

Pacific Perspectives Briefing Series

POLICY PRIMER ON LOSS AND DAMAGE CONSIDERATIONS FOR PACIFIC ISLAND COUNTRIES







Addressing Loss and Damage is a fundamental question of climate justice, international solidarity and trust

United Nations Secretary General, António Guterres, UN General Assembly 2022

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Acknowledgements

This policy brief has been developed jointly by the United Nations Development Programme (UNDP) Pacific Office in Fiji and the Pacific Islands Forum (PIF). A team of technical contributors and project leads have collaborated on this multi-stakeholder submission, to provide guidance to the Pacific region on the current status of Loss and Damage financing and the contextual nuances of this issue for Pacific Islands Countries and Territories.

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The work was funded by the UNDP Governance for Resilient Development in the Pacific (Gov4Res) project with support from the Australian Government Department of Foreign Affairs and Trade (DFAT), Korea International Cooperation Agency (KOICA), New Zealand's Ministry of Foreign Affairs and Trade (MFAT), the Swedish International Development Cooperation Agency (Sida) and the United Kingdom's Foreign, Commonwealth and Development Office (FCDO).

Disclaimer: The views expressed in this publication are those of the authors and do not necessarily represent those of UNDP or PIF. The paper does not represent formal policy or negotiating positions of Pacific Island Countries.

UNDP Governance for Resilient Development in the Pacific project, supported by:













Introduction

Limiting global average temperature rise to below 1.5 degrees Celsius is often described as a goal or target but for Pacific Island Countries this objective is best understood as a critical threshold.

As the climate crisis escalates, many societies are experiencing the impacts of slow onset climate events, the exacerbation of existing socio-economic challenges, and increasingly extreme disaster events. In many cases, climate change induced loss and damage is becoming increasingly unavoidable as physical, social, and economic thresholds are approached and, in some cases, surpassed.

Pacific Island Countries led the push to include language within the Paris Agreement that emphasises the importance of pursuing all efforts to keep global average temperature rise below 1.5 degrees Celsius. The implications of surpassing this critical threshold will be catastrophic for the Pacific Small Island States.¹ Every incremental increase in warming brings with it an array of new and compounding risks for Pacific Island Societies - putting additional pressure on limited resources, increasing adaptation financing needs, driving up the cost of development, while also increasing the incidence and scale of unavoidable and irreversible loss and damage.

Small island developing states (SIDS) and their intrinsic characteristics and limitations often result in increased vulnerability, exposure, and sensitivity to climate change. In the case of Pacific SIDS (PSIDS) – these common factors are further exacerbated by remoteness, pre-existing climate variability, and economic development profiles which differ with other regions as well as with other SIDS.² As a result, Pacific islands face extreme and uniquely complex loss and damage scenarios which are often defined by the confluence of irreversible slow onset events and intensified sudden onset hydrometeorological events. Small landmasses and constrained economic profiles of island nations increase the average exposure of PSIDS populations to risk (risk-density) and climate

change increases the likelihood that both sudden and slow onset events will impact a high proportion of the population and economy. Unlike, larger states, where the impacts of climate change are likely to vary dramatically across different geographic areas, PSIDS populations have high relative proportionate population exposure. Some Pacific Island countries, especially the Pacific atoll nations³, have limited viable adaptation potential and the adaptation options that may exist often involve difficult trade-offs. In many cases climate change projections require these nations to consider risks which pose implications that are existential in their implications and scale threatening their very survival and sovereignty. The Intergovernmental Panel on Climate Change's (IPCC) Sixth Assessment Report (2022) suggests that in some small island state contexts, the limits of adaptation may be reached within years rather than decades. The IPCC's sixth assessment report affirms 'at least medium confidence level' that small island states will experience:

- Loss of terrestrial, marine, and coastal biodiversity and ecosystem services
- Loss of lives and assets, risk to food security and economic disruption due to destruction of settlements and infrastructure
- Economic decline and livelihood failure of fisheries, agriculture, tourism and from biodiversity loss from traditional agroecosystems
- Reduced habitability of reef and non-reef islands leading to increased displacement
- Risk to water security in almost every small island⁴

¹ IPCC, 2022: Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. Cambridge University Press, Cambridge, UK and New York, NY, USA, 3056 pp., doi:10.1017/9781009325844.

² Human Development Index, UNDP Data Platform for SIDS (https://data.undp.org/sids/app/development-indicators/region/recentValue/choro

³ Kiribati, The Republic of the Marshall Islands, and Tuvalu

⁴ Climate Change 2022, Impacts Adaptation and Vulnerability SPM, IPCC, 2022

This 'medium confidence level' for all small island states is likely to translate to a <u>high confidence level</u> in reference to Pacific Island Countries as much of the Pacific region – for example - is experiencing sea level rise at a rate that is **2-3 times the global average**⁵.

With this reality understood, Pacific Island countries require that the shape and form of loss and damage financing be compatible and adaptable to their contextual needs. These needs must also be considered and made compatible with the vastly differing economic and geo-physical profiles of developing country parties to the United Nations Framework Convention on Climate Change (UNFCC). The scale, permanence, and secondary impacts of climate change-driven loss and damage will continue to differ greatly between contexts and regions. Furthermore, climate vulnerable countries have made it clear that efforts to address loss and damage must be understood as distinct from and additional to adaptation efforts⁶, in practice.

Loss and damage assessment capacity, associated capabilities, required financing, as well as support to manage the legal implications of loss and damage must be scaled up in response to the rapidly unfolding climate change scenario in the Pacific and the direct potential threats to national sovereignty and wellbeing that they entail.

Pacific Island countries will face extreme economic, cultural, social, and environmental losses if parties fail to achieve the objectives of the Paris Agreement and its call to limit global average temperature rise to below 1.5 degrees Celsius⁷. The voice and stature of Pacific Island countries within UNFCCC negotiations has, as a result, been defined and shaped by these factors and the direct experience of climate change impacts. As a result, the Pacific's perspective has often been perceived as an important lens through which to connect scientific evidence and projections with lived experience and future foresight.

SIXTH ASSESSMENT REPORT

Working Group I - The Physical Science Basis





Regional fact sheet - Small Islands

Common regional changes



Observed warming (high confidence) in the Small Islands¹ has been attributed to human influence (medium confidence). Warming will continue in the 21st century for all global warming levels and future emissions scenarios, further increasing heat extremes and heat stress (high confidence).



Ocean acidification has increased globally as have the frequency and intensity of marine heatwaves in some areas of the Indian, Atlantic and Pacific Oceans except for a decrease over the eastern Pacific Ocean. Marine heatwaves and ocean acidification will increase further with 1.5°C of global warming (high confidence) and with larger increases at 2°C and higher.



Sea levels will very likely continue to rise around Small Islands, more so with higher emissions and over longer time periods (high confidence).



Sea level rise coupled with storm surges and waves will exacerbate coastal inundation and the potential for increased saltwater intrusion into aquifers (high confidence).



Sea level rise will cause shorelines to retreat along sandy coasts of most Small Islands.



Small Islands will face more intense but generally fewer tropical cyclones, except in the central north Pacific where frequency will increase (medium confidence at a global warming level of 2°C and above).

⁵ https://www.usgs.gov/centers/pcmsc/science/impact-sea-level-rise-and-climate-change-pacific-ocean-atolls

⁶ https://pina.com.fj/2021/11/09/pacific-calls-for-dedicated-funding-facility-for-loss-and-damage/

⁷ https://www.preventionweb.net/publication/effects-climate-change-15deg-temperature-rise-relevant-pacific-islands

The Dynamics of Loss and Damage in Pacific Island Countries

Developing effective responses to loss and damage requires an understanding of economic, social, cultural, and non-economic value and utility. Efforts to create context-relevant responses to climate-driven loss and damage must be articulated and understood in relation to contextual, local, and pre-existing baselines. This need for contextual responsiveness is of particular importance to Pacific Island countries and societies due to their close integration with, and reliance on their natural environment and its services. Some key factors that need to be considered in Pacific small island states when considering responses to loss and damage include but are not limited to:

- geomorphology, dependency on external markets and financing, remoteness / distance to market
- coastal proximity of assets, economic and environmental sensitivity/fragility, disaster and climate change exposure and vulnerability to climate change.
- 3. cultural and social context, narrowness of existing economic base, development status.
- 4. data deficits, resource constraints, human capital / capacity, and other issues that create barriers to the management of systemic disruption.
- 5. High dependency on ecosystem services and environmental integrity.

These pre-existing factors create a starting point for understanding how climate change drives and shapes loss and damage in Pacific Island contexts. With these underlying factors considered, there are a range of key considerations that are vital to account for in relation to loss and damage from a Pacific perspective. Five important technical considerations for shaping Pacific approaches to addressing and responding to loss and damage in general are summarised below:

Key Messages and Considerations

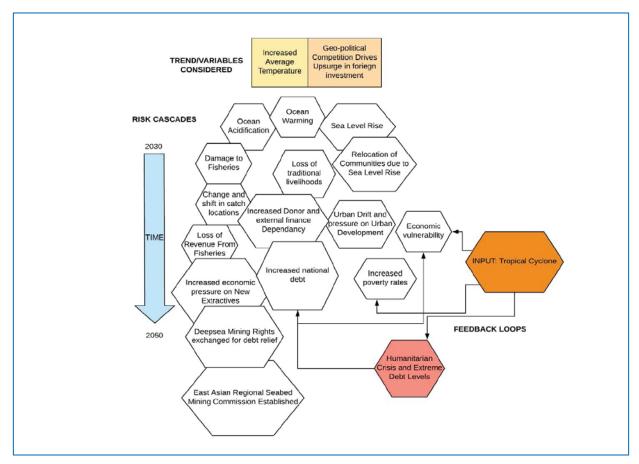
- 1. ROLE OF EXISTING DEVELOPMENT STATUS:
 There is a complex interplay between risks and socio-economic circumstances in highly vulnerable Pacific Island Countries and Territories. Climate change continues to drive sea-level rise, extreme hydro-meteorological events, soil salinization, and threats to key biodiversity and environmental services that have been the lynchpin of life in the Pacific for generations. Loss and damage arising from these changes impacts various sectors and exacerbates existing development challenges acting as a 'threat multiplier'.
- Addressing loss and damage through financing solutions, requires measures that respond to these multi-faceted and tiered impacts while also considering the development issues, socioeconomic circumstances, political vulnerabilities, and other contextual considerations that further limit the potential for 'self-management'.
- Loss and damage profiles need to be understood through the lens of adaptive capacity, climate change sensitivity and exposure, as well as through the lenses of pre-existing human, social, natural, physical, and financial capital.⁸

⁸ Khajuria A, Ravindranath NH (2012) Climate Change Vulnerability Assessment: Approaches DPSIR Framework and Vulnerability Index. J Earth Sci Climate Change 3:109. doi:10.4172/2157-7617.1000109

- LOCATION AND CONTEXT DEFINED: The impact
 of a changing climate on Pacific environments,
 economies, and societies must be understood
 at an increasingly granular and localised level
 to better understand and manage trade-offs
 and in order to anticipate and influence the
 way co-dependent systems will evolve.
- The systemic relationships, feedback loops and dependencies differ between localities, communities, provinces, countries, and regions.
- Governments and Civil Society must be incentivised to map out and anticipate the dynamics of climate change on complex environmental systems and local contexts.
- NON-LINEARITY OF RISK: Loss and damage is the result of cumulative, overlapping, and interrelated events, impacts, tipping points, and incremental changes.
- While loss and damage is often understood through the dichotomy of slow and sudden onset events, the complexity of climate driven changes means that there is also the need to understand situations in which a confluence of impacts conspire to create 'loss and damage'.
- Due to the overlapping nature of climate change impacts, disaster events, and residual risks - 'event' focused financing concepts such as insurance cannot easily be adapted in circumstances where multiple events, impacts, and associated challenges continue to interact. For example – shifting rainfall patterns, alongside intensified cyclone events, and sea level rise is, and will continue to, damage food and water security, driving up dependence on external supply chains, triggering urban drift, and altering cultural practices. The losses involved with this scenario may not be attributable to a single event, rather the losses will occur in a series of phases, incremental shifts, and overall losses in yield and productivity.

