



FROM RISK TO RESILIENCE:

Vanuatu's nutritional vulnerability in a changing climate

SUMMARY REPORT | OCTOBER 2025

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Save the Children Australia and Dikoda (2025) “Climate change and nutritional vulnerability: insights from Papua New Guinea, Solomon Islands and Vanuatu. Vanuatu Summary Report”. Save the Children Australia, Melbourne.



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Photos: Conor Ashleigh/Save the Children

Climate change pressures on nutrition: implications for Vanuatu

Climate change is reshaping the foundations of food and nutrition security in Vanuatu, with far-reaching consequences on the health and development of its most vulnerable communities. These impacts are especially critical during the first 1,000 days of a child’s life (from conception to their second birthday) when nutrition shapes lifelong health and cognitive development. Children under five and pregnant and lactating women (PLW) face heightened risks of malnutrition as climate pressures intensify.



It’s getting warmer

Vanuatu has already warmed by about 0.7°C relative to the pre-industrial baseline (1850-1900). By 2050, it could get 1.3°C to 1.9°C hotter, depending on the level of world emissions.

- more heatwaves
- droughts and harder conditions for farming
- greater risk of heat-related illness



Rain is becoming less predictable

Rainfall in Vanuatu is highly variable. Some years are very wet, others are dry. Looking ahead, conditions could become wetter or drier depending on shifting weather patterns.

- harder to plan for farming and food production
- water supply
- disaster preparedness



Stronger cyclones

Cyclones are becoming stronger, bringing more rain that is resulting in flooding and damage, especially with rising sea levels.

- stronger winds
- increased rain
- storm surges



Rising seas

Sea levels around Vanuatu are rising and could go up by 90cm by 2100 if emissions stay high.

- more coastal flooding
- loss of productive agricultural land / salinity of underground water sources
- damage to homes, roads, and infrastructure



Coral reefs are at risk

Warmer ocean temperatures can cause coral bleaching, where corals lose their colour and health. Bleached corals are more likely to die.

- affecting fisheries and food security
- tourism
- coastal protection from waves and storms

Source: CSIRO & SPREP. Current and Future Climate for Vanuatu: Enhanced ‘NextGen’ Projections Technical Report. <https://doi.org/10.25919/hexz-1r10> (2021).

Nutrition vulnerabilities



Children under five years

Vanuatu faces a triple burden of malnutrition among children under five.

- stunting is 29%
- wasting affects 8%
- overweight and obesity affects 10% and is on the rise
- micronutrient deficiencies, such as anaemia, affect 31% of children aged 6-59 months with rates likely to be higher in rural areas due to limited access to iron-rich foods



Pregnant and lactating women

Women in Vanuatu also face significant nutrition challenges.

- 24% are obese
- 30% are anaemic
- 31% do not meet the minimum dietary diversity, which is an indicator of diet quality and micronutrient intake, vital for growth, development and overall health

Source: Vanuatu Bureau of Statistics. Vanuatu Multiple Indicator Cluster Survey 2023, Survey Findings Report. (2024); WHO. Anaemia in children aged 6-59 months, prevalence (%). The Global Health Observatory, [\(https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-anaemia-in-children-under-5-years-\(-\)\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-anaemia-in-children-under-5-years-(-)) (2019).

WHO. Anaemia in women of reproductive age (aged 15-49), prevalence (%). The Global Health Observatory, [\(https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-anaemia-in-women-of-reproductive-age-\(-\)\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-anaemia-in-women-of-reproductive-age-(-)) (2023).

