



## Whose paradigm counts? An Australia-Pacific perspective on unheard voices in food and water systems

### **Acknowledgement of Country**

This report was developed on the traditional Country of the Gadigal people of the Eora Nation, and we pay respects to Elders past, present and emerging.

Walgett is on the traditional Country of the Gamilaraay people, and we acknowledge the leadership and custodianship of Gamilaraay and Yuwaalaraay Elders, past and present.

### **Welcome**

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

### **Introduction**

Amid widespread calls to build back better and fairer in the wake of the COVID-19 pandemic, the social

“Addressing food and water insecurity in Australia demands a considered response that privileges an Aboriginal paradigm of health and culture, including the continued connection between people and Country that has existed over many thousands of years”

**Yuwaya Ngarra-li's Walgett Partnership Manager Wendy Spencer and Walgett Aboriginal Medical Service (WAMS) CEO Christine Corby<sup>14</sup>**

determinants of health have never been more important. In September 2021, UN Secretary-General António Guterres is convening a Food Systems Summit (the Summit) as part of the Decade of Action to achieve the Sustainable Development Goals (SDGs) by 2030. The aim of the Summit is to: 'launch bold new actions to deliver progress on all 17 SDGs, each of which relies to some

## Summary of recommendations

Based on consultations with key stakeholders, information from case studies included within this report and our research and advocacy expertise, we believe:

### **Organisers of multilateral summits should:**

- Ensure First Nations voices are represented at all levels and in all aspects of governance structures from the earliest stages of summit conception.
- Recognise the diversity of global Traditional Knowledges and unheard voices and embed flexibility in engagement mechanisms to ensure these are captured.
- Ensure discussions of food systems include consideration of water systems as a default.

### **Health systems should:**

- Recognise climate change and its impacts on human health in policy and practice and take responsibility for reducing their own climate footprint.

### **Governments should:**

- Design food policy through a process of community-led policy development that recognises Traditional Knowledges and includes engagement with community leaders and Elders, and shared planning and decision making.
- Adopt a systems approach to developing policy, recognising the relationships and reciprocal links between food and water systems, the burden of non-communicable disease, climate change and equity.
- Support consumer demand for sustainable, fresh and healthy foods, and implement policies to ensure these foods are easily accessible, available and affordable.

### **Researchers should:**

- Monitor the effectiveness of policies that aim to improve food and water systems and develop the evidence base on the impacts of implementation on equity, climate change and the disease burden.



First harvest from new water efficient beds at Walgett Aboriginal Medical Services Community Gardens 2020

degree on healthier, more sustainable and equitable food systems'.<sup>1</sup> Dubbed 'the People's Summit', it calls on people of the world to: 'work together to transform the way the world produces, consumes and thinks about food'.<sup>1</sup> Summit organisers and stakeholders developed five Action Tracks to focus discussions. The Action Tracks were designed to address possible trade-offs with other tracks, and to identify solutions that can deliver wide-reaching benefits in food systems.

As experts in food policy and Indigenous health, The George Institute for Global Health is focusing on a 'Triple P' agenda: to prevent non-communicable diseases (NCDs), protect the planet and promote equity. The George Institute sought to co-convene an Independent Dialogue (the Dialogue) that could bring together diverse voices to discuss the health, environmental and equity impacts of food and water systems as they pertain to unheard voices – Aboriginal and Torres Strait Islander peoples and Pacific Islander peoples.

The aim of the Dialogue was to develop recommendations that can be submitted to the Summit that are reflective of community priorities in food and water systems. In pursuing this, we sought to focus our event on Action Track Two, 'Shift to sustainable consumption patterns', as it was most closely linked to the 'Triple P' agenda. However, it quickly became apparent that there were numerous barriers to community participation within the predetermined paradigm of the Summit.

The George Institute recognises the inclusion and representation of unheard voices – in this context, Aboriginal and Torres Strait Islander peoples and Pacific Island peoples – to be crucial to the success of any

dialogue. Only through understanding and respecting what the paradigm of health and food and water systems means for different cultures can impactful actions be conceived and developed. Unfortunately, the lack of recognition or understanding of Traditional Knowledges outside of a Western paradigm in the Action Tracks meant limitations were placed on topics for discussion from the outset. This is evident by the exclusion of discussion on water systems in the Summit.

While The George Institute has focused on Action Track Two, this topic is also inextricably linked to Action Track 1 ('Ensure access to safe and nutritious food for all') and Action Track 5 ('Build resilience to vulnerabilities, shocks and stress').