- LINKED THRESHOLDS: Social and economic tipping points must be understood in addition to physical and environmental tipping points.
 - The 'tipping point' at which a community is no longer willing or able to inhabit a specific piece of land, or the point at which a business may be unable to continue to operate maybe inclusive of both physical, physiological, emotional, economic, factors that together create a scenario or experience which is untenable (i.e. the point at which a community or business abandons a site or activity to pursue viable alternatives). Similarly, several incremental factors can lead to a tipping point at which a sudden change occurs (i.e., confluence of temperature rise, salt water salination, and heavy rainfall that devastates crop yield)
- Loss and damage concepts are important when considering climate change tipping points, their implications, and the array of environmental, social, and economic regime shifts that can occur quickly after a period of incremental change.
- The growing need to improve the understanding around how environmental regime shifts translate to socio-economic systems has increased the need for new analytical tools to better understand and take stock of potential loss and damage.
- Improving capacity to develop 'foresight'-based tools and products will be increasingly important as a means to pre-empt and avoid loss and damage.

Figure 1 – Example Scenario Building Exercise



- 5. INCREASING TRADE-OFFS and DIMINISHING ADAPTATION POTENTIAL: The degree to which adaptation interventions both in place and in the 'pipeline' can be seen as possible, viable, and sufficient in the context of long-term climate disruption for many Pacific Island countries remains unclear.9
- Financing for loss and damage will require concerted efforts to better understand loss and damage through the integration of science and multi-dimensional analysis into the formulation of needs assessments.
- Adaptation measures may increasingly be required to require decisions on difficult trade-offs and incorporate some degree of unavoidable residual loss and damage. In many highly vulnerable contexts, there is increasing awareness of circumstances where despite adaptation progress, there will be losses that cannot be avoided irrespective of the value and effectiveness of the overarching adaptation approach.

 The understanding of the inherent trade-offs between the dimensions of 'risk', 'equity', 'time', and 'participation' have been identified central to the discipline that underpins disaster risk reduction and broader resilience building efforts.

⁹ Klock and Nunn, Adaptation to Climate Change in Small Island Developing States, 2019

Figure 2 – A Typology Framework of Trade-Offs (Tuhkanen, et Al 2018)

Trade-Off Dimension and Definition	Examples of Trade-Offs and How They Were Constructed	Examples of Key Questions to Explore Each Dimension
Aggregation: The aggregation of development and DRR gains and losses	 Competing needs vs. DRR [34] (E) Economic gain vs. DRR [39] (E) 	 What are the goals and needs, and how are they defined? What are the losses, and are they anticipated? How are gains and losses measured or quantified?
Risk: The prioritisation of risks when seeking to reduce multiple risks	 Reducing one risk vs. another risk [62] (E) Individual DRR vs. general system resilience [47] (E) 	 What are the known risks (hazard and non-hazard related)? How are individual risks interrelated and linked to general system resilience? How is managing/reducing risks prioritised? What are the underlying assumptions of (multi-) risk assessments?
Equity: The equity of decision-making processes and outcomes	 Equity vs. equality [65] (E) Equity vs. efficiency [66] (E) Market led economic development vs. resilience [62] (E) 	 How equitable is the distribution of expected/desired gains and anticipated losses? To what extent are impacts on vulnerable and/or marginalised groups in society explicitly considered? To what extent does the economic development pathway influence equity and resilience?
ime: The balancing of near nd long-term goals, costs, nd benefits	 Pursuing short-term vs. long-term aims [15] (I) Immediate disaster response vs. intervention risk management [76] (E) 	 What time-frames for goals, costs, and benefits are being considered and what takes priority? What are the potential impacts beyond the time-frame? How compatible are short- and long-term goals, gains, and losses? How compatible are proactive and reactive plans and goals? Are future costs and benefits appropriately discounted?
articipation: The istribution of articipation and power	 Cooperation vs. competition [40] (E) Resource-efficient participation vs. effective participation [79] (I) Participation vs. decision-making power [6,85] (C) 	 How participatory and collaborative are key processes? How is decision-making power distributed? How are those who stand to directly gain and lose engaged? What transparency, accountability, monitoring and evaluation mechanisms are in place?

Key Issues and Framing for Pacific Island Countries

Climate science and recent projections show that losses are now 'baked in' to any and all scenarios especially for Pacific Island Countries who will suffer high losses in any and all current climate change scenarios. IPCC reports confirm the scale of potential losses that small island states will need to endure irrespective of actions taken over the next decade due to 'climate inertia'. The science requires PSIDS to increasingly prepare for threats that have potential to exceed the limits of adaptation and pose an unacceptable existential threat to Pacific societies. The magnitude of these loss and damage scenarios must now be addressed under the Paris Agreement, which to date, has focused more on efforts to prevent loss and damage (avert / minimise, mitigation / adaptation) than on efforts to address loss and damage.

At COP27, UNFCCC Parties agreed to establish a dedicated fund and funding arrangements for loss and damage. While mitigation and adaptation priorities and challenges remain, this commitment creates opportunity to increase the support required to address the impacts and tipping points that are occurring and will continue to occur at a national and local level. The linkage between science, foresight, and unavoidable baseline losses – suggests there is major benefit to introducing systems to managing these losses prospectively, and to do so, the voice and perspective of Pacific Island Countries will continue to be critical.

Ensuring the Pacific's Context and Needs Can be Understood and Accounted For

Loss and damage must be understood and defined by contextual circumstances: Loss and damage must be defined primarily by the context in which loss and damage occurs. Any action must, at the fore, be defined by what can be lost or damaged in a particular context. The specific scope of loss and damage is unlikely to benefit from a standardised definition but instead must be shaped from the national level upwards and confirmed through a process that has potential to integrate contextual factors and localised implications into the considerations and modalities of support. Due to the uniqueness of many Pacific contexts, cultures, and social norms, it is imperative that Pacific experiences of loss and damage are understood and recognised.

With the intrinsic and systemic challenges faced in relation to the access to, availability, and effectiveness of climate finance considered against the backdrop of rising climate change impacts and global market volatility, the Pacific's exposure to ongoing and escalating loss and damage is unquestionable. The requirement to manage loss and damage increasingly alongside the costs of feasible adaptation interventions (and ongoing development costs) is not a question of 'if' but a question of 'to what degree'.

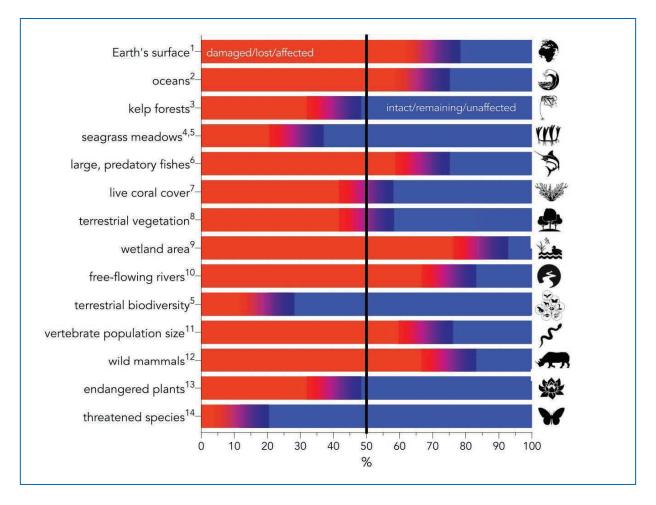
While there are various messages that are important for Pacific Island Countries to communicate there are particular issues that Pacific Parties have often provided the most credible experiences of. Three key examples are provided below:

1. High Socio-ecological Integration and Non-Economic Loss and Damage:

Because Pacific cultures are highly dependent on their natural environment and associated ecosystem services, Pacific cultures and traditions remain very much intact and dependant on these nonmonetized systems of value. The damage to Pacific environments has severe socioeconomic and cultural implications due to the high degree of integration that continues even as development continues in the modern Pacific. Once lost, these systems cannot be adapted or revived easily. They also cannot be quantified, negating the potential to use pure economic methods such as insurance to buffer losses. Instead, when these losses occur due in part to exceeded natural thresholds and limited global action – the loss is difficult to quantify or compensate.

However, the need for targeted support to create alternatives, memorialise loss, fund planned retreat, and rehabilitate communities and cultural practices will continue to be pronounced. While direct monetization of non-economic losses is neither possible or appropriate, the high dependence and reliance on non-economic value that is being eroded by climate change will create increasingly non-linear and disruptive outcomes unless safety nets are developed and financed alongside adaptation initiatives.

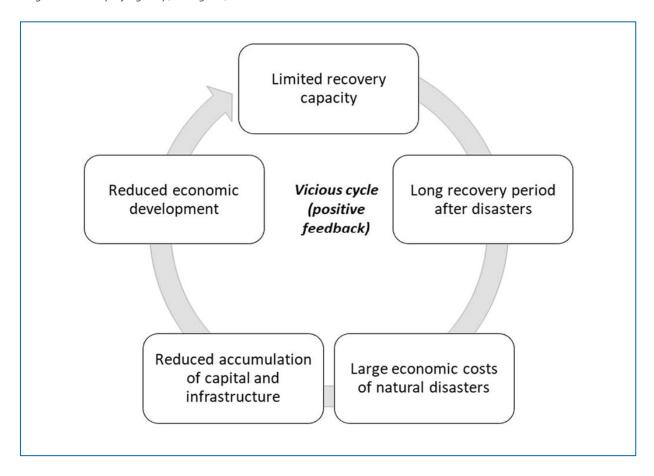
Figure 3 - Summary of major environmental-change categories expressed as a percentage change relative to the baseline - (Bradshaw et al. 2021).



