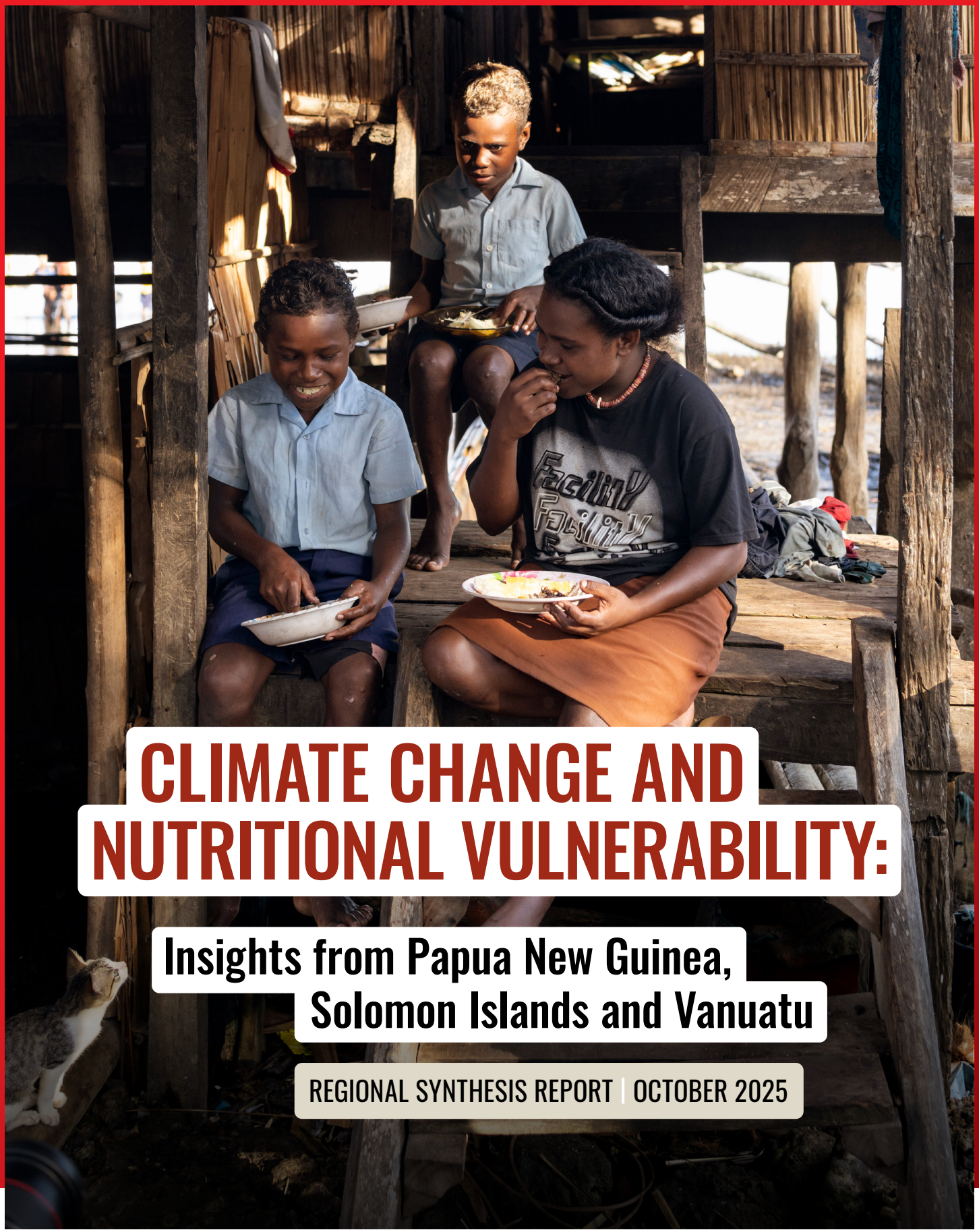

CLIMATE CHANGE AND NUTRITIONAL VULNERABILITY:

Insights from Papua New Guinea, Solomon Islands and Vanuatu

REGIONAL SYNTHESIS REPORT | OCTOBER 2025

Australian Aid

Save the Children

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Acronyms

ADB	Asian Development Bank
DfCDR	Department for Community Development and Religion (Government of PNG)
DFAT	Department of Foreign Affairs and Trade (Australian Government)
FGD	Focus group discussions
GBV	Gender-based violence
GCF	Green Climate Fund
ICAN	Integration of Climate Change and Nutrition
IYCF	Infant and Young Child Feeding
KII	Key Informant Interviews
MEAL	Monitoring, evaluation and learning
MHW	Marine heatwave
MoH	Ministry of Health
NCD	Non-communicable diseases
NGO	Non-Governmental organisation
PLW	Pregnant and lactating women
RMNCH	Reproductive, maternal, newborn and child health
SBCC	Social Behaviour Change Communication
SOLKAS	Solomon Islands Knowledge Action-Sustainability for Resilient Villages
WASH	Water, Sanitation, and Hygiene
WFP	World Food Programme

Key concepts

Climate extremes (extreme climate or weather event)

Events where weather or climate conditions go significantly above or below what's normally expected, landing near the highest or lowest ends of recorded measurements. These include both extreme weather and extreme climate phenomena, and together they're simply called climate extremes (IPCC, 2012).

Food systems

The full set of components including environmental conditions, human participants, inputs, operations, infrastructure, and institutions and activities involved in growing, processing, transporting, preparing, and eating food, along with the resulting social, economic, and environmental impacts (HLPE, 2017).

Climate-resilient food systems

Refers to the ability of institutions, policies, individuals, communities, natural systems, and socio-ecological processes to uphold and strengthen their capacity to anticipate, cope with, adjust to, and transform in response to ongoing uncertainties, especially those intensified by systemic and unexpected shocks, pressures, and vulnerabilities (HLPE, 2025). This concept is grounded in fairness and seeks inclusive transformation across all levels of the food system.

Nutrition-sensitive food systems

Food systems that intentionally integrate nutrition goals into their design, policies, and actions to improve diet quality and health outcomes, and address the underlying determinants of nutrition and development. These systems consider the entire pathway from agricultural production to food access and consumption, and aim to enhance the availability, affordability, and diversity of nutritious foods, especially for vulnerable populations (Ruel & Alderman, 2013).

Disasters

Major disruptions to how a community or society typically functions, caused by dangerous physical events interacting with vulnerable social factors. These disruptions lead to serious harm to people, property, economies, or the environment and often demand swift emergency actions to address urgent needs, potentially requiring outside assistance for recovery (IPCC, 2012).

First 1,000 days

The First 1,000 days represents the period of child development from conception (pregnancy) until the second birthday. This is a key period of rapid physical and cognitive development where the right care and nutrition (encompassing the needs of both pregnant and lactating women as well as children) are critical for children to reach their full potential in life (UNICEF, 2022b).

Executive summary

A collision of crises

One in three Melanesian children faces stunting, anaemia, or being overweight – while the region grapples with some of the world's fastest-intensifying climate changes. These twin crises are already undermining food security, health services, and water access. Yet their intersection remains underexplored. This study investigates how climate change is affecting nutrition and food security for women and children under five – particularly those in the First 1,000 Days – in Papua New Guinea, Solomon Islands and Vanuatu.

Key findings

Climate change is deepening nutrition risks

Climate change is accelerating both rapid- and slow-onset changes in Papua New Guinea, Solomon Islands and Vanuatu – ranging from more intense cyclones and floods to prolonged droughts, rising temperatures, shifting rainfall patterns, and sea-level rise. These are not isolated incidents but **cumulative stressors**, creating a cycle of preparation, survival, and recovery with no clear reprieve. This constant strain is not only undermining food security and public health systems – it is deepening nutritional vulnerability.

Climate change is driving malnutrition through a series of pathways

Climate change impacts nutrition through linked effects across **food systems** by impacting food production and biodiversity, disrupting livelihoods, contributing to food price inflation and hindering market access – all of which reduces accessibility and stability of diverse, nutritious foods and can contribute towards a shift to unhealthy diets high in ultra-processed foods. Similar scale impacts are evidenced in **health systems**, where climate-exacerbated disasters damage healthcare facilities and transportation networks, reducing access to health services, lowering the quality of care and causing interruptions in delivery and supply chains. Finally, climate change impacts the availability, accessibility, and safety of **water, sanitation and hygiene** systems that are crucial to health and nutrition.

Intersecting factors amplify the nutrition impacts of climate change

The climate crisis was seen to be intensifying nutrition vulnerabilities across all communities in this report, with disproportionate impacts on women, children under five, and persons with disabilities. Women face increasing **labour burdens** due to climate change, leading to chronic fatigue and reduced capacity to care for children. Persons with disabilities in rural areas encounter significant **physical and social barriers** to accessing food and essential services, which worsen during climate extremes. Gaps in nutrition knowledge – often shaped by **restrictive socio-cultural beliefs** and taboos – further hinder adequate child and maternal nutrition. **Unreliable income and limited land access** exacerbate food insecurity, while **substance abuse**, often used as a coping mechanism for societal stressors, diverts household resources from food and childcare. Traditional **food sharing networks** are weakening due to declining yields and evolving communal structures, leaving vulnerable households with less community support. **Remote and isolated communities** become even harder to reach during disasters, limiting access to markets, healthcare, and nutrition services.

Current policy and programs at the climate-nutrition nexus

In Papua New Guinea, Solomon Islands and Vanuatu, initiatives addressing the climate-nutrition nexus are most advanced in **food systems**, in areas such as integrating adaptation and mitigation in agriculture across value chains, water management, smallholder income support, and nutrition education targeting women, people with disabilities, and vulnerable groups. **Health sector integration** is emerging but less developed, with efforts like mobile clinics, digital nutrition surveillance, and rural health strengthening aiming to mitigate climate-driven food insecurity

and disease. **WASH programs** incorporate climate and nutrition goals variably, emphasising community capacity, inclusive services, and gender equity to improve nutrition outcomes. **Social protection** remains limited but holds potential through anticipatory and adaptive approaches.

Policy and programmatic recommendations

There is an urgent need to work with governments, development partners and civil society organisations on the integration of climate and nutrition into existing national food, health, and WASH policies and programs, focusing on five areas of policy and program action:

1. Climate-resilient, nutrition-sensitive food systems	**POLICY:** Integrate nutrition-sensitive, climate-resilient and biodiversity conservation goals into national and sectoral development policies.	**PROGRAM:** Promote nutrient rich native, locally adapted crops and support diversified home and community gardens and food preservation activities.
2. Nutrition and child-sensitive, adaptive social protection	**POLICY:** Promote greater adoption of anticipatory and adaptive social protection programs in government policies with a focus on nutrition-sensitive schemes.	**PROGRAM:** Continue to pilot cash-based assistance and add nutrition-sensitive top-ups.
3. Climate-adapted reproductive, maternal, newborn and child health and outreach health services	**POLICY:** Embed climate adaptation clauses (mobile outreach triggers, surge staffing) in RMNCH guidelines and health-sector contingency plans.	**PROGRAM:** Scale up outreach programs, pre-position staff kits for post-disaster periods, and integrate climate related health messaging into routine health promotion.
4. Inclusive, climate-resilient WASH infrastructure	**POLICY:** Update national WASH design codes to require flood, saltwater intrusion and heat-resilient infrastructure, as well as universal design for disability inclusion.	**PROGRAM:** Expand infrastructure, hygiene promotion and equitable service delivery in peri-urban areas and informal settlements, as well as ensuring WASH infrastructure is inclusive.
5. Cross-sectoral coordination and alignment	**POLICY:** Establish cross-sector inter-ministerial Climate-Nutrition Task Forces and align actions with existing policies.	**PROGRAM:** Engage cross-sectoral community networks, and support learning and replication of good practice climate-nutrition sensitive programming.

