



FARESHARE SHELF-STABLE MEALS PROJECT

Providing Emergency Food Relief that Provides Sustenance for Disaster-Affected Communities.



Queensland
Government

INTRODUCTION

Natural disasters severely disrupt food access, particularly in remote communities where logistical challenges make food security¹ a pressing concern. Following Cyclone Jasper in December 2023, it became evident that communities in far-north Queensland require proactive measures to ensure food security. FareShare's Shelf-Stable Meals Project transforms primarily rescued food into nutritionally balanced meals which are shelf-stable for a minimum of six-months, providing a pre-emptive solution to ensure vulnerable communities have access to essential nutrition during emergencies.

The meals are created and distributed by food rescue and relief organisation Secondbite|FareShare. This innovative approach not only strengthens disaster resilience, improves mental, and physical health outcomes during times of crisis, but also minimises environmental impact by diverting surplus food from landfill. This project builds on FareShare's existing production of frozen meals, to create shelf-stable meals that can be delivered to communities without the need for cold chain transport or refrigerated storage.



THE PROBLEM

Scope and Urgency: Natural disasters exacerbate food insecurity, particularly in remote communities where access to emergency food supplies is often delayed or inadequate.² Food insecurity affects individuals, families, and entire communities, leading to serious social consequences, including increased violence and crime.³ Beyond social impacts, food insecurity has severe consequences for physical and mental health,⁴ contributing to malnutrition, chronic illness, and psychological distress.⁵ This is especially harmful to individuals already experiencing poorer health outcomes, further deepening inequities.⁶ At the same time, food waste remains a global crisis—one-third of all food produced is wasted, driving greenhouse gas emissions and highlighting the urgent need for sustainable solutions.

Beneficiaries: The primary beneficiaries are vulnerable populations in disaster-affected remote communities, including children, the elderly, and low-income households. Research has shown that access to balanced meals can improve health outcomes, and foster resilience in vulnerable groups.⁷

Current Efforts and Gaps: Traditional aid models often function well in metropolitan and regional areas but are either non-existent or face significant delays and logistical challenges when addressing the needs of remote communities. Furthermore, conventional food relief options, such as canned goods and ultra-processed foods, are not only nutritionally inadequate but also culturally unsuitable, contributing to poorer health outcomes.⁸ These issues underscore the urgent need to address food insecurity to safeguard community safety and well-being. Additionally, the opportunity to mitigate the environmental impact of food waste remains largely untapped. FareShare's solution effectively addresses these gaps by providing nutritionally balanced, shelf-stable meals that can be pre-positioned for quick deployment, while simultaneously leveraging rescued surplus food to reduce waste.

THE SOLUTION

FareShare, in partnership with the Queensland Department of Primary Industries and End Food Waste Cooperative Research Centre (CRC), has pioneered an innovative initiative to transform primarily rescued food into shelf-stable meals for vulnerable populations, including remote communities impacted by natural disasters.⁹ This project incorporated training to assist FareShare to conduct culturally appropriate sensory evaluations tailored for remote First Nations communities, allowing for valuable feedback to further refine the recipes.

By utilising surplus produce and proven food preservation technology, this collaboration ensures that nutritious, culturally appropriate meals are readily available when and where they are needed most. To understand where these meals are most needed, interviews were conducted with Red Cross, Salvation Army, Foodbank and Uniting Vic.Tas. Which found that remote communities have a higher need for shelf-stable meals than metropolitan and regional areas, where resources are more accessible and fresh meals or bulk food packs are distributed by food relief organisations. This project has the potential to strengthen food security in remote and disaster-prone areas, offering scalable and sustainable solutions to both hunger and food waste.



Chickpea Tagine, Image Supplied by the Queensland Department of Primary Industries.

THE 10 MEALS

Freeze Dried Meals

- Savoury Chicken with Vegetables and Rice
- Beef Bolognese and Pasta
- Chickpea Tagine
- Asian Chicken Noodle
- Tuna Mornay

Retorted Meals (Shelf-Stable, Pre-Cooked Meals Sterilised Through High-Heat Processing)

- Spiced Chicken with Vegetable and Rice
- Beef Bolognese and Pasta
- Chickpea Tagine
- Chilli Con Carne
- Beef Stroganoff

These nutrient-rich, shelf-stable meals primarily made from rescued food can be strategically pre-positioned in disaster-prone areas, offering:

- No need for refrigeration or freezing, ensuring availability even during power outages.
- Nutritionally balanced meals that support health and well-being in times of crisis.
- A sustainable solution that reduces food waste and minimises environmental impact.
- Culturally appropriate recipes, developed with First Nations community input.

CASE STUDY:

Wujal Wujal's Food Security Response

Wujal Wujal is a close-knit, predominantly First Nations community with strong communal living traditions, large intergenerational households, where family connections play a central role in daily life.¹⁰ The community faces economic challenges, due to limited employment opportunities and a significantly higher than the national average unemployment rate.¹¹ These factors contribute to the community's unique social and economic landscape, reinforcing the need for tailored food security and disaster resilience strategies that reflect local needs and priorities.

Currently, FareShare's 'Meals for the Mob' program is the only dedicated food relief provider in the community, storing frozen meals in generator-powered containers. However, frequent power outages put this supply at risk, and with only 2,000 emergency meals available, the stock would feed the community for only one to two days. Wujal Wujal is approximately 170 kilometres north of Cairns and is expected to be self-reliant for at least 72 hours following a natural disaster.¹² Beyond 'Meals for the Mob' program, access to food remains limited. While a chain grocery store is available, the remote location drives up costs, making groceries expensive. Additionally, the shelf-stable foods available for emergencies are often basic ingredients that don't form a complete meal or are lacking in nutritional value. Housing shortages further compound food insecurity, particularly for women in refuges and those living rough outside of town.