2. The vicious cycle of loss arising from the confluence of slow and sudden onset events is crippling Pacific Island Countries: PSIDS are continually faced with the problem of limited resources, competing interests, fragmented revenue streams, and increasing financing needs. This scenario weakens investment in long-term resilience building. Without additional financing to address loss and damage, public expenditure required to address these urgent issues is likely to drive up debt, slow development, and ultimately lead to higher degrees of loss and damage in the future. A common concept in the field of disaster risk management known as the 'amplifying loop' is of value to this perspective and assertion.

This dynamic has been prominent over the last three years as Pacific Island countries have faced the need to respond to disaster events, keep pace against climate change adaptation needs, and deal with global market volatility, all while dealing with the disruption of COVID-19, and the various related direct and indirect impacts on national debt.

Figure 4 The Amplifying Loop, Hallegatte, 2014 modified¹



¹ Banica, Alexandru, Kourtit, Karima - Nijkamp, Peter PY - 2020/08/18 SP - T1 - Natural disasters as a development opportunity: a spatial economic resilience interpretation VL - 40 DO - 10.1007/s10037-020-00141-8 JO.

3. Pacific island countries face direct threats to human security and national sovereignty: Climate change-induced sea level rise (SLR) and its multitude of implications for Pacific Island countries which are experiencing SLR at a rate that is higher than global averages are often managed through coastal interventions that involve complex trade-offs and offer high potential for maladaptation. Sea level rise is just one of a range of impacts that Pacific islanders must grapple with. In some cases, the confluence of these impacts will require relocation, internal-migration, and in some cases, cross border migration. The Pacific's vulnerability to climate change, raises

legal questions around sovereignty, human-rights, and the demarcations between what is understood as adaptation and what is seen as addressing loss and damage. It is important for the Pacific to communicate awareness and experience with circumstances which are not easily considered within the definitions and scope provided through existing definitions. Addressing loss and damage in the Pacific requires recognition of the need for legal protections and legal support to create solutions to emergent issues around identity, sovereignty, property rights, and global responsibilities.

CMIP6 - Sea level rise (SLR) Change meters - Long Term (2081-2100) SSP3-7.0 (rel. to 1995-2014) – Annual Regions: South Pacific Ocean [IPCC, 2022]

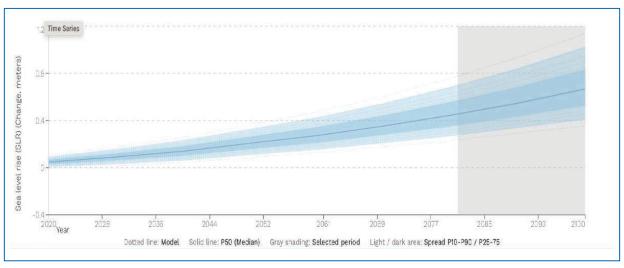


Figure 5 - Source - Reliefweb.int - from SPREP 2022

Tuvalu's Innovative Contingency Plan To Address Scientific Predictions Of Being Uninhabitable By 2050 🔋 News and Press Release • Source: SPREP • Posted: 15 Nov 2022 • Originally published: 15 Nov 2022 • Origin: View original 🗗 BY SOSIKENI LESA Primary country: Tuvalu 14 November 2022, Sharm el-Sheikh, COP27 - In another first for the world, the island nation of Tuvalu has embarked on a national contingency plan to preserve and protect its statehood and sovereignty, in the event it becomes uninhabitable by 2050. Secretariat of the Pacific Regional **Environment Programme** It's not waiting for climate finance from loss and damage or any other climate finance mechanism to fund its plan that will likely see the Pacific island exist virtually and online for its Format: people's displaced by climate change and rising sea level. News and Press Release Through the Rising Nation Initiative, Tuvalu's Finance Minister Seve Paeniu is promoting the new plan that protects the island nation's maritime boundaries through a Constitution amendment. Climate Change and Environment /

Avoiding Narrow Modalities for responding to Loss and Damage. Problems with 'Risk Transfer' and Insurance

The cost of residual damages from climate change and resulting losses is rising and is expected to exceed \$1 trillion USD by 2050 (using conservative estimates)¹⁰. Under a high ambition mitigation scenario there is potential to curtail this trend, however the window to effectively minimise losses and damages in the Pacific is highly constrained in many contexts and adaptation strategies remain under-developed. In cases where loss and damage is anticipated, due to exposure to traditional forms of risk and disasters, risk transfer mechanisms such as insurance have been often touted as the most effective solution for managing unavoidable risk.

The historical focus on conventional insurance mechanisms, as the main conceptual 'financing mechanism' for loss and damage, has delayed action to establish more dynamic and responsive financing solutions. The Pacific has, in part due to high levels of non-economic loss and damage, struggled to benefit from these mechanisms. The potential for market-based instruments, contingent financing arrangements, and other forms of disaster risk financing to 'address' irreversible loss (such as land-loss, ecosystem, and economic sector collapse) is highly limited. In some cases, risk financing instruments such as contingent and concessional loan-based instruments can instead serve to drive up potential for debt distress and rarely are designed to provide support beyond the traditional responseto-recovery continuum. While some Parties may seek to utilise the establishment of new funding arrangements and the dedicated Fund for loss and damage to reduce the cost of insurance and create more concessional arrangements for developing countries, these solutions are unlikely to offer the Pacific credible means to offset loss and damage due in part to the nature of the risks the Pacific faces.

Many insurance-based instruments function under the assumption of 'recovery' being possible if compensation is made available. These arrangements often focus on a linear progression from a specified event to response, recovery, and reconstruction. This linear approach may support recovery from extreme weather events to some degree but is highly limited in its offering for contexts facing irrecoverable losses and a confluence of both slow and sudden onset impacts from climate change. Similarly, insurance-based instruments, bonds, and other instruments are premised on economic models that, by design, support investment interests and can only be maintained and function in the marketplace if they are profitable. While these instruments will continue to play an increasing role in disaster response and economic resilience building across various sectors and national contexts - this economic dynamic does not lend itself well to the circumstances in which PSIDS face irrecoverable losses.

A recent study conducted by the prominent researcher specialising in insurance instrument applications and concepts, JoAnne Linneroth-Bayer concluded that:

Beyond costs and benefits, a main message is that if no significant intervention is undertaken in their designand implementation, market-based insurance mechanisms will likely fall short of fully meeting WIM aspirations of loss reduction and equitable compensation¹¹

This assessment illustrates the fundamental design challenges involved with reconfiguring traditional insurance concepts to suit the scale and depth of climate change-induced loss and damage in the Pacific. It will continue to be important for the Pacific to communicate examples of the way in which slow onset events, changes to environmental conditions and patterns, coupled with disaster events conspire to create systemic losses that are not always directly attributable to a singular 'trigger' or 'event'.

¹⁰ https://pure.iiasa.ac.at/id/eprint/14506/1/2019_Book_LossAndDamageFromClimateChange.pdf

¹¹ https://link.springer.com/chapter/10.1007/978-3-319-72026-5_21

3. Addressing Broader Questions Around the Reform of Development Finance

In the lead up to COP27, the call to reform global financial systems and move beyond post-World War II ideologies and systems in light of increasing transboundary risks¹² reached fever pitch¹³. Within this rising call, Pacific nations play a key role in defining the case studies, financial mechanisms, and priorities which need to be incorporated into the overarching rationale needed to push forward practical and effective reform within international financing arrangements more generally. The high incidence and potential for Pacific SIDS to experience increasing climate change-driven loss and damage requires fundamental changes to development planning and decision making to ensure development outcomes are risk-informed, minimise loss and damage, and in so doing-reduce the scale of the loss and damage that must be addressed over the long term. Gaps, duplications, and inefficiencies within existing climate financing frameworks are therefore having an overweighted impact on PSIDS development outcomes. Incorporation of loss and damage as a third pillar of the climate financing regime provides an opportunity to re-assess the financing landscape in part to help confirm and ensure additionality, improve coordination, and accelerate actions required to improve complementarity and effectiveness.

Targeted and urgent actions can be financed in a timely and effective manner, only if prioritisation and responsiveness of development financing and climate financing is improved. Existing studies have estimated that 'economic' residual damages experienced by developing countries could exceed USD\$500bn annually by 2030. Though only an approximation – this estimate, which does not include the scale of non-economic loss and damage is purely indicative of the scale of disruption expected and the need to ensure financing mechanisms are designed and directed towards the full range of financing needs which will define our shared future.

Over and above the estimates for loss and damage, the Organisation for Economic Co-operation and Development (OECD) estimates indicate that about 74% of climate finance comes in the form of loans. ¹⁴ Furthermore, countries vulnerable to the climate crisis are often charged more to borrow because of their climate vulnerability, which lenders argue makes the loan riskier. This is essentially punishing lower income countries for their climate vulnerability. Higher interest rates based on climate vulnerability are predicted to cost the most vulnerable countries USD\$168bn over the next decade. ¹⁵

SOURCE	ESTIMATED COST BY 2030	
DARA (2012)	~\$4 trillion	
UNEP's Adaptation Gap Report (2014)	~USD\$50bn per year by 2025/ 2030	
Baarsch et al. (2015)	~USD\$400bn in 2030	

¹² https://www.iddri.org/sites/default/files/PDF/Publications/Catalogue%20lddri/Etude/202111-ST0921-Coastal%20Migration.pdf

¹³ https://www.devex.com/news/devex-invested-at-cop-27-calls-to-reinvent-the-global-financial-system-104375

¹⁴ oecd.org/newsroom/climate-finance-for-developing-countries-rose-to-usd-78-9-billion-in-2018oecd.htm

¹⁵ ft.com/content/18103b92-7ae6-11e8-bc55-50daf11b720d 33



Calls for re-organising the global multilateral system must consider small island developing states and the transboundary risks they face, to prevent a future burden on advanced economies and taxpayers. It is therefore understood that effective action to address loss and damage must in part be complemented by broader reforms needed to ensure more equitable development outcomes are possible.

Similarly, climate change focused funds and funding modalities – such as the Green Climate Fund, bilateral climate financing arrangements, arrangements offered by multi-lateral development banks are not seen as appropriate structures to retrofit to include capability to address loss and damage in a sensitised way. Managing loss and damage is likely to entail difficult trade-offs which require contextually responsive measures that are unlikely to fit with the standardised requirements dictated by existing arrangements. These systems are unlikely to be easily adapted to the complexities of loss and damage especially if loss and damage is expected to be included as an additional dimension rather than as an institutional focus and specialty.

