

Cultural heritage loss in the face of sea level rise and climate change: perspectives from the Asia-Pacific and Tuvalu

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Abstract: *La perdita di patrimonio culturale di fronte all'innalzamento del livello del mare e al cambiamento climatico: prospettive dall'Asia Pacifica e Tuvalu* - This article examines the adequacy of legal and policy responses to cultural heritage loss in the face of sea level rise and climate change, focusing on the Asia-Pacific and the case of Tuvalu. It argues that the erosion of cultural heritage reveals a blind spot in climate governance centred on adaptation. Indeed, the loss of cultural heritage and land are deeply intertwined yet not fully addressed in current local actions or international law, with a few timid exceptions. Through the analysis of selected Asia-Pacific domestic responses and bilateral and international instruments, the article highlights existing gaps and emerging pathways. It also explores the recent approaches of international judicial and quasi-judicial bodies, revealing an increasing, albeit cautious, focus on the dimension of cultural heritage loss.

Keywords: Cultural heritage; Asia-Pacific; Tuvalu; Loss and damage; Sea level rise

1725

1. Introduction

The promising opening of the Australia-Pacific Development Partnership Plan 2025-2029 embeds many remarkable values and perspectives:¹ the sense of collectiveness and support; the profound bonds built on a shared pattern of cultural roots, history, and interests; the common threats and challenges posed by climate change, sea level rise, and both sudden and slow-onset events in the Asia-Pacific area. Even if a deeper analysis could lead us to consider the Development Partnership Plan as a prompt response to

¹ «Australia sees the Pacific as family. Our relationships with Pacific countries are longstanding and enduring, based on true partnerships, respect and friendship. These relationships are central to Australia's national interest and identity, recognising our shared geography, history and culture and the deeply interconnected nature of our region's peace, stability and prosperity. [...] Our engagement in the Pacific aims to support national sovereignty, promote prosperity and development, uphold regional unity, and foster peace and security [...] recognising the breadth of our shared interests and the challenges we face collectively, none of which is greater than the threat of climate change». See Australian Government (Department of Foreign Affairs), *Pacific Regional Development Partnership Plan 2025-2029*, www.dfat.gov.au/sites/default/files/australia-pacific-regional-development-partnership-plan-2025-2029.pdf.

political concerns arising from security matters in the Pacific region², this paramount action must be viewed in the context of the legal framework within which the Plan was conceived.

As an entry point for the present research, two concepts enshrined in the Australia-Pacific Development Partnership Plan should be highlighted under a critical lens: the emphasis on the term “culture” and the worrying threats posed by climate change. If climate change is having a direct impact on the cultural heritage of many countries around the world³, especially the so-called “Small Islands Developing States” (hereinafter “SIDS”) of the Asia-Pacific region, one may ask if “culture” and “cultural heritage” loss provoked by climate change and land disappearance has been taken into account in recent domestic policies and plans, international agreements - namely, the 2015 Paris Agreement⁴, flagship disaster risk reduction frameworks (the Sendai 2015-2030 Framework on Disaster Risk Reduction)⁵, and, of particular interest to the present discussion, innovative bilateral legal solutions (the Australia-Tuvalu Falepili Union Treaty)⁶.

Nowadays, climate change and sea level rise are consistently threatening *inter alia* the population, the economy, and the cultural heritage of Asia-Pacific SIDS, as well as the very existence and sovereignty of these countries⁷. Given the relevance of the region and the dramatic impact of climate change on the fragile archipelagos, the research will focus on the Asia-Pacific context, with special reference to the recent innovative measures adopted by one of the most threatened countries, Tuvalu, for the protection of its cultural heritage.

This paper, therefore, asks whether current approaches adopted in the Asia-Pacific area are truly adequate to confront these challenges and argues that the loss of cultural heritage resulting from sea level rise and territorial disappearance exposes a structural blind spot in adaptation-centred climate change legal governance. Indeed, territorial loss amid

² Security concerns are the core of the analysis of A. Green and D. Guilfoyle, *The Australia-Tuvalu Falepili Union Treaty: Statehood and Security in the Face of Anthropogenic Climate Change*, in 118 *Am. J. Int'l L.* 684, 690-697 (2024); in this regard, see also A. Mariconda, *Advancing climate-related obligations through security concerns: Lessons from the Falepili Union Treaty*, in 112 *QIL* 3, 4-5 (2025).

³ As for the notion of cultural heritage, the International Criminal Court (ICC) OTP Policy on Cultural Heritage provides a far seeing and broad definition of the concept. Thus, the notion “cultural heritage” includes i.e. movable/immovable and tangible/intangible cultural heritage, underwater cultural heritage, natural heritage. See ICC, *OTP Policy on Cultural Heritage 2021*, 1, 7, para 16.

⁴ United Nations Framework Convention on Climate Change (UNFCCC), *Decision 1/CP.21, Adoption of the Paris Agreement*, FCCC/CP/2015/10/Add.1, January 2016.

⁵ *Sendai Framework for Disaster Risk Reduction 2015-2030*, adopted at the Third UN World Conference in Sendai on 18 March 2015.

⁶ *Australia-Tuvalu Falepili Union Treaty*, signed on 9 November 2023 and entered into force on 28 August 2024.

⁷ J. McAdam, *Climate Change, Forced Migration, and International Law*, Oxford, 2012; see also J. McAdam, T. Wood, *Kaldor Centre Principles on Climate Mobility*, UNSW Law & Justice, 2023, 6 ff., www.unsw.edu.au/kaldor-centre/our-resources/legal-and-policy-resources/kaldor-centre-principles-on-climate-mobility.

climate change and the consequent cultural heritage erosion are profoundly linked yet not fully addressed in current local actions and international law regime, with a few - albeit timid and not completely satisfactory - exceptions that will be scrutinized throughout the present article. To this end, this research relies on a combined policy and legal analysis, including a brief comparative overview of some policy solutions adopted in the Asia-Pacific region. Alongside Tuvalu, which anchors the analysis as the primary case study of a State facing existential territorial loss in the face of sea level rise, the research also recalls, rather than fully examines, the national experiences of Japan and Bangladesh. Unlike Tuvalu, neither country is threatened with outright territorial disappearance; both, however, have been severely and repeatedly affected by climate change and by disasters directly impacting their cultural heritage, and have each produced a documented body of disaster risk reduction (hereinafter “DRR”) and management policy engaging - if only partially - with this dimension. Reading these two recent, non-SIDS experiences alongside the Tuvaluan case allows the analysis to capture current orientations and identify potential areas of implementation in the broader Asia-Pacific region. Within this scheme, concepts such as economic and non-economic loss and damage (hereinafter “ELD” and “NELD”), international frameworks, and DRR strategies will be recalled, systematizing the pattern.

Furthermore, one of the key insights of this research will be the framework of the Falepili Union Treaty, adopted bilaterally by Tuvalu and Australia in 2023, and entered into force in August 2024. In fact, Tuvalu constitutes not only a compelling case study but also a test for considering new legal orientations. The Asia-Pacific scenario raises the question of whether the categories of “mitigation” and “adaptation” remain meaningful when entire territories disappear and both countries and their cultural heritage are forced to exist in a “surrogate” or virtual form, through the creation of digital twins in the metaverse.

Finally, drawing on the Tuvaluan case and the broader Asia-Pacific context, the analysis examines whether, and to what extent, recent positions of international judicial and quasi-judicial bodies have engaged with cultural heritage loss in the face of climate change. It thereby explores whether such loss may constitute an additional legal foothold beyond state survival and climate mobility concerns. This overview will therefore seek to take into account the (definitive?) disappearance - frequently overlooked from a legal perspective - of cultural heritage in contexts of profound vulnerability such as that of the Asia-Pacific; once a comprehensive picture has been established, it will then be possible to put forward relevant considerations for further inquiry in this field.

2. Framing loss and damage: is cultural heritage adequately considered?

To contextualize the scenario at the core of the present study, it is worth

recalling some data. Between 2000 and 2022, SIDS are estimated to have experienced indirect economic loss and damage amounting to approximately \$107 billion, of which around \$39 billion can be linked to climate change⁸. When both direct and indirect impacts are considered, measurable losses in SIDS rise to roughly \$141 billion, with 38% attributable to climate change⁹. SIDS have always been at the forefront in several fora to strongly open the debate around a peculiar component of the broader theme of “loss and damage”¹⁰. As a matter of fact, SIDS pushed the discussion forward, advocating to encompass also the non-economic component of the main concept of loss and damage.