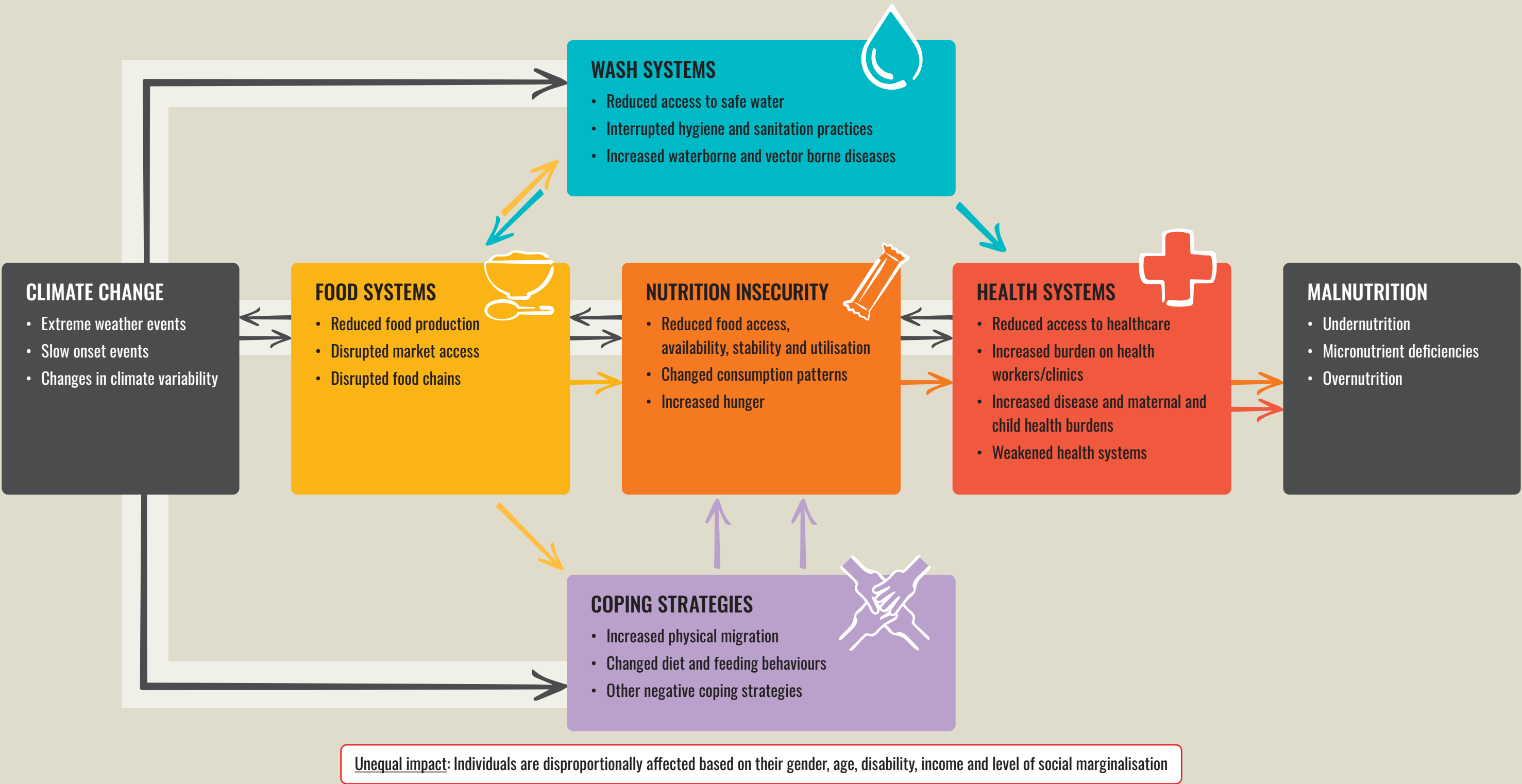


CLIMATE CHANGE AND EARLY LIFE NUTRITION: Mapping pathways of vulnerability

Climate change is increasing the risk of malnutrition in Vanuatu through disruptions across three key interconnected systems: food, health, and water, sanitation, and hygiene (WASH). These impacts are especially severe for pregnant and lactating women, and children under five, who have higher nutritional needs and are more vulnerable to disease and food insecurity.

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.¹

¹ Cresta, C., Manger, M., Brooks, R., Smith, K., Singhkumarwong, A., Dibari, F., Hobbs, N., Allen, R., Berardo, A., & Goudet, S. (2025). *Climate change and nutrition in Asia-Pacific: a pathways framework*. [Submitted to The Journal of Climate Change and Health].



Food systems

In the food system, hazards such as cyclones and floods repeatedly destroy crops, fruit trees, and fishing zones, delaying replanting and reducing stability, accessibility and availability of locally grown, nutritious foods. Slow-onset changes like temperature increase, saltwater intrusion (contamination of groundwater and freshwater sources by saltwater), and more variable rainfall further undermine traditional farming practices. Fishing is also affected, with coastal erosion, ocean acidification and pollution pushing fish farther offshore and reducing access to key nutrients like protein, iron, and zinc. Women and children with disabilities experience particularly higher levels of food insecurity and are often left out of relocation or post-disaster response efforts.

Disruptions to food production have cascading effects on livelihoods, especially for women, who take on a disproportionate share of unpaid care and household work and have less time to pursue alternate means of income. Reduced agricultural and fishery productivity mean lower household incomes, making it harder to afford diverse and healthy diets. Food prices often spike after extreme climate events, pushing families toward cheaper, processed foods that are high in sugar, salt, and fat but low in essential nutrients. Market access is also compromised by damaged roads and rising transport costs, particularly in rural areas, further limiting the availability and affordability of fresh produce. Community stakeholders raised that in times of declining yields and incomes, traditional Pacific practices around food sharing are weakened as households focus more on feeding themselves and less on communal needs.