Interviews conducted by FareShare's First Nations Officer, Jason Mollenhauer, with local council members and Elders, reinforced the urgent need for improved emergency food strategies to better support the community in times of crisis. When Cyclone Jasper struck Wujal Wujal in December 2023, a 1-in-100-year flooding event followed, causing widespread damage, displacement, and prolonged power outages.¹³

In response, the community has prioritised food relief preparedness by identifying five high-ground storage sites for emergency supplies, enhancing resilience for future disasters.¹⁴ While frozen foods offer a solution, they present a risk due to power reliance. During discussions with FareShare's First Nations Officer, Wujal Wujal council members and community Elders expressed strong support for the meals, describing them as a game changer for the community's emergency preparedness and response. When given samples, Elders particularly appreciated the soft texture of certain meals, making them easier for those with dental issues to eat.



Beef Stroganof, Image Supplied by the Queensland Department of Primary Industries.

“The community has expressed a strong desire for access to these resilience meals, understanding their importance in ensuring food security during emergencies. These meals are a vital part of the broader effort to create a sustainable solution for disaster readiness, providing a reliable and nutritious food source when traditional supply chains are disrupted, such as during cyclones or other natural disasters. The ability to store, transport, and prepare these meals ensures that Wujal Wujal will have access to nourishment during challenging times. This initiative aligns with Wujal Wujal’s long-term goals of resilience, ensuring the community is prepared for emergencies while maintaining health and well-being.”

- Jason Mollenhauer, First Nations Officer with SecondBite FareShare.

This initiative marks a significant step forward in disaster resilience, directly addressing food security challenges and enhancing community well-being with nutritious and culturally appropriate ready-to-eat meal solutions.



Left to Right: Wujal Wujal Aboriginal Shire Council CEO, Kiley Hanslow, Wujal Wujal Aboriginal Shire Council Mayor, Alister Gibson, SecondBite|FareShare First Nations Officer, Jason Mollenhauer. Image Supplied by FareShare.

CASE STUDY:

Simon George & Sons

Simon George & Sons, a fourth-generation fruit and vegetable wholesaler, uncovered the scale of food waste in their operations despite delivering premium produce to industries nationwide. Before partnering with FareShare through the Australian Food Pact, surplus fresh produce, such as broccoli stems, potato skins, and lemon pulp, often went to waste, due to the complexities of fresh food donation and the need for these foods to be incorporated into meals to be utilised. Wasted food contributes to greenhouse gas emissions, not only from decomposition in landfill but also from the resources used to grow, harvest, process, and transport it. This includes the unnecessary use of land, water, energy, and fertilisers—all of which carry their own carbon footprints.¹⁵ Since joining the Australian Food Pact in 12 months, Simon George & Sons identified opportunities and redirected over 20 tonnes of surplus produce into FareShare's kitchen. This surplus, previously discarded as 'waste,' now contributes to more than 50,000 nutritious meals annually.¹⁶



Impact and Expected Outcomes

- It is estimated that up to 150,000kg of rescued food can be transformed into shelf-stable meals for distribution to disaster-impacted communities.
- Increased food security for remote communities, reducing reliance on emergency food shipments.
- Enhanced disaster preparedness by pre-positioning food supplies, enabling disaster response organisations, councils, and communities to respond swiftly to urgent needs during emergencies.
- Access to nutritionally balanced meals to support individual's physical health and well-being while also helping to ensure existing health issues are not exacerbated.
- Enhancing resilience, ensuring communities can sustain themselves through crises and recover more effectively while helping to mitigate the risks that are associated with food insecurity, including increased violence and crime.
- Reduced greenhouse gas emissions associated with growing and disposing of food (approximately 150 tonnes of CO₂-equivalent (CO₂e) emissions).¹⁷

CONCLUSION

FareShare's shelf-stable meals project demonstrates the power of innovative, sustainable solutions in strengthening food security for disaster-affected communities. Transforming primarily rescued food into nutritionally balanced, long-life meals, not only provides essential nutrition in times of crisis but also reduces food waste and its environmental impact. The Wujal Wujal case study highlights the importance of culturally appropriate, advanced provisioning of food relief in remote areas, ensuring communities can sustain themselves when disasters strike. As the program expands, it has the potential to enhance disaster resilience across Australia, offering a scalable, sustainable model for emergency food security.

ENDNOTES

1. Food security is defined as a condition in which 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. World Bank. (2024). What is food security? <https://www.worldbank.org/en/topic/agriculture/brief/food-security-update/what-is-food-security>
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12. End Food Waste Australia (2025), TRANSFORMING RESCUED FOOD INTO SHELF STABLE MEALS - End Food Waste Australia » End Food Waste Australia
13. Wujal Wujal has a population of 279 people, over 90% identifying as Aboriginal and/or Torres Strait Islander. Households average 3.4 people compared with 3.1 in Australia (Australian Bureau of Statistics (2021), 2021 Wujal Wujal, Census Aboriginal and/or Torres Strait Islander people QuickStats | Australian Bureau of Statistics)
14. Wujal Wujal's unemployment rate of 10.8% as of September 2024 and compared to the national rate of 4.0 (Regional Development Australia (2025), Unemployment rate | RDA Tropical North | economy.id)
15. Interview conducted by FareShare's First Nations Officer with Wujal Wujal Council member (2024)
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