options for administrative arrangements could include:

a) a special program or unit under a regional CROP agency (such as the Climate Change Centre at SPREP) or UN institution based in the region (ESCAP or UNEP),

b) a stand-alone legal entity located in a Pacific Island country and overseen by the annual meeting of the Pacific Forum Economic Ministers

c) a joint arrangement with PCRAFI with a Board determined by member countries

Each of these options has advantages and disadvantages. The critical consideration would be whether the administrative arrangement has the best opportunity for sourcing climate change finance. Joint arrangements with PCRAFI may create difficulties with climate change finance as PCRAFI deals with natural hazards which are geological in nature.

It is critically important that the new administrative arrangement does not merely focus on risk assessment work. The insurance and reinsurance industry has well proven models for determining risk assessment. We should not be creating new bureaucracies that undertake risk assessment work, when the industry is far more advanced and efficient at doing this work.

**Longer-Term Finance:**

Once the concept of the PICCI Facility is endorsed, various donors would need to be approached to provide financial assistance to the administration of the Facility as well as support Index Based Insurance Scheme. Assistance would also need to be source to subsidise the premiums paid by member countries.

The Green Climate Fund could be seen as a major contributor to the funding pool for the Index/ Parametric Based Insurance Scheme.

Other options for long-term funding would be explored. This may include seeking levies on international transport or fossil fuel producers. Various NGOs have explored these approaches.

As this is a climate change related Facility it is important to ensure that funding for the Facility is derived from outside the region. Vulnerable Pacific Island countries should not be responsible for funding climate change impacts. The Pacific's contribution to climate change is minimal. It is the major polluters of the world that should be contributing to such an arrangement. Establishing a comprehensive Facility to address climate change impacts will significantly reduce the need to seek compensation measures in the longer future. If decisive steps are taken now to assist Pacific Island countries the need to seeking compensation will be diminished.