A case study:

Preventing non-communicable diseases, protecting the planet and promoting equity in the Pacific

### Welcome

Ni Sa Bula Vinaka, Kia orana, Noa'ia, Talofa lava, Mauri, Mālō e lelei, Tālofa, Fakaalofa lahi atu, Mālō ni and warm Pacific greetings.

### Introduction

Pacific Island nations are on the frontline of two of the most pressing global challenges: climate change and the growing burden of non-communicable diseases (NCDs). Both challenges represent existential threats to the Pacific way of life and will continue to impact the lives of future generations.

The nations that make up the Pacific Islands all have unique cultures and practices. However, they share similarities in that they all have relatively small populations, are in remote locations, have high costs associated with transport and communications, and have varying levels of infrastructure.<sup>1</sup>

Tourism, agriculture and fishing are all key sources of income for Pacific Island nations. In Fiji, for example, tourism contributed over 30%, agriculture around 8% and fisheries 1.8% towards GDP in 2018.<sup>2</sup> The Pacific region is also a key contributor to the global fish supply. It provides two-thirds of the global tuna stock, making fishing a major income source in the region.<sup>3</sup> This reliance on tourism, agriculture and fishing puts Pacific Island nations at higher risk from the impacts of climate change, which can cause major disruptions to these sources of income and food production. These disruptions have knock-on effects on health and wellbeing, further exacerbating inequity for communities experiencing vulnerability.

Climate change represents a major threat to food and water security in the Pacific region.<sup>4</sup> Eighty per cent of people in Pacific Island countries live within 1.5 km of an ocean or river,<sup>1</sup> and 80% of their protein sources come from the sea in the form of fish or seafood.<sup>3,5</sup> Rising sea levels are displacing communities and disrupting culture;

warming oceans are impacting traditional agriculture and fishing practices; and tropical cyclones are disrupting access to safe and clean drinking water and food. These factors expose the direct links between climate change and health – all of these climate-related realities lead to increased food and water insecurity, a key contributor to poor diets that result in higher rates of NCDs.<sup>6</sup>

### Twin Threats Impacting Sustainable Development

The twin threats of climate change and NCDs are impacting sustainable development within the Pacific region, exacerbating inequities and poor health outcomes. The 2030 UN Sustainable Development Goals (SDGs) have set out an ambitious agenda to reduce the impacts of climate change and the burden of NCDs. Unfortunately, the SDGs address these challenges as separate and distinct policy issues. This approach likely comes from the knowledge pool or 'voices heard' during previous SDG dialogues, under-recognising different experiences from various regions that bear the brunt of issues such as climate change, NCDs and inequities concurrently. This top-down approach to sustainable development inevitably results in a fragmented approach to policy development that leaves unheard voices underserved and most vulnerable to the impacts of climate change and food insecurity. There is a need to take a systems approach to improving sustainable development that considers Pacific Island people's voices and experiences.





### Climate Change Drives Food Insecurity and Inequity

The Pacific region is already suffering from the impacts of climate change, but it is predicted to suffer some of the worst impacts globally.<sup>7</sup> Changes in the climate are resulting in more extreme weather events, rising sea levels and a warming ocean, which, in turn, affect food production and local income generation activities, including subsistence farming, leading to food insecurity.<sup>8</sup> The impact of climate change in the Pacific region adds to the current inequities experienced within countries. People with fewer resources will be more exposed to the impacts of climate change and less likely to have the resources to recover from related events like tropical cyclones. Groups currently experiencing inequities or vulnerability will, therefore, be even more at risk of food security.

Climate change has already been implicated in the declining agriculture yields in Fiji. It is having a profound impact on Pacific fish stocks and coastal fisheries, which are a key food and income source for many communities. It is estimated that 75% of coastal fisheries will not meet their food security needs by 2030 due to a forecast 50% growth in population and limited productivity of coastal fisheries as a result of climate change.<sup>3</sup> Climate change also impacts economic sustainability. Tourism becomes less viable as coral atolls die as a result of warming oceans. Tourism infrastructure is vulnerable to cyclones, and unpredictable weather patterns decrease interest in visiting the Pacific. This, in turn, drives migration from rural or coastal areas to urban areas with a corresponding move away from people's traditional income sources. Urban migration is challenging sustainable development, as traditional sources of income are no longer viable, and people need jobs in other sectors, causing economic insecurity and, ultimately, food insecurity.