Selected Pacific Loss and Damage Scenario Examples

Recent assessments have suggested that previous science on the potential future impacts of climate change on PSIDS have underestimated scale of the potential risk¹⁶ and especially in relation to sea level rise. A growing body of research presents the view that Pacific nations will be best served if they prepare for worst case scenarios. This view is in part influenced by 1) current science and projections, 2) the state of global climate ambition, and 3) insufficient access to transformative levels of adaptation financing. A range of different broad loss and damage scenarios of relevance to PSIDS have been presented and considered through loss and damage negotiations and broader adaptation-related programming. A selection of broad loss and damage issues and scenarios are presented below:

Loss of Sectoral Productivity: Pacific Island state economies are highly dependent on the productivity of sectors that are highly exposed to climate change risks. The Pacific's fisheries, tourism, and agriculture sectors have continued to report volatile revenues due to both specific disaster events and systemic climate change impacts. The prospects for these sectors are increasingly of concern. For example - warming sea surface temperatures and the resulting, potentially irreversible depletion of Pacific tuna stocks. Over 1.7 million metric tons of skipjack tuna were caught in the Pacific in 2020, worth USD\$2.45 billion¹⁷ and with an end value of close to USD \$10bn based on an the estimated 4x multiplier effect as calculated in 2018. This potential is now under threat. Skipjack tuna caught in the western and central Pacific region account for 35% of the world's total commercial tuna catch. This important sector being threatened by climate change, as seen in Figure X below showing projected change

This direct relationship between climate trends and tuna stocks is a prime example of a sector wide opportunity cost and direct economic loss that will have major impacts on the Pacific region's economic stability and autonomy. This dynamic has been clearly underlined by a synthesis report¹⁸ on the impacts of climate change on fisheries and agriculture by the Food and Agriculture Organization (FAO) which documents the projected changes in tuna distributions as a result of climate change. Global warming is likely to affect food webs that are supporting key tuna species, and very likely to cause changes in distribution and abundance of tuna by 2050 under a business-as-usual emissions scenario. By 2040 under a climate scenario commensurate with RCP 8.5 the mean catch potential in the southwest Pacific is likely to be reduced by over 100% based on current mean catch potential. Redistribution of tuna is very likely to affect license fee revenues from purseseine fishing and shift more fishing into international waters (Figure below)19. Harvest strategies will need to account for changes in distribution and abundance that result from climate change.

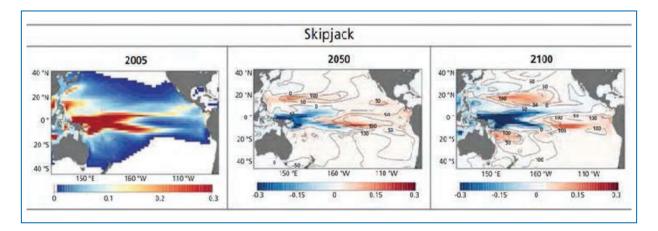
¹⁶ Storlazzi, C. D. & et Al., 2018. Most atolls will be uninhabitable by the mid-21st century because of sea- level risk exacerbating wave-driven flooding. Science Advances, 16 September, pp. 1-9.

¹⁷ Netting Billions 2020: A Global Tuna Valuation Report, October 2020. The Pew Charitable Trust.

¹⁸ FAO. 2018. Impacts of climate change on fisheries and aquaculture: Synthesis of current knowledge, adaptation, and mitigation options. http://www.fao.org/3/19705EN/i9705en.pdf. (Referenced in the Asian Development Bank Pacific Economic Monitor, December 2021).

¹⁹ Average historical (2005) distributions of skipjack (Mt/km2) in the tropical Pacific Ocean, and projected changes in biomass of the specie relative to 2005 under the RCP8.5 emission scenario for 2050 and 2100, simulated using SEAPODYM. Isopleths in the projections for 2050 and 2100 represent the relative percentage change in biomass caused by climate change.

Figure 6 – Change in Biomass overtime – coloured areas represent the relative percentage change in biomass (Source: Asch, et al, 2018)



Sea Level Rise, Land Loss, and Threats to Sovereignty.

A rise in sea level of 50cm in the Republic of the Marshall Islands is expected to result in the loss of 80% of the habitable land of Majuro Atoll, which is home to around 70% of RMI's population. Current sea level rise projections which will likely result in 1m of sea level rise above the preindustrial average in the coming decades suggest that 40% of the buildings in Majuro would become permanently flooded (Source: World Bank, 2021). In Tonga, sea level rise projections suggest significant risk for the island nation which could jeopardise the functionality of much of Tonga's economy especially when considering the combined impact of sea level rise projections and the impacts of disaster events such as cyclones.

 Rising sea levels pose risks to Pacific sovereignty and require collaborative efforts to address the legal, political, environmental, social, and economic implications of different potential climate change projections and impact scenarios.

- The role of slow onset events in triggering displacement and time scales involved varies between PSIDS, however the potential scale and risk is clear and is evident in the increasing direct policy responses put forward by Pacific Governments.
- Loss and damage arising from sea-level rise directly as well as due to the indirect impacts of sea level rise (impact on tourism, agriculture, food prices) paired with increased extreme weather events, increased sea surface temperature / ocean acidification, etc have direct implications for human well-being and security in small island developing states.

Erosion of Sustainable Development Potential and the Increasing Risk of Debt Distress. Many Pacific Island Countries have documented reduced progress against the Sustainable Development Goals (SDGs) and cited rising costs due to disaster events, COVID-19, reduced agricultural yields, and rising debt burden

- The aggregate external debt of the V20 Group was calculated at \$686.3bn USD in 2021 (V20 Secretariat 2022) and 13 of the V20 countries were classified as 'debt-distressed' or at 'high-risk' of debt distress.
- The multi-faceted and complex implications of climate change impacts are impacting sustainable development progress in the Pacific and the Economic and Social Commission for Asia and the Pacific (UNESCAP) reported that the Pacific subregion is not on track to achieve any of the 17 SDGs by 2017²⁰
- The Asia-Pacific region overall has only achieved 14.4% of the progress needed for SDG achievement by 2030. UNESCAP has in part attributed the extreme deficit in progress to the fact that many Asia-Pacific countries are 'acutely affected' by climate change'²¹
- Rising debt burden, increased competition over public funds, and volatile revenue streams are also increasing the potential for maladaptation and other secondary implications which can have a regressive impact on Pacific development objectives.

SCIENCE ADVANCES | RESEARCH ARTICLE

OCEANOGRAPHY

Most atolls will be uninhabitable by the mid-21st century because of sea-level rise exacerbating wave-driven flooding

Curt D. Storlazzi, ^{1*} Stephen B. Gingerich, ² Ap van Dongeren, ³ Olivia M. Cheriton, ¹ Peter W. Swarzenski, ⁴ Ellen Quataert, ³ Clifford I. Voss, ⁵ Donald W. Field, ⁶ Hariharasubramanian Annamalai, ⁷ Greg A. Piniak, ⁶ Robert McCall ³

Sea levels are rising, with the highest rates in the tropics, where thousands of low-lying coral atoll islands are located. Most studies on the resilience of these islands to sea-level rise have projected that they will experience minimal inundation impacts until at least the end of the 21st century. However, these have not taken into account the additional hazard of wave-driven overwash or its impact on freshwater availability. We project the impact of sea-level rise and wave-driven flooding on atoll infrastructure and freshwater availability under a variety of climate change scenarios. We show that, on the basis of current greenhouse gas emission rates, the nonlinear interactions between sea-level rise and wave dynamics over reefs will lead to the annual wave-driven overwash of most atoll islands by the mid-21st century. This annual flooding will result in the islands becoming uninhabitable because of frequent damage to infrastructure and the inability of their freshwater aquifers to recover between overwash events. This study provides critical information for understanding the timing and magnitude of climate change impacts on atoll islands that will result in significant, unavoidable geopolitical issues if it becomes necessary to abandon and relocate low-lying island states.

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²⁰ UNESCAP – Asia and the Pacific SDG Progress Report 2023

²¹ UNESCAP – Asia and the Pacific SDG Progress Report 2023

Figure 7 - Dashboard of expected SDG achievements for the Pacific region (UNESCAP 2023)



Conclusions

PSIDS are highly exposed to the implications arising from the divergence between the Paris Agreement's goals, the aggregate potential influence of national commitments, and current and projected global emissions trajectories. The failure to increase ambition and meet existing financing targets is exacerbating and accelerating loss and damage and the potential for future loss and damage across Pacific Island societies.

PSIDS provide clear examples of the need to improve *conceptual* integrity and coherence across the various workstreams, negotiation areas, and modalities of the UNFCCC climate regime. The recent surge in global engagement around the need to address loss and damage through new financing flows has created the basis for improved conceptual integrity needed to understand the connection between first order mitigation action, its relationship to adaptation needs, and the limits at which loss and damage must be pre-empted and addressed. Loss and Damage must, not only be addressed through a new dedicated fund or broad commitment to create new funding arrangements- but be fully integrated as the third pillar of climate financing.



Introduction

Failure to ramp up mitigation efforts and drive adequate levels of financing into effective adaptation outcomes has resulted in an increasing and pronounced risk of overshooting the 1.5-degree Celsius guardrail, an ever-increasing climate 'financing gap', and a dramatically rising need for financing arrangements that specifically 'address loss and damage'.

The concept of 'averting, minimising and addressing' loss and damage can be disaggregated into three separate but related assumed references. Mitigation activities seek to reduce the root causes / drivers of climate change, which are often framed and understood as actions to 'avert' loss and damage. Adaptation activities which seek to manage and mitigate exposure to climate change impacts and reduce potential for loss and damage are often framed and understood as actions to 'minimise' loss and damage. When loss and damage has not been averted or minimised – actions to 'address' loss and damage are then highly likely to be required.

With this understanding and set of relationships in mind the direct reference to 'loss and damage' in the context of climate change and the UNFCCC refers broadly to climate change impacts that are not averted or minimised through mitigation and adaptation actions and in such cases, the need to 'address' irreversible instances of loss and damage becomes an imperative.

For Pacific Island Countries, the relationships between mitigation, adaptation, disaster, risk management, adaptation limits and ultimately existential risk is integral to ensuring the full spectrum and scale of risk is understood and considered under the UNFCCC and its associated mechanisms.