In general terms, loss and damage can be understood as impacts that cannot be avoided through adaptation and mitigation measures or actions, resulting in residual, unavoidable harm¹¹. However, a sharp distinction between a political dimension of loss and damage and a descriptive one should be clarified. If the descriptive concept falls under the impossibility (or the complete failure) to adapt or mitigate the unavoidable harm resulting in both economic and non-economic losses, according to the AR6 WGI Glossary¹² “Loss and Damage”, on the other hand, can be also conceived as the political agenda surrounding the functioning and the establishment of the Warsaw International Mechanism on Loss and Damage in 2013, within the realm of the United Nations Framework Convention on Climate Change (hereinafter “UNFCCC”)¹³. Thus, the Intergovernmental Panel on Climate Change (hereinafter “IPCC”) clarified this - anything but subtle - distinction. In the UNFCCC technical paper on non-economic losses in the context of the work programme on loss and damage¹⁴, NELD occur in three distinct focus areas: private individuals, society, and environment. The categories highlighted above provoke both economic and non-economic losses; however, a cascade effect is visible, since a loss or damage in one specific area triggers other losses or damages in another distinct one; thus, these three categories are permeable and interconnected. In the attempt to draft

⁸ V. Panwar, E. Wilkinson, I. Noy, *The price of a changing climate extreme weather and economic loss and damage in SIDS*, ODI Global Policy Brief, 05-11-24, 7, 11.

⁹ *Ibid.*

¹⁰ See generally E. Roberts, M. Pelling, *Climate change-related loss and damage: translating the global policy agenda for national policy processes*, in 10(1) *Climate Dev.* 4 (2016).

¹¹ See generally E. Roberts, S. Huq, *The history of loss and damage under the UNFCCC*, in 8(2) *Int'l J. Glob. Warm.* 141 (2015).

¹² Intergovernmental Panel on Climate Change (IPCC), *Annex I: Glossary, Climate Change 2023: Synthesis Report*, 2023, www.ipcc.ch/report/ar6/syr/.

¹³ See United Nations Development Programme (UNDP), *Loss and Damage and Climate Litigation: How can the Maldives and other Small Island Developing States (SIDS) position for greater climate action?*, 29 November 2023, 12 ff., www.undp.org/maldives/publications/loss-and-damage-and-climate-litigation; see also Y. Chiba, R. Shaw, S. Prabhakar, *Climate change-related non-economic loss and damage in Bangladesh and Japan*, in 9(2) *Int'l J. Climate Change Strategies & Mgmt.* 166, 172 (2017).

¹⁴ UNFCCC, *Non-economic losses in the context of the work programme on loss and damage*, 9 October 2013, FCCC/TP/2013/2.

guidance, the technical paper also provides the content of what NELD embodies: «can be understood as losses of or related to, among other things, life, health, displacement and human mobility, territory, biodiversity, ecosystem services, cultural heritage, indigenous/local knowledge, and other social capital»¹⁵. It is evident that the “cultural dimension” of NELD plays a relevant role. Going beyond the mere “use value” of the cultural heritage site itself¹⁶, a “non-use value” further complicates the issue¹⁷: what does the unavoidable and irreplaceable loss of cultural heritage entail for the people affected? Are existing methodologies tackling the scale of the problem¹⁸? Moreover, if we consider climate-induced mobility and displacement, as in the case of Tuvalu, it becomes evident that these dynamics are profoundly intertwined with the loss of cultural heritage¹⁹.

This connection makes clear that the cultural dimension is among the most endangered, both in terms of erosion and in its very survival. Nonetheless, cultural heritage is often overlooked and a marginalized dimension within the already complex domain of loss and damage, particularly from a legal standpoint.

Interestingly, cultural heritage fits in the “society” loss and damage focus area recalled above, alongside other important loss and damage entries: the human mobility loss dimension, the territory loss («Sovereignty and sense of place have intangible benefits that are unique to a context and so valuation can be challenging due to subsequent incomparability»)²⁰, and the loss of indigenous knowledge, highly impacting on the cultural, spiritual and social cohesion²¹.

¹⁵ *Ibid.*, 12, para 46.

¹⁶ As for the concepts of “use value” and “non-use value”, see D. Throsby, *Heritage Economics: A Conceptual Framework*, in G. Licciardi, R. Amirtahmasebi (Eds), *The Economics of Uniqueness: Historic Cities and Cultural Heritage Assets as Public Goods*, Washington DC, 2012, 45, 52-54, documents1.worldbank.org/curated/en/727651468340186831/pdf/730720PUB0EPI001200pub0date01001012.pdf.

¹⁷ UNFCCC, *Non-economic losses*, cit., 24; the UNFCCC technical paper also considers the value of indigenous and local knowledge and other social capital: «Valuation of indigenous and local knowledge must consider that the value of such knowledge is derived from interlinkages with and the cohesiveness of social networks».

¹⁸ For instance, Y. Chiba, R. Shaw, S. Prabhakar, *Climate change-related non-economic loss and damage*, cit., 170 note: «L&D from climate-related disasters such as slow onset events, including sea-level rise and salinization, are not captured in the existing disaster loss databases such as emergency events database (EM-DAT)».

¹⁹ As for climate-induced mobility and its link with cultural heritage loss, it is noteworthy to compare the experience of other Asia-Pacific area’s countries (e.g. Papua New Guinea and Kiribati). In this regard, and to understand the shortcomings of the relevant legal instruments, see Y. Yang, *Integrating cultural heritage into climate displacement law: the Carteret islanders case*, in 25 *Int’l Env’t Agreements* 615, 617, 625-626 (2025).

²⁰ UNFCCC, 2013, cit., 24.

²¹ The UNFCCC 2013 technical paper for instance, links the loss of intangible cultural heritage to the social capital (29 ff.); *ibid.*, 24, as for indigenous knowledge: «Indigenous and local knowledge is knowledge that is unique to a particular cultural group or community. It often has strong links with the environment and is valuable as it is often spiritual, cultural and practical and contributes to social cohesion and identity».

As can be inferred from the report issued at the end of 2024, and prepared under the plan of action of the Expert group on non-economic losses of the Executive Committee of the Warsaw International Mechanism for Loss and Damage (WIM ExCOM), a specific section addressing the impact on cultural heritage offers an extensive analysis and guidance to navigate the issue²². The section on non-economic losses and cultural heritage has been prepared by the United Nations Educational, Scientific and Cultural Organization (hereinafter “UNESCO”), highlighting the key role played by this actor in tackling the matter at stake. According to the Report, NELD occurring from cultural heritage loss has been neglected and pushed to the sidelines in the international treaty climate framework. The 2024 Report divides NELD into three layers: loss of biodiversity, loss of livelihoods, and loss of cultural heritage. Interestingly, one of the key concepts highlighted in the document is the link between the loss of cultural heritage and disaster resilience; furthermore, it acknowledges that cultural heritage loss «may also be interlinked with other [NELD], including loss of territory, biodiversity and ecosystem, as well as the loss of indigenous knowledge and the loss of social/cultural identity»²³, encompassing a broad spectrum of contexts, and putting the accent on the vulnerability of SIDS²⁴.

Focusing on the role of SIDS, it is important to underline the crucial role played by the Alliance of Small Islands States (hereinafter “AOSIS”) at the beginning of the nineties, before the UNFCCC negotiations²⁵. The AOSIS called for the establishment of an international insurance mechanism; the idea was to design a collective system for sharing losses, aimed at compensating the most vulnerable small island and low-lying coastal developing countries for the damages caused by sea level rise. The financing of this mechanism was to be based on mandatory contributions²⁶. However, this “Insurance Annex” was ultimately not included in the 1992 Rio Convention²⁷. Thus, the central role in shaping the debate on loss and damage has been played by the most vulnerable countries. SIDS were instrumental in bringing the issue to the international agenda, although

²² See generally UNFCCC, *Non-Economic Losses: Featuring loss of territory and habitability, ecosystem services and biodiversity, and cultural heritage*, November 2024, unfccc.int/technical-paper-on-non-economic-losses-featuring-loss-of-territory-and-habitability-ecosystem.

²³ *Ibid.*, 63.

²⁴ This perspective seems to integrate some of the core takeaways contained in the MONDIALCULT 2022 Declaration, to embed cultural heritage into international climate change debates, recognizing culture as the fourth pillar of sustainable development. See UNESCO, *World Conference on Cultural Policies and Sustainable Development – MONDIACULT 2022*, 28-30 September 2022, www.unesco.org/en/mondiaucult/2022.