Unfortunately, the siloing of these topics reflects a lack of recognition of a holistic approach to food and water systems and privileging of a Westernised and colonising approach that excludes Traditional Knowledges. It also fails to consider how stakeholder perspectives can be more broadly included to recognise diversity within communities and across nations. Despite these limitations, there was enthusiasm from communities to contribute to the Summit in a meaningful way.

As such, The George Institute has aimed to facilitate a process through which community priorities, strengths and solutions are shared and heard, bringing global attention to important local issues. To ensure the inclusion of as many voices as possible and a community-led rather than a top-down approach (see box, right), a series of meetings with community stakeholders and experts were held over five months between March and July 2021. From these activities, this report and community case studies were developed for submission to the feedback process to the Summit.

This report reflects the perspectives of specific communities on barriers to reform and community-led solutions for food and water systems. It is important to remember that while there are similar experiences around food and water systems, Aboriginal and Torres Strait Islander peoples and Pacific Islander peoples are diverse in cultures and practices and, therefore, should not be homogenised in approaches to solutions. This report should not be taken to represent all perspectives from all



Aboriginal and Torres Strait Islander and Pacific Islander peoples and communities. Rather, this report is based on our experiences and community feedback of what it takes to build successful collaborations. We hope this learning will be useful for Summit organisers and others, and can help to inform the design of future Summits.

“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**

## Community-led solutions vs top-down approaches<sup>2</sup>

### **Community-led programs**

- Community groups define the challenges and opportunities.
- Programs are coordinated by leaders, community members or community-controlled organisations from within Aboriginal and Torres Strait Islander communities.
- There is a focus on building and strengthening capacity and skills.
- Indigenous research methodologies and decolonising approaches are utilised.

### **Top-down approaches**

- Outside agents define the challenges and opportunities.
- Outside ‘experts’ dominate the coordination of the group.
- There is a focus on identifying and addressing weaknesses, problems or deficits.
- Quantifiable outcomes and targets are a priority.

### **Unheard voices in food and water systems**

Aboriginal and Torres Strait Islander and Pacific Islander people’s voices and Traditional Knowledges are often missing from, or go unnoticed in, decision-making processes that profoundly impact their own communities.<sup>3</sup> This top-down approach results in solutions that are not fit for purpose and not appropriate for specific communities and cultural contexts. Therefore, this Dialogue had three major focal points: (i) to understand and explore community experiences of food and water systems; (ii) to highlight community-



identified priorities, strengths and solutions in shifting to healthy and sustainable consumption patterns (Action Track 2); and (iii) to examine links between community priorities, strengths and solutions, and government responsibility, engagement and action.

### **Vulnerability of food and water systems**

In Aboriginal and Torres Strait Islander and Pacific Islander communities, vulnerabilities in precarious food and water systems are being exacerbated by climate change. These vulnerabilities lead to increased food and water insecurity, a key contributor to poor diets, resulting in higher rates of NCDs.

Food and water systems in Aboriginal and Torres Strait Islander and Pacific Islander communities are vulnerable to a range of environmental and geographic factors. Climate change and disaster events, including bushfires and drought in Australia and tropical cyclones, rising sea levels and a warming ocean in the Pacific, continue to expose and worsen food and water insecurities. Geographic constraints, including the remoteness and relative isolation of many Aboriginal and Torres Strait Islander and Pacific Islander communities, have further limited the affordability and availability of healthier foods.<sup>4,5</sup>

### **Community-identified food and water system challenges**

Discussions with community stakeholders and experts have led to the development of the case studies, ‘Preventing non-communicable diseases, protecting the planet and promoting equity in the Pacific’ and ‘A community in action: How Walgett is redefining food systems’. From those, two key food and water security challenges were identified.

#### **1. A shift from traditional diets has compromised food security**

For millennia, the diets of Aboriginal and Torres Strait Islander peoples were rich in local flora and fauna, particularly native fruit, vegetables and lean animal proteins.<sup>6</sup> The colonisation of Australia and the dispossession of and forced removal from Country caused a ‘nutrition transition’ away from traditional diets and disruption to food and water systems, resulting in ongoing food insecurity. Forced rations replaced traditional diets



The Food & Water for Life Program Working group – Vanessa Hickey (DEG/YN), Jacqui Webster (The George Institute), Wendy Spencer (DEG/YN), Loretta Weatherall (WAMS), Jessica Spencer (NSW Ministry of Health), Peta MacGillivray (UNSW/YN)

and included large quantities of refined grains and processed foods containing high levels of salt, saturated fat and added sugars, which has had ongoing detrimental impacts on health.<sup>5</sup> Communities were prevented from accessing traditional food and water sources on Country, exacerbating hunger and food insecurity.