The Alliance of Small Island States (AOSIS) proposals related to loss and damage have been introduced as early as 1991 and in the first instance by Vanuatu. The concept of loss and damage was referenced in the 2007 Bali Action Plan and gained further footing in negotiations through the work program on loss and damage which was established at Conference of the Parties (COP) 16 (2010), and the later agreement to establish institutional arrangements for loss and damage at COP18. In 2013, at COP19, the Warsaw International Mechanism on Loss and Damage (WIM) was established, and its Executive Committee produced the first WIM work plan in 2014.

These incremental steps to recognize loss and damage over this 15-year period cleared the landing zone for the inclusion of language on loss and damage under Article 8 of the Paris Agreement in 2015. While this inclusion was seen to have significance, treatment of loss and damage remained limited to the scope and capacity of the WIM. The WIM review conducted in 2016 illustrated the limitation of this mechanism and disjunction between its mandate and its capacity to deliver meaningful support.

At COP23, the Least Developed Countries (LDCs) and the AOSIS requested further integration of loss and damage in the activities of the Subsidiary Bodies²². The Fijian COP23 presidency worked with AOSIS and LDCs to support additional progress in bringing loss and damage into focus within mainstream political dialogue. The agreement to conduct a 'Suva expert dialogue on loss and damage associated with climate change impacts' ahead of COP24 was achieved despite strong push-back from developed countries. This dialogue was held in Bonn in August 2018 and resulted in a report which provided various recommendations including a broad statement on the need to develop further clarity and specificity in relation to loss and damage:

'Further clarity and specificity on what it means to avert, minimise and address loss and damage associated with climate change impacts can facilitate the mobilisation of relevant and most appropriate information, data, knowledge, expertise, technology, capacity-building and finance, to respond to the emerging needs of developing countries in managing residual climate impacts in the future'.

[Report of the Suva Expert Dialogue, 2018]

This statement served to highlight the range of needs associated with loss and damage along with the importance of further articulating the array of support required to manage loss and damage moving forward. Questions around the adequacy of financing for residual risks were raised in 2016 resulted in the realease of a technical paper by the UNFCCC Secretariat entitled 'Elaboration of the sources of and modalities for accessing financial support for addressing loss and damage'. The report concluded that:

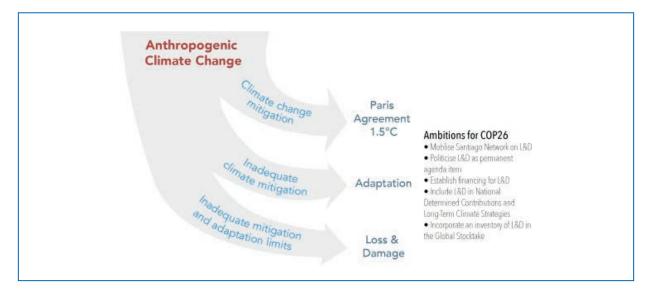
'Currently no dedicated financial instrument that explicitly aims at supporting transformational approaches has been reported in the context of addressing loss and damage.'

At COP25 in Madrid, agreement was made to establish the Santiago Network on Loss and Damage (SNLD) under the Warsaw International Mechanism. The purpose of this mechanism was described in 2/CMA.2 and 2/CP.25 as being a means to 'catalyse technical assistance' to support 'the implementation of relevant approaches'.

COP26 took place in October and November 2021, delayed by a year due to the global pandemic and convened against the backdrop of dramatic economic disruption and increasing climate-related disaster events. This created a staging ground to further address the disjunction between Paris Agreement targets, party ambitions, rising global emissions, and ongoing investment in fossil fuel subsidies and coal-fired power plants. The gaps and divergence between global targets and action provided further rationale for advancing dialogue around the governance of 'loss and damage'. As depicted in the graphic below – the need to address loss and damage due to the failure to deploy financing for mitigation or adaptation put further pressure on Parties to review and re-engage on the concepts of loss and damage along with existing governance mechanisms under the UNFCCC.

²² Under the Convention (UNFCCC) there are two permanent subsidiary bodies. The Subsidiary Body for Implementation (SBI) oversees all implementation issues under the UNFCCC, Kyoto protocol and the Paris Agreement, while The Subsidiary Body for Scientific and Technological Advice (SBSTA) is responsible for the provision of timely information and advice on scientific and technological matters.

Figure 8 - Boyd et Al, 2021, Loss and Damage from climate Change: A new climate justice agenda, One Earth V4 Issue 10, PP 1365-1370



While COP26, and the work of the UK Presidency, helped to shift the narrative on loss and damage from taboo to dialogue, failure to advance loss and damage priorities and agree on a means to address rising financing related gaps and issues, resulted in the Presidency including the concept of a 'Glasgow Dialogue' on financing for loss and damage in the final text of the Glasgow Pact. While the dialogue was criticised as being an insufficient effort to placate the call from many developing countries for a financing facility for loss and damage, the agreement to convene this dialogue was indicative of growing momentum to address the issue.

The first iteration of the Glasgow Dialogue transpired in Bonn during the 56th sessions of the UNFCCC Subsidiary Bodies held in June 2022. During the associated sessions of this dialogue, Pacific Island Countries (PICS) worked collaboratively to present examples and experiences dealing with climate change driven loss and damage, in many cases, illustrating the irrecoverable losses associated with sea level rise, biodiversity loss, and ecosystem collapse.

Given the lack of progress made to operationalise the Santiago Network ahead of COP27 and the call to establish a financing facility for loss and damage, a proposal was put forward by AOSIS, the G77, and China (a block representing 6 of every 7 people globally), on the need for an agenda point on Loss and Damage under matters relating to finance Along with increasingly extreme climate and disaster driven damage dominating global headlines, the UNFCCC secretariat put forward a provisional agenda point on loss and damage ahead of COP27.

Pacific Advocacy for Loss and Damage at COP27

At COP27 in Egypt, PSIDS rallied around the call within AOSIS and the wider G77 for a decision to establish a dedicated fund for loss and damage financing. While PSIDS are particularly vulnerable to climate change risks and face unique loss and damage scenarios, the Pacific supported an inclusive approach to the loss and damage financing negotiations in alignment with the G77. The PSIDS based their call for a loss and damage fund on a set of key assumptions, messages, and evidence – which can be summarised as the following:

- a. That loss and damage is a consequence of the failure to ramp up mitigation (averting loss and damage) and adaptation (minimising loss and damage) financing and actions.
- b. That existing financial mechanisms established under the UNFCCC such as the Green Climate Fund (GCF) may have potential and growing policy pressure to help 'address' elements of loss and damage but will be unlikely to be institutionally able (due to donor preferences and expectations) to direct the scale of expertise, attention, and policy reform required to fund high trade-off issues. The GCF continues to prefer criteria and thematic focus on established or emergent solutions which do not involve difficult trade-offs, environmental, social and governance (ESG) risks, or complexities that require high levels of contextual sensitivity to be assessed and understood.

- c. That the need for additional financing to address loss and damage is not proposed or understood as a 'blank cheque' approach from which to price compensation for all climate impacts. Rather, that loss and damage financing, like financing for adaptation or mitigation will be targeted at nationally determined priorities and needs.
- d. That the call for loss and damage financing must also not be interpreted as acceptance of failure to achieve the global temperature limitation goal and that loss and damage financing must be distinct and additional to mitigation and adaptation financing.
- e. That no singular fund under the UNFCCC is expected to provide a complete financial solution to loss and damage and that a spectrum of arrangements will need be considered and linked to the central fund.



The COP27 Decision on Financing for Loss and Damage

COP27 Decision 2/CP.27 entitled 'Funding arrangements for responding to loss and damage associated with the adverse effects of climate change, including a focus on addressing loss and damage' was hard won, following fraught negotiations between developed and developing country parties in Egypt. The decision title is footnoted with the following text 'This item and the outcomes thereof are without prejudice to the consideration of similar issues in the future'. This clarification reflects an effort to ensure the decision is bounded by its context and within the circumstance of a compromise and is not to be interpreted as reflective of the agreement of views that can be referenced out of context. This text helps to resolve the impasse around concepts of liability and compensation on which parties do not agree.

Similarly, the preamble of the decision reflects compromises made through statements of urgency in addressing loss and damage and recognition of overall shortfalls in financing action. This is balanced with a general recognition of existing financing activities, including new initiatives such as the 'Global Shield against Climate Risks'. Footnotes in the Decision also provide welcome reference to IPCC reports as well as historical dialogues on loss and damage (including the Suva Expert Dialogue) which help to contextualise the decision alongside information on the agenda point adopted at COP27.

 Paragraph 1 provides the formal 'acknowledgement' by all Parties of the issue the decision addresses which in its entirety is important for the Pacific as a reference and precedent under the UNFCCC:

Acknowledge the urgent and immediate need for new, additional, predictable, and adequate financial resources to assist developing countries that are particularly vulnerable to the adverse effects of climate change in responding to economic and non-economic loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events, especially in the context of ongoing and ex post (including rehabilitation, recovery, and reconstruction) action.

A key word in this paragraph which was fought for in response to Pacific needs is the word 'ongoing' which helps to ensure that the concept of loss and damage financing is not constrained by the traditional disaster risk financing concepts of 'exante and ex-poste' financing.

- Paragraphs 2 and 3 are arguably the most significant paragraphs to land within the decision text despite the significant concessions that were required on both sides. Here, parties 'decide' to 'establish new funding arrangements' as well as decide as part of that overarching decision to establish a 'fund'. This decision reflects a hard line taken by AOSIS and the G77 on the need to secure a political decision to create a new fund at COP27 rather than a process to arrive at a decision to do so.
- Paragraph 4 creates the modality for delivering the decisions in paragraphs 2 and 3 which is the establishment of a 'transitional committee'. The concept of a transitional committee draws directly on the precedent of the Green Climate Fund which was established through the same mechanism. The committee is tasked with operationalizing the fund and its funding arrangements through recommendations to inform a decision that will be made at COP28. The ensuing paragraphs then describe the overarching mandate for the recommendations the committee will make and the elements it will consider in making those recommendations.

- Paragraph 5 sets out parameters for the recommendations the TC must provide to enable the operationalization of the 'Funding arrangements' and 'Fund' set out in Paragraphs 2 and 3. The recommendations, which are now the focus of the TC's work will provide guidance to COP28 intended to shape a decision for:
 - a. Establishing institutional arrangements, modalities, structure, governance and terms of reference for the fund referred to in paragraph 3 above;
 - b. Defining the **elements of the new funding** arrangements referred to in paragraph 2 above;
 - c. Identifying and expanding sources of funding;
 - d. Ensuring **coordination and complementarity** with existing funding arrangements;

This element of the decision clarifies the substance of what the TC must recommend.