²⁵ For a complete overview, see M.J. Mace, R. Verheyen, *Loss, Damage and Responsibility after COP21: All Options Open for the Paris Agreement*, in 25(2) *Rev. Eur. Comp. & Int'l Env. L.* 197, 197-201 (2016).

²⁶ *Ibid.*, 198.

²⁷ UNFCCC, *United Nations Framework Convention on Climate Change*, 9 May 1992; insights into the debate at stake can be found in both art. 4.4 and 4.8.

their efforts remained largely unsuccessful until the adoption of the Paris Agreement in 2015, with its art. 8 on mechanisms addressing loss and damage resulting from climate change. This should not come as a surprise, given that the Asia-Pacific region is one of the areas most prone to disasters, with a high level of loss and damage²⁸. Its extensive coastlines, numerous archipelagos, vast geographical area, and the concentration of low-lying island states, often situated only a few meters above sea level, make it especially exposed and vulnerable to the impacts of climate change, which directly threaten the very existence of countries in the region, as exemplified by the case of Tuvalu. Therefore, unsurprisingly, SIDS have been at the forefront of advocacy in this domain²⁹.

Hence, it is essential to give due consideration to the concept of loss and damage as articulated in art. 8 of the Paris Agreement. Art. 8(1) of the Paris Agreement affirms: «Parties recognize the importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events, and the role of sustainable development in reducing the risk of loss and damage». Moreover, art. 8(4)(g) and (h) also identify non-economic losses and resilience of communities, livelihoods, and ecosystems as areas in which facilitation, action, cooperation, and support through the Warsaw International Mechanism for Loss and Damage (WIM) can be achieved. The WIM, established after COP19, aims to address climate change impacts - both sudden and slow onset - particularly in vulnerable developing countries. Over its first decade, the WIM has advanced the global agenda on loss and damage by promoting technical assistance and financial support. An Executive Committee oversees its implementation, while the Santiago Network (created in 2019) coordinates technical expertise and support at local, national, and regional levels.

Thus, the Paris Agreement seems to set a progressive approach, formulating a comprehensive understanding of the concept of losses, and instituting a permanent mechanism. Nevertheless, a careful examination of the final paragraph of Decision 1/CP.21 reveals a rather monolithic stance against any form of compensation or liability: «Agrees that Article 8 of the Agreement does not involve or provide a basis for any liability or compensation»³⁰. The inclusion of a foundation for liability and compensation would have operated to the detriment of developed countries while favouring developing nations. Consequently, this position appears to preclude and frustrate any potential claims of this nature; to understand the matter at stake, it is worth recalling a remark made by a Bangladeshi representative, during COP26: «The term loss and damage is a euphemism

²⁸ Y. Chiba, R. Shaw, S. Prabhakar, *Climate change-related non-economic loss and damage*, cit., 172.

²⁹ According to E. Roberts, M. Pelling, *Climate change-related loss and damage*, cit., 4, thanks to the SIDS efforts, loss and damage can now be framed as the third pillar, alongside mitigation and adaptation, completing the UNFCCC framework.

³⁰ UNFCCC, *Decision 1/CP.21*, cit., paras 51-52.

for terms we're not allowed to use, which are liability and compensation [...] 'Reparations' is even worse»³¹.

While it is true that loss and damage do not entail state liability or compensation, the recent establishment of the Fund for Responding to Loss and Damage (hereinafter “FRLD”) may, at least indirectly, alter this dynamic³². Through decisions 2/CP.27 and 2/CMA.4, the COP and the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (“CMA”), established new funding arrangements to assist countries most vulnerable to climate change impacts, such as those of the Asia-Pacific. The Fund aims to address both ELD and NELD resulting from climate-related extreme and slow-onset processes, thereby aligning with the principles and orientations outlined in art. 8 of the Paris Agreement. At COP 28, the FRLD was operationalized as part of the Financial Mechanism of the Convention, also serving the Paris Agreement, and will function under the guidance and authority of both the COP and the CMA.

Although the Fund's potential has already been threatened by the withdrawal of the United States, which has resulted in the loss of a major contributor, it nevertheless represents a turning point that should not be underestimated³³. This turning point can be illustrated through three main considerations. Firstly, the creation of the FRLD was strongly advocated by SIDS, such as Tuvalu, and other developing countries, and it can be regarded as a victory for the most vulnerable states in securing a financial mechanism that may provide effective economic relief. Nevertheless, the term compensation appears only once in the most recent report of the FRLD Board, among the criteria proposed by civil society for an effective loss and damage finance architecture³⁴. These criteria - which this research also claims to be central - include: «(1) comprehensive recognition of loss and damage; (2) obligatory and compensatory mechanisms based on non-debt instruments; (3) new, additional, predictable, and adequate funding; (4) prioritization of direct access for developing countries and affected communities; (5) meaningful participation of local communities; and (6) promotion of intersectional human rights»³⁵.

Secondly, countries such as Australia, given their geographical proximity to vulnerable states, have already committed financial resources

³¹ S. Sengupta, *Calls for Climate Reparations Reach Boiling Point in Glasgow Talks*, in *The New York Times*, 11-11-2021, www.nytimes.com/2021/11/11/climate/climate-glasgow-cop26-loss-damage.html.

³² The Fund has been strenuously awaited by Tuvalu. See UNFCCC, *Opening Statement by the Prime Minister of Tuvalu, the Hon Feleti Penitala Teo COP29 World Leaders' Climate Action Summit 29th Conference of the Parties of the UNFCCC [November 2024, at Baku Azerbaijan]*, November 2024, unfccc.int/sites/default/files/resource/TUVALU_cop29cmp19cma6_HLS_ENG.pdf.

³³ J. Dahl, *US withdraws from UN climate damage fund*, in *Politico*, 08-03-2025, www.politico.eu/article/us-withdraws-from-un-climate-damage-fund/.

³⁴ UNFCCC, *Report of the Board of the Fund for responding to Loss and Damage*, 23 September 2025, FCCC/CP/2025/10-FCCC/PA/CMA/2025/14, 12.

³⁵ *Ibid.*

to the FRLD, as reflected in the Australia–Pacific Development Plan. It could therefore help awaken a renewed sense of responsibility among countries towards the most vulnerable states.

Thirdly, strengthening the Fund’s role and effectiveness may yield indirect benefits by enhancing cooperation among countries highly exposed to climate risks. For example, disaster-prone states such as Japan, which have engaged in adaptation initiatives alongside SIDS, by sharing DRR best practices, are also among the largest contributors to the FRLD.

However, the scope of the FRLD must also be considered in light of the following critical point: the Fund is, in fact, a voluntary climate finance mechanism that does not entail redress for an international wrongful act. This is because the states that have “caused” the damage may choose whether or not to provide funds for compensation. This point, therefore, sheds light on the limits and future effectiveness of the FRLD, which nonetheless represents progress and a long-awaited, much-needed tool for SIDS and many other states even outside the Asia-Pacific area.

2.1 Insights into the Asia-Pacific context

It is therefore pertinent to examine whether the loss of cultural heritage has been adequately considered and assessed in some areas of the Asia-Pacific context. By briefly drawing on two interesting national Asia-Pacific experiences (namely, Japan and Bangladesh) beyond the SIDS framework, the aim is to ascertain whether larger states in the region have meaningfully tackled the issue at stake. Notwithstanding the differences between Japan, Bangladesh, and SIDS, these examples have been selected based on the following criteria: the geographical area (the Asia-Pacific), the predisposition to disasters, the impact of climate change and sea level rise, and the progressive legal and policy solutions adopted by these countries to deal with cultural heritage loss. As a matter of fact, Japan is holding a pivotal position in helping SIDS of the Asia-Pacific region in sharing best practices and innovative pathways. Indeed, particularly interesting is the case of Japan; Japan may be regarded as a positive example, as it has recently undertaken significant work on disaster risk management specifically aimed at strengthening the resilience of cultural heritage, building on lessons learned from past events³⁶. What is particularly striking, however, is that Japan - much like Bangladesh - had not previously included non-economic losses stemming from socio-cultural and environmental dimensions in its official statistics³⁷.

In the 2020 report *Resilient Cultural Heritage: Learning from the*

³⁶ Global Facility for Disaster Reduction and Recovery (GFDRR), *Resilient Cultural Heritage Learning from the Japanese Experience*, 2020; see in general Y. Chiba, R. Shaw, S. Prabhakar, *Climate change-related non-economic loss and damage*, cit.