Pacific Island nations include a wide range of 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>7</sup> They also share a reliance on subsistence agriculture, and tourism, agriculture and fishing are key sources of income and support for their economies. Traditional diets of Pacific Islander communities have been also disrupted by colonisation and dispossession, resulting in food insecurity. Extreme weather events have further exacerbated this issue in the Pacific, where the subsequent provision of unhealthy food aid after extreme weather events, including white rice and tinned meats, is relied on to prevent hunger. In these settings, urban migration increases, as local food production and productivity decreases the viability of subsistence farming.<sup>6</sup> This again prevents communities from accessing traditional food sources and limits the ability to grow food. With more people migrating to urban centres and changes in traditional jobs, gender-related roles and responsibilities are changing,<sup>8</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 care work for their families. The need to balance paid and unpaid work is increasing the reliance on convenience foods, which are often cheap but ultra-processed and lacking nutrition.



Typhoon damage to an old mangrove forest

Across the Pacific, women continue to play key roles in agriculture and fisheries sectors; however, they tend to be undervalued and underrepresented actors in agriculture and fisheries development and decision-making.<sup>9</sup> This underrepresentation means that typically unheard voices in crucial industries go ignored, exacerbating inequalities.

## ***2. High salinity groundwater has compromised the quality of drinking water and food security***

The degradation of inland rivers over time, due to drought and government mismanagement, has had increasingly devastating effects on food and water security and the health and wellbeing of Aboriginal and Torres Strait Islander communities. Communities such as Walgett in New South Wales, Australia, have had to rely on groundwater for drinking and food production. The salinity of this water is almost double that recommended in the Australian Drinking Water Guidelines – which are based on palatability not health – and 15 times more than the amount recommended for people with high blood pressure. These unacceptably high levels of sodium can lead to dehydration and increased purchasing of soft drinks, further impacting community health. The salinity of the water in Walgett has resulted in reduced agricultural yield and destruction of soil structure within the local community garden, increasing the community's reliance on purchasing packaged, processed foods or takeaway foods that are more expensive and less healthy.<sup>5</sup>

Extreme weather events linked to climate change, such as tropical cyclones and rising sea levels, are contributing to increased soil salinity and contaminated drinking water in Pacific Island coastal communities. This is further exacerbated by long droughts, which make the soil less able to absorb rain, resulting in declining agricultural yields. Extreme weather events also destroy produce and farming resources, making subsistence farming untenable for local communities. Climate change is also limiting the productivity of local fishers and, therefore, increasing reliance on imported foods and food aid.<sup>6</sup> It is estimated that 75% of coastal fisheries will not meet their food security needs by 2030 due to a forecasted 50% growth in population and limited productivity of coastal fisheries as a result of climate change.<sup>10</sup>

## Community-led solutions

Aboriginal and Torres Strait Islander and Pacific Islander communities have identified that creating resilient food and water systems is a key priority to ensure a sustainable, secure local supply of affordable, nutritious food and safe drinking water. Creating resilient food and water systems will have the co-benefit of contributing to a reduced NCD burden. Approaches to achieving this rely on community-identified strengths and solutions and building and strengthening community capacity and skills. Community-led programs can be effective at improving food and water security, nutrition and health; they can help reverse the trend of worsening diets and increasing chronic diseases. The most effective programs adopt a multi-strategy, multi-sector approach that includes both securing and sustaining the supply of local healthy foods and access to safe drinking water.<sup>5</sup> They also include Traditional Knowledges and cultural practices passed down through millennia.

Governments need to work with communities rather than perpetuating a top-down approach, ensuring involvement of community leaders, shared planning and decision-making, and appropriate evaluation procedures to guarantee that community-identified food and water system challenges are responded to and community needs are met. Government responses must also respect Traditional Knowledges and ensure they are included in food and water policy.<sup>5</sup>

In 2011 in Walgett, community consultations led by the local Aboriginal medical service and Elders group highlighted community concerns about water security and exemplify community-led solutions. The community engaged experts to support action, responded to public consultations and parliamentary inquiries, and had discussions with the local council and health authority to identify solutions. Community advocacy and government engagement resulted in the government installing a desalination plant to improve water quality and the local council supporting the installation of public drinking water kiosks. While the desalination plant ultimately failed due to poor planning and unsustainable disposal of concentrate waste, the drinking water kiosks are soon to be installed. This example demonstrates how the community successfully advocated to government for, and achieved, solutions to self-identified water system challenges.<sup>5</sup>

With support from other partners and despite the challenges faced, the Walgett community now has high-quality local fruit and vegetables available for households and the community and weekly school food programs through a sustainable, climate-resilient community



garden system. The community is also working to ensure access to safe, affordable and nutritious food through a healthy supermarket strategy.<sup>5</sup> Healthy supermarket promotions negotiated by Walgett supermarket with Dharriwaa Elders Group and Walgett Aboriginal Medical Service in 2021 have led to healthier options being available to the community.