- Paragraph 6 sets out an overview of the information that will inform the TC recommendations, namely:
 - The current landscape of institutions, including global, regional and national, that are funding activities related to addressing loss and damage, and ways in which coherence, coordination and synergies among them can be enhanced;
 - b. The gaps within that current landscape, including the types of gap, such as relating to speed, eligibility, adequacy and access to finance, noting that these may vary depending on the challenge, such as climate-related emergencies, sea level rise, displacement, relocation, migration, insufficient climate information and data, or the need for climate-resilient reconstruction and recovery;
 - c. The **priority gaps** for which solutions should be explored;
 - d. The most effective ways in which to address the gaps, especially for the most vulnerable populations and the ecosystems on which they depend;
 - e. Potential **sources** of funding, recognizing the need for support from a wide variety of sources, including innovative sources;

Paragraph 7 adds further requirements for platforms that will be used to inform those recommendations which will include two workshops held in 2023, the preparation of a synthesis report on existing funding arrangements and sources of financing relevant to loss and damage by the UN-FCCC secretariat, and an invitation for Parties and relevant organisations to submit views on the topics and format of these workshops. Paragraph 7 (d) also invites broader submissions from third parties on options for enhancing access/speed/ scope/scale of financing for addressing loss and damage. Further invitations for inputs and clarifications on process are provided in paragraphs 8-18 including specific invitations to the World Bank Group and International Monetary Fund to contribute to supporting the decision within their respective annual meetings and decision-making processes.

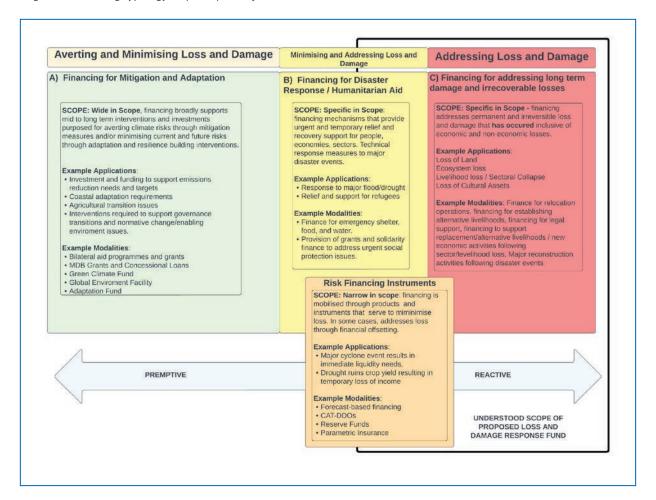
Differentiating loss and damage financing objectives from existing financing flows and typologies

The understanding of the existing 'gaps' in financing, 'priority gaps', existing 'sources' of financing, and the potential means to ensure 'coordination and complementary' between the new Fund and new Funding Arrangements with existing funds and arrangements requires a common understanding of the definitions used to differentiate between financing typologies and financing objectives. Financing deployed to address loss and damage must be additional to existing flows and classified in relation to other typologies of existing finance to which it must be delineated.

Delineation between financing typologies can be improved by organising financing objectives, modalities, applications, and scope around the concepts of 'averting', 'minimising' and 'addressing' loss and damage. This arrangement can be further clarified by the general differentiation between financing that supports 'pre-emptive' as opposed to 'reactive' measures. This articulation helps to show the relationships between objectives for which financing is purposed.

For example, financing to 'address' Loss and Damage is premised on the fundamental understanding that a loss has occurred, whereas funding to minimise or avert loss and damage is premised on there being existing potential to influence the scale of loss and damage. When addressing loss and damage - the modality is responsive and by default, deployed retrospectively after measures to pre-empt, limit, avert, and minimise a risk have failed. The decision taken at COP27 is inclusive of an understanding of the additional need to support efforts to further 'minimise' loss and damage as well as the fact that there are scenarios and financing objectives that serve to both 'minimise' and to some degree 'address' loss and damage. Therefore, the scope of the proposed 'fund', as demonstrated in the graphical depiction below by the black box representing the focus / scope of the proposed 'fund', would include a partial overlap with activities to 'minimise' loss and damage. Quickly deployed responses to sudden onset events, for example parametric insurance, could be considered to both minimise and address loss and damage due to the way in which the financing could be used to both prevent further risks (i.e. financing for anticipatory actions or use of funds to secure temporary security and provisions for vulnerable communities) and as a means to directly address financial losses (i.e. compensation that is then used to replace what is lost or repair what is damaged).

Figure 9 - Financing Typology Map, adapted (Fiji Government, 2022, revised 2023)



The depiction above highlights the different funding dimensions and their relationships while also, through examples, providing some clarity around the fundamental gaps that exist in relation to financing to 'address' loss and damage. For example, there are no clear modalities for addressing the loss of cultural assets or ecosystems (typology C) while there are clearly grants available to broadly support adaptation and mitigation objectives.

Crucial to ensuring sufficient structuring of intent and shared understanding of financing gaps is the further differentiation between economic and noneconomic loss and damage. The further required aggregation of needs and delineation of needs can be supported by the consideration of the different types of loss and damage that is experienced and must be accounted for. Broadly these areas can be understood as:

I. Economic Loss and Damage

Loss and damage that can be economically quantified using existing value systems and markets. Efforts to address economic loss and damage seek to provide financial protection. Economic loss and damage is understood through economic concepts such as 'rising uninsured losses', impacts on GDP, physical damage to assets and capital etc.

II. Non-economic loss and damage

Loss and damage experienced by individuals, societies, and environments as well as by specific cultures and communities that are not valued in markets.

III. Combined economic and noneconomic loss and damage

In some cases, the loss and damage scenario considered, will require the consideration of both economic and non-economic loss and damage and may be resistant to clear differentiation between the two. For example:

• Therelocation of communities and infrastructure due to slow and sudden onset events (physical insecurity) will require consideration of both the economic losses and costs involved as well as the way in which the potential solutions provided address both economic and non-economic loss and damage. In some cases, economic losses may be addressed through a solution that comes at the expense of non-economic value (loss of).

- Large scale threats to sovereignty and habitability (cross boarder migration, legal protections) will need to consider strategies that address both non-economic and economic loss and damage in an integrated fashion. Simply valuing the loss of a home and land on a Pacific Island as a means to provide equivalent economic compensation in the form of an economically comparable arrangement in a foreign country would fail to address the non-economic loss involved.
- Irrecoverable loss and damage to economic activities and sectors due to both fast and slow onset climate change impacts (agricultural decline, water security, ecosystem loss, loss of livelihoods) would require a more in depth understanding of lost value and consider an approach that considers a mix of both economic and non-economic factors when designing alternative options for those affected.

Failure of efforts to agree on a set of parameters to 'define climate financing' should provide some insight into the challenge involved with defining delineations between contextually construed experiences with climate change and the blurring that can occur between adaptation and the full spectrum of loss and damage that can be experienced as a result of climate breakdown. As a result, it is increasingly important to establish common views on financing typologies.

Figure 10 - UNFCCC 2019



Non-economic losses can be understood as the remainder of items that are not commonly traded in markets.

Simplified examples of the linkages between 'loss and damage scenarios' and relevant 'responses'

Drawing from an understanding of a set of example loss and damage scenarios, the dynamics of the associated need, and the resulting relevant response, the following table provides a means to consider a range of different ways in which loss and damage might be managed through differing financial instruments.

LOSS AND DAMAGE SCENARIO	DYNAMICS / NEED	RESPONSE EXAMPLE
		Pre-emptive - arranged Ex-Ante
Exacerbation of national debt due to large scale climate and disaster-related loss and damage and resulting burden on public financing	required quickly, deployed quickly, pre positioned	disaster clauses in loan agreements
Recovery from climate-induced disaster events and tipping points	required quickly, deployed quickly, pre positioned	low-cost parametric insurance to address short term residual losses
Exacerbation of human vulnerability due to confluence of slow and sudden onset impacts and events	required quickly, deployed quickly, pre positioned	Social protection arrangements and financing safety nets [resouces] positioned to address loss and damage when preventative actions fail.
		Reactive – arranged and deployed ex-post
Climate change exacerbation (slow onset) of sudden onset events	required quickly, deployed quickly, pre positioned	Addressing gaps in Humanitarian Assistance
Infrastructure Loss	required at scale, deployed mid- term	MDB Financing for Reconstruction
Irreversible damage to human habitats	required at scale, deployed mid- term	Community Recovery / Rehabilitation
		Deployed and Addressed on an Ongoing Basis
Escalating slow onset climate impacts	required through context- sensitive, design, deployed long-term	Use of national and regional instruments which seek to resource context-specific design of alternatives required as a result of un-adaptable impacts of slow onset evets
Addressing NELD associated with climate change impacts	required through context- sensitive, design, deployed long-term	Raising and allocating resources for the support of vulnerable communities
Addressing human displacement due to climate change impacts	required through context- sensitive, design, deployed long-term	Funding relocation and cross boarder migration

Primer – Translating Pacific Island Country Priorities into Recommendations

Broad summation of recommendations

- 1. A dedicated loss and damage fund must be designed in a way that is dynamic and sensitised to the differing circumstances in which loss and damage must be addressed.
- Pacific island countries understand financing for addressing loss and damage as fundamentally distinct from broader resilience-building and disaster recovery needs.
- 3. For many Pacific Island countries, irrecoverable losses due to climate change, require distinct activities (differentiated from adaptation interventions) that help to create viable and comparable alternatives when resources, infrastructure, ecosystems, economic sectors, and other elements of life are irrecoverably lost and permanently damaged by climate change impacts.
- 4. Complex loss and damage caused by transboundary climate change impacts require proactive national and localised efforts to respond to the needs of the most impacted.
- 5. Human and community-centred financing solutions must be context-defined, demand-driven and organised and legitimised by the oversight and legal mandate of national governments.
- 6. To ensure outcomes translate to alternatives and relief for the most vulnerable that are sustainable, appropriate, culturally sensitised, and fit for purpose, the design of disbursement arrangement should be nationally driven, and the role of the Fund and associated arrangements should be focused on the sourcing of financing to support national arrangements rather than on the evaluation of projects and dependence on a fixed donor replacement cycle.

7. Financing purposed to minimise and address loss and damage must be deployed primarily as grants, however, in some cases concessional loans may be required and purposed to achieve scale.

While no single instrument or arrangement will offer a comprehensive silver bullet for meeting loss and damage financing needs in the Pacific – financing must be deployed in a way that is:

- a. Defined by contextual needs and circumstances.
- Responsive to the scale of residual losses and long-term damage that is occurring and likely to occur.
- c. Sensitised to capacity constraints.
- d. Alerted to and considerate of existing debt burdens and public resource constraints.
- e. Aligned with existing development objectives of recipients.