Conclusion

Climate change is already reshaping the food, health, and WASH systems upon which nutrition depends in Papua New Guinea, Solomon Islands and Vanuatu. This study confirms that the intersection of climate change and existing socio-economic inequalities is driving, and will continue to drive, rising nutrition vulnerability for women and young children, especially during the First 1,000 Days. Yet, there is clear opportunity to act. By embedding nutrition in climate adaptation efforts and vice-versa – across key sectors – governments and partners can protect vulnerable populations and break the cycle of climate-exacerbated malnutrition. The evidence gathered here provides a strong foundation for integrated, equity-focused, and locally driven action that can build resilience before the impacts of climate change on nutrition become irreversible across the Pacific.

1. Introduction

1.1 Background and rationale

Countries in the subregion of Melanesia (Fiji, Papua New Guinea, Solomon Islands and Vanuatu) face a triple burden of malnutrition, including undernutrition (stunting and wasting), micronutrient deficiencies and overnutrition (overweight and obesity) (UNICEF et al., 2023). The prevalence of stunting – a consequence of inadequate nutrition and repeated infections – in children under five years, for example, is higher in Melanesia than the global average (43.6% vs 22.0% respectively) (UNICEF et al., 2023). These challenges are further compounded by climate change, with the Pacific at the frontline of climate-related extreme weather events and hazards such as coastal floods, rising sea levels, and tropical cyclones (IPCC, 2023).

Climate change is projected to exacerbate all forms of malnutrition, disproportionately affecting the poorest and most vulnerable populations, including pregnant and lactating women (PLW) and children under five (Pörtner et al., 2022). However, despite the urgency of this challenge, the evidence base for the impact of climate change on all forms of malnutrition in Melanesia remains limited, particularly regarding country-specific data and analysis.

1.2 Study objectives and scope

This study investigates the direct, indirect, and compounding impacts of climate change on the nutrition of children under five and women in rural, urban, and peri-urban areas of Papua New Guinea, Solomon Islands and Vanuatu. It also examines how intersecting factors – such as gender, disability, education, livelihoods, family dynamics, social systems, and geography – influence nutritional outcomes, with a focus on PLW and children under two, recognising the First 1,000 Days as a critical window for intervention.

The findings will inform evidence-based recommendations to strengthen Save the Children's nutrition and climate programming. Current efforts include targeted nutrition interventions in Papua New Guinea and multi-year community resilience programs in Solomon Islands and Vanuatu. All initiatives emphasise inclusive approaches tailored to the diverse needs of communities. Insights from this study will contribute to regional efforts in WASH, health, food security, and nutrition across the Pacific.

Protecting the livelihoods of children and vulnerable communities is a key focus of Save the Children's work in the Pacific.
Photo: Conor Ashleigh / Save the Children

1.3 Study questions

The study was guided by four questions:

1. How does climate change affect the nutritional vulnerability of PLW and children under five, particularly those in the First 1,000 Days, in both remote/rural and urban/peri-urban areas of Papua New Guinea, Solomon Islands and Vanuatu?
2. What other significant factors (such as gender, disability, education, religion, cultural beliefs, livelihood sources, and family dynamics) influence the nutritional status of children under five? How are these interconnected with climate change, and what implications do they have for program design in the targeted locations?
3. What policies and programs currently address the intersection of climate change and nutrition for children under five in the targeted countries? What lessons can be drawn from Melanesia and other similar international contexts, particularly regarding how these policies and programs affect women and children under five, with a specific focus on the First 1,000 Days?
4. What policy and programming approaches can Save the Children and other key actors adopt at regional and country levels to address the nutritional vulnerability of children under five through integrating climate change and health/nutrition?

1.4 Methodology

The study used a qualitative approach combining primary and secondary data collection and synthesis. It brought together five components:

- **Literature review:** Literature identified from databases and international development organisations was reviewed to examine the intersection of climate change and nutrition for target groups, as well as related policies and programs. It involved a structured search across academic databases and development organisation repositories, guided by the PICOS framework.[1] Literature was screened and selected based on relevance to study objectives, and data was extracted using a standardised form. Thematic analysis was then conducted to synthesise findings, identify trends, and highlight evidence gaps, particularly in relation to gender inequality, dietary diversity, and climate-related malnutrition pathways.
- **Vulnerability analysis:** Available data on key climate and nutrition vulnerabilities was evaluated at national and provincial levels. Nutrition outcomes like wasting and stunting, micronutrient deficiencies and measures of food security were included to assess nutritional vulnerability. Climate variability and climate change-related extreme weather events were investigated to assess climate vulnerability.
- **Key informant interviews:** Key informant interviews (KIIs) were conducted in all three countries, with a total of 29 contributors, 52% of whom were women. Each of them was either a service provider or national, provincial or local policy stakeholder. KIIs provided insights into policy frameworks, program implementation, and the intersection of climate change and nutrition.
- **Focus group discussions:** A total of 33 focus group discussions (FGDs) (68% female), across three to four sites in each country, were conducted with mothers/female caregivers, fathers, and grandmothers, employing a problem tree analysis approach to structure the discussion.

[1] *PICOS framework is a tool used in evidence-based research to formulate focused research questions by defining five components: Population (the group studied), Intervention (the treatment or exposure), Comparison (the alternative or control), Outcome (the effects measured), and Study design (the type of research study).*

- **Community mapping:** A total of 11 community mapping activities (52% female) were conducted, one per site in each country, to gather community-level data on the spatial and temporal dimensions of all manifestations of climate change impacts on malnutrition in children under five and their mothers.

Community mapping and FGDs were conducted at the same sites – in Autonomous Region of Bougainville, Papua New Guinea; in Malaita in Solomon Islands, and in Sanma and Shefa provinces in Vanuatu.

Insights from the KIIs were triangulated with findings from the literature review to understand policy and system-level dynamics. FGDs and the community mapping activity highlight local realities, informed by the literature review and vulnerability analysis. The study adhered to rigorous ethical standards to ensure voluntary, informed, and respectful participation. All participants, including those involved in KIIs, FGDs, and community mapping, were informed about the nature and purpose of the research by trained data collection teams. Participation was contingent on free, prior, and informed consent, which could be provided either orally or in writing. Participants were assured they could withdraw at any time without consequence. Child safeguarding protocols were also integrated into the training and fieldwork.

1.5 Study limitations

This study integrates climate and nutrition secondary data with qualitative insights from three Melanesian countries, acknowledging several limitations. Geographic and demographic coverage was constrained, with data collected from a limited number of sites per country, potentially missing intra-country variation, especially in remote or isolated communities which may not reflect broader national dynamics or specific challenges or opportunities. Nonetheless, purposive site selection across urban, rural, coastal, and inland areas enabled the identification of cross-cutting themes and shared challenges.

While the study engaged diverse community members including caregivers, health workers, and leaders, some groups – such as persons with disabilities and elders – were underrepresented in certain locations. Language translation from local dialects to English may have introduced minor inaccuracies, though post-fieldwork consultations helped ensure contextual accuracy. Additionally, qualitative methods like community mapping may have been affected by recall bias, and variations in facilitation could have influenced data depth and facilitation bias. Importantly, the study did not include detailed quantitative data or direct impact assessments of climate change on nutrition. Instead, it offered indicative pathways of influence, highlighting how climate change intersects with food systems, health services, and WASH.

Despite these limitations, the reliability of the findings is supported by triangulation across multiple data sources, thematic consistency across countries, and alignment with climate and nutrition vulnerability literature. While not universally generalisable, the results offer conceptual insights into systemic vulnerabilities, potential entry-points for action, and policy gaps that are likely relevant across similar contexts in the Pacific region.

2. Findings from Papua New Guinea, Solomon Islands and Vanuatu

2.1 Nutritional vulnerability in a changing climate: impacts on PLW and children under five

The pathways between climate change and malnutrition for PLW and children under five are diverse and nuanced, encompassing complex, multidirectional links that connect drivers, actions, and outcomes. This section draws from desk review evidence and primary data collection to highlight how these pathways are currently unfolding as climate change impacts exacerbate in the region.

The study utilised a simplified version of a theoretical framework developed by Dikoda and the World Food Programme (WFP) for the Asia-Pacific region to guide its exploration of the pathways through which climate change affects all forms of malnutrition (Cresta et al. 2025). This framework was adapted to the context of Papua New Guinea, Solomon Islands and Vanuatu, and was informed by findings from the desk review and vulnerability assessments. The framework highlights how the impact of climate change on malnutrition propagates through three intersecting and complementary pathways: food systems, health systems, and WASH, as illustrated in **Figure 1**. These pathways reflect how climate-related hazards and impacts influence the immediate and underlying determinants of malnutrition. The food systems pathway refers to the availability, accessibility, stability and utilisation of nutritious food, which can be disrupted by climate-induced changes such as droughts, floods, and reduced agricultural productivity. The health systems pathway captures how climate change affects disease patterns, healthcare access, and individual health status, which exacerbate undernutrition and micronutrient deficiencies. The WASH pathway links to malnutrition through exposure to contaminated water and inadequate sanitation, which contribute to gastrointestinal infections and impaired nutrient absorption.

By applying this modified framework, the study was able to structure its analysis of climate-malnutrition linkages and distinguish between evidence derived from the literature and insights generated through primary data collection. Specifically, the framework was used to guide the identification of climate-sensitive drivers of malnutrition across food, health, and WASH domains, while also helping to organise key informant reflections and community responses.

Food, health and WASH pathways are linked to children's nutritional health and wellbeing.
Photo: Conor Ashleigh / Save the Children

Climate change projections in Papua New Guinea, Solomon Islands and Vanuatu

Climate change is projected to reshape the Pacific region's climate, with rising temperatures, shifting rainfall patterns, and intensifying extreme weather events.

Warming in the Western Pacific is projected to increase by 2.0°C to 4.5°C by century's end relative to 1961-1990 (Wang et al., 2016). This will drive increased heat stress, with more days exceeding apparent temperatures dangerous to human health (>41°C), under a high emission scenario (Ranasinghe et al., 2021). Marine and land heatwaves are expected to become longer and more intense, threatening ecosystems and livelihoods. Sea-level rise will contribute to coastal erosion, storm surges, and saltwater intrusion into freshwater supplies (IPCC, 2021). Rainfall patterns are expected to shift, with wetter conditions in the Western and Equatorial Pacific and drier conditions in the subtropical South and East (Ranasinghe et al., 2021).

Despite potential increases in rainfall, freshwater availability will likely decline due to higher evaporation and salinisation (Ranasinghe et al., 2021). Extreme rainfall events are expected to intensify by about 7% per degree of warming, while droughts may become up to four times more frequent (IPCC, 2022). Tropical cyclones will become fewer but more intense, with a higher likelihood of Category 4–5 storms and increased rainfall rates – especially during El Niño events (IPCC, 2022). These changes will amplify risks to infrastructure, food and water security, and human health across the Pacific islands. The impacts of climate change will be expressed differently in each of the three countries examined in this study (IPCC, 2023). The following section describes both observed changes and projections from the most recent, highest resolution models for the three countries.[2]

Rapid-onset events

Tropical cyclones

The future of tropical cyclone activity in the South Pacific is expected to become more hazardous, despite a projected decline in the overall number of events. While fewer cyclones may form, those that do are likely to be more intense, with a growing proportion reaching Category 4 or 5 strength (Knutson et al., 2020). This shift toward stronger cyclones means that rainfall associated with these systems will become heavier, and storm surges more destructive – especially as sea levels continue to rise (Yoshida et al., 2017).

