

Acknowledgement of Country

Walgett is on the traditional Country of the Gamilaraay people, and we acknowledge the leadership and custodianship of Gamilaraay, Ngayiimbaa, 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.¹

"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 socioeconomic, business and government choices, environmental and geographic factors have further limited the affordability and availability of healthier foods, leading to worsening diets.²





"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"

 $Yuwaya\ Ngarra-li's\ Walgett\ Partnership\ Manager\ Wendy\ Spencer\ and\ Walgett\ Aboriginal\ Medical\ Service\ (WAMS)\ CEO\ Christine\ Corby^4$

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.²

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.^{2, 3}

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 noone 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 Spencer²

Community-led solutions vs top-down approaches⁵

Community-led programs

- Community groups define the challenges and opportunities.
- Programs are coordinated by leaders, community members, or communitycontrolled 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.²

Since 2015, the Yuwaya Ngarra-li Partnership has been working on issues that the Walgett community has long been concerned about.⁶ 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.²

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.6 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.^{2, 6, 7}

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"¹⁰
- 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"¹¹
- 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"¹²
- 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.^{2,7} 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.^{3,8}





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.^{3,8}

"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.^{3,8}











"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 member⁹

"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 member9

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.6 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. 13 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.12 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 Group⁸

Indigenous research methodologies¹

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 weatherresilient, 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 research¹⁴

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'.

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:

Partnership/community action

Environmental events

2010

Community gardens established

2011

Walgett Aboriginal community-controlled health services commence collaboration with UNSW Sydney

2013

2010

Local supermarket burnt down

2015

Yuwaya Ngarra-li Partnership between the Dharriwaa Elders Group and UNSW Sydney established

2017

Experts engaged to support action to reduce salt levels in Walgett community water

2017 High-9

High-salinity bore water and restricted access to river water due to drought compromises viability of community gardens

2018

Discussions held between community, the Council and local health authority to identify solutions to high levels of sodium in drinking water

2018

Baawan (Barwon) and Ngamaay (Namoi) Rivers dry up and town drinking water switched from river water to bore water

Sodium levels in town drinking water found to be 15 times recommended levels for people with high blood pressure

2019

Community forum held, Walgett Food and Water for Life Project launched

Community gardens reconfigured to become more water-efficient and operate effectively using high-salinity water

Dharriwaa Elders Group and Walgett Aboriginal Medical Service conduct community meetings to plan drinking water kiosks for high-use public areas in Walgett

Walgett school principals approached by Dharriwaa Elders Group to discuss introduction of student and community food programs

2019

Local supermarket burnt down

2020 •

Dharriwaa Elders Group and Walgett Aboriginal Medical Service respond to parliamentary inquiry into food pricing and food security in remote Indigenous communities, Productivity Commission's National Water Reform 202 Inquiry, a NSW parliamentary enquiry and NSW Government consultations regarding water management

Yuwaya Ngarra-li Partnership and The George Institute awarded \$AUD1.16 million NHMRC grant to strengthen and evaluate food and water security in Walgett

Dharriwaa Elders Group designs a reverse osmosis-treated drinking water kiosk for installation

Dharriwaa Elders Group and Murray Darling Lower Darling Rivers Indigenous Nations (MLDRIN) and Environmental Defenders Office (EDO) joint submission responds to a call by the United Nations Special Rapporteur on Human Rights and the Environment for input into the "Too Dirty, Too Little, Too Much: The Global Water Crisis and Human Rights" report

2020

COVID-19 pandemic leads to local food shortages

Government installs reverse osmosis system

Operation of reverse osmosis system unsustainable due to poor planning and local consultation resulting in unstainable disposal of concentrate wastes

Town water supply switched from bore water back to river water New supermarket opens in Walgett

2021

Recruitment of Food and Water for Life Co-ordinator in Walgett commences

Further discussions held between community, government and local council to improve water supplies

Healthy Supermarket promotions negotiated by Walgett IGA with Dharriwaa Elders Group and Walgett Aboriginal Medical Service

2021

Town water supply switched from river water to bore water with no reverse osmosis treatment



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;¹⁵
 - 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.



Images courtesy of www.dharriwaaeldersgroup.org.au

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