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Food Rescue in New Zealand: A sector in transformation

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Abstract

The COVID-19 pandemic significantly impacted New Zealand's food rescue sector, exposing vulnerabilities and spurring opportunities. Through 18 qualitative interviews and secondary data, this report explores the post-pandemic changes in the sector. First, the food rescue ecosystem has been significantly reshaped through the emergence of new actors and an increase in actors creating new dynamics in the sector. Second, with the shifts in funding post-pandemic, organisations have been exploring new ways of generating revenue but are also struggling with infrastructural and resource issues. Third, to meet community needs, food rescue organisations have cultivated capacities to innovate new practices. Fourth, the sector is showing clear signs of professionalisation including the standardisation and normalisation of practices, the creation of frameworks and the emergence of clearer boundaries around the field. And fifth, our interviewees are raising questions about the purpose and *raison d'être* of the sector.

Those changes highlight three main challenges for the sector. First, the sector is facing a number of paradoxical tensions: collaborating vs competing, efficiency vs relational focus, standardising vs improvising, food insecurity vs food waste and acting locally vs nationally. Although those tensions are not all entirely new, they have become increasingly salient post-COVID. Another challenge is the need for organisations to adapt to the constant changes and build resilience. And the third challenge requires thinking beyond the sector to address the systemic issues of food waste and food insecurity. Recognising and addressing those challenges is necessary for the food rescue to continue to develop and adapt but also to remain societally relevant.

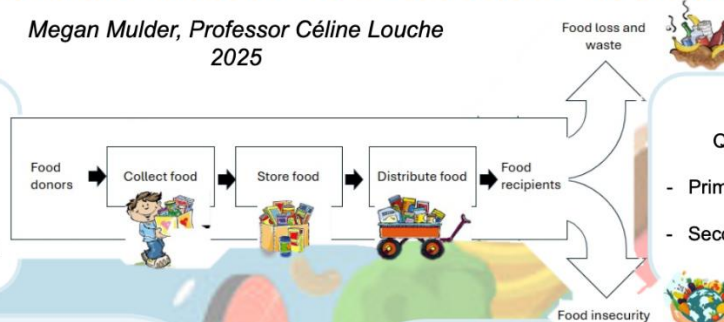
How COVID-19 transformed Food Rescue in New Zealand?



Megan Mulder, Professor Céline Louche
2025

Background

Food rescue organisations in New Zealand play a vital role in reducing food waste and alleviating food insecurity (1). During the COVID-19 pandemic, these organizations experienced significant changes in their operations (2). In the post-pandemic era, the sector faces ongoing challenges. This research explored the impact of COVID-19 on the food rescue industry in NZ.



Methodology

Qualitative, explorative research

- Primary data: 18 interviews with NZ food rescue organisations
- Secondary data: reports, websites, news articles

Results

Funding shifts

↑ in funding during COVID from MSD
= less competition, easy funding

↓ in funding post-COVID
= more competition, hard to get funding

NOW = Exploring new funding sources and business models

Professionalization of the Sector

↑ Standardisation & structuration:
= Developing working standards.
= Unifying organisations
BUT concerns about over-standardization and losing local focus.

Measurement & Accountability
= Showing and reporting on their impact

Emergence of New Practices

Organisations have shown capacity to innovate to new challenges post-COVID



BUT the lack of funding remains a significant barrier

Systemic Challenges

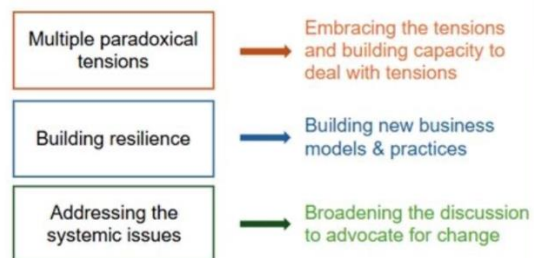
- Food rescue is not a long-term answer to food insecurity or food surplus.
- Tension between reducing surplus food and ensuring enough food for vulnerable populations.
- Systemic changes needed to create a more sustainable and equitable food system.

Conclusion

Food rescue organisations face multiple paradoxical tensions



Challenges moving forward



References

- (1) Clare, G., Diprose, G., Lee, L., Bremer, P., Skeaff, S., & Miroso, M. (2023). Measuring the impact of food rescue: A social return on investment analysis. *Food policy*, 117, 102454. <https://doi.org/https://doi.org/10.1016/j.foodpol.2023.102454>
- (2) Juliet Gerrard. (2022). *Food waste series - Report 2: Food rescue in 2022: Where to from here?* The Office of the Prime Minister's Chief Science Advisor. <https://dx.doi.org/10.17608/k6.opmcsa.21218243.v3>

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Introduction

The COVID-19 pandemic significantly impacted the food rescue sector. It disrupted the food supply chains, heightened food insecurity, and led to a surge in demand for food rescue services. This disruption catalysed rapid changes in the sector, including shifts in funding, operational models, and implementation of standards. Three years after the last COVID-19 lockdown in New Zealand, what is left from those changes? How has the COVID-19 period transformed the sector on a longer-term perspective?