As a result, diets across Vanuatu are shifting away from traditional, nutrient-rich foods toward ultra-processed staples like rice, tinned fish, and sugary snacks. This nutrition transition is contributing to both undernutrition and overweight, especially among children and pregnant and lactating women. Breastfeeding practices are also affected, with heat stress and poor maternal diets linked to perceptions of reduced production of breastmilk, which is critical for infant health and development.

Tropical Cyclones Judy and Kevin in 2023 had a devastating impact on food and agriculture in Vanuatu, destroying home gardens of 84% of the population and leaving 42% of people without enough food to meet their daily needs.²

Health systems

The health system, already strained by limited infrastructure and staffing, faces additional pressure from climate-related impacts. Cyclones and floods damage clinics and disrupt supply chains, cutting off access to maternal and child health services when they are most needed. Rural communities often rely on a single nurse or volunteer, and service delivery can halt entirely during disasters. This leads to missed antenatal visits, delayed child health checks, and reduced access to essential nutrition services.

Climate-sensitive diseases such as diarrhoea, respiratory infections, and dehydration increase during extreme weather events, compounding the risk of malnutrition. These diseases are climate-sensitive because temperature, humidity and water change the presence, concentration and spread of pathogens. Diarrhoea, for example, is both a cause of, and is made worse by, malnutrition – creating a vicious cycle that can lead to stunting, wasting, and impaired cognitive development in children. For pregnant and lactating women, diarrhoea and dehydration can result in poor birth outcomes, including low birth weight and stillbirths, and can interfere with breastfeeding.

² Government of Vanuatu. Post Disaster Needs Assessment: Vanuatu Tropical Cyclones Judy and Kevin. https://dsppac.gov.vu/images/roc/roc_23/pdna/tc-judy-and-tc-kevin-pdna.pdf (2023).

“When there is a cyclone it damages our bananas, taro, manioc and green cabbage. Post cyclone there’s no fresh greens and local root crops for families to eat. Children and mothers can only eat store bought food, like rice and tinned fish.”

– Grandmother from an inland community, Sanma Province

A study in Vanuatu after Cyclone Pam found that limited dietary diversity was linked to psychosocial distress in pregnant women, even in areas with minimal direct damage, highlighting the hidden mental health toll of food insecurity and the need for broad-based support.³ Climate extremes have the potential to disrupt essential health services and increase illness, driving malnutrition in children even further.⁴

WASH systems

WASH systems are similarly vulnerable. Extreme weather events damage water and sanitation infrastructure, reducing access to safe drinking water and functional toilets. Contaminated water sources and poor drainage contribute to frequent illness. Inadequate sanitation facilities and lack of hygiene supplies further increase exposure to disease, particularly during floods and droughts. In Vanuatu, WASH systems are already limited and sensitive to contamination. Increased impacts from climate change can increase the burden on these systems, intensifying health and nutrition impacts.

While 83% of people in Vanuatu have access to basic drinking water, widespread contamination with E. coli found in 85% of sources and 81% of households poses serious health risks.⁵ Sanitation remains inadequate for a third of the population, and only 35% have access to handwashing facilities with soap, dropping to just 26% in rural areas.⁶ Climate-related disruptions to water and sanitation systems further compromise food utilisation (how the body digests, absorbs and uses food), increasing the risk of water-borne disease and malnutrition.

“After a disaster or cyclone, the community’s water committee often shuts off access to water ... families must pay VT 50 per use, which many cannot afford ... poor hygiene and limited water access increase the risk of illness, dehydration, and infection.”

– Mother from a coastal community, Shefa Province

Interconnected pathways and social-economic inclusion

Together, these interconnected pathways create a compounding risk environment that undermines nutrition security in Vanuatu. Addressing malnutrition in the context of climate change requires integrated, multisectoral approaches that strengthen resilience across all three systems, with a particular focus on protecting the health and nutrition of women and young children.

Climate impacts in Vanuatu interact with other structural social inequalities, amplifying nutrition risks. Factors such as gendered caregiving roles, disability exclusion, low education, income insecurity, and remote geography reduce access to nutritious food and care, especially during disasters. These vulnerabilities compound the effects of climate change, leading to skipped meals, poor diets, and weakened support systems for the most at-risk children.

³ Pomer, A. et al. Psychosocial distress among women following a natural disaster in a low- to middle-income country: “healthy mothers, healthy communities” study in Vanuatu. Arch. Womens Ment. Health 22, 825–829 (2019).

⁴ Kim, H. et al. Health risks of climate change in the 21 Pacific Island states and noted gaps in scientific evidence: A scoping review. J. Clim. Change Health 8, 100166 (2022).