³⁷ See S. Addison et al., *Addressing loss and damage: practical insights for tackling multidimensional risks in LDCs and SIDS*, IIED, Working paper, July 2022, 61, www.iied.org/21046iied.

Japanese Experience - which accounts for and summarizes Japan's proactive national measures and solutions - the notion of loss and damage appears only sparingly, yet in a targeted manner, connected to concrete cases, such as the protection of cultural heritage in the event of floods³⁸. The report also advances concrete disaster risk reduction and management measures to address the issue, including simulations and early warning systems designed to safeguard cultural heritage from potential loss and damage³⁹. Moreover, several key takeaways are suggested for practitioners, with a particular emphasis on the importance of preparedness and the need to avoid unnecessary losses. Although not conclusive and context-specific, the Japanese approach represents a valuable example of how cultural heritage can be effectively protected through preparedness within disaster risk management and DRR frameworks, by using lessons learned as a crucial entry point.

Furthermore, other systems have explicitly recognized requirements in the aftermath of devastating episodes: in Bangladesh, although some shortcomings in reporting loss and damage and their impact on cultural heritage, the National Plan for Disaster Management⁴⁰ is now aligned with international DRR frameworks. As a matter of fact, some areas of action and implementation - including cultural heritage - of the Bangladeshi National Plan are a translation (both actual and potential) of the international framework into the domestic legal and policy context.

Alongside Japan and Bangladesh actions, other international actors are playing a pivotal role that might be relevant for the Asia-Pacific context. The United Nations Office for Disaster Risk Reduction (UNDRR) is currently exploring the impacts of disasters on cultural heritage. In particular, the UN Office is assessing whether cultural heritage is adequately incorporated into disaster risk assessments at the municipal and national levels, and it is developing AI-based modelling tools to better quantify and predict potential losses⁴¹. Finally, it should be emphasized that UNDRR has established a disaster tracking mechanism that accounts for both economic

³⁸ *Ibid.*, 57.

³⁹ *Ibid.*, «In general, DRM at CH sites focuses on developing and ensuring preparedness and response measures. CP managers and authorities in Japan generally focus on early warning systems and the simulation of potential damage to protect CP and facilities from potential loss and damage, and to enhance their preparedness for evacuation».

⁴⁰ See Government of the People's Republic of Bangladesh, *National Plan for Disaster Management (2021-2025) Action for Disaster Risk Management Towards Resilient Nation*, March 2020, para 81, zcralliance.org/resources/item/national-plan-for-disaster-management-2021-2025/: «[The Sendai Framework for Disaster Risk Reduction] is fundamental to the vision and ambition of GoB and thus requires full implementation. It is integrated into the objectives, goals and activities described below and serves as a template for translation to the Bangladesh context. The Government's disaster resilience strategy is in line with the [Sendai Framework], which it has adopted».

⁴¹ UNDRR, *Tracking losses and damages - turning impact data into action*, 2025, www.undrr.org/building-risk-knowledge/disaster-losses-and-damages-tracking-system-delta-resilience.

and non-economic losses and damages, including cultural heritage⁴². Also, a key development in 2024 was the establishment of the UNESCO Civil-Military Alliance, designed to facilitate training, practice sharing, and capacity building in emergency contexts⁴³. UNESCO, acknowledging the necessities of SIDS and least developed countries in the face of climate change, created a special capacity-building plan for protecting cultural heritage in disaster scenarios; four island states (Bahamas, Fiji, Tonga, Vanuatu) and Belize have been chosen to test post-disaster needs assessment capacity building, and to help the local communities in cultural heritage preparedness and disaster risk reduction⁴⁴. Despite such initiatives, many states remain unprepared: funding gaps persist, youth and indigenous voices are underrepresented, and compounded crises exacerbate vulnerabilities.

The broader concern, however, is that relegating the loss of cultural heritage to a peripheral or optional dimension fundamentally undermines the effectiveness of disaster risk reduction and management strategies. Now, if we consider that the culture of the Asia-Pacific also relies on the social and cultural fabric and on the intangible dimension of cultural heritage, this absence is particularly glaring. Some scholars conducted valuable assessments on the deficiencies of the current debate and local community involvement, noting: «[an] overall lack of appreciation of non-economic impacts resulting from climate change within national and regional policy responses. The loss of culture, local knowledge, ways of being, one's sense of place, biodiversity, and mental and emotional well-being are hard to value, which makes these damages less visible to policymakers and responses»⁴⁵.

Responses in the Asia-Pacific area to loss and damage are mainly grounded in mitigation and adaptation frameworks⁴⁶, and DRR policies touch upon material economic risks, neglecting cultural and social losses. Cultural heritage and traditional knowledge are somehow “invisible” to risks, and shared indicators are absent: this is the reason why loss and damage - and, of course, cultural heritage - must be duly integrated within a robust framework of DRR.

The Sendai Framework on Disaster Risk Reduction 2015-2030, adopted in the context of the 2015 World Conference on Disaster Risk Reduction in Sendai, Japan, and endorsed by the UN General Assembly, although non-binding, is trying to change this nebulous and lenient

⁴² *Ibid.*

⁴³ UNESCO, *UNESCO Civil-Military Alliance for the protection of cultural property*, 2025, www.unesco.org/en/1954-cimic-alliance.

⁴⁴ UNESCO, *Capacity building for safeguarding intangible cultural heritage in emergencies in Small Island Developing States (SIDS) in the Pacific and the Caribbean*, 3 December 2025, ich.unesco.org/en/events/sharing-insights-and-outcomes-capacity-building-for-safeguarding-intangible-cultural-heritage-in-emergencies-in-small-island-developing-states-in-the-pacific-and-the-caribbean-01061.

⁴⁵ A. Chandra et. al, *Climate-Induced Non-Economic Loss and Damage: Understanding Policy Responses, Challenges, and Future Directions in Pacific Small Island Developing States*, in 11(3) *Climate* 74, 86 ff. (2023)

⁴⁶ See generally *ibid.*

paradigm, directly integrating cultural heritage in its priorities and activities on DRR for States. For instance, priority one of the Sendai Framework, named understanding disaster risk, sets forth for the national and local level: «To systematically evaluate, record, share and publicly account for disaster losses and understand the economic, social, health, education, environmental and cultural heritage impacts, as appropriate, in the context of event-specific hazard-exposure and vulnerability information»⁴⁷, and priority three, named investing in disaster risk reduction for resilience: «To protect or support the protection of cultural and collecting institutions and other sites of historical, cultural heritage and religious interest»⁴⁸. Certainly, the approach launched by the Sendai Framework is to be welcomed and represents a step forward towards integrating cultural heritage protection into DRR policies and plans. There is still a long way to go, and local communities must be given a crucial role in taking action to ensure widespread interventions at the local level.

3. The case of Tuvalu

The entry into force of the Falepili Union Treaty between Tuvalu and Australia in August 2024 may constitute a landmark moment: as a matter of fact, it is the first bilateral treaty to establish a defined climate mobility pathway. While sea level and climate change are irreversibly threatening the very existence of Tuvalu, directly impacting Tuvaluans' population, cultural heritage, environment and institutions, the Treaty aims to offer viable solutions to cope with some of these challenges.

While the asymmetry of the Falepili Union Treaty inevitably can raise concerns, particularly regarding the risks of Australia's interference in the affairs of a small island nation, it nonetheless represents a precedent of considerable importance⁴⁹.

The core of the treaty is enshrined in articles 1-4, which must be read together with the Explanatory Memorandum⁵⁰. Three focal points emerge clearly from these provisions: first, Tuvalu will remain an independent and sovereign state, despite the existential threat posed by sea-level rise;

⁴⁷ *Sendai Framework for Disaster Risk Reduction*, cit., 15, para 24(d) and 19, para 30(d).

⁴⁸ *Ibid.*, 18, para 29.

⁴⁹ See A. Green and D. Guilfoyle, *The Australia–Tuvalu Falepili Union Treaty*, cit., 686, 690–701; see also A. Green and D. Guilfoyle., *The Australia–Tuvalu Falepili Union Treaty: Security in the face of climate change ...and China?*, in *EJIL: Talk!*, 28 November 2023, www.ejiltalk.org/the-australia-tuvalu-falepili-union-treaty-security-in-the-face-of-climate-change-and-china/.