The objective of this report is to investigate the changes and challenges faced by food rescue organisations in New Zealand since the onset of COVID-19. As the sector continues to navigate a post-pandemic landscape and face many challenges, understanding these changes is crucial for ensuring the long-term sustainability and impact of the sector. Food rescue organisations operate within a delicate balance, addressing both social and environmental dimensions while facing systemic barriers such as inconsistent access to food, limited infrastructure, and funding instability. These challenges create a complex environment that requires further investigation to ensure the sector continues to provide solutions to the food poverty and food waste challenges.

Building on 18 interviews, our findings highlight major post-COVID changes in the food rescue sector:

- A more crowded and interconnected ecosystem: not only has the number of food rescue organisations increased but also new large institutional actors are structuring the field.
- A shift in funding: funding patterns shifted dramatically, with initial government support during the pandemic ceasing post-COVID, giving way to heightened competition and a need for innovative revenue streams.
- Emergence of new practices: The pandemic created an environment in which food rescue organisations had to reimagine their activities. As a result, many new and innovative practices emerged, and new innovative skills were developed. The challenge post-COVID is to sustain this energy and new competencies in a financially constrained environment.
- An accelerating professionalisation process: the sector is showing clear signs of professionalisation such as a standardisation of definition and processes, the increasing connection between actors, the emergence of central actors, and a sense of unification.

- A sense of purpose being questioned: linked to all the above changes is a concern about the *raison d'être* of the sector and how to pursue its mission.

Although some of those changes are not entirely new, the pace has been accelerated. All together, they highlight several paradoxical tensions the sector needs to address, the need to build new business models to be resilient and meet growing demands and to broaden the discussion of the systemic challenges, food poverty and food waste, beyond the food rescue sector.

The report is structured as follows. First, we provide information about the food rescue sector, its actors and the changes that occurred during the COVID-19. Second, we introduce the methodology followed for the project. Third, we present the findings of the project organised around five main themes. Fourth, we discuss our results, highlighting the challenges the changes have raised in the sector. And finally, we provide some concluding thoughts.

The food rescue sector: an overview

This section builds on knowledge from the academic and grey literature. It provides insights on the food rescue sector, both globally and more especially in New Zealand, with a special focus on the impact of the COVID-19 as represented in the literature.

Understanding food rescue

Food rescue can be described as safely redirecting edible food that would otherwise be thrown away and providing it to people facing food insecurity (Reynolds et al., 2015). Two dimensions are central to food rescue: reducing both food waste and food insecurity. The primary goal is to prevent edible food from ending up in landfills or being diverted to lower levels of the food waste hierarchy, such as animal feed, industrial uses, composting, or disposal (Papargyropoulou et al., 2014). Food rescue organisations collect, store and redistribute food to community groups and charities, such as food banks (Kore Hiakai Zero Hunger Collective, n.d.).