⁵ Vanuatu Bureau of Statistics. Vanuatu Multiple Indicator Cluster Survey 2023, Survey Findings Report. (2024).

⁶ Vanuatu Bureau of Statistics, (2024).

“The community has access to only one clinic to service over 1,000 people. More children under five are vomiting and having diarrhoea because of the contaminated water after heavy rains.”

– Father from an inland community, Sanma Province

From insight to impact

Policy and planning recommendations

Climate and nutrition policy integration

Coordinate policy action across agriculture, nutrition, and climate to improve food availability and diet quality.

PRIORITY ACTIONS:

- Integrate nutrition outcomes and considerations into climate, agriculture, fisheries, and food security policies and plans, and align climate finance proposals accordingly.
- Align sectoral priorities and programs with emphasis on meeting needs for pregnant and lactating women, and children.

WASH codes and standards

Reduce disease burden and improve food utilisation through safer hygiene and equitable access to WASH infrastructure.

PRIORITY ACTIONS:

- Update WASH design codes for climate resilience and accessibility.
- Retrofit solar-pumps, rainwater tanks and build flood-resilient, gender-separated latrines with universal design for people living with a disability.
- Ensure considerations are included in national standards and the National Sanitation and Hygiene Policy.
- Prioritise remote areas and peri-urban informal settlements in WASH policies and plans.

Health services disaster preparedness and response

Reduce service gaps and protect maternal and child health and nutrition during emergencies and throughout the recovery phase.

PRIORITY ACTIONS:

- Develop disaster preparedness and response strategies that help ensure the continuity of reproductive, maternal, newborn and child health services during and after disasters.
- Embed mobile outreach and surge staffing in health contingency plans, and integrate nutrition messaging into routine care.

National nutrition messaging framework

Increase public awareness and support behaviour change.

PRIORITY ACTIONS:

- Develop a cross-sectoral communication strategy on climate and nutrition. Messaging should align with national nutrition policies and campaigns such as Gudfala Kakae and other platforms focused on promoting healthy diets and weight management.

Adaptive social protection systems that support health and nutrition outcomes under the National Comprehensive Social Protection Policy

Scale up support for vulnerable households, increase resilience and support for child and maternal nutrition during crises.

PRIORITY ACTIONS:

- Develop adaptive social protection systems that can integrate social protection, disaster risk reduction, and climate change adaptation to provide timely, scalable assistance before, during and after a crisis.
- Link cash assistance to early warning triggers, such as rising food prices, by introducing nutrition-sensitive vouchers or food baskets and expanding anticipatory cash top-ups ahead of extreme climate events.

Programming recommendations

Use a food systems approach to support food and nutrition security

Increase the availability, access and consumption of diverse, micronutrient-rich foods.

PRIORITY ACTIONS:

- Identify nutritionally dense crops and food options, such as dark leafy greens, pulses and vegetables that can be included in agricultural projects.
- Scale and promote home, school and community gardens, economic incentives to reduce the cost of nutritious local foods, and health and nutrition promotion campaigns.

Develop integrated health and nutrition service packages for pregnant and lactating women

Strengthen comprehensive health and nutrition care and systems and improve early detection and mitigation of nutrition risks.

PRIORITY ACTIONS:

- Embed tailored nutrition and climate resilience messaging into existing health service delivery, such as antenatal care, immunisation visits, and adolescent health weeks to reduce the need for additional contact points.
- Develop and distribute standardised five-minute counselling scripts to use in clinics and outreach settings.
- Expand nutrition surveillance systems to include climate-sensitive indicators and enable early detection of nutrition risks during disasters.

Strengthen hygiene and food safety through integrated infrastructure and behaviour change

Reduce water-borne diseases and support safe food utilisation.

PRIORITY ACTIONS:

- Upgrade water and sanitation infrastructure in vulnerable communities and ensure designs are inclusive and climate resilient.
- Targeted social behaviour change campaigns on hygiene practices and food safety through community-led delivery channels to reinforce safe food handling, handwashing, and water treatment practices.

Study approach

The recommendations in this summary brief were informed by a comprehensive study that included a desk review of over 100 peer-reviewed articles, government strategies, and program reports. Findings from the literature were complemented by primary data collection across four sites representing peri-urban, rural, coastal and inland communities in two provinces (Shefa and Sanma) in Vanuatu, involving eleven key-informant interviews, twelve focus-group discussions, four community mapping exercises, and a systematic review of national and sub-national policies and programs to assess the depth of climate-nutrition integration. Results presented in this summary integrate the findings across all data collection methods.

This brief provides a country summary for Vanuatu and is intended to be read alongside the three-country synthesis [Nutritional Vulnerability in a Changing Climate: Insights from Papua New Guinea, Solomon Islands and Vanuatu](#).

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