⁵⁰ Government of Australia, *Explanatory Memorandum: Falepili Union between Tuvalu and Australia*, www.dfat.gov.au/sites/default/files/explanatory-memorandum-falepili-union-between-tuvalu-australia.pdf; see C. Schofield, and F. Anggadi, *The Australia–Tuvalu Falepili Union Treaty: Opportunities and Controversies*, in 9(1) *Asia Pac. J. Ocean L. Pol'y* 85 (2024); A. Shetye, *Dignity Beyond Borders and Waters: Navigating Climate Displacement & Protection System in the Asia-Pacific*, in *DPCE Online*, 2026, 1, 483, 508–509.

secondly, Tuvaluans are granted a “human mobility with dignity”⁵¹. The concept of “dignity” is embedded in art. 3 of the Falepili Union Treaty, and spans from the possibility for Tuvaluans to study, work, live, and have access to Australian healthcare, education, and other fundamental national services. Hence, Tuvaluans are fully involved - with dignity - in the socio-economic fabric of the host community. Lastly, the treaty allows for the conclusion of further agreements between the parties, subject to mutual consultation.

It is precisely this third last element that raises delicate questions. Although presented as a cooperative safeguard, the requirement of mutual consultation may, in practice, blur the line between legitimate assistance and undue interference in Tuvalu’s external relations.

From the perspective of this research, however, the more pressing question is whether the treaty adequately addresses the loss of Tuvalu’s cultural heritage. The joint statement of commitment between Tuvalu’s Prime Minister and the Foreign Minister of Australia, released in May 2024, frames the protection of Tuvalu’s culture and identity as a core element of the Falepili Union partnership⁵². Yet the overall discourse remains vague: neither the Treaty nor the joint declaration contains a clear reference to measures capable of safeguarding Tuvalu’s tangible and intangible cultural heritage in the face of inevitable territorial disappearance.

This lacuna stands in contrast with Tuvalu’s own proactive initiatives. As a matter of fact, it is worth mentioning the provision contained in Tuvalu’s recently amended Constitution, which states: «The State of Tuvalu, within its historical, cultural and legal framework, shall continue to exist in perpetuity into the future, notwithstanding the impacts of climate change or other causes resulting in a loss of Tuvalu’s physical territory»⁵³. Thus, the Constitution now includes a declaration on the “permanence” of the State of Tuvalu and a redefinition of its territorial boundaries, and it enshrines, precisely in this programmatic section, the equal importance of the cultural element, alongside the historical and legal ones, in the face of the loss of territory caused by climate change and sea level rise.

Tuvalu has recently ratified the 1972 UNESCO World Heritage Convention, becoming the 195th State Party to the Convention⁵⁴, and, in January 2024, the Tuvaluan Ministry of Local Government and Agriculture proposed the inscription of the Pacific atoll-island cultural landscape of Tuvalu on the UNESCO World Heritage List, emphasizing the ancestral link between land, sea, and community⁵⁵. It is worth mentioning that Tuvalu

⁵¹ *The Australia-Tuvalu Falepili Union Treaty*, cit., art. 1(b) and 3.

⁵² Australian Government (Department of Foreign Affairs and Trade), *Joint Statement on commitment to the Falepili Union*, www.dfat.gov.au/countries/tuvalu/joint-statement-commitment-falepili-union.

⁵³ *The Constitution of Tuvalu Act 2023*, section 2.1.

⁵⁴ Tuvalu became the 195th State to ratify UNESCO World Heritage Convention on 18 May 2023.

⁵⁵ UNESCO, *The Pacific atoll-island cultural landscape of Tuvalu*, 2026, whc.unesco.org/en/tentativelists/6707/.

was, before May 2023, one of the few countries to have not ratified the 1972 UNESCO Convention; this far-seeing shift could mean two things: first, Tuvalu acknowledges the fundamental role and assistance that might come from UNESCO, and, as a second layer, the call for international attention by ratifying the UNESCO Convention and immediately inscribing its atoll-island cultural landscape in the World Heritage tentative list.

UNESCO is aware of the threats deriving from climate change: according to the World Heritage Centre, established in 1992 as a focal point and coordinator for all matters related to UNESCO World Heritage, out of the 1,223 properties inscribed on the UNESCO World Heritage List, a third of natural and one in six cultural heritage sites are threatened by climate change⁵⁶. Although listing cultural and natural heritage on the UNESCO World Heritage List does not represent a perfect *ad hoc* tool to protect sites against major threats deriving from climate change and disasters⁵⁷, it raises awareness within the international community on the importance and necessity of safeguarding that specific cultural or natural heritage.

Art. 2(2)(c) of the Falepili Union Treaty - which acknowledges that more recent technological developments provide additional adaptation opportunities - could, at least in principle, serve as an entry point for cultural preservation initiatives, although no such measures are spelled out in the text. In this sense, Tuvalu plays a peculiar key role. The small island state launched its innovative “digital nation” project: a digital twin in the metaverse designed to preserve Tuvalu’s cultural memory and traditional practices in virtual form⁵⁸; this unprecedented initiative highlights both the limits - or the failure - of conventional adaptation strategies and the potential for alternative, technology-based approaches. By way of illustration, the sense of grief and sadness experienced by the population of other countries of the Asia-Pacific area impacted by climate change, such as Fiji, resulting in loss of habitability, territory, and displacement, provoked a cascade effect on social and cultural aspects of local communities⁵⁹. If Tuvalu somehow “prepared” or adapted the preservation of its cultural traditions and heritage to the adverse effects of climate change and sea level rise by “moving them” to the metaverse, the consequent impact on the mental health and well-being

⁵⁶ Data referred to 2021; see UNESCO, *Climate Change*, in 100 *World Heritage* (2021) whc.unesco.org/en/review/100.

⁵⁷ See generally L. Lixinski, *Luci E Ombre: The Bright and Dark Sides of International Heritage*, in 22(1) *Ital. Y.B. Int'l L.* 133, 138 ff (2013); see also F. Zorzi Giustiniani, *Protecting World Cultural and Natural Heritage against Climate Change and Disasters: An Assessment of the Effectiveness of the World Heritage Convention System*, in 2(1) *Y.B. Int'l Dis. L.* 233, 256 ff. (2021).

⁵⁸ Minister Simon Kofe strenuously advocated these aspects in his COP27 speech: «Our land, our ocean, our culture are the most precious assets of our people and to keep them safe from harm, no matter what happens in the physical world, we'll move them to the cloud», see S. Yeo, *Tuvalu: The disappearing island nation recreating itself in the metaverse*, in *BBC*, 21-11-2024, www.bbc.com/future/article/20241121-tuvalu-the-pacific-islands-creating-a-digital-nation-in-the-metaverse-due-to-climate-change; Minister Kofe reiterated the concerns expressed at COP 27 also at COP28.

⁵⁹ UNFCCC, *Non-Economic Losses. Featuring loss of territory and habitability*, cit., 30 ff.

of Tuvaluans is yet to be assessed. Also, transferring cultural heritage to a virtual dimension does not consider shortcomings in technological or economic development, as previously experienced by other countries – namely, the Maldives or Kiribati⁶⁰.

As the former Tuvaluan Prime Minister Natano remarked: «However we adapt to cope with the increasing devastation of climate change and sea-level rise, for some of us, the capacity to adapt is waning, for technical and financial reasons. Consequently, we will bear the burden of significant costs due to loss and damage even at safer temperature levels»⁶¹. Taken together, these elements illustrate a paradox – concerning cultural heritage loss – of the Falepili Union Treaty. It advances sovereignty recognition in the face of climate threats yet fails to integrate concrete mechanisms for cultural heritage protection. Without such integration, the “subsidence” of Tuvalu’s cultural identity – its language, traditions, and ancestral knowledge – risks becoming the starkest evidence of the inadequacy of prevailing adaptation models, thus resulting in an inevitable and hardly quantifiable loss.

The Tuvaluan case study is undoubtedly significant; however, it is essential to acknowledge that the Falepili Union Treaty remains limited in scope, given its strictly bilateral nature. Nonetheless, the bilateral treaty between Tuvalu and Australia does set a discernible normative orientation within the broader Asia-Pacific landscape. To some extent, what the Treaty fails to address may be mitigated and completed, only partially, by the Australia–Tuvalu Development Plan 2025–2030⁶², which, although formally situated within the realm of policy as a development bilateral instrument, operates as a functional “palliative”. Indeed, this comprehensive document frames the actions for culture and cultural heritage as a priority area, indirectly counterbalancing the deficiencies of the Falepili Union Treaty. In the Development Plan’s 2025–2030, the “maintenance and promotion of Tuvaluan culture”⁶³ is mentioned among the focus measures for climate adaptation, and it is strongly intertwined with the mobility entry⁶⁴. More specifically, the Plan provides a specific entry – called culture – throughout which culture, heritage, and traditions can be valorised⁶⁵.