For Papua New Guinea, Solomon Islands and Vanuatu, this evolving cyclone profile – which was one of the most frequently cited manifestations of climate change by participants – translates into heightened risks. Infrastructure damage, loss of livelihoods, and increased coastal flooding are likely to become more frequent and severe (CSIRO & SPREP, 2021a, 2021b, 2021c).

Extreme temperatures

Extreme temperatures are projected to increase significantly across Papua New Guinea, Solomon Islands and Vanuatu, with more frequent and intense heatwaves and days above 30° expected under high emission scenarios (CSIRO & SPREP, 2021b, 2021a, 2021c). Although rainfall projections vary, the combination of higher temperatures and possible reductions in seasonal rainfall – particularly during the dry season – could exacerbate drought conditions, impacting water availability, agriculture, and ecosystems across all three countries (CSIRO & SPREP, 2021c, 2021a, 2021b). These changes will have widespread implications for human health and livelihoods, especially in lowland and coastal areas where temperature thresholds critical for crops and water stress may be exceeded more often (Ranasinghe et al., 2021).

Marine heatwaves (MHWs) in the South-West Pacific, including waters surrounding Papua New Guinea, Solomon Islands and Vanuatu, are projected to increase in frequency, duration, and intensity – regardless of future global warming pathways (IPCC, 2018). Currently, the equatorial Pacific experiences MHWs lasting around 30 days annually, but this is expected to rise to 100 days at 1.5°C of global warming, and 200 days at 2.0°C, effectively tripling the duration (Oliver et al., 2018). The rate of ocean warming could be twice the current rate under a very

[2] *Projections are presented for Coupled Model Intercomparison Project phase 5 (CIMP5) data using the Representative Concentration Pathway 8.5 (RCP 8.5).*

low-emission scenario, and up to eight times higher under a very high-emission scenario (Oliver et al., 2018). This intensification will have profound impacts on coral reefs, fisheries, and coastal ecosystems, threatening food security and livelihoods.

Extreme rainfall events

Extreme rainfall and flood risks are expected to intensify across Papua New Guinea, Solomon Islands and Vanuatu due to climate change even though average rainfall trends remain uncertain due to high variability and limited historical data. For Papua New Guinea, projections under high emissions scenarios suggest annual rainfall could increase by up to 25% by 2050, with much heavier rainfall events and greater tropical cyclone impacts (CSIRO & SPREP, 2021a). Vanuatu faces a similar outlook, with projections indicating up to 20% more annual rainfall and increased cyclone-related flooding under high emissions (CSIRO & SPREP, 2021c). In Solomon Islands, rainfall may increase by up to 10% by 2050 under high emissions, with more intense rainfall events and sea level rise exacerbating coastal flood risks (CSIRO & SPREP, 2021b).

Slow-onset shifts

Temperature

All three countries are experiencing clear and ongoing warming. Since the pre-industrial period (1850-1900), average temperatures have increased by approximately 0.7°C in Vanuatu, 0.8°C in Solomon Islands, and 0.9°C in Papua New Guinea (CSIRO & SPREP, 2021a, 2021c, 2021b), consistent with global trends (Ranasinghe et al., 2021). By 2050, projected warming relative to the 1986-2005 baseline (CSIRO & SPREP, 2021a, 2021b, 2021c) ranges from 0.7-1.3°C in Vanuatu, 0.8-1.3°C in Solomon Islands, and 0.8-1.4°C in Papua New Guinea.

Rainfall

Rainfall projections are more uncertain due to high variability and limited historical data. In Solomon Islands and Vanuatu, scenarios range from a 10% decrease to a 20% increase by 2050 (CSIRO & SPREP, 2021c, 2021b). In Papua New Guinea, projections indicate increases of up to 13% on the mainland and 29% in island and ocean regions by 2090 under high emissions (CSIRO & SPREP, 2021a).

Sea-level rise

Future projections show that sea level will continue to rise for centuries, even if global emissions are halted, due to committed warming and ice melt (Oppenheimer et al., 2019). Under current climate mitigation policy trajectories, the Pacific region is expected to experience at least 15cm of additional sea level rise by 2050, with median projections reaching 68cm by 2100 (United Nations, 2024). In worst-case scenarios involving rapid ice sheet collapse, regional sea level rise could approach 2m by the end of the century.

Under high emissions scenarios, sea levels are projected to rise by 0.68-1.22m in Vanuatu, with a median estimate of 0.90m (CSIRO & SPREP, 2021c). Similar projections apply to Solomon Islands, with potential rises of up to 1.22m, and Papua New Guinea, where sea levels could increase by 0.65-1.21m (CSIRO & SPREP, 2021a, 2021b). These changes will exacerbate coastal erosion, saltwater intrusion, and storm surge impacts, posing severe risks to infrastructure, ecosystems, and livelihoods. The implications are particularly acute for low-lying coastal communities.

Critically, participants in all three countries noted that the impacts of climate change are **cumulative and overlapping**. They reported that communities often do not have an opportunity to recover from or address one problem before another emerges. This recurring cycle of disruption takes a psychological toll as people are repeatedly forced to prepare for, survive, endure, and recover from successive climate-related disasters.

> **“There has been no respite.**
>
> – Participant in Vanuatu, describing the cumulative and overlapping effects of repeated disasters.

Nutrition vulnerabilities in Papua New Guinea, Solomon Islands and Vanuatu

Each of the three countries examined in this study is currently facing a triple burden of malnutrition, with high levels of stunting and wasting among children under five, micronutrient deficiencies in children and PLW, and rising rates of obesity in both groups (Global Nutrition Report, 2024a, 2024b, 2024c; WHO, 2020).

Table 1: Prevalence of the triple burden of malnutrition among women and children in Papua New Guinea, Solomon Islands and Vanuatu

	PAPUA NEW GUINEA	SOLOMON ISLANDS	VANUATU
Prevalence of stunting (children under five)	48.2%	31.6%	29.1%
Prevalence of wasting (children under five)	16.2%	7.9%	7.8%
Anaemia (children under five)	46.7%	38.1%	31.0%
Anaemia (pregnant women)	30.9%	34.8%	32.3%
Overweight and obesity (children under five)	13.7% overweight (and rising)	3.9% overweight (and rising)	9.5% overweight (and rising)
Overweight and obesity (women)	57.3% overweight and obese	29.5% overweight, 17.9% obese	30.6% overweight, 23.5% obese

Source: Stunting, wasting and overweight data are from the most recent nationally representative surveys available, except for overweight in women in Papua New Guinea which was from WHO (2022). Anaemia prevalence are from the most recent WHO estimates. (National Statistical Office [Papua New Guinea], 2010; Solomon Islands National Statistics Office et al., 2017; Vanuatu Bureau of Statistics, 2024; WHO, 2019; WHO, 2022; WHO, 2023).

Communities highlighted the various impacts of this triple burden of malnutrition on children under five and PLW.

Children under five: Participants asserted that malnourished children appeared weak and smaller than expected for their age. They were falling ill more frequently and taking longer to recover from their conditions, the most common of which included diarrhoea, skin infections, respiratory issues, stomach aches, and constipation. Malnourished children were seen as overtired and withdrawn, suffering from low energy levels and lacking the ability to concentrate in school.

> **“Even when they go to school, the children are not listening or learning properly, maybe because their stomachs are not full.**
>
> – Participant in Solomon Islands, describing the impact of malnutrition on children’s ability to learn.

PLW: Participants noted that malnourished women who are pregnant or breastfeeding commonly suffered from physical symptoms such as swelling, fatigue, body aches, and appetite loss. Participants highlighted emotional and behavioural changes among nutritionally-taxed mothers, including irritability, emotional withdrawal, poor decision-making, as well as increased stress, anxiety, and social isolation. Women also described slow recovery after childbirth, which they attributed to inadequate nutrition.

Across the three countries, FGD data suggests early warning signs of breastfeeding stress and early weaning are emerging. Participants described some women as being too weak to breastfeed efficiently and suffering from reduced breastmilk production, impacting the health of their children. A connection was made between reduced breastmilk production and maternal nutrition, with some participants asserting that food insecurity, a lack of available nutritious foods, and subsequent declines in maternal nutrition reduced mothers’ milk supply.

Research investigating the association between maternal nutrition and breastmilk supply has yielded mixed results (Adhikari et al., 2022; Bravi et al., 2016), and malnourished mothers can often continue to breastfeed and will continue to produce breast milk that meets the nutritional needs of their infants, at the expense of maternal reserves (WHO, 2025). However, stress – commonly experienced during food shortage and disasters – can affect the flow of a mother's milk, and be misunderstood as not having enough milk.

While breastfeeding has long been practised in these countries, with exclusive breastfeeding rates above global averages (Global Nutrition Report Stakeholder Group, 2022), this study indicates that this positive practice may now be under threat. The need to uphold and support breastfeeding during and after crises was consistently emphasised as critical to protecting child nutrition and health.

> **"The baby feels unsatisfied with the breastfeeding. Maybe because the mother's breast is not filled with milk for the baby, because of a lack of food, like vegetables, fruits.**
>
> – Participant in Solomon Islands, highlighting the perceived connection between maternal malnutrition and insufficient breast milk production.

Food systems pathway

Food production

The most direct and well-studied routes between climate change, climate variability and malnutrition are through reduced food production, which in turn reduces food availability, stability and accessibility. Most studies on climate change and food in the Pacific focus mainly on production, such as agriculture and fisheries, without accounting for the broader food system (Trudinger et al., 2023). This limits the current understanding of how climate change affects food access, nutrition, cultural practices, and economic stability, which are deeply interconnected and essential to food and nutrition security in Pacific Island communities. However, direct and indirect impacts of climate change and climate variability have been documented for key staples, such as taro, cassava and sweet potato (Taylor et al., 2016). For example, changes in the El Niño-Southern Oscillation have been associated with drought which led to losses of up to 50% in Papua New Guinea (Joseph et al., 2019). In each of the three countries, food production from farming and fishing is expected to continue to decrease due to the impacts of climate change (CFE-DM, 2023a; FAO, 2023a; World Bank, 2021c). Participants highlighted the many ways this is taking place, resulting from both rapid- and slow-onset events. Extreme events like cyclones, floods, droughts, and landslides, along with increasingly high temperatures, are damaging crops, degrading soil quality and damaging marine ecosystems. In 2015, Tropical Cyclone Pam caused damage to Vanuatu's agricultural sector valued at nearly two thirds of the country's GDP (Government of Vanuatu, 2015). Simultaneously, increased rainfall and temperature variability are disrupting traditional agricultural cycles, increasing the risk of food and agricultural losses (Amato-Ali et al., 2024). In addition, rising sea levels combined with increasing groundwater demands are leading to saltwater intrusion which degrades arable land, making it unviable for cultivation, and contaminating fresh water sources needed for human consumption and sanitation (Sharan et al., 2021).

