TD 1.3 GST RT 2 Fiji: (Adaptation and Loss and Damage) Intervention

Messages:

- Adaptation activities are conceived within the bounds of existing scientific and budgetary constraints and as risk scenarios shift the risk of mal-adaptation and loss and damage increases.
- Insufficient financing made available for the scale-up of adaptation measures over the past decade in response to sea level rise in the Pacific (which is now 2-3 times the global average) is driving loss and damage at an unprecedented scale in many SIDS contexts.
- There is a complex interplay between risks and socio-economic circumstances in highly vulnerable Pacific Island states
- 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 and adapt.
- Climate driven loss and damage experienced in the Pacific is often the result of cumulative, overlapping, and interrelated events, impacts, tipping points, and incremental changes.
- Financing for loss and damage will require concerted efforts to better understand loss and damage through the integration of best available science and multi-dimensional analysis required to support the formulation of needs assessments.
- Adaptation measures may increasingly 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 as central to the discipline that underpins disaster risk reduction and broader resilience building efforts.

Fiji wishes to build on the views expressed by the Dominican Republic and the Maldives on behalf of AOSIS and bring attention to a specific dimension of the relationship between mitigation, adaptation , and loss and damage through examples derived from a number of case studies from the Pacific region.

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.

In Fiji's view there is need to highlight the importance of recognizing the ways in which historical adaptation interventions and the sunk costs involved in adaptation interventions have been negatively impacted by escalating climate risks.

Climate change dynamics are understood as a risk across time and space. And the impact of the time dimension on decisions premised on best available science is important as often these decisions are based on uncertain assumptions around mitigation action. Specifically - representative concentration pathways include implicit assumptions which are often derived from a range of variables which are difficult to assess. This is because the most uncertain and influential variable and question in relation

to the feasibility of long-term adaptation in vulnerable island states – is the scale of the real, as opposed to projected, mitigation actions that Parties will take over time.

Our adaptation and potential for adaptation is directly contingent on the degree to which mitigation activities are scaled up in alignment with the objectives of the Paris agreement, and how mitigation activity will interact with existing climate inertia, adaptation efforts, and access to finance.

It is important to highlight that the understanding of adaptation limits and the factors involved in determining these limits must be context-relevant and understood through cultural, gender-disaggregated, and localized considerations.

There is an array of examples in relation to agricultural adaptation projects and infrastructure resilience investments that have failed due to the escalation of unforeseen interactions between existing and escalating climate change impacts, - and the associated environmental regime shifts they drive at the local and national level.

We have increasingly found examples where the real as opposed to expected scale of climate driven impacts result in the expiry of the relevance of the intervention. This is often associated with the non-validity of the prospective climate change scenario upon which the intervention was premised.

Often limited adaptation finance means there is limited scope to invest at the scale necessary to preempt worst case scenarios.

However, these 'worst case' scenarios must increasingly be considered – hence the need to emphasize the use an array of prospective foresight tools alongside scientific models.

Fiji has passed legislation which references the value of developing integrated risk scenarios for decision makers as a result of the increasing challenge to adapt at the scale required by the evolving risks we now face.

There is a large body of literature that showing high levels of agreement on the fact that it is unclear the degree to which adaptation solutions in many cases in the Pacific region can be deemed robust and effectively evaluated.

We often find coastal protection infrastructure built a decade ago in an array of Pacific Island countries to protect vulnerable coastlines were designed based on climate change projections and representative concentration pathways premised on the understanding of science available at the time and modelling preempting Paris aligned action from all parties in line with IPCC projects.

Over time limited access to adaptation financing has hampered the potential to scale up existing adaptation investments while insufficient action to reduce emissions has increased the pressure on existing adaptation investments - leading to mal-adaptation and loss and damage.

For example, a \$25m USD seawall designed to provide protection over a 30year period may under new projections have a 10-year life span as we revise projected representative concentration pathways upwards.

Accelerated sea level rise combined with extreme weather events can now mean that these investments are no longer providing protection.

In some cases, failed adaptation infrastructure has been irrecoverable and resulted in communities requiring relocation as a result of this scenario.

The loss and damage and associated costs, economic and non-economic costs of relocating people and structures is compounded by loss of utility from the sunk costs into the adaptation measures in question.

The message here is that adaptation interventions must now increasingly account for worst case scenarios which are often under-represented specified and considered in available science. To offset this risk we require higher upfront investment and increased deployment of adaptation at scale.

Investment in adaptation must consider a range of different time horizons and scenarios. Risk of maladaptation is increased when adaptation options are limited by analysis of present costs and justified against a narrow set of scenarios.

Finally, adaptation in highly climate sensitive contexts require continual support to integrate new science into modelling to ensure holistic sight of adaption limits and increase understanding of potential loss and damage.