## Burden of disease

Aboriginal and Torres Strait Islander communities and Pacific Islander communities experience exceptionally high burdens of NCDs and premature mortality. In Aboriginal and Torres Strait Islander communities, NCDs are responsible for 64% of the total disease burden.<sup>11</sup> In the Pacific region, NCDs are responsible for almost 70% of deaths, of which two-thirds are premature.<sup>12</sup> Diet is a huge factor in the increasing burden of NCDs. Diet-related diseases, such as high blood pressure and type 2 diabetes, account for the greatest portion of NCDs both in Aboriginal and Torres Strait Islander communities and in the Pacific.

## A case study for change

The importance of community-led engagement, the privileging of unheard voices and the commitment to facilitate self-determination cannot be overstated.

Over the past 10 years, the Aboriginal and Torres Strait Islander Health Program at The George Institute has evolved from a few projects and staff to a formalised and broad-reaching program that is centred in Aboriginal and Torres Strait Islander research methodologies and practice. Today, the program continues to expand its delivery of meaningful and ethical research, transforming the health and wellbeing of First Nations peoples and communities.<sup>4</sup> This has not been easy and has required commitment from management and staff to ensure the Program has been supported and respected.

The Program operates within a collective and relational team dynamic that places Aboriginal and Torres Strait Islander voices and knowledge at the centre of the research process. This decolonised space involves unpacking colonial practices that have created



Walgett community members with UNSW water engineers and The George Institute at the Walgett Aboriginal Medical Services Community gardens 2019

inequalities and racism. Within the research space, this means questioning whose knowledge counts and, by extension, research practices, program design and policy formation.<sup>4</sup>

During the same period, The George Institute has worked in collaboration with Pacific Island research institutes, non-government organisations and government ministries to support the reduction of diet-related NCDs in the region. Currently, we are collaborating with Fiji National University to support the strengthening of food policy implementation in the region. This process is based on listening to community voices and synthesising community knowledge, enabling community ownership and, therefore, power to change diet-related issues in Fiji in a sustainable way.

“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**

When we tried to apply this approach to the Food Systems Summit, it became clear that the processes for feedback and information gathering did not allow for us to facilitate Aboriginal and Torres Strait Islander and Pacific Islander community engagement in the timescales. A top-down, rather than a community-led approach was apparent in the Action Tracks and pathways to provide feedback to Summit organisers. There seemed to be no recognition of the importance and interconnectedness of food with water systems. In future, Summit processes would benefit from flexible approaches that recognise diverse Traditional Knowledges and communication. This includes understanding and centring the importance of connection to Country and relationality of families and communities. It also includes understanding the holistic nature of Aboriginal and Torres Strait Islander people's paradigm of health, which encompasses the physical, social, emotional and spiritual wellbeing of not just individuals but the whole community.<sup>5</sup>

## Decolonising Research<sup>13</sup>

Decolonising is the undoing of colonialism, or the undoing of domination and subjugation of one people over another. Colonisation is about power and control and, therefore, consciously or unconsciously, informs whose knowledge counts and, by extension, research practice, program design and policy formation. Decolonising involves focusing on the strengths, capacity and resilience of peoples and Traditional Knowledges that have been colonised rather than seeing them as a 'problem'.

Images courtesy of [www.dharriwaeldersgroup.org.au](http://www.dharriwaeldersgroup.org.au)

## Summary

The George Institute recognises the inclusion and representation of unheard voices – in this context, Aboriginal and Torres Strait Islander peoples and Pacific Island peoples – to be crucial to the success of any United Nations process. It is only through the understanding and respect of what the paradigm of health and food and water systems means for different cultures can impactful actions be conceived and developed. This report makes a series of recommendations that should be considered by organisers of the UN Food Systems Summit for future events.

“It's not just about focusing on the research, but also understanding the work environment and how it allows us to self-determine success through our own research paradigm”

**Keziah Bennett-Brook, Program Lead, Aboriginal & Torres Strait Islander Health Program**

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**Suggested citation:** Rosewarne E<sup>1</sup>, Hunnisett C<sup>1</sup>, Bennett-Brook K, Coombes J, Corby C, Leslie G, McCausland R, McKenzie B, Spencer W, Feeny E<sup>2</sup>, Webster J<sup>2</sup>. Whose paradigm counts? An Australia-Pacific perspective on unheard voices in food and water systems. Sydney, Australia: The George Institute for Global Health; 2021.