> **"It's difficult to know when to plant because rain may come then stop suddenly, or it may rain too much and destroy everything.**
>
> – A participant from Solomon Islands, highlighting the uncertainty caused by erratic and unpredictable rainfall patterns.

Critically, the participants indicated that the impacts of climate change on food production are severe for local farms and household gardens, with traditional areas degraded, damaged, or destroyed. Multiple studies also highlight this problem (CFE-DM, 2023a; Global Alliance for the Future of Food, 2022; Sammut et al., 2024).

In addition to agricultural production, each of the three countries has been identified as a hotspot for climate-related impacts to fisheries (Cottrell et al., 2019). Participants in all three countries pointed out the impacts already being felt, including from damaged marine ecosystems and saltwater intrusion contaminating fresh water sources. Given the high reliance on fish as a critical source of protein and other micronutrients in all three countries, disruptions to fisheries pose a serious threat to food and nutrition security (Global Alliance for the Future of Food, 2022; Sammut et al., 2024). By 2100, under both low and high emission scenarios, Papua New Guinea and Solomon Islands are projected to experience a 50% or greater reduction in maximum catch potential (Mycoo et al., 2022).

Biodiversity loss, highlighted consistently in focus group discussions and key informant interviews, represents an existential threat that undermines food production. In Papua New Guinea, Solomon Islands and Vanuatu, biodiversity loss poses a particularly acute threat to the health and well-being of pregnant and lactating women and children in their crucial first 1,000 days, exacerbating existing vulnerabilities. The rich agro-biodiversity and marine resources that traditionally underpin food systems in these Pacific Island nations are under severe pressure from climate change, deforestation, and unsustainable practices (Mohammed, 2022). Coral bleaching, coastal erosion, and the degradation of tropical forests and coastal habitats all reflect worsening ecological instability, contributing to the loss of vital food sources. The degradation of natural ecosystems can alter the prevalence and distribution of vector-borne diseases like malaria, a significant health burden in Papua New Guinea, Solomon Islands and Vanuatu, disproportionately affecting pregnant women and young children (UNICEF et al., 2023). These interconnected environmental shifts directly compromise the foundations of nutrition, health and livelihoods – particularly for the most vulnerable.

Livelihoods

Climate change, through reduced food production, can have severe negative impacts on livelihoods, particularly those reliant on agriculture and fisheries (FAO, 2023b). When food production is disrupted by climate change, agricultural and fishery workers, as well as subsistence farmers, can lose a critical source of income at the same time as food availability declines.

This is a significant threat across the three countries, where livelihood practices lack diversity, and are primarily subsistence-based and climate-sensitive, with households relying on farming, fishing, and informal trade (Schmidt et al., 2023; Solomon Islands National Statistics Office, 2015; Vanuatu National Statistics Office, 2021b). Livelihoods in Papua New Guinea are centred on more diverse farming (cocoa, coconut, bananas) and informal trade with limited value addition (Schmidt et al., 2023), while in Solomon Islands, coastal communities rely heavily on fishing and gardening but face declining yields due to climate impacts (Dey et al., 2016), and in Vanuatu, most households depend on home gardens and reef harvesting with constrained access to markets and minimal processing (Eriksson et al., 2017; Nef et al., 2021).

Women in the three countries are particularly vulnerable to a loss of livelihoods, as many of those participating in the labour force do so in the informal sector, meaning they often lack protection when work is disrupted (Jolly et al., 2015). Women also take on a disproportionate share of unpaid care and household work, indicating that when livelihoods are disrupted, women have less time with which to pursue alternative means of income.

Participants in the three countries noted the loss of livelihoods as a serious concern, as poverty is already widespread, with a significant portion of the population living below the poverty line in Papua New Guinea, and a smaller, but highly vulnerable proportion of the population below the poverty line in Solomon Islands and Vanuatu (Global Nutrition Report, 2024c, 2024b, 2024a). Indeed, the participants noted that lower-income households already struggle to purchase a diverse and nutritious diet. Moreover, participants noted that when incomes are

strained, households resort to selling high-quality produce, while retaining lower quality items for household consumption, or turning to inexpensive store-bought items such as noodles and tinned fish.

Food prices

Climate-related impacts can result in rising food prices as well as price instability, making healthy diets less accessible (FAO, 2023b). This can arise through both disruptions in domestic food production, as well as in global supply chains, leading to increases in food prices. On average, households in all three countries spend significant portions of their budget on food (FAO & University of Wollongong 2023; IFPRI, 2023; Vanuatu National Statistics Office, 2021a), indicating that rising food prices may make food unaffordable for many households. In Vanuatu, the average household spends 60% of their total expenditures on food (Vanuatu National Statistics Office, 2021a). Participants from all three countries had experienced increased food prices following climate-related disasters, with some describing prices doubling after cyclones.

Compounding the problem, as the impacts of climate change and other drivers lower the availability and accessibility of food, households are often forced to engage in negative food- and livelihood-based coping strategies to meet their food needs, including taking loans and spending savings (FAO, 2023b). The use of these coping strategies reduces the resilience of households, lowering their capacity to resist and adapt to future climate impacts (Macheka et al., 2022). Participants described skipping meals, selling their most nutritious produce at markets, and increasing their consumption of cheap, energy-dense and nutrient-poor foods following spikes in food prices.

Market access

In addition to food system impacts related to food production, climate change and climate-exacerbated disasters also affects nutrition by disrupting access to markets. This problem was emphasised by participants in all three countries. Participants described flooding cutting off roads to markets or damaging bridges, and storms preventing travel by land and sea. This isolates rural and remote communities, who may need to travel up to a full day to access certain goods, delaying restocking and limiting food availability.

Economic access to markets was described as a critical barrier by participants, with lower income households less able to purchase diverse foods. Rising transport costs prevent households from attending markets where they can buy food and sell their own produce for income generation, and even where markets are accessible, rising transport costs reduce profit margins for already fragile incomes. Rural areas have more difficulty getting agricultural goods to market in urban and peri-urban areas, resulting in fresh produce becoming scarcer or unaffordable in those areas. At the same time, participants described markets as being stocked with cheap, processed foods, a potential driver of the shift towards increasing processed food consumption.

Diets

Climate change erodes food systems, impacting diets through the reduced availability and accessibility of food, and particularly nutritious food. These reductions can be damaging for children under five, for whom an adequate intake of essential nutrients is critical for healthy physical and cognitive development. PLW also face heightened risk due to higher nutritional requirements needed to support foetal development and to reduce the risk of complications during pregnancy and childbirth.

Research shows that reduced availability and accessibility of nutritious food due to the impacts of climate change is contributing to a 'nutrition transition' away from nutritious traditional diets and towards increased consumption of ultra-processed foods high in fat, sugar, and salt, as well as sugar-sweetened beverages (FAO, 2023b). Participants confirmed this. A nutrition transition towards less nutritious diets in all three countries is highly concerning, given that dietary diversity is already low.

Overall, declines in agricultural and fishery productivity driven by climate change are reducing the availability of nutritious foods. Across all three countries, participants reported that the pressures of reduced local food production,

as well as rising food prices, lead to increased consumption of processed and ultra-processed foods, which are more affordable, accessible, and have longer shelf lives. Increased consumption of ultra-processed foods, however, undermines diet quality and long-term health, particularly in the context of rapidly rising rates of overweight and obesity among women and children (Swinburn et al., 2019). Moreover, the resulting waste also contributes to environmental degradation, further threatening land and marine ecosystems, which will continue to undermine diet quality. In terms of solutions, key informants emphasised the importance of processing and preserving locally grown nutritious foods (such as through pickling or solar drying) to improve the supply of foods stored in households, which can address seasonal scarcity and help to maintain food security and diversity following climate extremes, particularly in small and remote communities that are hard to reach.

> **Children nowadays ... they will always choose rice and tin tuna if given the option to choose between taro and cabbage and rice and tin tuna.**
>
> – Participant in Vanuatu, describing the country's 'nutrition transition' driven food system changes.

Health systems pathway

Infrastructure, supplies and service delivery

Extreme weather events such as floods, cyclones, and heat waves can damage healthcare facilities and transportation networks, reducing access to health services when facilities are closed or roads are untraversable, and reducing the quality of care when supply chains for crucial medicines and health products are disrupted, thus impeding access to vital treatments and the provision of care (De Guzman et al., 2024). This is notable, as healthcare systems in Papua New Guinea, Solomon Islands and Vanuatu are currently fragile, with limited trained staff and infrastructure highly vulnerable to extreme weather events (CFE-DM, 2022).

> **During continuous rains, supplies run out because riverbanks are flooded, blocking road access. Teachers and health workers cannot receive medical, school, and food supplies from the coast and town.**
>
> – Participant in Papua New Guinea, describing the challenges faced by rural healthcare facilities.

Participants identified various ways climate change is impacting the provision of health services. Health infrastructure is damaged by flooding, cyclones, and storm surges, disrupting services when they are most needed. The supply of essential items can also be disrupted by weather-related disasters, and take weeks to restock, affecting medicines, therapeutic foods, and nutritional supplements. Critical and time-sensitive reproductive, maternal, newborn, and child health (RMNCH) services, including prenatal care, delivery, postnatal care, immunisations, and treatment for malnourished children, are especially vulnerable. Geographic isolation compounds this, with health posts located in remote or rural areas, often staffed by a single health worker, are often cut off entirely during disasters.

Climate-sensitive diseases

The burdens of poor maternal and child health outcomes and disease in each country are already high, including diarrhoeal disease, dengue, malaria, and non-communicable diseases (NCDs) such as diabetes and stroke (CFE-DM, 2023a). Climate change, both directly and by compounding interruptions in service delivery, is driving a further

rise of climate-sensitive illness and disease – both infectious and non-communicable – which is being recorded in all three countries (FAO, 2023b). Community feedback supported published data, highlighting increases in both diarrhoeal diseases and the spread of malaria and dengue, as well as respiratory infections and skin conditions. Fatigue and dehydration were also mentioned as rising due to extreme heat events in all three countries.

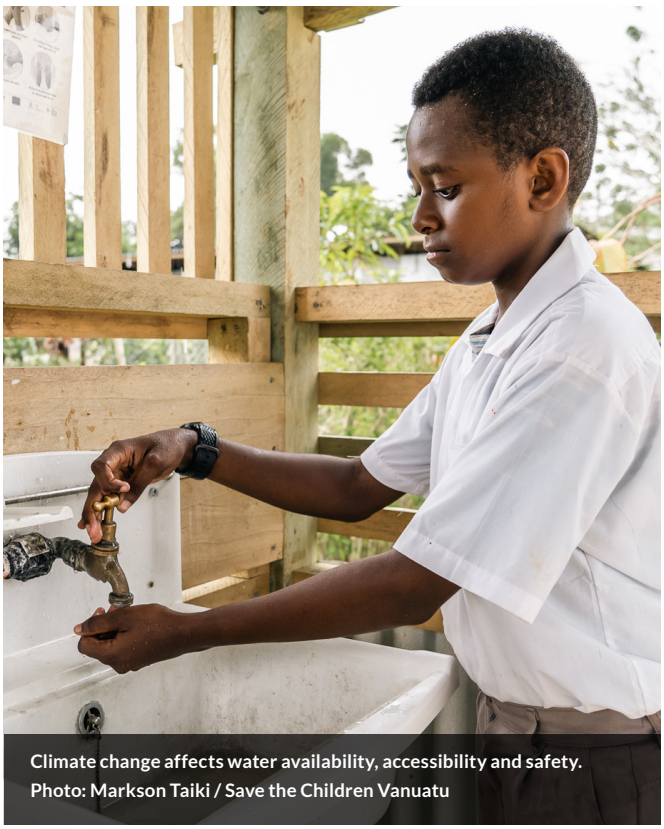
Adverse pregnancy outcomes

Concerns about an increase in adverse pregnancy outcomes such as low birthweight and stillbirth were raised by communities, linked to poor maternal nutrition, physical and emotional strain, and limited resources. There is no published data on linkages to climate change in Melanesia, but high temperatures and extreme rainfall during pregnancy were associated with adverse birth outcomes in India, Pakistan and Vietnam (Le Roch et al., 2022; Shankar et al., 2023). Pacific-specific risk factors for adverse pregnancy outcomes have been identified, including betel nut and tobacco use, maternal short stature and obesity, malaria during pregnancy, and lack of antenatal care (Kaforau et al., 2022).