# Extreme Weather and Food and Water Security

In March 2015, Category 5 Tropical Cyclone Pam struck Vanuatu, killing 11 people, leaving thousands homeless and causing widespread damage. The damage included:

- US\$450 million in economic damage and losses, equating to approximately 64% of Vanuatu's gross domestic product.<sup>9</sup>
- Most of the banana crop was destroyed, along with key local food sources, such as coconuts, cabbage, cassava, taro and yams.
- Many farm animals, such as pigs and poultry, were killed, while fishing boats and nets were damaged, affecting people's access to vital sources of protein.
- Capacity to rebuild and recover was hampered by the destruction of seed stocks and lack of income.
- High reliance on unhealthy food aid, such as white rice and tinned meat, exacerbated rates of NCDs.<sup>10,11,12</sup>



### Food Insecurity Drives Ill Health Burden

Ten years ago, Pacific Island leaders declared an NCD crisis.<sup>13</sup> At the time, approximately 75% of all adult deaths in the Pacific were due to NCDs, presenting serious implications for sustainable development in the region. Pacific Island countries have high levels of overweight and obese people,<sup>6</sup> and there are known gender differences in the prevalence and burden of NCDs. In Fiji, for example, 42% of women and 22% of men are obese.<sup>14</sup> Yet, more men than women die younger due to NCDs. Sadly, many NCD-related deaths are preventable and occur below the age of 60.<sup>15</sup>

This is in part caused by a 'nutrition transition'<sup>16</sup> resulting from less consumption of locally grown, fresh and healthy produce<sup>16</sup> and an increasing reliance on imported, processed foods due to extreme weather events and climate change. It is also in part due to predatory marketing of big food companies to communities experiencing vulnerability,<sup>17</sup> including those with food insecurity. As part of the transition, there is now an extensive range of nutrient-poor ultra-processed packaged foods available in the Pacific region. These foods not only contribute to poor nutrition and ill health, but their production in other countries and importation to Pacific Island nations leads to greenhouse gas emissions.<sup>18</sup> It is a vicious cycle, where environmental crises entrench the reliance on processed packaged foods and food aid is comprised of processed packaged food of low nutritional quality.<sup>12, 19</sup>

In 2018, 40% of eligible products available in the main supermarkets in Suva, Fiji were higher in salt than recommended.<sup>20</sup> Despite 16 of the 21 Pacific Island countries having some form of levy on sugar-sweetened beverages (SSB),<sup>21</sup> overconsumption is still a major factor in poor health outcomes. Importantly, many of the countries that export the most SSBs to the Pacific also provide the Pacific region with aid to reduce the NCD burden.<sup>22</sup> This ironic correlation hampers global efforts towards SDG achievement and highlights the need for a whole-of-system approach in driving solutions.

NCDs are putting strain on the already overburdened health system, impacting progress towards universal health coverage. While governments in the region have been proactive in the past decade in endorsing food and health-related policies,<sup>23</sup> the challenges have remained entrenched and are worsening. A range of factors mean that countries in the Pacific region continue to have the world's highest rates of premature death due to NCDs. A major factor is that the burden of NCDs in the Pacific region is being balanced with other crises and perceived policy needs rather than being considered a major priority. This is despite the burden being preventable and coming at a substantial economic cost to Pacific Island countries.



### Crises Contributing to the Burden of Disease

While NCDs have been declared a crisis in the Pacific, they tend to be viewed as a 'slow-burn' crisis and often slip down the political agenda when more immediate crises, such as COVID-19, emerge. Similarly, NCDs and climate change are perceived to be in competition for policy attention, funding and leadership response. This is evident around the world, not only in the Pacific region. This perception needs to change – NCDs must be seen as an immediate, ongoing and urgent crisis linked to and influenced by other key challenges like climate change, inequities and COVID-19.

Importantly, while global and regional attention is focused on COVID-19, the NCD crisis is gathering pace, and food security issues are being overlooked as resources and attention are diverted to tackling the global pandemic. For example, as a consequence of food aid in the past, Pacific Island communities were exposed to a high dependence on imported processed food, which has resulted in problems like hidden hunger - where people are deficient in essential vitamins and minerals, without clear symptoms – and increases in NCDs.<sup>12</sup> It is a dangerous situation; individuals with diet-related diseases are more at risk of dying from COVID-19, while the disruption to health services caused by COVID-19 is affecting access to health care for conditions that can be treated.<sup>24, 25</sup> An increase in the diet-related disease burden will only exacerbate the impact of acute crises, including COVID-19 and climate emergencies. This presents a concerning challenge for sustainable development and makes it unlikely that the health-focused SDGs will be achieved. A focus on strengthening food policy, via sustainable food systems, needs to be a priority and maintained through times of crises.

Triple-duty actions to address climate change, NCDs and inequities can work concurrently to provide broadranging solutions that will put Pacific Island countries in



"The COVID-19 pandemic in our region has threatened our livelihood, compounded poverty, insecurity with social and health inequities"

Gade Waqa, Head of Pacific Research Centre for the Prevention of Obesity and Non-Communicable Diseases, Fiji National University

a better position when other crises hit. In particular, the health and economic threat of COVID-19 in the Pacific needs to be supported by a community-identified, holistic approach that also takes into account impacts on food security and diet-related diseases.<sup>26, 27</sup> This means working with community organisations and Pacific Island leaders to identify areas of greatest need, endorsing Pacific Islander knowledge and expertise, and creating relevant community-led solutions that are scalable and sustainable.