Potential approaches for supporting recommendations from the Transitional Committee required by Decision 2/CP.27

The Fund

Terms of Reference

The value proposition of establishing the new loss and damage 'fund' supporting developing countries hinges on the ability of this fund to 1) create accessible funding for 'addressing loss and damage' in vulnerable countries and to 2) shape and scale up new and additional financing that is complementary to existing modalities and sources of funding. It is imperative that the terms of reference for the agreed fund reflect a central emphasis on these two core mandates.

Institutional Arrangements

The most vulnerable developing countries will fail to benefit from the proposed fund if it is not housed and resourced in a way that is appropriate and reflects the gravity of its mandate and task. The Transitional Committee will be responsible for shaping the institutional setup of the fund and in doing so must pre-empt the demand, capacity requirements, and practical institutional arrangements needed to ensure this fund is dynamic, accessible, and well capitalised by donor parties.

Modalities (Access)

Parties recognise the importance of including provision for rapid pay-outs and insurance-based protection financing through the fund but there remain concerns that these rapid mobilisations primarily reflect needs arising from sudden-onset disaster events. Imperative to the success of the fund is ensuring that the fund has a well-defined financial modality for supporting the structural loss and damage arising from long term slow onset events. Due to extreme exposure to slow onset risks and sudden onset events it is imperative that financing for loss and damage is conceived beyond the limited potential of insurance-based concepts and rapid pay-outs linked to time bound events. Modalities should be needs-based, demand-driven, and context-defined and provide the means to create predictable flows of financing for national arrangements designed to directly support the needs and contextual circumstances of the most vulnerable in society.

Access Eligibility

Due to the scale of global needs and differing views on the priorities the fund should focus on supporting, it is imperative that the fund is structured in a way that ensures equitable distribution of funds and is able to recognise the range and diversity of contexts and needs it must address.

Fund Structure

The fund should be structured in a way that is responsive to national / regional instruments, arrangements, and funds that are approved by the Fund

Governance of the Fund

Major emphasis on the rationale to create a new fund (rather than build loss and damage financing priorities into existing climate financing arrangements) has been the recognition of the need for a fund which is governed in a way that addresses the sensitivity and complexity of climate-induced loss and damage and the range of forms it will take in different contexts. The fund must deviate from existing funds which use standardised templates, eligibility criteria, predetermined assessment methods, and other 'one-size fits all' approaches to governing the disbursement of funding. The Board should be comprised of representation from all regions, have adequate representation from SIDS and LDCs to ensure representation of key regional groups and contexts. The split between developed and developing country parties will be contingent on whether or not the fund becomes an operating entity of the Convention and Paris Agreement (noting the requirement under Article 11.2 for entities of the financial mechanism to have equitable and balanced representation of Parties)



New Funding Arrangements

The commitment to create 'new funding arrangements' for minimising and addressing loss and damage creates further opportunity to complement existing arrangements and the mandate of the new fund. The discussion of 'new funding arrangements' is also linked to the question of 'sources' of financing and could provide the impetus to leverage innovative solutions outside the jurisdiction of the UNFCCC. For example, new arrangements could take the form of national/regional initiatives, new offerings from existing multi-lateral actors, the opportunity to improve market-based insurance offerings and/or risk pools, as well as an entry point for prompting international actions that could either directly support developing countries or provide new sources of financing for the new 'Fund'.

Sources of Financing

The question of 'sources' is crucial and the most controversial and will be key to the overall impact of the COP27 decision. An overview of examples of a range of sources that could be considered by Parties and key financial actors, include but are not limited to:

	Voluntary Donor Contributions
Voluntary	Decisions to create dedicated financing windows within existing mechanisms / financial institutions
	Bilateral partnerships and programmes
	Contributions from nationally determined taxes and levies
	Repurposing of fossil fuel subsidies
	Windfall taxes
Mitigation Linked	Debt Cancellation / Debt Relief
	Global phase out of fossil fuel subsidies
	Carbon taxes and levies
	Development of contribution requirements based on specific 'responsibility metrics'
	Taxes and levies on Shipping and Aviation
Reform Based	Contributions derived from the use of Article 6 Mechanisms
	Taxes on financial transactions
	Use of Special Drawing Rights
	Revision of Multilateral Lending Agreements
Mitigation Linked and Compliance Based	Climate Damages Tax

See Annex 1 for further examples and detail on potential sources of additional financing and complimentary funding arrangements for loss and damage.

Summary of Concepts of Relevance to Pacific Island Countries

The key issues, questions, and associated recommendations that can be considered of specific relevance and importance to Pacific Island countries based on the review of the risk context (Part 1), negotiations context (Part 2), and the recent decision taken at COP27 and its implications in relation to Pacific priorities (Part 3) are summarised below.

ISSUE CLUSTER HEADING	SUMMARY DESCRIPTION	OPERATIVE QUESTION
Attribution	Loss and Damage issues in developing country contexts may often result from a confluence of factors - for instance existing development status , infrastructure quality, climate change impacts, and non-climate related disaster events (i.e. earthquake). Specific principles must be established to help reduce the risk that the deployment of financing is hampered by contested views in relation to 'attribution'. This issue can be addressed through the avoidance of a generalized set of definitions of loss and damage and the effort to retain a focus on the case-bycase assessment of national/regional solutions (funds, instruments, programmes)	What will be funded?
Establishing Definitions and Typologies	Financing for addressing loss and damage must be distinguished and differentiated in relation to adaptation financing to support proof of additionally and prevent potential diversion of funding from adaptation efforts. Definitions, must, in response be focused on differentiation between end results (i.e., addressing loss and damage that has occurred as opposed to effort to improve adaptive capacity)	What will be funded?
Proving and Creating Additionality	Financing accessed through the 'fund' and/or new arrangements must be additional to existing financing which has already fallen short of global committments. Efforts to fund loss and damage interventions may come at a cost to other commitments if methods are not employed to assess additionality. Furthermore, a key objective is to find a means to source financing from a range of sources and in doing so, increase the aggregate amount of financing available for the full spectrum of climate financing needs (mitigation, adaptation, and loss and damage) in developing countries.	Where / How will funds be sourced?
Importance of appropriate financing sources / avoiding perverse incentives	L+D financing will ideally be derived from donors or industries that have responsibility to support the most vulnerable and in so doing provide a further means to incentivise greater action to address root causes of loss and damage (i.e. mitigation). There is a need to ensure loss and damage financing is not provided and scaled up at the expense of greater mitigation action and adaptation finance mobilisation. The interlinkage between the 1.5c target and the scale of loss and damage financing required should be made clear and remain conceptually linked.	Where / How will funds be sourced?

ISSUE CLUSTER HEADING	SUMMARY DESCRIPTION	OPERATIVE QUESTION
Sustainability / Predictability of Financing	Equitable, effective, and sustainable access to loss and damage financing is most likely to be assured if linked to a predictable and regularised source as opposed to donor preferences / volitility of aid. The need to finance efforts to address loss and damage are likely to rise dramatically in the coming decade and thus the ability to scale up predictable financing over time must be a key objective within the design of the 'fund' and funding arrangements.	Where / How will funds be sourced?
Access and Scale	Small populations and economies face potential to struggle to access funding if their needs are pitted against the scale of financing required by larger developing economies. PSIDS and their unique profiles and limited resources are likely to require a specific financing window or ring-fenced allocation to ensure access needs are met.	Who will access the funds? / Eligibility
Scope and eligibility	Access to financing must be prioritized and appropriately positioned for those directly impacted by loss and damage however some conceptualisations of the purpose of the funding is more rooted in 'minimisation' of loss and damage, while other parties suggest risk of a broadened view of loss and damage linked to potential losses of revenue linked to transition risks. A focus on responses that protect the most vulnerable from harm / social protection, management of irrecoverable environmental loss, and minimization of disruption to livelihoods should remain at the center of the mandate for all new financing flows.	Who will access the funds? / Eligibility
Modalities	Insurance instruments and realted concepts are rooted in a normative predicticion for economic losses and pre-understood risks. Addressing loss and damage will be ineffective if market-based mechanisms and use of traditional risk-transfer concepts dominate the design of the proposed modalities and financing solutions. The need to develop solutions that seek to address non-economic loss and damage is crucial to the effectiveness of the Fund and the development of new financing arrangements.	How will funds be disbursed?
Context Relevance	Financing for addressing loss and damage must be deployed in a way that is sensitive to contextual circumstances and flexible. There is risk that predetermined approaches and template-based solutions will not be fit for purpose for those seeking financing to address loss and damage that is associated with complex loss scenarios and the nature of inter-related localized impacts. Principles for financing must be shaped around the concepts of contextual relevance, demand-driven solutions, and cultural sensitivity.	How will funds be disbursed?

Other related issues

Financing Classifications and Requirements within Climate Financing Contributions and Reporting

Decisions taken on loss and damage financing at COP27 and COP28 are expected to have an impact beyond the scope of the proposed fund and its design. Developed country parties and technical partners have made various bilateral pledges to support loss and damage financing priorities while also in some cases, repurposing existing funding to address a greater array of issues. To prevent 'leakage' between financing efforts, it is imperative to improve the classification of climate financing interventions and outcomes against the three climate financing Ensuring reporting on climate finance expenditure is understood against agreed definitions and requirements associated with classifications of activities will be important for tracking international efforts to scale up financing for loss and damage.

The Santiago Network and its Mandate

The relationship between the mandate of the Santiago Network and the proposed 'Fund' requires consideration to ensure A) prevent blurring between mandates, B) enable complementarity, C) ensure the Santiago Network provides support that increases the capacity of Pacific Island countries to assess needs, develop solutions, and access financing for loss and damage.

Reform of Existing Funds

While developing countries refuted the appropriateness of retrofitting existing funds such as the GCF for the purpose of meeting loss and damage financing needs, there is recognition that -in addition to the new fund created under the UNFCCC - that the GCF should be required to create complementary funding opportunities. In practice this may be realised through the integration of further funding priorities, indicators, or thematic calls for proposals under the GCF. However, as this would require adjustments to existing safeguard mechanisms and a need for the GCF secretariat to ensure it has capacity to assess proposals seeking to integrate loss and damage financing objectives into project design, the potential for GCF deployed funding to play a significant role in addressing the need is considered minimal.

The Relationship between Debt and Loss and Damage

The financial impacts of climate change driven loss and damage in the Pacific is often reflected (and in some cases 'masked') by the rising debt burden in Pacific Island Countries. Large scale disaster events often necessitate use of concessional loans for rehabilitation and reconstruction while at the same time, resources required post disaster will often also detract from national capacity to make timely debt repayments on existing loans. National efforts to minimise loss and damage and build resilience in the Pacific continue to be exacerbated by reliance on loans and debt servicing responsibilities. The growing financial burden on national budgets due to climate change is exacerbated by an array of factors and not easily managed when the potential for debt distress detracts from limited resources available for other preventative risk-informed development priorities and investments.