WASH pathway

Extensive research highlights how WASH systems are impacted by climate change in ways which reduce the availability, accessibility, and safety of water resources that are crucial to health and nutrition (WFP, 2024). This is of particular concern, given that access to adequate WASH services and facilities is already severely limited in all three countries, with approximately 70% of the population without access to basic sanitation and increasing challenges to water security across the Pacific (WaterAid, 2023).

Participants highlighted how climate change is impacting WASH systems, particularly for vulnerable groups like PLW and children under five. During prolonged droughts and periods of unreliable rainfall or extreme heat, access to safe drinking water is reduced, with households relying on rainwater tanks that often run dry or become contaminated during dry spells. During cyclones and floods, water infrastructure can be damaged or disrupted, while runoff or debris can enter water tanks, and latrines can overflow, leading to contamination of water sources. Saltwater intrusion during storm surges can also spoil groundwater and shallow wells with brackish water. Damage to sanitation infrastructure was also noted, particularly during and after floods, with periodic closures of sanitation facilities and overflows of sewage into living areas and groundwater. Across sites, participants associated climate-related WASH challenges with cases of diarrhoea, flu, malaria, and skin disease, especially among children under five.

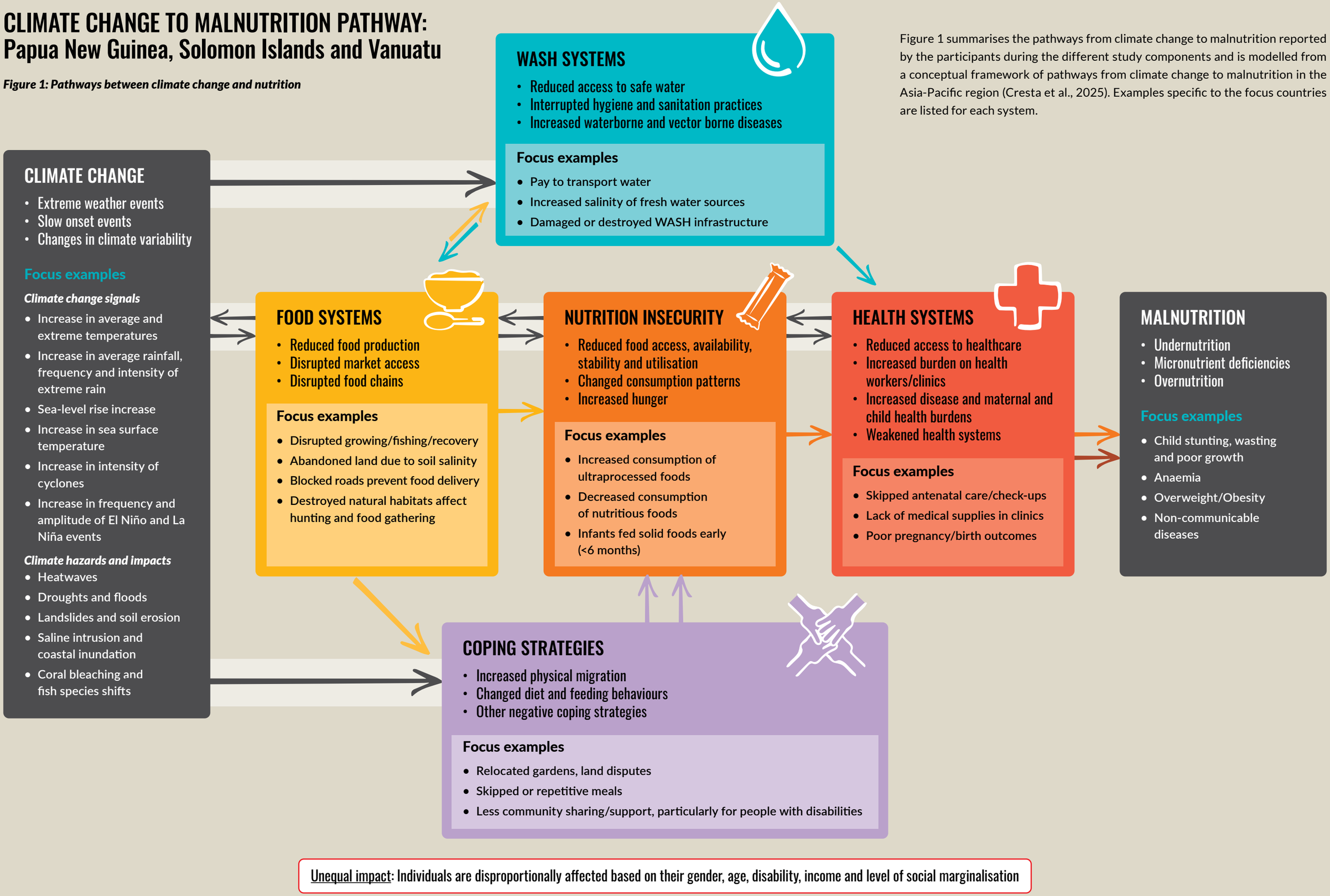


Climate change affects water availability, accessibility and safety. Photo: Markson Taiki / Save the Children Vanuatu

CLIMATE CHANGE TO MALNUTRITION PATHWAY: Papua New Guinea, Solomon Islands and Vanuatu

Figure 1: Pathways between climate change and nutrition

Figure 1 summarises the pathways from climate change to malnutrition reported by the participants during the different study components and is modelled from a conceptual framework of pathways from climate change to malnutrition in the Asia-Pacific region (Cresta et al., 2025). Examples specific to the focus countries are listed for each system.



2.2 Understanding intersecting and compounding factors in climate-undernutrition vulnerability: implications for program design in Papua New Guinea, Solomon Islands and Vanuatu

Weather extremes, slow-onset changes, and related nutrition vulnerabilities affect all households, yet their impacts are not experienced equally. Social, cultural, and economic factors interact with climate change stressors in ways that compound nutritional vulnerability, particularly among children under five and PLW. Findings from FGDs, community mapping, and KIIs highlight several key contributors: gendered caregiving and labour roles; disability-related exclusion; low maternal education and nutrition knowledge; insecure livelihoods and land access; substance use-related neglect; the decline of food sharing and social networks; and the highly remote geography of the three countries studied. This section reviews each of these key contributors.

Gender inequities and gender-based violence

Research shows that the effects of climate change can lead to heavier female workloads (Committee on World Food Security, 2023). Participants in all countries noted gendered divisions of labour place disproportionate burdens on women, who bear primary responsibility for food production, water collection, and caregiving, each of which becomes a heavier responsibility during climate shocks. Secondary evidence from the three countries supports this, reporting significant proportions of women working in jobs that are vulnerable to sudden disruptions without wage or job protections (CFE-DM, 2023b, 2023a; FAO, 2020).

As heavier workloads are undertaken during, and recovering from, climate-exacerbated disasters, participants noted numerous negative impacts. Women spoke of being chronically tired, particularly during the dry season when food is scarce and garden productivity declines. This fatigue was exacerbated by heavy workloads, including walking long distances for water or cultivating gardens farther from home due to soil salinisation or flood damage, under hot temperatures. These conditions not only impact daily productivity but also reduce time and energy for meal preparation, childcare, or for seeking healthcare, thereby compounding malnutrition risks.

Women described slow recovery after childbirth, which they attributed to inadequate nutrition, and they expressed difficulty accessing protein-rich foods and vegetables, which are needed to support healing. Communities also linked insufficient food to reduction in breastfeeding mothers' milk supply – describing dizziness or weakness, and voicing concern that their babies were not getting full – but did not make connections to heavy workloads and psychosocial stress as important factors disrupting the lactation and breastfeeding. In several inland sites, girls were said to become ill more frequently than boys, which participants linked to physical exhaustion.

While GBV was not directly described by participants, secondary data from all three countries indicates alarmingly high rates of GBV despite underreporting (National Statistical Office -NSO/Papua New Guinea & ICF, 2019; United Nations Population Fund, 2021). Climate change can exacerbate underlying causes of GBV by increasing stress, poverty, displacement, and resource competition, thereby making violence more likely or severe (Spotlight Initiative, 2025). This is concerning not only as a rights violation but also because of the well-established links between GBV and poor child nutrition outcomes (UNICEF, 2022a).

> **"Girls are getting sicker than boys … They help their caregivers more and get stomach pains, flu, and aches.**
>
> – Participant in Vanuatu, explaining the gendered impacts of malnutrition.

Disability and exclusion

Participants reported that people living with disabilities, particularly in rural inland communities, faced significant physical and socio-cultural barriers to securing food and accessing services, especially because they could not make gardens. These challenges are especially pronounced during climate-related disasters, where mobility and communication limitations further restrict their ability to respond or adapt. In many cases, the inability to cultivate gardens significantly undermines food security.

> **"There was a disabled person who couldn't go to the garden. When the family has no food, they just wait.**
>
> – Participant in Solomon Islands recounting the experience of a disabled person during a disaster.

Notably, while people with disabilities participated in FGDs and community mapping sessions, disabled persons themselves and other participants were reluctant to discuss disability openly due to cultural stigma. Supporting the existence of this stigma, and its negative impacts, some key informants described how persons with disabilities experience neglect. They highlighted the lack of inclusive training opportunities, limited access to early warning systems, and a general absence of disaggregated data on people with disabilities in national systems. Neglect, compounded by socio-cultural stigma and a lack of inclusive systems, exacerbates their vulnerability and undermines their ability to source nutritious food.

Nutrition knowledge and misinformation

Participants highlighted gaps in nutrition knowledge as well as harmful cultural beliefs and taboos, all of which function as barriers to adequate maternal and child nutrition. Gaps in nutrition knowledge constrain household feeding practices, with particularly negative consequences for women and children in the First 1,000 Days given their increased nutrient requirements. While some caregivers are aware of optimal diets for children and pregnant women, some rely on inexpensive, filling staples like rice or instant noodles, especially during food shortages.