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### A case study:

## A community in action: How Walgett is redefining food systems

### Acknowledgement of Country

Walgett is on the traditional Country of the Gamilaraay people, and we acknowledge the leadership and custodianship of Gamilaraay, Ngayimbaa, Wayliwan and Yuwaalaraay Elders, past and present.

This case study was developed on the traditional Country of the Gadigal people of the Eora Nation, and we pay respects to Elders past, present and emerging.

### Introduction

Over the last five years, the Yuwaya Ngarra-li Partnership (the Partnership), a collaboration between the Dharriwaa Elders Group (DEG) and the University of New South Wales (UNSW Sydney), has been developing Aboriginal community-led solutions to community-identified challenges, including food and water insecurity, in the remote town of Walgett. These community-led solutions have focused on establishing resilient food and water systems to ensure a sustainable, secure local supply of affordable, nutritious food and safe drinking water, and present a model of community-university collaboration to improve community health and wellbeing outcomes, and increase the broader evidence base.

### Background

In Australia, it is crucial that Aboriginal and Torres Strait Islander peoples and knowledges are considered, included and respected. Central to this is embedding Aboriginal and Torres Strait Islander ways of knowing, being and doing into program engagement. This includes understanding and centring the importance of connection to Country and relationality of families and communities. It also includes understanding the holistic nature of Aboriginal and Torres Strait Islander people's paradigm of health, which encompasses the physical, social, emotional and spiritual wellbeing of not just an individual but the whole community.<sup>1</sup>

"It is really important that our work considers a decolonising lens, placing the sovereign connection between Aboriginal and Torres Strait Islander peoples to land and waters as central to understanding health and wellbeing"

**Keziah Bennett-Brook, Program Lead, Aboriginal & Torres Strait Islander Health Program, The George Institute for Global Health**

For millennia, the diets of Aboriginal people were rich in local flora and fauna, particularly native fruit, vegetables, and lean animal proteins (e.g. game, fish). Traditional diets were disrupted by colonisation and dispossession, with the introduction of Westernised diets and forced rations that included large quantities of refined grains and processed foods containing high levels of salt, saturated fat and added sugars. A range of socio-economic, business and government choices, environmental and geographic factors have further limited the affordability and availability of healthier foods, leading to worsening diets.<sup>2</sup>





NSW Govt's James McTavish and Ahsley Albury meeting with WAMS and DEG to improve Walgett's drinking water and food security.

“Addressing food and water insecurity in Australia demands a considered response that privileges an Aboriginal paradigm of health and culture, including the continued connection between people and Country that has existed over many thousands of years”

**Yuwaya Ngarra-li's Walgett Partnership Manager Wendy Spencer and Walgett Aboriginal Medical Service (WAMS) CEO Christine Corby<sup>4</sup>**

Today, many Aboriginal communities are food insecure. Energy-dense, nutrient-poor diets are contributing to nutrition-related chronic diseases that now account for 10% of the total burden of disease for this population. This includes high rates of cardiovascular diseases, diabetes and cancer. In some communities, cultural knowledges of traditional diets – for example the preparation of bush foods – has been eroded, while in others, they prevail.<sup>2</sup>

Community-led programs can be effective at improving food security, nutrition and health, and reversing the trend of worsening diets and increasing chronic diseases. The most effective programs adopt a multi-strategy approach, including increasing supply of, and demand for, healthy foods, targeting the social determinants of food choice and integrating genuine community involvement

and Aboriginal leadership at all stages of program development and implementation.<sup>2, 3</sup>

In 2019, the Food and Water for Life project was launched to build a long-term approach to addressing food and water insecurity issues in Walgett, including poor drinking water and lack of affordable, safe and nutritious food, and the associated health and wellbeing issues. The project enables community-led, sustainable food and water initiatives that are run by and employ Aboriginal people. Activities to date include innovative water management solutions to increase the drought resilience of a local community garden and improve its yield and variety of foods, and improved access to quality drinking water and healthy foods through collaboration with the local council and supermarket.

“Isn't it great, we know we're in a really caring community where no-one will let anyone go hungry if they know about them. That's one of the core principles that we've found out today: that this community does not accept any member of our community going hungry”

**Yuwaya Ngarra-li's Walgett Partnership Manager Wendy Spencer<sup>2</sup>**

## Community-led solutions vs top-down approaches<sup>5</sup>

### **Community-led programs**

- Community groups define the challenges and opportunities.
- Programs are coordinated by leaders, community members, or community-controlled organisations from within Aboriginal and Torres Strait Islander communities.
- Building and strengthening capacity and skills.
- Indigenous research methodologies and decolonising approaches are used.

### **Top-down approaches**

- Outside agents define the challenges and opportunities.
- Outside “experts” dominate the coordination of the group.
- Focus on identifying and addressing weaknesses, problems or deficits.
- Quantifiable outcomes and targets are a priority.