⁶⁰ *Ibid.*

⁶¹ See Addison et al, *Addressing loss and damage*, cit. 20 ff. Furthermore, former Prime Minister Kausea Natano declared «As a nation we have come to the shocking realisation that we now exist to mitigate and adapt to the effects of climate change», see UNFCCC, *Tuvalu National Statement for the COP 28 Meeting*, 2023, unfccc.int/sites/default/files/resource/TUVALU_cop28cmp18cma5_HLS_ENG.pdf.

⁶² Australian Government, *Australia-Tuvalu Development Plan*, cit.

⁶³ *Ibid.*, 2.

⁶⁴ *Ibid.*: «We will provide pre-departure and settlement support services to help those who come to make the most of the opportunities available in Australia and retain their culture and traditions». As for the support for workers to preserve Tuvaluan culture, traditions and values see 9-10, under objective 2: “Connecting Tuvalu with Australia and the region”.

⁶⁵ *Ibid.*: «In response to consistent feedback throughout consultations, Australia will elevate the role of culture across our partnership. The preservation, maintenance and

Thus, cultural and heritage protection needs are incorporated into the broader policy framework, following consultations with a wide range of stakeholders, including civil society representatives, youth groups, activist networks, and women's advocacy and rights organizations⁶⁶.

Yet, it is noteworthy, as a critical remark, that under the heading "climate change", no explicit reference to culture or cultural heritage appears⁶⁷. However, in section three, by identifying three objectives or "pillars" - namely, creating opportunities for all to stay and thrive, connecting Tuvalu with Australia and the region, and enhancing resilience in the face of shocks - the Plan explicitly highlights that «The pillars are interconnected and mutually reinforcing in their contribution to the overarching goal. Key themes such as climate change, gender equality, disability equity, and culture are relevant to all pillars»⁶⁸. Yet, a closer scrutiny of pillar three - "enhancing resilience in the face of shocks" - reveals that the focus areas concerning cultural heritage, values, and traditions entirely fade away⁶⁹, finding no place alongside other key domains such as climate adaptation, economic governance, cybersecurity, and disaster resilience⁷⁰. This omission is particularly striking, considering that the Plan previously asserts that the three pillars are interconnected and mutually reinforcing and that cross-cutting themes - including climate change and culture - are relevant to all objectives. It therefore becomes legitimate to question whether these areas are, in practice, as interconnected and mutually reinforcing as the Plan purports. A more organic integration of cultural considerations within the resilience agenda would have been both expected and normatively consistent with such a claim.

The conclusion is that the broader Falepili framework remains incomplete in addressing the unresolved issues surrounding cultural heritage adaptation and loss. Notwithstanding these critical elements, it is certainly positive that mobility and sovereignty considerations are acknowledged. It remains to be assessed whether the Falepili Union Treaty - and the policies adopted in its wake, which function as its corollary despite remaining non-binding instruments - may serve as a replicable model. From a normative perspective, such mechanisms could be adapted and replicated across the Asia-Pacific region for the benefit of other states, especially SIDS, provided that the missing considerations are meaningfully incorporated. For instance, the Planned Relocation Guidelines issued by the Fijian

promotion of culture, heritage and traditions will be mainstreamed through our programs and support for culture retention will be a key focus of the mobility pathway. We will work to deepen our sporting and church connections».

⁶⁶ *Ibid.*

⁶⁷ *Ibid.*, 5.

⁶⁸ *Ibid.*, 7.

⁶⁹ See *ibid.*, 7, 10-11.

⁷⁰ The specific policy actions related to these areas are further detailed in subsequent sections of the document: see *ibid.*, 7, 16.

government⁷¹, through the embracement of a human rights or “human-centred” approach, take into account cultural matters amid planned relocation caused by climate threats: «[...] this would implicitly apply to all stages of planned relocation, as an interdisciplinary approach where relevant measures should address a variety of factors, such as social, cultural and economic, to avoid gaps in planning, implementation and follow up [...] and minimize the impact of the environmental stressors»⁷².

The Fijian framework directly involves local communities in preparing the plans «in accordance with conserving traditions, cultural practices, and human rights standards»⁷³. Hence, planned relocation, climate change, and the protection of cultural heritage are strongly intertwined.

Moving to more “operational” layers, Australia, for instance, has committed to a coastal adaptation project aimed at physically expanding Tuvalu’s land, with the declared objective of enabling Tuvaluans to maintain their livelihoods and cultural traditions⁷⁴. A similar solution can be observed in the Maldivian context, through the land reclamation mechanism in the context of a long-term climate risk reduction plan⁷⁵. While the coastal adaptation initiatives can be seen as a form of climate resilience, they inevitably fall short in addressing the profound cultural loss tied to the vanishing bond between land and sea. By contrast, Tuvalu’s autonomous and forward-looking digital adaptation strategy offers a more dynamic and context-sensitive response to the existential threats posed by climate change.

4. The orientations of international judicial and quasi-judicial bodies

Having reviewed some Asia-Pacific domestic solutions and international instruments relevant to the matter at stake, it is important to consider whether international judicial and quasi-judicial bodies have taken, or could take, meaningful steps in this direction. This could contribute to a better understanding of the limitations and potential ways to strengthen and advance responses to cultural heritage loss (in the Asia-Pacific and beyond) in the context of climate change.

In this regard, the long-awaited advisory opinion on climate change delivered on 23 July 2025 by the International Court of Justice (hereinafter “ICJ”) represents a landmark moment⁷⁶. Requested by Vanuatu and supported by youth representatives from the Pacific Islands, the opinion

⁷¹ Republic of Fiji, *Planned Relocation Guidelines. A framework to undertake climate change related relocation*, 2018, fijiclimatchangeportal.gov.fj/ppss/planned-relocation-guidelines-a-framework-to-undertake-climate-change-related-relocation; see A. Shetye, *Dignity Beyond Borders*, cit., 499-500.

⁷² *Ibid.*, 11.

⁷³ *Ibid.*, 12.

⁷⁴ UNDP, *Tuvalu Coastal Adaptation Project*, 2025, www.adaptation-undp.org/projects/tuvalu-coastal-adaptation-project.

⁷⁵ See UNDP, *Loss and Damage and Climate Litigation*, cit. 18 ff.

⁷⁶ ICJ, *Obligations of States in respect of climate change*, Advisory Opinion, 23 July 2025.

recognizes climate change as an “existential threat”⁷⁷ of unprecedented proportions, having the Court observed that the environment is foundational for human life. The ICJ further reaffirmed the principle of state responsibility for transboundary harm, meaning that SIDS could, in principle, bring claims against major emitters whose conduct causes identifiable harm to their territories⁷⁸. Within this framework, the Court imposed stringent due diligence standards, stressing that the degree of risk and harm determines the intensity of the obligations of conduct⁷⁹. The advisory opinion also emphasized the importance of international cooperation, solidarity, and collaboration⁸⁰, while articulating general principles such as common but differentiated responsibilities. In addition, the opinion provides fertile ground for advancing new claims and strengthening their legal standing in the climate justice arena.

Focusing on the aspects most relevant to this discussion, it is interesting to note that the ICJ advisory opinion explicitly addresses loss and damage⁸¹, yet it never makes any reference to cultural heritage; however, a few reflections are raised in terms of safeguard of culture and traditions - specifically, in sections devoted to the relevant scientific background and obligations of states concerning sea level rise - intertwined with the threats to the very existence of the state⁸². The Court expressly limits its examination to certain human rights⁸³, citing some decisions of the

⁷⁷ *Ibid.*

⁷⁸ *Ibid.*, para 272.

⁷⁹ *Ibid.*, para 280.

⁸⁰ *Ibid.*, para 308.

⁸¹ *Ibid.*, paras 413 ff.; interestingly, the ICJ recalls the work of the IPCC, *ibid.*, para 83: «The IPCC has also concluded with “very high confidence” that risks and projected adverse impacts and related loss and damage from climate change will escalate with every increment of global warming. It added that these risks, projected adverse impacts and related loss and damage are “higher for global warming of 1.5°C than at present, and even higher at 2°C”. [...] Indeed, in 2018, the IPCC concluded with high confidence that “warming of 1.5°C is not considered ‘safe’ for most nations, communities, ecosystems and sectors and poses significant risks to natural and human systems”».