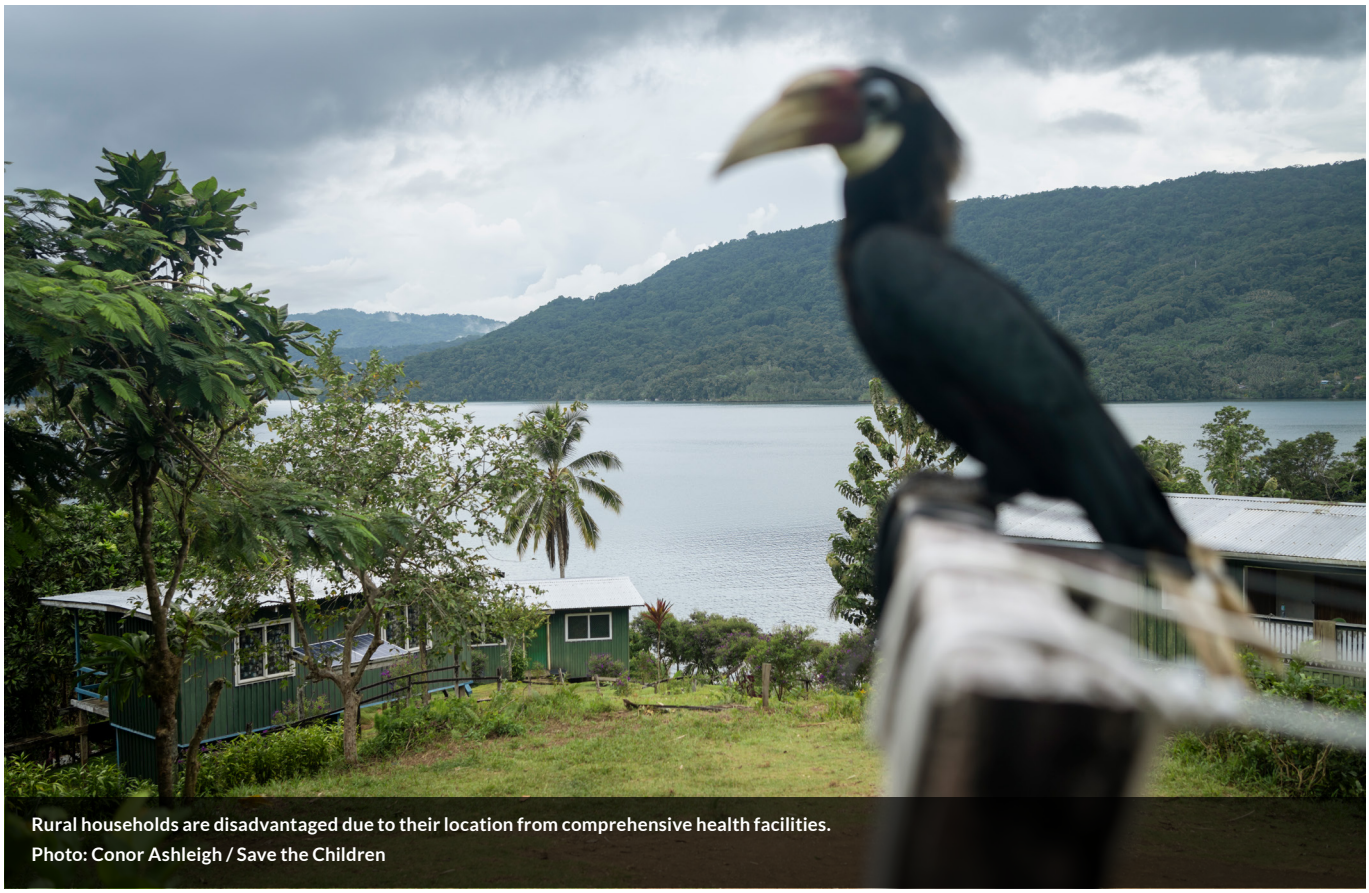
Participants also described how food taboos and cultural beliefs restricted consumption of certain nutritious foods among PLW. For example, in some communities, pregnant women were discouraged from eating pork or cuscus due to beliefs that these meats would cause birthing complications, while in others, tuna, eggs, shellfish, and various greens are avoided due to longstanding fears of rashes, diarrhoea, or behavioural consequences. These practices persist even when such foods are otherwise available, limiting dietary diversity and nutritional adequacy during critical periods for child growth and maternal health.

Income security and land holding

Access to reliable income sources and land plays a significant role in accessing sufficient and nutritious food. Livelihood insecurity exacerbates nutritional vulnerabilities, influencing the ability to purchase food in markets: lower-income families often rely solely on their gardens and are more vulnerable to food shortages, especially after disasters. Households with larger landholdings or stable cash crop production are better able to maintain food access, while others experience chronic shortages. During disasters, which cause crop failures and result in food price spikes, food can be unaffordable for land-poor families, leading to a greater reliance on low-nutrient foods and decreased food intake. This is amplified by food assistance provided by national disaster management response offices which also provide imported processed and packaged foods (UN Women, 2022).

Access to water and healthcare is also influenced by income. Participants noted that wealthier households can travel further in trucks to fetch water from large water sources during times of drought, while poorer households face greater burdens collecting limited water supplies. Similarly, for rural households living far from comprehensive medical facilities, income determines their ability to access healthcare, with costs incurred to travel to clinics.

Notably, livelihood insecurity is shown to disproportionately impact women. This is due to women having lower literacy levels than men, as well as lower access to productive resources (including climate-resilient crops), extension services and financing (Malala, 2024), as well as land and employment (UN Women, 2022). Seeds for climate-resilient crops are often more expensive or distributed through channels that women may not access. Moreover, often employed in the informal sector, any social protection available in the formal sector is lacking when work is disrupted (FAO, 2023b). Women also take on a disproportionate share of unpaid care and household work (Save the Children, 2023b), again indicating that when livelihoods are disrupted, women have less time to pursue alternative means of income.



Rural households are disadvantaged due to their location from comprehensive health facilities.
Photo: Conor Ashleigh / Save the Children

Substance abuse and neglect

Rising levels of substance use and abuse are closely linked to declines in socioeconomic status, financial instability, and increased household stress. These factors can reduce a family's capacity to access and afford nutritious food. As a result, families may be compelled to opt for lower-cost, less nutritious food choices, negatively affecting the dietary quality of PLW as well as young children (Lipari & Horn, 2017). Participants noted that substance use, including kava, marijuana, and alcohol consumption, in both urban and rural settings risks diverting household income away from food and nutrition-related purchases while also interfering with childcare decisions, feeding routines, and food preparation. Notably, substance use was highlighted as a coping mechanism to deal with periods of stress or hardship, particularly after disasters, providing both an explanation for the practice, as well as insights into climate change's wide-reaching effects on nutrition.

Food sharing and social networks

Participants noted that traditional food sharing and mutual assistance systems *(wantok)*, long a cornerstone of community resilience in the three countries, are under strain. They recalled how neighbours and extended family members once shared garden produce, meals, supplies, and support during lean seasons, ensuring that no one went hungry and that families were cared for, helping to mitigate the worst effects of climate change.

> **"Before, people used to share their food. Now everyone is just trying to keep enough for their own family.**
>
> – Participant in Vanuatu, describing the social impacts of food system strain.

However, these informal, community-led social protection mechanisms are reportedly becoming less common in the face of declining local yields and worsening shortages, with traditional community systems weakening and households shifting towards individualised purchasing and consumption. Indeed, one participant described 2023 as a "year of selfishness". Paired with other geopolitical aspects such as COVID-19 and global inflation, this has resulted in the erosion of collective support systems, which likely leaves low-income, ill, and disabled individuals even more exposed to climate change, and to the impacts of food and nutrition insecurity.

Remote, isolated communities

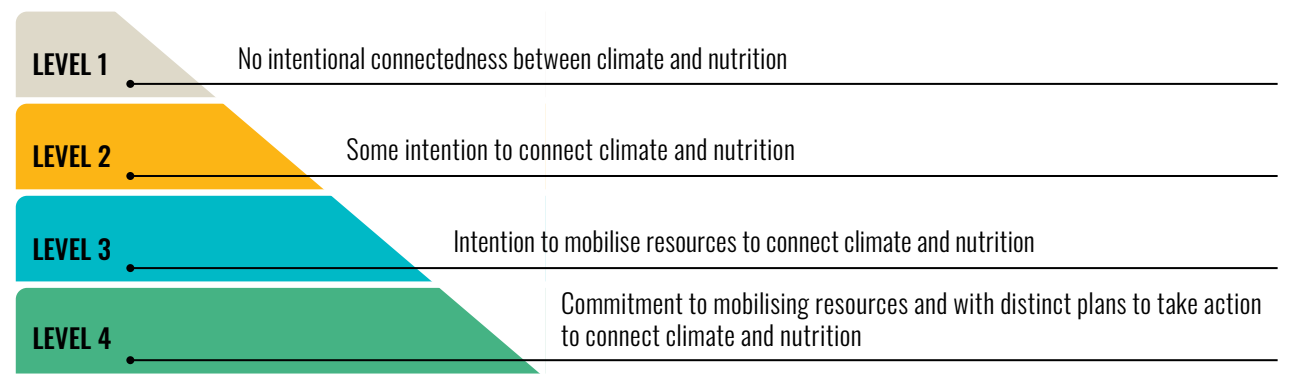
The three countries examined in this study are each comprised of many small islands. For example, Solomon Islands alone is comprised of nearly 1,000 islands. Though some of the islands in the region are not inhabited, many are, and the logistical challenges of reaching the most remote of these islands is significant. To deliver goods and services, travel often requires long boat rides over open seas, and ferries may only appear every second week if the weather is good. During disasters, this travel can be disrupted entirely, leaving communities cut off from critical goods and services.

The participants identified the unique challenges to nutrition faced by communities in some of the most remote areas. Market access is limited and becomes even more constrained during extreme weather events that damage infrastructure or render seas impassable. As a result, shelf-stable foods become essential – but these are often ultra-processed and nutrient-poor, such as instant noodles, crackers, and imported staples like white rice. Access to healthcare is similarly affected. Severe weather events can halt the delivery of medical supplies and restrict access to clinics, undermining antenatal care, child health services, and emergency referrals.

2.3 Current policy and program responses at the climate–nutrition nexus

This section synthesises the findings from the literature review and KIIs to evaluate how national and subnational policies and programs in the three targeted countries incorporate climate change and nutrition considerations. In doing so, it will describe the gaps as well as emerging opportunities to strengthen integration of climate change and nutrition. The Integration of Climate Change and Nutrition (ICAN) framework developed by GAIN was employed to organise policies and programs based on their level of intention to connect climate change and nutrition, where Level 1 shows no intention and Level 4 shows a commitment to mobilising resources to take action to connect climate change and nutrition (Figure 2). (GAIN, 2023) Guided by the ICAN framework, the findings are organised into four systems: food, health, WASH, and social protection.

Figure 2: Integration of climate change and nutrition



Source: GAIN. Accelerating Action and Opening Opportunities: A Closer Integration of Climate and Nutrition

Food system

Most food system policies and programs in the three countries score highly on the ICAN scale (Levels 3 and 4), indicating notable progress towards integrating climate and nutrition consideration in this area, and reflecting a growing political intention to improve food security and strengthen resilience.

The study identified eleven programs and projects which supported the integration of climate change and nutrition in food systems. These programs showed an emphasis on one or more of the following elements:

- **Reducing household food insecurity** with training and supplying inputs for climate resilient agriculture and water management.
- **Increasing smallholder farmer incomes,** including some targeting women in particular.
- **Targeted training and support to women and people with disabilities,** with a specific focus on engaging communities on remote islands.
- **Increasing nutrition education** about local and diverse crops/foods.
- **Setting aside project budget** to be used in the event of a natural disaster to mitigate the impacts, and prevent gains from being lost.