“When we looked at the sodium levels in the water in Walgett, they were shockingly high. It was clear they were having a detrimental impact on health in the long run”

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

### Community-identified challenges

Community consultation led by the Walgett Aboriginal Medical Service (WAMS) and Dharriwaa Elders Group (DEG) over several years has highlighted community concerns around food and water insecurity and poor water quality.<sup>2</sup>

Since 2015, the Yuwaya Ngarra-li Partnership has been working on issues that the Walgett community has long been concerned about.<sup>6</sup> In 2019, a Food Forum was convened in Walgett in response to community concerns about food and water security. Key challenges raised by community members included the erosion of cultural knowledges about bush foods and food preparation patterns that have been passed on for generations, and the cost of fresh fruit and vegetables.<sup>2</sup>

Local rivers are described by Aboriginal people in Walgett as the ‘lifeblood’ of their community and hold deep cultural and community significance. The degradation of those rivers over time due to drought and government mismanagement has had increasingly devastating effects on Aboriginal community health and wellbeing, as well as food and water security in the Walgett community.<sup>6</sup> As well as limiting intergenerational gatherings and activities, including fishing, swimming and camping on Country, the community has had to rely on Great Artesian Basin “bore” groundwater for drinking. Concerns have been raised about the bore water’s high sodium levels and its long-term impacts on health. Sodium levels in this water are almost double the Australian Drinking Water guidelines (which are based on palatability not health) and 15 times more than the amount recommended for people with high blood pressure. Such high levels of sodium are unacceptable and can lead to dehydration and increased consumption of soft drinks, thereby having a further negative impact on community health.<sup>2, 6, 7</sup>

### Food and water ‘security’ vs ‘sovereignty’

- Food security: “When all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life”<sup>10</sup>
- Water security: “The capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human wellbeing, and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability”<sup>11</sup>
- Food sovereignty: “The right of people to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems”<sup>12</sup>
- Water sovereignty: An approach based on underlying values, whereby land and water and humans and nature are integrated, and Indigenous knowledge systems are prioritised.

Dry rivers have led to no fish or yabbies and loss of vegetable gardens due to lack of water. This has increased the community’s reliance on purchasing packaged foods at the local supermarket, which are far more expensive and less fresh, or using take-away food options.<sup>2, 7</sup>

Walgett has one supermarket and a small selection of cafes, restaurants and take-away outlets. The local supermarket has burnt down twice in the last decade. This led to residents having to travel 80 kilometres to the next closest supermarket, rely on emergency food relief or a very limited temporary supermarket, or frequently purchase take-away foods.<sup>3, 8</sup>



Participants in the 2019 Food Forum in Walgett.



The Local supermarket in Walgett burning down in 2013

Access to food has been further disrupted by the COVID-19 pandemic, when panic buying in cities plunged remote areas into severe food shortages. Efforts to maintain stock on city supermarkets shelves in response to increased demand dramatically reduced supplies available for remote areas. The temporary supermarket – Walgett IGA – reported only 26% of the stock it ordered during the height of the first wave of the pandemic. Families were going hungry on consecutive days and with schools closed, children were no longer receiving food provided by the breakfast program and school canteens.<sup>3, 8</sup>

“When there is no water in the river, the people of the community are getting angry, hurt and upset. It’s having massive impact on everyone in the community. It’s the source for food, water and the community source of culture and country”

**Walgett Aboriginal Medical Service CEO Christine Corby**

The cost of living, including the high cost of buying fresh fruit and vegetables locally, has been raised as a major problem in Walgett. Nationally, remote supermarkets

have been shown to be up to 70% more expensive than supermarkets in capital cities. In Walgett, a basic family fortnightly food shopping basket, consisting of fruit and vegetables, grains, meats, and dairy was priced at \$AUD508, compared to \$AUD347 in a suburb of Sydney. These prices are unaffordable for many families in the community.<sup>3, 8</sup>



“The river means a lot: it is country, it is the meeting place for camping, de-stress and connecting. It’s having an impact on the whole community: kids, youth, and even the non-Indigenous community”

**Walgett Aboriginal community member<sup>9</sup>**

“Being Aboriginal people, we have that connection - going to the river and fishing and camping - now it’s stopped because you can’t go there because there’s no water or you’re not going to eat the fish out of the river because it’s very stagnant”

**Walgett Aboriginal community member<sup>9</sup>**

### **Community-identified solutions**

The Walgett Food and Water for Life project aims to establish resilient food and water systems to ensure a sustainable, secure local supply of affordable, nutritious food and safe drinking water. It uses innovative community-led processes, encompassing Indigenous rights and knowledges, to strengthen, implement and evaluate community solutions and build resilience to mitigate future risks to food and water security.<sup>6</sup>

Recent activities under the project include improvements to the Walgett Aboriginal Medical Service (WAMS) Community Garden. Established in 2010, the WAMS Garden provided boxes of fresh vegetables and fruit to the local community. However, by 2017 the productivity of the garden declined due to drought, which reduced access to river water, and a shift to the use of saline bore water, which reduced yield and destroyed soil structure.