⁸² As for the scientific background, *ibid.*, para 72: «Many participants emphasized the significant and devastating consequences they face because of climate change, stressing the urgent nature of the problem and the imminence of the threat it poses to their populations, territories, economies, cultural traditions and, for some, the very existence of their State»; see also para 364: «[...] In the Court’s view, sea level rise poses challenges in several respects, including of an economic, social, cultural and humanitarian character. It thus finds that the duty to co-operate assumes particular significance in this context, requiring States to take, in co-operation with one another, appropriate measures to address the adverse effects of this serious phenomenon».

⁸³ *Ibid.*, paras 372 ff. and para 376: «The Court is thus of the view that the adverse effects of climate change, including, *inter alia*, the impact on the health and livelihoods of individuals through events such as sea level rise, drought, desertification and natural disasters, may significantly impair the enjoyment of certain human rights. The Court will consider some of these rights, without attempting to be exhaustive».

Human Rights Committee (“HRC”) – for instance, *Teitiota v. New Zealand*⁸⁴ – with respect to the right to life⁸⁵ and the right of everyone to the enjoyment of the highest attainable standard of physical and mental health, under art. 12 ICCPR⁸⁶.

Culture, therefore, remains somewhat peripheral to the ICJ reasoning, except for a brief and indirect reference to the decision of the HRC Torres Strait Islanders case⁸⁷, and even then, only recalling the right to private and family life (under art. 17 ICCPR). In 2019, the members of an indigenous community residing in the Torres Strait Islands, off the northern coast of Australia, lodged a complaint before the HRC. The applicants alleged that Australia’s failure to take adequate measures to protect them from the adverse effects of climate change constituted a violation of their rights to enjoy their culture (art. 27 ICCPR) and to be free from interference with their private and family life and home, as protected under the ICCPR⁸⁸. The Committee duly considered the islanders’ profound spiritual connection with their ancestral lands and the dependence of their cultural identity and integrity on the health of the surrounding ecosystems. On 23 September 2022, the Committee upheld the communication, finding that Australia had indeed breached its obligations under art. 27 ICCPR⁸⁹. It requested the State to provide full reparation to the victims, including adequate compensation for the harm suffered, to engage in meaningful consultation with the affected communities to assess their needs, and to adopt effective measures ensuring their continued safe existence on their respective islands. This decision represents the first successful climate-related petition ever brought before a United Nations treaty body, marking a significant precedent in the

⁸⁴ HRC, *Ioane Teitiota v. New Zealand*, UN Doc. CCPR/C/127/D/2728/2016, 24 October 2019.; see E. Sommario, *When climate change and human rights meet: A brief comment on the UN Human Rights Committee’s Teitiota decision*, in 77 *QIL* 51 (2021); Y. Yang, *Integrating cultural heritage into climate displacement law*, cit., 628.

⁸⁵ HRC, *Ioane Teitiota v. New Zealand*, cit., para 377.

⁸⁶ *Ibid.*, para 379.

⁸⁷ ICJ, *Obligations of States*, cit., para 381: «In the view of the Court, the enjoyment of the right to privacy, family and home, protected by Art. 17 of the ICCPR, is also likely to be hindered by the adverse effects of climate change. The Court considers that a State’s failure to implement timely and adequate adaptation measures to address the adverse impacts of climate change may violate the right to privacy, family and home»; see also HRC, *Daniel Billy et al. v. Australia*, Communication n 3624/2019, Views of 22 September 2022, UN Doc. CCPR/C/135/ D/3624/2019, paras 8.9-8.12.

⁸⁸ Interestingly, one of the main Australian federal acts governing the protection of cultural heritage is an *ad hoc* measure devoted to the protection of the aboriginal and Torres Islander heritage, providing a basis for the safeguard of sacred objects and ancestral remains, alongside the possibility to issue an emergency declaration if the cultural heritage is under threat: see Australian Government (Federal Register of Legislation), *Aboriginal and Torres Strait Islander Heritage Protection Act*, No. 79, 1984, www.legislation.gov.au/C2004A02943/latest/text.

⁸⁹ A convincing analysis of the strategic nature of litigation to advance climate change adaptation is offered by R. Luporini, *Strategic Litigation at the Domestic and International Levels as a Tool to Advance Climate Change Adaptation?: Challenges and Prospects*, in 4(1) *Y.B. Int’l Dis. L.* 202 (2023).

recognition of climate change as a human rights issue.

While the HRC adopted a forward-looking stance on the protection of cultural heritage connected to human rights, hindered by climate change and sea-level rise, this aspect still appears marginal in one of the most prominent international judicial bodies, namely, in the ICJ's perspective.

As for loss and damage, the ICJ referred to the participants' submissions concerning the proposition that the climate change treaty framework could constitute a *lex specialis* in relation to the rules on state responsibility, particularly with respect to the procedural mechanisms established under art. 8 of the Paris Agreement⁹⁰. The Court, however, merely reaffirmed the impossibility of interpreting art. 8 as a legal basis for liability or compensation, instead emphasizing its cooperative nature, which lies at the core of the provision⁹¹. Thus, the ICJ rejected the view that art. 8 could embody a form of *lex specialis*⁹², thereby excluding the applicability of the general rules on state responsibility, and clarified that the loss and damage mechanism was not designed as a special regime «to address disputes relating to the breach of the provisions of the Paris Agreement»⁹³.

If we consider the cultural heritage of Tuvalu and its inherent loss resulting from the disappearance of land, what legal grounds can truly be relied upon? For instance, art. 27 of the ICCPR (rights of minorities), which also protects the right to enjoy one's culture, «holds a collective and intertemporal dimension that fits the purpose of climate-related complaints»⁹⁴. However, in the case of Tuvalu, the situation differs, as we are not dealing with an indigenous group, but with an entire population. Finally, in the Torres Strait Islanders case, the HRC underscored Australia's obligation to provide effective remedies through full reparation and to adopt measures aimed at preventing similar violations in the future⁹⁵.

Having already recalled the views of both the HRC and the ICJ, it is equally useful to draw on the orientation of other international judicial and

⁹⁰ ICJ, *Obligations of States*, cit., para 413.

⁹¹ *Ibid.*, para 414.

⁹² *Ibid.*, para 415.

⁹³ *Ibid.*, para 417.

⁹⁴ See R. Luporini, *Climate Change Litigation before International Human Rights Bodies: Insights from Daniel Billy et al. v. Australia (Torres Strait Islanders Case)*, in 3(2) *Ital. Rev. Int'l Comp. L.* 238, 255 (2023).

⁹⁵ R. Luporini, *Climate Change Adaptation, Disaster Risk Reduction and Human Rights in International Law*, Cham, 2025, 84, further notes: «It is argued that traditional communities that are not legally recognised as 'Indigenous' should also seek to invoke this right if the circumstances are appropriate. Examples include fishing communities in coastal areas threatened by erosion and sea-level rise, or agricultural communities in regions prone to desertification and drought»; for further reflections on other interesting points, see E. Polymenopoulou, *Cultural Rights in the Prevention and Management of Disaster*, in *Handbook of Human Rights and Disasters*, in F. Zorzi Giustiniani, E. Sommaro, F. Casolari, G. Bartolini (Eds), New York, 2018, 261; regarding the right to take part or participate in cultural life, see A. Chechi, *Extraterritorial Jurisdiction and Right to Take Part in Cultural Life at the ECtHR: a Critical Examination of Different Approaches to Recurring Issues*, in *Ord. Internaz. Dir. Um.*, 2025, 2, 365, 377-378.

quasi-judicial bodies that offer valuable insights into the issues at stake. Particularly instructive is the ITLOS advisory opinion submitted by the Commission of Small Island States on climate change and international law, rendered in May 2024⁹⁶. When recognizing the deleterious effects of greenhouse gases pollution on human communities, the Tribunal recalls the «impacts on marine ecosystems which would put key cultural dimensions of lives and livelihoods at risk»⁹⁷, thus embracing a culture-oriented approach that valorises a profound link between human communities and sea-level rise. Even more compelling is the approach adopted by the Inter-American Court of Human Rights (IACtHR), in the judgment *Lhaka Honhat Association v. Argentina*⁹⁸, which, for the first time in its jurisprudence⁹⁹, recognized a direct and autonomous ruling on the rights to a healthy environment, to food, to water, and to cultural identity, the latter as an offshoot of the right to enjoy cultural life. By moving beyond the traditional reliance on art. 21 (right to property) of the Convention as the sole normative vehicle for protecting indigenous territorial interests¹⁰⁰, the IACtHR acknowledged that the deprivation or degradation of ancestral lands may simultaneously and independently impair a plurality of interrelated economic, social, cultural, and environmental rights.