However, three notable gaps were identified by key informants:

- **Nutrient-rich foods and dietary diversity:** While several policies and programs in each country support climate-resilient food production, less emphasis is placed on the production of nutrient-rich varieties of fruits and vegetables to enhance dietary diversity and nutrition.
- **Contextual sensitivity:** There is a lack of contextual sensitivity among policy makers to vulnerable populations in existing policies and programs, with a need for grassroots engagement and a stronger focus on the economic and social barriers experienced by women, children under five, remote families, and people with disabilities.
- **Education and outreach:** There is a need for policies and programs with specific provisions designed to increase community knowledge on the connection between climate change and malnutrition.

Health

Overall, health system initiatives scored lower on the ICAN scale than those related to food systems, with many policies and programs at Levels 1 or 2, and few at Levels 3 or 4, reflecting a need to better integrate climate and nutrition links in the future.

The study found six relevant examples of programs which address these gaps and support the integration of climate change and nutrition in health systems. These programs showed an emphasis on one or more of the following elements:

- **Bridging access gaps to remote and isolated communities** through establishing community level facilities (e.g. medicine houses and health clinics), and/or satellite clinics. These projects also provide basic drugs for common illnesses and training to community health volunteers, with services targeting PLW and children under five.
- **Enhancing surveillance of climate-sensitive diseases** including malnutrition. Examples include monitoring for the rapid detection of diseases using an e-notification system to provide real-time updates to health workers, while another project seeks to create climate and health-sensitive early warning systems.
- **Multisectoral service support**, such as the integration of health and nutrition with WASH infrastructure, educating locals on the use of climate resilient agriculture, and development of disaster risk reduction plans.

Three important gaps were highlighted by key informants:

- **Remote areas:** Limited policies and programs were identified which were designed to improve the capacity and climate resilience of health systems specifically in remote and rural areas. While mobile outreach programs exist, resources are limited, and health workers face competing priorities, highlighting a need for further scale up.
- **Vulnerable groups:** Participants noted that some policies contain gaps which must be updated to better address the specific needs of vulnerable groups, such as children under five, mothers, and those living in remote and rural areas. Specifically, some participants noted that the unique needs of children in the First 1,000 Days are not adequately addressed.
- **Obesity and NCDs:** While a rise in overweight and obesity, and a subsequent rise in NCDs was noted in all three countries, each of their national policies designed to address this growing problem is lacking, and limited programmatic focus was also observed.

WASH

Policies and programs related to WASH systems scored across ICAN levels, with numerous examples at Levels 1 through 4, indicating some progress, alongside significant gaps. The study found three relevant examples of programs which address these gaps and support the integration of climate change and nutrition in WASH systems. These programs showed an emphasis on one or more of the following elements:

- **Integrating WASH, climate, and nutrition goals** using inclusive, climate-sensitive approaches. These were delivered across services to schools, health facilities, and communities. Some projects integrated climate-resilient food production and capacity building for healthcare professionals.
- **Inclusive national WASH policies** that integrate climate change adaptation, encourage gender equity in WASH programs with a view to strengthening the role of women in decision-making, and promote health equity.
- **Building climate-resilient WASH infrastructure** such as climate-proofing water management systems.

Key informants highlight two notable gaps:

- **Peri-urban and informal settings:** Both the desk review and the participants highlighted a lack of WASH policies and programs focused on peri-urban areas and informal settlements. While rural areas do not lack in importance, key informants emphasised the need for expanded infrastructure and equitable service delivery in peri-urban areas and informal settlements, especially given increasing urban drift.
- **Disability inclusive WASH:** Participants highlighted inclusivity gaps in WASH policies and programs, including a lack of focus on WASH infrastructure designed to meet the specific needs of people with disabilities, such as wheelchair access.

Social protection

Few policies and programs addressing social protection systems were identified in this analysis. Those which were identified spanned ICAN scores from Levels 1 through 4, again, indicating progress alongside significant gaps. Where social protection policies and programs do exist, they are often not anticipatory or adaptive and therefore not designed to be responsive to climate change, and also lack child-sensitive components. Communities noted the use of negative coping strategies by households during disasters, indicating that social protection coverage is insufficient to meet needs during shocks.

Positive progress includes non-governmental organisations (NGOs) in Solomon Islands and Vanuatu piloting cash-based assistance programs, while in Papua New Guinea, a ground-breaking national child nutrition grant program, funded by a loan from the World Bank and led by the Department for Community Development and Religion (DfCDR) and the Ministry of Health (MoH), is being rolled out to support PLW, and children in the First 1,000 days.

Key informants specifically highlighted the potential of **cash-based assistance programs** to improve health and nutrition outcomes for children under five and PLW while supporting local food producers and market vendors. A growing body of research by Dikoda (Chan et al., 2023; Elevate Nutrition, 2025) and others in the region and globally has indicated that cash-based assistance – particularly when combined with social behaviour change communication – can have positive impacts on nutrition, including preventing wasting, stunting, and improving dietary diversity, while also being cost-effective.

However, despite this potential, key informants questioned whether cash-based assistance can be effective in rural and remote areas, where access to markets is limited, and secondary evidence supports this concern (Elevate Nutrition, 2025), indicating that the success of cash-based interventions is directly tied to the functioning of local markets, acceptance from involved communities, and operational conditions. Where markets are unable to meet the demand produced by cash assistance, price inflation and food shortages can emerge, thus harming both beneficiary and non-beneficiary households (Save the Children, 2023a).

2.4 Integrating climate change and nutrition: five core pillars for reducing nutritional vulnerability

Drawing on the desk review, community consultations, and key informant interviews, **five thematic pillars emerged** as opportunities for Save the Children and its partners to strengthen the integration of climate change and nutrition interventions across policy and programmatic levels:

1. Climate-resilient, nutrition-sensitive food systems
2. Nutrition- and child-sensitive, anticipatory and adaptive social protection
3. Climate-adapted RMNCH and outreach health services
4. Inclusive, climate-resilient WASH infrastructure
5. Cross-sectoral coordination and alignment

Through these, several policy and programmatic actions have been identified that will help move Papua New Guinea, Solomon Islands and Vanuatu toward food, WASH and health systems that anticipate climate changes, cushions the most vulnerable, and promotes resilient, nutritious diets for all.

Policy actions

While the policies covering food, health, and WASH systems show an intent to connect climate change and nutrition, significant gaps remain. Importantly, key informants emphasised that even where policies do appear to address the intersection of climate change and nutrition, policy actions may be vague and are not always implemented.

Save the Children and its partners should work with national and local governments on the integration of climate and nutrition into national food, health, and WASH policies, and advocate for their implementation. This requires a multisectoral approach, engaging relevant ministries and/or departments of Health, Agriculture, Climate/Environment, Rural Development, WASH and Social Protection. This approach should include reviewing and updating existing policies to ensure their relevance, particularly for vulnerable groups. To guide this approach, the following policy actions and changes are suggested:

1. **Climate-resilient, nutrition-sensitive food systems**

   Ensure that national climate change, agriculture, and food security policies include nutrition-sensitive agriculture with biodiversity conservation (e.g., banana planting, drought/flood/salt-tolerant crops, indigenous crop preservation, diversified home gardens), and that budget lines and input subsidies are earmarked to guarantee sustained implementation and long-term impact. Use the policies to increase the understanding of the links between climate change and malnutrition. Advocate for adjusted VAT policies and import duties to discourage ultra-processed foods and promote local, nutritious food choices.

2. **Nutrition and child-sensitive, anticipatory and adaptive social protection**

   Promote the greater adoption of anticipatory and adaptive social protection programs for vulnerable groups in government policies and integrate nutrition-sensitive voucher or basket schemes (linked to climate or price thresholds).

3. **Climate-adapted RMNCH and outreach health services**

   Embed climate-adaptation clauses (mobile outreach triggers, surge staffing) in RMNCH guidelines and health-sector contingency plans to help direct the provision of services during extreme weather and disasters. Allocate resourcing for training community-based health volunteers and pre-positioning staff kits for post disaster periods with a focus on the specific needs of women and children in the First 1,000 days. Acknowledge the emerging concerns of obesity and NCDs in relation to climate change in policies.

4. **Inclusive, climate-resilient WASH infrastructure**

   Update national WASH design codes to require flood, saltwater intrusion and heat-resilient infrastructure and universal design for accessibility. Support retrofitting of water points and latrines.

5. **Cross-sectoral coordination and alignment**

   Initiate a cross-sector Climate-Nutrition Working Group to support governments with coordination, planning, budgeting, and integration across ministries. Additional actions may include supporting governments with large multisectoral proposals and improving data management, such as real-time dashboards (food prices, water quality, stunting/overweight, service outages). Improve the capture and sharing of gender and disability data to inform more inclusive policies and programs.

Programmatic actions

Climate resilient, nutrition-sensitive food systems

- **Resilient food production:** To strengthen climate-nutrition action, there is a need to expand the presence of nutrition in climate-resilient agriculture programming through nutrition-sensitive approaches. Focus should be directed on scaling up and supporting climate-resilient home gardens, using drought/flood-resistant and salt-tolerant crops to stabilise food availability in communities faced with droughts, cyclones, and rising sea levels. Nutrient-rich and diverse crops should be prioritised (fruits, pulses, roots and tubers, native vegetables), alongside crop diversification. Households, and particularly women-led households, should be provided with tools, seedlings, and locally adapted training.

> **“Family Farming programs have been a success for most of our local farmers which we saw increased income that enables them to buy food.**
>
> – A key informant in Papua New Guinea highlights economic and related nutrition benefits of promoting home gardens.

- **Food processing and preservation:** To address seasonal scarcity and buffer against extreme events, food processing and preservation can support food access, particularly in small and remote communities that are hard to reach. Traditional, low-cost methods such as drying, smoking, and fermenting can extend the availability of perishable foods like fruits, vegetables, and fish. Preserving small, nutrient-rich native fish species – high in essential micronutrients – is especially important for meeting the needs of pregnant and breastfeeding women and children aged 6–23 months. Scaling up these practices can reduce reliance on ultra-processed foods, smooth consumption during periods of scarcity, and improve year-round access to nutritious, locally available foods by remote communities. To support this, more operational learning is needed to understand: the extent and drivers of dietary shifts toward ultra-processed foods; which locally available, nutrient-dense foods should be promoted; and lesson learning within and between countries as to how foods can be safely and sustainably processed or preserved for household use or sale.[3]
- **Safeguard biodiversity:** Invest in research and monitoring to better understand the diversity of native marine and land food sources, their conservation status (whether they are endangered or not), and how to effectively promote and protect these important food resources. This is especially critical for nutrient-dense fruits, vegetables, legumes, and animal-sourced foods that are vital to the population's nutrition and food security. Once lost, these food sources cannot be recovered.

