Remote Queensland Healthy Food Supply Chain Study

gather+grow

Health and Wellbeing Queensland (HWQld) is the Queensland Government's dedicated prevention agency, with a remit to improve healthy weight, nutrition and physical activity for all Queenslanders. Addressing food insecurity in remote Queensland is a strategic priority for HWQld, and Gather + Grow is HWQld's multi-strategic response to food insecurity in Aboriginal and Torres Strait Islander communities in Cape York, Torres Strait Islands and the Lower Gulf.

Through Gather + Grow, HWQld is leading the development of plans to improve food security in remote Queensland by partnering with community to address systematic challenges.

The Remote Queensland Healthy Food Supply Chain Study was led by HWQld as part of the development of the **Gather + Grow** Strategy and Action Plan and initiated in response to advice from community and other stakeholders during the <u>2021 Queensland Remote</u> Food Security Roundtable Series.

This study was completed in partnership with the Torres and Cape Indigenous Council Alliance (TCICA) and Arup Australia.

Food insecurity is associated with poor diet quality and impacts community, family and individual health and wellbeing. In addition to other systemic barriers, the high cost of food in remote communities impacts food security. At the same time, the shelf life and quality of fresh food in remote Queensland is usually poorer than in urban centres. Amongst other factors, the performance of remote supply chains contributes to food insecurity and can influence its drivers.





What was the purpose of the study?

To establish the role of supply chains in remote food security and identify opportunities, risks and solutions for their improved performance.

The study aimed to:

- Map the supply chain of healthy food items to two remote Queensland communities (one island and one mainland community).
- Identify key characteristics of the supply chains and their impact on cost and quality of food.

What did the study investigate?

13 healthy foods from five food groups were identified by communities as low quality, high in price and/or not available.



Fruit: apples, pears, bananas and oranges

Vegetables: carrots, lettuce, onions, potatoes, pumpkin and tomatoes







What's next?

The study will be used to bring together leaders from across government, industry and community to work collaboratively on the challenges identified. It will help to inform solutions and create positive and lasting change for remote communities in Queensland.

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Key findings

There are key differences between the supply chains that service remote communities and those that service urban or regional population centres. These differences interact to create significant food security challenges in remote Queensland.

Remote supply chains in Queensland...

Cover large distances

Due to community demand, some food travels the entire length of Australia (almost 4,000 km) to reach remote communities. This is up to 35 times longer than

similar supply chains to Brisbane.



Take a long time to navigate

Some foods take up to 8 days to travel from the producer to the store. In Brisbane, supply chains can be as quick as 1–2 days.



Involve a lot of handling

Some remote supply chains involve up to 20 touch points across organisations, including mode changes between road and sea freight. Each touch point increases the cost and has potential to impact the quality of food.



Are prone to disruption

Disruptions are common, particularly between Cairns and remote communities in Cape York, Torres Strait and Lower Gulf, due to weather events and infrastructure issues. Workarounds are costly and can result in a shortage of food supply.

Are carbon intensive

A single pallet of food can generate over 277kg of CO₂ emissions during its journey to reach remote communities. This is the equivalent of a passenger car driving from the Sunshine Coast to Melbourne.

Are more expensive

Healthy foods investigated by the study, were on average, 12% more expensive in Bamaga and 34% more on Mornington Island, compared to Brisbane.

How do supply chains impact food security?



• Availability Food is available in communities

Distance and duration put pressure on shelf life, which may result in poor quality food.

Many touch-points across the supply chain increase the risk of cold-chain disruption which may cause wastage despite good handling processes.

Disruptions due to weather may cut supply for weeks at a time, resulting in shortages or reliance on expensive air freight.



Food is chosen and prepared

Supply of healthy home equipment and infrastructure (such as fridges and cooking equipment) is reliant on the same long supply chains as food. This means that not everyone has the same opportunity to store, prepare and consume healthy food at home.

O Acce

Access Food is affordable and accessible

Transport costs (particularly fuel), inventory, handling of foods, infrastructure charges and costs to work-around disruption all contribute to operating expenses, putting pressure on prices. Organisations throughout the supply chain must achieve reliable cashflow and margins in order to keep servicing communities, which is difficult under challenging circumstances.

Resilience and stability

Food is available in communities year-round and into the future

The supply chain has key points of vulnerability and single points of failure across the chain (most notably Cairns distribution hub and port infrastructure in communities, such as wharfs).

Weather and port infrastructure availability are key risks, especially during wet season.



