

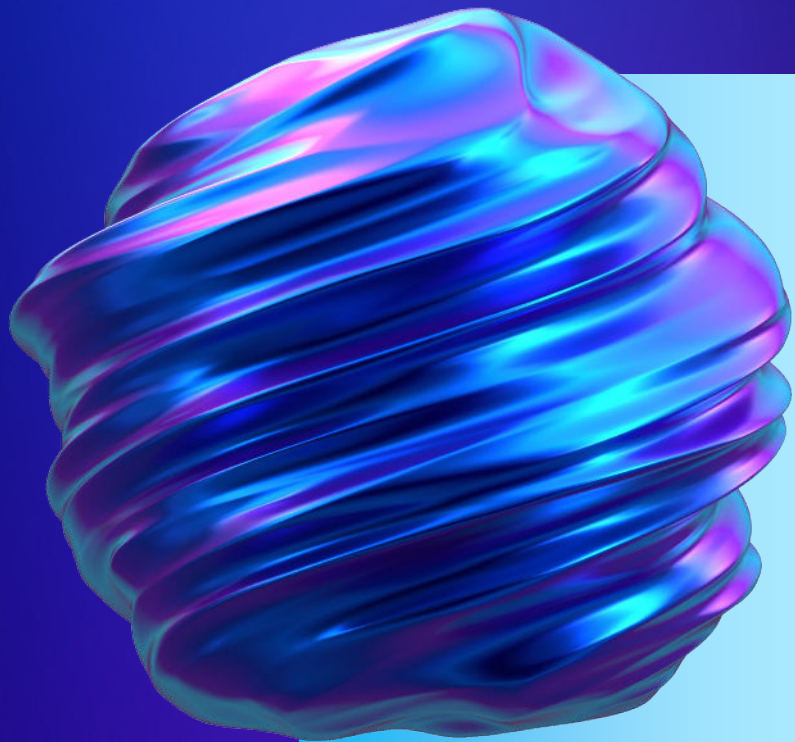


Mitigating climate impact on the Pacific

Minimising non-economic loss and damage for young women, girls and gender-diverse young people

This summary report has been prepared by KPMG for Plan International Australia

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November 2024



Climate change is an existential issue for the Pacific region.

KPMG was engaged by Plan International Australia to conduct a literature review of the current evidence regarding Non-Economic Loss and Damage experienced by young women, girls and gender diverse people in the Pacific Islands. This summary report contains an overview of KPMG's literature review findings relating to 6 key focus areas including; health, mental health, displacement, child, early and forced marriage and gender-based violence, education, and livelihoods.

Pacific island nations are disproportionately impacted by the threat of climate change. Given their sea-level proximity, climate change presents major increased risks of climate disasters, coastal erosion, and loss of biodiversity, agriculture and freshwater access (Parsons). This will significantly impact regional security, economic development and wellbeing.



If climate change is unmitigated, 49 million people in East Asia and the Pacific may become climate refugees by 2050 (Ramsay et al.)



Climate change is exposing Pacific Islanders to increased risks of disease, poor mental health and harm from extreme weather events (World Health Organization)



Economic losses from flooding in 2022 were four times more than the average of the previous 20 years for the South-West Pacific (World Meteorological Organization).

Australia is taking a leadership role addressing climate change across the Pacific:

- Committing \$150 million to regional and global climate funds (DCCEEW).
- Leading global talks on the New Collective Quantified Goal on Climate Finance (NCQG) (COP29 Presidency).
- Bidding to host the UNFCCC Conference of the Parties (COP31) in partnership with Pacific countries, to highlight the urgency of the challenge for the Pacific region (WWF).

Addressing gender-based impacts will be critical for an effective regional response to climate change.

Why this group?

- Young women, girls, and gender diverse young people in the Pacific islands often face heightened inequality, exacerbated by traditional gender roles and limited access to education and healthcare.
- Climate change magnifies these disparities, disproportionately affecting their livelihoods and safety, exposing them to risks of violence, child marriage, and exploitation.
- These challenges require specific research and intervention. Despite this, development and aid funding targeting this cohort is below global averages.

Why NELD?

- Climate research often focuses on loss and damage that can be expressed in economic terms.
- Encompassing all non-economic impacts for human societies and the environment, NELD has cross-cutting significance.
- Limited work has been done to ascribe value to NELD factors, due to their complex nature and measurement difficulties.
- A better understanding would be tremendously beneficial to guide Australia's climate-related investments, and its advocacy of regional outcomes in the Pacific.

Literature review findings: Gender-based harms with outsized impact from climate change

KPMG conducted a literature review of available research on NELD for young women, girls and gender-diverse young people in the Pacific. Below is a summary of the key findings.



Physical health

Climate impacts the prevalence of communicable and non-communicable diseases, with additional effects on young women and girls:

- **Communicable Diseases:** Zika and dengue pose significant risks to children and pregnant women (World Mosquito Program).
- **Non-Communicable Diseases:** Malnutrition, cardiovascular, and respiratory diseases can lead to preterm and stillbirths, and expose children to heat stress and lung diseases (World Health Organisation). Malnutrition and dietary risks are the leading causes of disease in the Pacific islands (Davila et al.).
- **Food Insecurity:** Climate events can cause major resource shortages. Cyclone Pam (2015) led to an 80% loss of food sources in Vanuatu, resulting in long-term malnutrition and stunted growth in children (Bowen).
- **Sexual and Reproductive Health:** Climate-related displacement can increase risky behaviour, transactional sex, and sexual abuse (Burns et al). Between 2021-2031, 14 million women in PNG could lose access to contraception, leading to 6.2 million unintended pregnancies and 2.1 million unsafe abortions (MSI Reproductive Choices).