Relevant reflections also emerge from the UN Committee on the Rights of the Child (CRC), notably in *Sacchi and Others v. Argentina and Others*¹⁰¹, where the Committee, despite declaring the communication inadmissible for failure to exhaust domestic remedies¹⁰², reaffirmed its broader understanding of climate change as a systemic threat to the enjoyment of Convention rights - including cultural rights. Relying on the findings of the IPCC¹⁰³, the Committee stressed that a state failure to take preventive and regulatory measures in the face of foreseeable climate harm may constitute a breach of its human rights obligations¹⁰⁴. The *Sacchi and Others* case evidences a new sensitivity of the CRC to the importance of cultural considerations: the latter can potentially underscore the strategic

⁹⁶ ITLOS, *Request for an Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law*, Advisory Opinion of 21 May 2024, para 174, read together with para 66. See also M.J. Alarcón-Santillán, *Climate Change, Human Rights, and the Law of the Sea: Towards a Systemic Integration of Legal Obligations through Advisory Jurisprudence*, in *Völkerrechtsblog*, 8 October 2025, voelkerrechtsblog.org/climate-change-human-rights-and-the-law-of-the-sea/.

⁹⁷ The reference to “key cultural dimensions of lives and livelihoods at risk” directly derives from the IPCC, *Special Report on the Ocean and Cryosphere in a Changing Climate*, 2019, 5.

⁹⁸ IACtHR, *Case of the Indigenous Communities of the Lhaka Honhat (Our Land) Association v. Argentina*, 6 February 2020.

⁹⁹ *Ibid.*, para 201.

¹⁰⁰ *Ibid.*, para 27 ff.

¹⁰¹ CRC, *Sacchi et al v Argentina et al*, Communication n 104/2019, Views of 11 November 2021, UN Doc CRC/C/88/D/104/2019.

¹⁰² *Ibid.*, paras 10.15 ff., 11.

¹⁰³ *Ibid.*, para 10.6.

¹⁰⁴ *Ibid.*

relevance of such dimensions within the broader landscape of litigation before judicial and quasi-judicial bodies. In this light, cultural rights acquire salience in the context of climate-related adjudication.

While no autonomous human right to cultural heritage *stricto sensu* exists¹⁰⁵, nor is such a right currently articulated in climate litigation, the growing judicial attention to culturally embedded forms of harm suggests that cultural rights may play a significant role in shaping legal reasoning and outcomes.

As this part of the analysis has shown, cultural heritage loss sheds light on the growing - albeit still cautious - use of culturally oriented arguments as a form of leverage in climate-related litigation, notwithstanding the shortcomings on cultural heritage matters of the ICJ advisory opinion. Notably, the bulk of the advisory opinions and cases discussed are directly linked with the Asia-Pacific context, except for the CRC case and the IACtHR jurisprudence considered above.

5. Conclusion

In light of the analysis conducted in this article, the discussion sought to provide an overview of the approaches currently adopted in the Asia-Pacific region and by Tuvalu relating to cultural heritage loss in areas vulnerable to climate change and disasters. What emerges is a fragmented framework. Furthermore, the binary categories of “mitigation” and “adaptation” appear increasingly inadequate in contexts of inevitable and irreversible loss, particularly in the case of the disappearance of Tuvalu’s Pacific atoll-island cultural landscape, which is deeply rooted in the ancestral relationship between land, sea, and human life. The loss of culture and traditional knowledge constitutes a threat as grave as the disappearance of territory or statehood itself. As this paper argues, cultural heritage loss linked to territorial disappearance reveals a blind spot in adaptation-centred climate change governance, leaving affected communities without adequate tools.

This paper has also recalled the notion of loss and damage, assessing how recent international and Asia-Pacific domestic policies have - or have not - integrated cultural heritage as a priority area. As highlighted in the 2024 UNFCCC report on the matter, «cultural heritage must be integrated into all national, subnational and local climate plans and policies as well as those related to disaster risk reduction and management»¹⁰⁶.

Similarly, although the Falepili Union Treaty presents evident limitations - especially regarding cultural heritage loss, given its bilateral nature, its focus on climate mobility, and its primary concern with ensuring the continued sovereignty of the Tuvaluan state in the event of its physical disappearance - the instruments adopted in its wake may still represent a

¹⁰⁵ See generally Y. Donders, *Cultural Heritage and Human Rights*, in F. Francioni, A.F. Vrdoljak (Eds), *The Oxford Handbook of International Cultural Heritage Law*, Oxford, 2020, 379, 389 ff.

¹⁰⁶ UNFCCC, *Non-Economic Losses: Featuring loss of territory and habitability*, cit., 63.

step forward.

To take stock of the legal and policy toolkit examined throughout this article, a brief recapitulation is warranted. At the level of international law, the picture remains modest: art. 8 of the Paris Agreement acknowledges loss and damage, including its non-economic component, yet Decision 1/CP.21 expressly precludes any basis for compensation; the FRLD, for its part, channels climate finance towards NELD and ELD – cultural heritage among them – but remains, as already noted, a voluntary mechanism rather than a redress-based one. At the level of technical and policy guidance, the UNFCCC’s work programme on non-economic losses has done more than any treaty provision to name cultural heritage as an autonomous layer of loss, while the Sendai Framework’s priorities, although devised for disaster risk reduction rather than for loss and damage *stricto sensu*, already integrate cultural heritage into a cognate governance track. It is precisely at this intersection between an acknowledged gap and practice that further operational tools deserve mention. On that note, the paramount Post-Disaster Needs Assessment Guidelines Volume B “Culture”, developed jointly by UNDP, the Global Facility for Disaster Reduction and Recovery, the World Bank and the European Union, already provide a tested sectoral methodology for appraising culture and cultural heritage losses¹⁰⁷. Likewise, the pivotal UNESCO Updated Policy Document on Climate Action for World Heritage, adopted by the General Assembly of States Parties to the World Heritage Convention in 2023¹⁰⁸, signals a growing institutional willingness to translate climate change challenges into heritage-specific action. Whether, and how, these progressive culture/cultural heritage-tailored operational tools could be woven into a coherent legal architecture for cultural heritage loss and damage exceeds the scope of the present analysis, but it certainly merits further, dedicated inquiry.

The Asia-Pacific region must play a pivotal role in setting the right direction, alongside the international policy framework. Thus, the analysis has also touched upon the role of the Asia-Pacific as a “laboratory” for innovative solutions. If digital technologies represent the only viable – yet “dystopian” – means of preserving and transmitting culture, social fabric, and traditional knowledge, then Tuvalu’s digital efforts may indeed be seen as meaningful.

Finally, attention was given to the recent orientations of international judicial and quasi-judicial bodies, to assess whether they are

¹⁰⁷ Global Facility for Disaster Reduction and Recovery (GFDRR), United Nations Development Programme (UNDP), European Union, World Bank, *Post-Disaster Needs Assessments Guidelines: Volume B – Culture*, www.gfdr.org/sites/default/files/2017-09/PDNA%20GUIDELINES%20VOLUME%20B%20-%20Culture.pdf, prepared as a sector-specific complement to the *ibid.*, *Post-Disaster Needs Assessments: Volume A – Guidelines*, 2013, www.gfdr.org/sites/default/files/2017-09/PDNA-Volume-A.pdf.

¹⁰⁸ UNESCO, *Updated Policy Document on climate action for World Heritage*, WHC/23/24.GA/INF.8, 3 November 2023, unesdoc.unesco.org/ark:/48223/pf0000390439?posInSet=17&queryId=787ba74e-a230-4b91-8b55-4a4632898799.

moving toward a more positive definition of the problem and whether new avenues may emerge through the leverage of existing norms in relation to cultural heritage loss, both within and beyond the Asia-Pacific context. Although such leverage is timidly starting to appear, and a cautious approach should be adopted, recent developments coming from international judicial and quasi-judicial bodies, national policies, and the operationalization of the FRLD suggest potential pathways for further reflection and legal advancement. Integrating cultural heritage protection across multiple levels of the climate change governance architecture is, therefore, not only desirable but essential to ensure that the human and cultural dimensions amid climate change and sea level rise are no longer treated as peripheral.

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