In response, the Food and Water for Life team installed 48 water-efficient wicking beds that can survive harsh climates, are water efficient and can yield 114 kg per month – 3 kg per bed.<sup>13</sup> This has led to the Community Garden being able to provide free boxes of vegetables to Elders and patients, supporting members of the community and their nutritional needs. Fruits and vegetables include butternut squash, leafy greens, strawberries, rockmelons, cucumbers and tomatoes.<sup>12</sup> Other initiatives planned under the project include a productive micro-farm and compost and waste-water

The Yuwaya Ngarra-li partnership is working to “restore a robust belonging to thriving families, community and country, while making our place in the nation and sharing our learning with other communities”

**Dharriwaa Elders Group<sup>8</sup>**

### **Decolonising research<sup>14</sup>**

Decolonising is the undoing of colonialism, or the undoing of domination and subjugation of one people over another. Colonisation is about power and control and therefore consciously or often unconsciously informs whose knowledge counts, and by extension, research practice, program design and policy formation. Decolonising involves focussing on the strengths, capacity and resilience of peoples and knowledges that have been colonised, rather than seeing them as a ‘problem’.

### **Indigenous research methodologies<sup>1</sup>**

Indigenous research methodologies use a frame that acknowledges and centres the cultural practices, knowledge and values of the community within which the research is conducted. Examples include:

- **Yarning:** A conversational process that involves the sharing of stories and the development of knowledge.
- **Dadirri:** From the Ngan’gikurunggurr and Ngen’giwumirri languages, a concept and spiritual practice of inner, deep listening and quiet, still awareness.
- **Weaving methodology:** A conceptual process of interweaving two knowledge systems together at the interface of Indigenous and Western knowledge systems.
- **Aboriginal patient journey mapping:** Mapping the experience of an Aboriginal person’s journey at different points of contact with the healthcare system.

recycling solutions. The aim is to produce weather-resilient, high-quality local fruit and vegetables for households and community and school food programs.

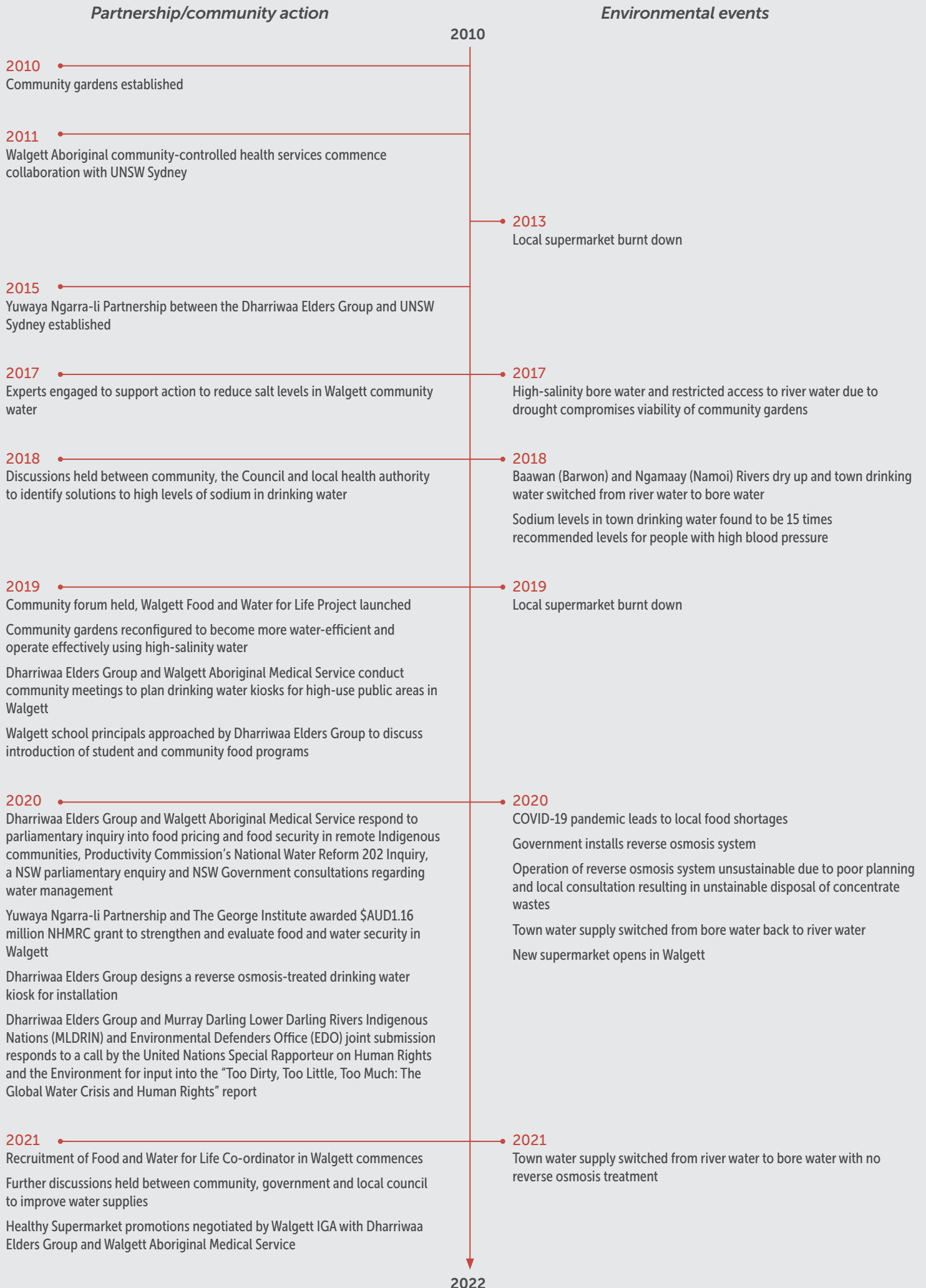
Activities to improve access to quality drinking water and healthy foods through the local supermarket are underway. The community advocated for, and obtained, a desalination plant and are collaborating with the local council to install public drinking water kiosks in Walgett. The supermarket has now been rebuilt and the community is working with the supermarket to ensure increased availability of healthy foods and to educate community members around making healthier food choices.