Mental health and wellbeing

The mental health impacts of climate change on young women, girls, and gender-diverse young people in the Pacific islands and areas affected by climate events are profound and multifaceted:

- **Increased Depression and Anxiety:** After Typhoon Sudal, women and children in Micronesia experienced heightened levels of depression and anxiety (Filho et al.). Similarly, children exposed to Hurricane Sandy in-utero faced significant mental health issues, with female children showing increased risks of anxiety, phobias, depressive disorders, separation anxiety, and generalised anxiety (Nomura et al.).
- **Substance Abuse:** Youth in Micronesia showed increased substance abuse following Typhoon Sudal, indicating a coping mechanism for the stress and trauma experienced (Filho et al.).
- **Tangible loss of capacity:** Mental disorders rank first among 22 diseases and health risks for girls aged 5-14 in every Pacific island. In Fiji alone, girls aged 5-14 lost 903 years due to poor mental health in 2021, equating to 1,019 years per 100,000 girls (Institute for Health Metrics and Evaluation)

Literature review findings: Gender-based harms with outsized impact from climate change



Displacement and mobility

Across the Pacific, there were approximately 8.1 thousand internally displaced people from climate induced disasters in 2023. For the 50 per cent of this group who were women and girls, displacement had many impacts:

- **Healthcare Access:** Displacement disrupts healthcare services, making it difficult for women and girls to access essential medical care. This is particularly critical for maternal and reproductive health services, which are often deprioritized during crises (Unites Nations Children's Fund)
- **Educational Disruption:** Displacement often leads to the closure of schools and educational facilities, interrupting the education of girls. This disruption can have long-term effects on their educational attainment and future opportunities (United Nations Children's Fund)
- **Increased Exposure to Violence:** Displacement increases the risk of gender-based violence, exploitation, and abuse. Women and girls in displaced communities are more vulnerable to trafficking, domestic violence, and other forms of exploitation (Care International).
- **'Trapped populations':** In Kiribati, 94% of households have been affected by climate disasters in the last decade. Two-thirds of the population of the outer islands have migrated, leaving behind a 'trapped population', many of whom are women. These women often cannot travel because their skills are not valued in the Kiribati economy, making it difficult for them to find jobs. Consequently, they bear increased caregiving, household, and family leadership responsibilities (Oakes et al).



Child, early and forced marriage and gender-based violence

Climate change can increase the risks of child marriage, gender-based violence, and abuse:

- **Safe spaces:** The aftermath of climate disasters often results in a lack of safe spaces, resources, and access to education, which further increases these risks (Pacific Women Lead)
- **Increased exposure to violence:** After two tropical cyclones in 2011, there was a 300% increase in new domestic violence cases (UN Women).
- **Child marriage:** A study in Indonesian villages found a positive correlation between natural disasters and the likelihood of girls entering child marriages. Research in Bangladesh's coastal regions showed that during years with 30 or more days of extreme heat, girls aged 11-14 were twice as likely, and girls aged 15-17 were 30% more likely to marry, compared to baseline years (Girls not Brides).

Literature review findings: Gender-based harms with outsized impact from climate change



Education

Pacific countries are at the epicentre of immediate and physical disruption to education, given the greater frequency and intensity of extreme weather events. But they can also mitigate the effects of climate disaster through increased climate literacy:

- **Infrastructure damage:** Between 50 to 90 percent of 6,000 school buildings across Samoa, Tonga, and Vanuatu were assessed as possibly unable to withstand a strong cyclone. This was evidenced in 2020, when a cyclone in Vanuatu destroyed and damaged 885 schools (Marin et al.).
- **Opportunity for mitigation:** The Notre Dame Global Adaptation Initiative (ND-GAIN) has demonstrated improved climate disaster readiness and resilience for each year of education that girls receive. Another study found that nations investing in climate literacy for girls have lower deaths from droughts and floods. For each year of secondary education completed, there is an average six per cent decrease in the likelihood of child marriage or giving birth before 18 (Malala Fund).



Livelihoods

The immediate and long-term impacts of climate change can lead to NELD, especially through increased unpaid work and exposure to exploitation or forced labour:

- **Lost working days:** After Cyclone Pam, 3,600 female microentrepreneurs lost 39 days of paid working days each because their time was redirected to unpaid labour, mostly care work. During the 2015-16 El-Nino induced drought in PNG, women were expected to continue food production with limited resources, while their paid and unpaid daily tasks became more arduous, involving long walks to collect water, switching to more drought resistant crops, and effectively utilising food preservation efforts to ensure sustainable availability of food (Asian Development Bank).
- **Increased exposure to heat-affected jobs:** When including unpaid labour, women's losses due to the impact of extreme temperatures on their job increased by 260 per cent compared with men's losses at 76 per cent (Adrienne Arsht Rockefeller Foundation Resilience Centre).
- **Child labour:** Climate change acts as a threat multiplier, especially in agriculture where 70 per cent of child labour is located (International Labour Organisation).

Further targeted research will strengthen the evidence base, ensuring targeted and effective policy interventions. Our literature review has identified specific gaps to be addressed, focused on localising datasets from research in other regions and establishing longitudinal studies to achieve a more holistic view of the impacts over time.

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Contact us



Sarah Newport

Partner

T: +61 2 6248 1131

E: snewport@kpmg.com.au



Ben Wallace

Partner

T: +61 8 8236 3432

E: bwallace@kpmg.com.au

KPMG.com.au



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