Conclusion: The Governance Challenge

The IPCC recognizes that 'governance systems are too fragmented across administrative boundaries and sectors to address the increasing and cascading risks' (IPCC, 2019) an observation that has been further compounded by the assertion that climate change is a fundamental threat to the legitimacy of public policy. Under the UNFCCC, loss and damage has been a contested concept which collides directly with differing perspectives on equity, responsibility, collaboration, and risk foresight. In this regard, Pacific Island countries play an important role in calibrating the perception and understanding of loss and damage from the perspective of experience and acute vulnerability. The priority issues and areas highlighted in this section are proposed as a basic framing to support engagement. Pacific Island stewardship of a third of the earth's largest ocean and exposure to escalating geo-political and geostrategic interests suggest further rationale to ensure all opportunities to influence the global negotiations on loss and damage are leveraged.

Reliance on voluntary national commitments, donor reliant multi-lateral climate funds, and the adaptation of existing market mechanisms to effectively limit climate change have failed to meet requirements needed to prevent a systemic rise in the occurrence of climate-induced loss and damage.

Past failures must now inform the development of solutions.

These solutions must be driven by countries that are most vulnerable to climate change as well as those least complicit in driving the climate crisis. While the conversion of fossil fuels into energy required to accelerate development progress, has created significant benefits for many developed countries the costs involved are increasingly borne by the developing world driving inequality at an unpreceded scale.



In addition to contributions from developed country parties, a range of additional 'innovative sources' of financing have been discussed by parties and non-parties as a means to ensure adequate financing can be accessed to help address loss and damage in developing countries. Selected 'innovative sources' of financing that have been referenced in the context of decision 2/CP.27 2/CMA.4 are presented below. These 'sources' are presented for example only and are not reflective of specific PSIDS proposals or preferences.

Carbon-Based Taxes and Levies

Enhancing carbon taxation on greenhouse gas emissions produced by goods and services globally is key to tackling both the cause and effects of climate change as these instruments offer a means to create additional financing flows for developing countries while also incentivising businesses and industries to decarbonise. Other specific mitigation-linked proposals include fossil fuel extraction levies imposed on oil, gas, and coal producers. An extraction levy linked to CO2 emissions potential could be raised on each barrel of oil, ton of coal, or cubic meter of gas. A levy of \$6 USD per ton of CO2 associated with the emissions factor of the type of fossil fuel could, for example, raise \$150bn USD per year.²³ A further proposal considered through analysis of taxation options has been to impose a tax on windfall profits from fossil fuels. This tax would be imposed on large profits derived from fossil fuels due to changes in economic conditions. In November 2022 several European countries imposed a 60% windfall tax on both banks and fossil fuel producers at the national level. The EU also introduced a temporary windfall tax in 2022 on oil and gas profits.

Taxes and Levies on Sectoral Emissions Outside the mandate of the UNFCCC

The cumulative carbon emissions and carbon intensity derived from international aviation and international shipping are significant. Ongoing political pressure is required to ensure that parties to the International Maritime Organisation and International Civil Aviation Organisations agree to pursue targets that are 'Paris Aligned'. There is high potential for the percentage share of total global emissions attributed to the international aviation and shipping sectors to rise as domestic emissions reductions are achieved. In order to increase pressure on these sectors a robust supporting policy framework is required to increase the uptake of low-carbon technologies, efficiency improvements, and alternative fuels. The

overweight carbon burden created by the private sector companies that oversee international shipping operations will become a driver of loss and damage if a system of taxes and incentives is not introduced in a systematic way. Action to address loss and damage in vulnerable countries as well as incentive to scale back emissions from aviation and shipping could be promoted through the introduction of a tax/levy on long-haul flights for large airline operators. A \$10bn²⁴ USD levy on all airline tickets (based on 2018 aviation data) could raise over \$40bn USD which could create a significant additional source of financing for climate vulnerable countries. Efforts to directly tackle shipping and aviation emissions through taxes and offsetting schemes are already underway. The International Maritime Organisation (IMO) is introducing a levy of USD 100 per Tonne CO2 on all shipping bunkers to help achieve the sector's 2050 net zero target. The International Civil Aviation's Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is expected to raise \$17bn USD²⁵ in climate financing between 2021 and 2035. Both schemes could potentially be positioned to deploy funds for addressing loss and damage.

The Reappropriation of Fossil fuel Subsidises

In 2022 over USD \$7 trillion was spent on fossil fuel subsidies globally, a sum equivalent to 7.1% of GDP. Global spend on fossil fuel subsidies have risen by \$2 trillion since 2020²⁶. This financing creates artificial price competitiveness between fossil-fuels and renewable energy, exacerbating climate change impacts at scale. The linkage between this investment trend and loss and damage must be emphasised and reform must consider options that provide a means to both avert loss and damage and address current and future loss and damage.

²³ IDDRI, Wemaëre, M., Vallejo L., and Colombier M. (2023). Financing loss and damage: Overview of tax/levy instruments under discussion.

²⁴ IDDRI, Wemaëre, M., Vallejo L., and Colombier M. (2023). Financing loss and damage: Overview of tax/levy instruments under discussion.

²⁵ Aviation Benefits Beyond Borders Organization .

 $^{26\} International\ Monetary\ Fund,\ 2023,\ https://www.imf.org/en/Topics/climate-change/energy-subsidies$

A Financial Transaction Tax

Some analysts have suggested that placing a levy on monetary transactions (e.g., foreign currency exchange) or on financial instruments and contracts such as stocks, options, derivatives, and bonds would be one of the most effective ways to create predictable financing for loss and damage. The reason for this is due to the daily volume of these transactions which, even with a very low levy applied – at for instance .01% the revenue produced would be substantial. Some proponents suggest that this approach would not have a disruptive impact on financial markets if the levy was set low, however, some suggest that imposing such a levy might result in an incentive to reduce trading frequency which could have a negative impact on markets.

A Tax on Wealth

In 2023, Oxfam published a report 'Survival of the Richest' which suggests that an additional tax on world's richest (multi-million and billionaires) set at 5% would raise \$1.7 trillion USD per year²⁷. With increasing finance held by the ultra-rich there is rationale to consider alterations to national tax regimes. Increasing taxation on the world's wealthiest offers a means to support both national revenue creation alongside predictable financing for global efforts to address loss and damage.

Other Taxes / Incentives

Tax incentives or taxes on savings schemes, pension products, and investments could be imposed based on the climate implications of these investments. There is also potential for banks to use the adjustment of bank levies to promote/incentivise sustainable investments while also creating revenue for loss and damage. The taxation of investments which do not align with sustainability criteria offers several direct and indirect benefits that could help support various objectives of the Paris Agreement. A further innovative means to raise revenue is through the taxation of companies that purchase their own shares (share repurchase) rather than distribute taxable dividends and in so doing raising their own share value. This approach is currently in place in some European countries and has recently been introduced in the US through the Inflation Reduction Act which proposes a 1% tax on 'stock buybacks'. This US tax is expected to raise roughly \$10bn USD per year.28

Concessional Financing Mechanisms and Natural Disaster Clauses in Sovereign Loan Agreements

The increased use of 'disaster clauses' within lending agreements is a means to embed within the contractual terms of a debt instrument - the ability of an issuer to defer payments (interest and principal) in the event of a qualifying disaster event. Scaling up the use of these clauses and conditions by international banks and IFI's would help to ensure that vulnerable countries are not unduly exposed to increased residual debt burden as a result of events that cause unavoidable loss and damage.

The inclusion of a Natural Disaster Clauses in bilateral sovereign debt contracts for Pacific SIDS could be an indirect tool for addressing the financial impacts of Loss and Damage events. Though Natural Disaster Clauses would allow countries to temporarily suspend debt repayments in the aftermath of a disaster in some cases the aggregate impact would not create sufficient financial space to have a meaningful impact on recovery and reconstruction. Alternatively, loan agreements could integrate an instrument that allows for additional highly concessional financing to be accessed in the wake of a national disaster. In either case, considering growing risks and increasing debt burden – it is crucial that development banks and other lenders work with developing countries to create instruments that prevent debt from hampering national action to address recovery and reconstruction needs.

In addition to reform to bilateral debt agreements, future issuances of traditional and sustainable bonds could incorporate disaster clauses to support liquidity needs of the issuer if a national disaster occurs preventing the need to engage in formal debt restructuring in the wake of a disaster event.

²⁷ Oxfam, 2023, https://www.oxfam.org/en/research/survival-richest

²⁸ Analysis from various sources estimates that between 7 – 10bn USD is expected to be derived from the 1% buyback tax in the US

Insurance Industry Reform and Product Development

Insurance products play an increasingly important role in mitigating loss and damage caused by climate change in the Pacific region. Social protection arrangements remain limited in the Pacific and increased uptake of micro-insurance and low-cost livelihood protection schemes offer a means to manage climate-related loss and damage. As demonstrated by UNCDF's design and deployment of low-cost parametric insurance products for communities in Fiji and Vanuatu – the disbursement of parametric insurance pay outs can provide relief temporarily and when paired with other instruments help to further buffer the most vulnerable from the full brunt of climate change impacts.

There is also some degree of evidence to suggest the application of risk-transfer instruments can support environmental recovery. One prominent example is the Mesoamerican Reef Insurance Program which launched a ground-breaking parametric insurance product 2021. This insurance product was designed to support the recovery of coral reefs following disaster events, using a pre-arranged, trigger-based financing approach. Financing deployed through the instrument is designed to provide a rapid response supporting reef-dependant businesses while also funding efforts to improve the health of the reef directly through targeted interventions. This scheme made its first pay-out following Hurricane Lisa in 2022 and funded immediate reef recovery and restoration efforts. Willis Tower Watson (WTW) will publish detailed impact reporting in 2023. WTW received funding from UNDP's Blue Accelerator Grant Scheme to replicate its success in Mexico in Fiji through the development of a new related product.

The cost of reinsurance continues to hamper the ability of Pacific Island countries to develop and access affordable risk-transfer products. Efforts to subsidise the cost of reinsurance for vulnerable countries would help contribute to downstream efforts to develop appropriate instruments and mechanisms for managing loss and damage across the region.

Special Drawing Rights (SDRs)

The deployment of additional quotas in the form of extra Special Drawing Rights (SDRs) are currently restricted. Channelling SDR's to SIDS via MDB's will be closely guided by the level of flexibility countries have outside the established IMF options and initiatives. A key opportunity exists to leverage SDRs as either high-quality capital or risk-free capital, to access supra-national backed debt, for Pacific nations, with low cost of borrowing.²⁹

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²⁹ https://www.cgdev.org/blog/can-sdrs-be-used-loss-and-damage-finance



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