In 2020, the project team was successful in obtaining a National Health and Medical Research Council of Australia Ideas Grant to strengthen and evaluate the community-led program and employ local Aboriginal people, including a project co-ordinator and data analyst.

### **Decolonising research asks:**

1. What research do we want done?
2. Whom is it for?
3. What difference will it make?
4. Who will carry it out?
5. How do we want the research done?
6. How will we know it is worthwhile?
7. Who will own the research?
8. Who will benefit?

## A timeline of action:





### ***Community recommendations to government***

- Establish a National Food and Nutrition Strategy that:
  - o upholds the Universal Declaration of Human Rights, which states that everyone has the right to a standard of living adequate for the health and wellbeing of themselves and their family, including food;<sup>15</sup>
  - o prioritises community involvement, including shared planning, decision-making and evaluation by communities and government; and
  - o ensures there are mechanisms in place to guarantee community-identified food security priorities are responded to and community needs are met.
- Increase food and water security in Australia by:
  - o working with community-controlled organisations, councils and state governments to strengthen food and water infrastructure and community disaster preparedness, including urgently responding to climate change;
  - o subsidising retailers to ensure prices are equivalent across the country and standards relating to prices are regulated;
  - o prioritising policies to ensure highly nutritious local food supplies can respond to increasing climate and water challenges;
  - o ensuring the health of rivers and groundwaters are restored, protected and maintained to provide river foods and water for garden networks; and
  - o revising guidelines for drinking water to ensure standards for sodium levels are aligned with health guidelines.
- Support Aboriginal community-controlled organisations to establish programs to address food and water security in their communities.



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## Project Team

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**Suggested citation:** Rosewarne E<sup>1</sup>, Hunnisett C<sup>1</sup>, Bennett-Brook K, Coombes J, Corby C, Feeny E, Leslie G, McCausland R, McKenzie B, Webster J and Spencer W. A community in action. How Walgett is redefining food systems. Sydney, Australia: The George Institute for Global Health; 2021.

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### 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, Mälō e lelei, Tālofa, Fakaalofa lahi atu, Mälō 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.





Traditional Fijian banquet

### 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>



Local produce in Fiji at risk from climate change



### **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 broad-ranging solutions that will put Pacific Island countries in



Community members gathering food data for FoodSwitch

“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 co-benefits 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**



Health training in Vanuatu

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**Suggested citation:** McKenzie B<sup>1</sup>, Hunnisett C<sup>1</sup>, Feeny E, Rosewarne E, Webster J, Waqa GD. Sustainable Food Security in the Pacific. Sydney, Australia: The George Institute for Global Health; 2021.

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