[3] *See for example Vanuatu's recent investment in food preservation (Devex, 2024).*

- **Integrated Social Behaviour Change Communication (SBCC) approaches that improve nutrition literacy:** Programs should not only focus on increasing the availability and accessibility of food through support for food production and income, but should also be combined with nutrition education that empowers people to make positive choices in the context of climate change. In all three countries, there is a clear need to strengthen communication related to infant and young child feeding (IYCF), including breastfeeding. Misconceptions and cultural beliefs often undermine effective IYCF practices, and targeted communication is essential to address barriers and support optimal infant and young child feeding. Additional areas of importance include rebuilding knowledge of traditional, diverse diets; supporting shifts away from ultra-processed foods; and promoting traditional as well as innovative food processing and preservation techniques, particularly for nutrient-dense indigenous foods. Health-seeking behaviours, women's and children's safety, women's empowerment in decision-making, equitable gender roles and labour burden, climate-smart agriculture, and optimal hygiene practices are also crucial. If the development of SBCC strategies is not feasible, programs can create simple communication plans to ensure that messaging is evidence-based, clear, persuasive and targeted.
- **Livelihood support and diversification:** Offer microfinance and training for alternative livelihoods (honey, eco-tourism, sustainable fishing) to cushion income shocks. Develop income generation programs and value chain support (producer groups, microfinance, transport subsidies) for women farmers.

Nutrition and child-sensitive, anticipatory social protection

- **Cash-based assistance and vouchers:** Pilot cash-based assistance programs to improve the health and nutrition of PLW and children under five, and add nutrition-sensitive top-ups to any future anticipatory cash triggers tied to climate-exacerbated disasters. Cash transfers for people with disabilities can also be pursued to improve economic access to markets. Additionally, introduce community food basket vouchers redeemable for local fish, fruits, and vegetables, triggered when thresholds for food inflation are met, and integrate food vouchers into existing cash transfer programs or other safety net programs.

Climate-adapted RMNCH and outreach health services

- **Rural health systems and health system infrastructure:** Key informants note that strengthening rural health systems and health facility resilience should be prioritised to ensure continuous maternal and child nutrition services during and after disasters. They suggest expanding mobile health outreach to support rural access when services delivered at fixed facilities are disrupted, including through the integration of climate trigger clauses, and recommend training community health volunteers to conduct nutrition screenings, facilitate referrals, and deliver climate-sensitive behaviour change messaging. Key informants also suggest expanding community-based surveillance for nutrition-related health risks. Health facility resilience can be improved through contingency planning, stockpiling essential supplies, and targeted optimisation of transport systems so that they may remain traversable during times of disaster.
- **Climate health messaging in routine contacts:** Key informants suggest that climate-health messaging should be integrated into routine health contacts, including immunisation days, adolescent health weeks, and antenatal care visits, to reinforce awareness of nutrition and climate messages, and extend preventive practices.
- **Invest in peer learning and community support systems in remote areas:** In the context of remote communities where access is a challenge, invest heavily in peer learning and support groups. Where relevant and appropriate, implement the evidence-based Care Group model for nutrition and climate change, a peer-based behaviour change and health promotion strategy (Food Security and Nutrition Network Social and Behavioral Change Task Force, 2014). The Care Group (or similar peer-facilitated group learning models) can both strengthen local capacities and help fill human resource gaps when health workers are distant or unavailable. If possible, create strong linkages between peer learning and support groups and healthcare workers, in addition to extension agents from other sectors.

- **Protect, promote and support breastfeeding:** Programming should strengthen breastfeeding education, counselling, and peer support to sustain breastfeeding during and after extreme weather events, and to preserve the strong culture of breastfeeding. Programs should engage elder women, fathers and other key influencers to reinforce the importance of support and ensure consistent messaging.

Inclusive, climate-resilient WASH infrastructure

- **Improve WASH infrastructure:** WASH programming should focus on building and upgrading water and sanitation systems that can withstand extreme weather and saltwater intrusion, including utilising universal design principles across infrastructure projects. Key informants highlighted how this could include constructing flood-resilient water points in inland areas, expanding rainwater harvesting systems, and providing affordable household-level filtration technologies. Key informants emphasised the importance to direct these programs towards underserved areas, including peri-urban communities and informal settlements, as well as towards ensuring access for people with disabilities.

> **"Climate change is new to us and is here to stay. My main concern is the availability and accessibility of nutritious foods, clean water, and fully active WASH systems for persons living with disability in the province.**
>
> – A key informant indicates the importance of WASH programs tailored to disabled persons.

- **Hygiene promotion:** Alongside improvements in WASH infrastructure, WASH messaging must be expanded to ensure appropriate behaviours and practices among targeted populations. Key informants suggested that interventions to improve WASH infrastructure should include a WASH messaging and behaviour change component to enhance nutrition outcomes. Moreover, WASH messaging should be integrated into maternal and child health programs to reinforce safe practices as part of broader nutrition and disease prevention efforts.

Cross-sectoral coordination and alignment

- **Connect actions with live policy clauses:** Aligning with national climate adaptation strategies and food security plans will ensure program relevance and increase access to government and donor financing. While many of the government policies identified by this study make commitments to address the intersection of climate change and nutrition, the commitments are not always implemented. Aligning actions with existing policies provides direction to government departments in turning commitments into reality, supporting allocation and assignment of government and donor funds. In addition, aligning stakeholders under the umbrella of existing policy commitments and goals supports coordinated and scaled investment, focusing efforts in the same direction and multiplying their effects. As such, each country package should be welded to a live policy clause and funding line – for example, Solomon Islands Knowledge Action-Sustainability for Resilient Villages (SOLKAS) gardens align with Solomon Islands' Climate Smart Agriculture strategy, women-led gardens align with Vanuatu's Climate Change and Disaster Risk Reduction policy/Gudfala Kakae plans, and solar cold-chain clinics align with Papua New Guinea's Health Plan – and these interventions align with the funding streams of key donors (e.g. World Bank, Green Climate Fund (GCF), the Australian Department of Foreign Affairs and Trade (DFAT) and Asian Development Bank (ADB).

- **Mobilise multi-stakeholder platforms:** Multi-stakeholder partnerships should be mobilised to align efforts and scale investment in integrated climate–nutrition programming, fostering collaboration between key government agencies alongside NGOs and donors. In addition, a Climate-Nutrition Taskforce could be convened bringing together relevant ministries (e.g. Health, Agriculture, Environment, Finance), NGOs, and donors to support coordination and alignment of goals.
- **Formalise at district-level:** To scale integrated climate-nutrition action, sign formal memorandums of understanding with local health authorities, agriculture officers, faith networks and women's groups to anchor ownership and last-mile delivery.
- **Replicate proven pilots and facilitate cross learning in the region:** Proven pilots should be replicated in additional provinces, with adaptations to suit local contexts. For example, replicate SOLKAS inland gardens to salt-intruded atolls in Solomon Island's Malaita Province and Papua New Guinea's Manus Province. Strong MEAL systems are critical to track achievements and identify important lessons as replication expands.
- **Leverage trusted community networks as entry points for implementation:** Activate women's savings groups, church leaders, health volunteers and agriculture extension agents as frontline messengers and monitors. Extension officers supply seed and compost tips; church radio networks broadcast cyclone-trigger voucher instructions; Village Health Volunteers track child dietary diversity.
- **Create and utilise evidence:** Embed rapid-learning loops so data drives scale-up and donor confidence. Use existing dashboards that include stunting, price shocks and service outages; share quarterly briefs with MoF, GCF focal points and donor mission teams.

Alignment with national climate adaptation strategies and food security plans strengthens program and policy implementation.
Photo: Conor Ashleigh / Save the Children

3. Conclusion

Climate change is already reshaping the food, health, and WASH systems upon which food and nutrition security depends in Papua New Guinea, Solomon Islands and Vanuatu. This study sought to explore the complex and interconnected linkages between climate change and nutrition in children and PLW across a variety of contexts in the three countries. The experiences of communities and stakeholders have highlighted that the intersection of climate change and existing socio-economic inequalities is, and will continue, driving rising nutrition vulnerability for women and young children, especially during the First 1,000 Days. Yet, there is clear momentum to act.

Five thematic pillars emerged from the review across three study countries which provide clear actions to strengthen food, health and WASH systems in the region. These evidence-based recommendations for future programming and policies will further support Save the Children's efforts to improve nutrition outcomes and enhance climate change adaptation.

Climate-resilient, nutrition-sensitive food systems

Food loss from climate impacts and rising dependence on imported, low-nutrient foods.

POLICY ACTIONS:

- Include nutrition-sensitive agriculture in the national climate change, agriculture, and food security policies.
- Highlight the connection between climate change and malnutrition.

PROGRAM ACTIONS:

- Support diversified and climate tolerant crops in home gardens and food preservation activities which can build on existing agriculture programs.
- Integrate provisions for vulnerable groups.
- Support initiatives that safeguard biodiversity.
- Integrate strong SBCC approaches.
- Support the diversification of livelihoods.

Nutrition and child-sensitive, adaptive social protection

Highly vulnerable households struggle to buy nutritious/diverse foods when staples fail or prices spike.

POLICY ACTIONS:

- Promote the greater adoption of anticipatory and adaptive social protection programs in government policies with a focus on nutrition-sensitive schemes (linked to climate or price thresholds).

PROGRAM ACTIONS:

- Continue to pilot cash-based assistance programs to improve the health and nutrition of PLW and children under five.
- Add nutrition-sensitive top-ups to any future anticipatory cash triggers.
- Introduce community food-basket vouchers redeemable for local fish, fruits, and vegetables, triggered in response to extreme weather events.

Climate-adapted RMNCH and outreach health services

There are essential health service gaps in rural/outer-island areas during storms, floods or droughts which disproportionately affect children and PLW.

POLICY ACTIONS:

- Embed climate adaptation clauses (mobile outreach triggers, surge staffing) in RMNCH guidelines and health-sector contingency plans.
- Ensure the unique needs of the First 1,000 Days are addressed.
- Acknowledge the emerging concerns of obesity and NCDs in relation to climate change.

PROGRAM ACTIONS:

- Strengthen rural health systems including scale up of outreach programs, particularly in remote and rural areas.
- Pre-position staff kits for post-disaster periods.
- Integrate climate-health messaging into routine health promotion, including breastfeeding promotion, and invest in community level health support networks.

Inclusive, climate-resilient WASH infrastructure

Water insecurity and inaccessible facilities due to climate impacts are drivers of diarrhoeal disease and caregiving burden.

POLICY ACTIONS:

- Update national WASH design codes to require flood, saltwater intrusion and heat-resilient infrastructure, and universal design for disability inclusion.

PROGRAM ACTIONS:

- Expand infrastructure, hygiene promotion and equitable service delivery in peri-urban areas and informal settlements, given increasing urban drift.
- Prioritise and enforce WASH infrastructure standards that meet the specific needs of people with disabilities.

Cross-sectoral coordination and alignment

Siloed budgets and weak coordination across policy, implementation and data management hinder scale-up and donor alignment across the region.

POLICY ACTIONS:

- Establish cross-sector inter-ministerial Climate-Nutrition Task Forces in each country, linked regionally.
- Strengthen regional data collection and sharing, including gender-disability requirements to inform inclusive policies and programs.

PROGRAM ACTIONS:

- Align actions with existing policies and help draw together ministries and stakeholders through common climate, nutrition, food, health, WASH and equity goals.
- Engage cross-sectoral community networks.
- Support the learning and replication of good practice climate-nutrition sensitive programming and ensure strong MEAL investment to create and utilise evidence.

By embedding nutrition into climate adaptation efforts across agriculture, health, social protection, and infrastructure, there is a clear opportunity for governments and partners to protect vulnerable populations and break the cycle of climate-exacerbated malnutrition. The evidence gathered here provides a strong foundation for integrated, equity-focused, and locally driven action that can build resilience before the impacts of climate change on nutrition become irreversible.

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