# Building the Evidence Base and Trialling Solutions

The George Institute for Global Health, Fiji National University, Sydney University and Deakin University are collaborating to ascertain how to strengthen sustainable scale-up of food policy interventions in Fiji and Samoa through a Global Alliance for Chronic Diseases project.<sup>28</sup> The project aims to reduce the incidence of diet-related NCDs, such as diabetes and cardiovascular disease. Since the establishment of the project, there has been an assessment of the food supply, consultation with key policy stakeholders on existing and potential food policy interventions, and modelling of the cost-effectiveness of food policy interventions in Fiji. The modelling found that reducing salt intake by 1 g per day for a year would potentially prevent 234 heart attacks and 72 strokes a year. This would result in 131 lives saved and more than FJD1.8 million in reduced costs to society each year.<sup>29</sup>

### **Recommendation: Build Coalitions for Change**

Improving food environments to prevent NCDs is a stated priority of all governments in the Pacific region, and multi-sectoral approaches are accepted as the best way to achieve impact.<sup>23</sup> However, the implementation of policies is often delayed or planned approaches are watered down. This is likely because different stakeholders, including industry representatives, have different priorities. These priorities often conflict with the priorities of public health, undermining policy development and governance. Ensuring an understanding of priorities and positions on NCDs within countries and across government departments - for example, among health, agriculture and trade ministries helps drive a stronger and less easily influenced NCD response.<sup>23</sup> Additionally, all stakeholders – with a particular focus on privileging unheard voices – need to be engaged in finding practical solutions.

### **Recommendation: Improve Monitoring and Evaluation**

Better data and timely evidence to monitor the effectiveness of regulations are crucial for influencing policy change. Food and nutrition data are often outdated and missing key information. This limits the ability to accurately monitor nutrition risk and undermines efforts to influence changes in overnutrition or undernutrition in the region. It also limits the ability of public health advocates to hold the food industry to account for the composition of their products. By improving monitoring and evaluation, public health researchers and advocates are better placed to inform decision-making with the best evidence.

### **Recommendation: Foster Sustainable Diets**

To ensure that there is a sustainable move to healthier diets in the Pacific region, there is a need to promote interest and create consumer demand for sustainable, fresh and healthy foods. This means making these foods easily accessible to consumers. A good example of progress in this area is from the Ministry of Agriculture in Fiji, who have been handing out seeds for people to grow their own food at home. This initiative was particularly popular during the initial COVID-19 lockdown in 2020.<sup>30</sup> Fostering suitable diets has the co-benefit of improving health outcomes by stabilising food insecurity and reducing emissions that exacerbate climate change.

### **Recommendation: Apply a Gender Lens**

Gender equality is a priority in the SDGs. With more people migrating to urban centres and changes in traditional jobs, gender-related roles and responsibilities are changing,<sup>31</sup> which has subsequent impacts on diet and health. In Fiji, for example, more women are now in the formal workforce, yet they maintain responsibility for the bulk of the caring duties. This is increasing the reliance on convenience foods, which are often cheap but ultra-processed and lacking in nutrition.

Across the Pacific, women continue to play key roles in agriculture and fisheries; however, they tend to be undervalued and underrepresented actors in agriculture and fisheries development and decision-making.<sup>31, 32</sup> This underrepresentation means that typically unheard voices in crucial industries go ignored, exacerbating inequalities.

It is crucial that the voices of people across the spectrum of gender identities are included in discussions about sustainable food systems and health. This will ensure that gender considerations are taken into account to aid an equitable reduction in food insecurity and diet-related NCDs connected to climate change.

### Recommendation: Integrate Health and Climate in the Policy Context

Climate change and diet-related NCDs are often viewed as separate policy issues. Indeed, they may be viewed as competing priorities. The George Institute has conducted research into understanding the policy landscape in Fiji, which has provided important insights into how policymakers view these twin challenges.<sup>28</sup> From interviewing key stakeholders in the food industry, non-government organisations and government representatives in 2020, both diet-related NCDs and climate change were identified as important issues. However, they were viewed as separate issues, and when asked to rank them, climate change was viewed as a greater policy priority than diet-related NCDs. It is crucial that health and climate are recognised as interlinked areas of concern rather than siloed policy spaces. Health and climate policy should recognise that there are cobenefits of improvements to both areas, and they should be funded accordingly.

"By working with community to understand barriers and opportunities, we can support local partners to strengthen implementation of policies that improve diets. In this way we can prevent NCDs, protect the planet and promote equity"

Jacqui Webster, Professor of Food Policy, The George Institute for Global Health



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