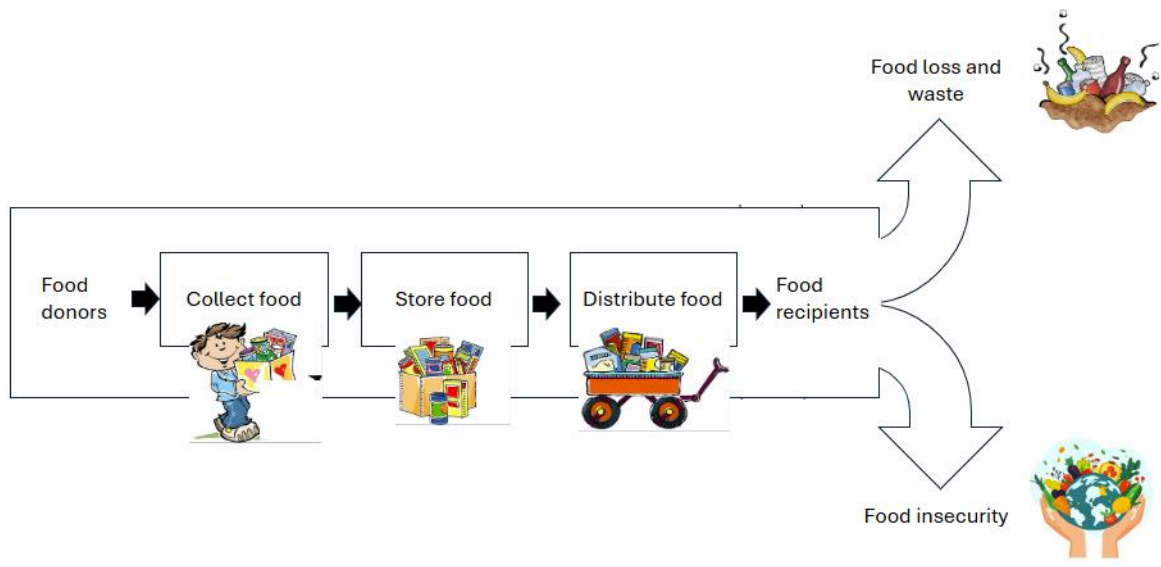


Figure 1 – The food rescue chain

Food insecurity is defined by the Food and Agriculture Organisation as a “lack of regular access to enough safe and nutritious food for normal growth and development and an active and healthy life” (FAO, n.d.). In 2023, 28.9% of the global population was moderately to severely food insecure (FAO et al., 2024). In New Zealand, one in five children, and more than one in three Māori or Pacific children, live in food insecure households in 2022 (Ministry of Health, 2023) and 15% of 12-year-olds lived in moderately food insecurity households (2% in severe food insecurity) (Growing Up in New Zealand, 2023). The United Nations report on the State of Food Security and Nutrition shows that Oceania is the only region where food insecurity worsened, with New Zealand’s prevalence rising from 10% (2014-2016) to 16.4% (2020-2023) (FAO et al., 2024).

Despite increasing food insecurity, food is abundant especially in a country like New Zealand. However, a lot of food fit for human consumption is being wasted. **Food loss and waste** occurs when food exits the supply chain and is not eaten by people or animals. *Food Loss* is “food that leaves the supply chain from the time when the food is ready for harvest (or slaughter), through to the processing and manufacturing stage”, whereas *Food Waste* is “food that leaves the supply chain from the wholesale, retail and marketing stage onwards. This includes waste that occurs at the consumption stage (at home or away from home)” (Ministry for the Environment, 2023). Another term commonly used is *food Surplus*. It is defined as the oversupply of food due to factors like producing too much food during

farming, governments importing large amounts of agricultural products, weather changes, and farmers adjusting what they grow based on market prices. This often leads to excess harvests, with surplus produce being thrown away before it even reaches suppliers, food processors, restaurants, or consumers (Papargyropoulou et al., 2014). The environmental benefits of food rescue can be understood by looking at its impact on reducing waste or through a broader life cycle perspective. When food is rescued for human consumption, it avoids being dealt with in lower-priority ways, helping to reduce environmental damage, such as greenhouse gas emissions and harmful leaching (Gerrard, 2024). Calculating food waste and loss faces many challenges such as defining and categorizing food waste, defining measurement, and understanding the many supply chain stages (Love Food Hate Waste, n.d.). According to the UNFCCC, 1.05 trillion tons of food were wasted in the world in 2022, accounting for 8 to 10% of annual global warming and costing \$1 trillion annually (UNCC, 2024). In New Zealand, retail food waste in 2018 was estimated at around 13kg/capita/year, where fresh vegetables (27%), bakery (23%), meat and fish (19%) and fresh fruit (17%) contributed the most to discarded products (Goodman-Smith et al., 2020). More recent data on food waste in New Zealand was not available at the time of the production of this report.

The food rescue sector contains a **diverse range of actors**. Academics (Aloysius & Ananda, 2023; Bramanti et al., 2017; Clare et al., 2022; Hecht & Neff, 2019), and practitioners (AFRA, 2025) have made many attempts in categorising them based on their model of distributions (Clare et al., 2022), their activities or model (AFRA), or their distance to the recipients (Clare, 2024). Classification will also vary from one country to another. For the purpose of this project, we categorised them in three broad groups:

- Facilitators are intermediary organisations between food donors and food rescue organisations, such as NZFN, purchasing or receiving donated bulk surplus from large-scale donors. They then repackage the food in smaller quantities and distribute it to food rescue organisations throughout the country.
- Food rescue organisations, are organisations collecting, storing, and redistributing rescued food to people in need. Although food rescue and food relief activities are closely interconnected, it might be important to distinguish them. Food rescue activities centre around collecting the food which otherwise would have been wasted, while food relief focuses on providing help to people in need often relying more on donated and purchased food (such as food banks and social

supermarkets). Although many food rescue organisations are active in both food rescue and food relief, they may be more inclined towards one or the other.

- Network organisations, that is organisations that do not directly collect or distribute food but bring food rescue organisations or actors involved in food rescue together to share knowledge, collaborate, and collectively address common interests.

Food rescue organisations are not-for-profit organisations. They play a pivotal role in the sector. Without those not-for-profit organisations, the sector would not function. Food rescue organisations manage the collection, storage, sorting, and redistribution of food to those in need. They typically recover surplus food from producers, wholesalers, and retailers in the food industry, redistributing it as groceries or food parcels. This support may be provided directly to individuals or indirectly through other organisations that serve them (Clare, 2024). In 2024, New Zealand food rescue organisations rescued 12,900 tonnes¹ of food (Gerrard, 2022).. A Social Return On Investment (SROI) analysis of the food rescue industry in New Zealand was conducted over the period 2020-2021. It revealed that every \$1 invested in food rescue yields \$4.50 in social value (Clare, Miroso, et al., 2023). SROI is a type of economic analysis used to evaluate the overall "value" created by an organisation's activities, including social, environmental, and economic benefits. It involves working closely with key stakeholders to identify and measure the impact the organisation or project has had. By using financial proxy values, SROI translates these outcomes into monetary terms, which are then expressed as a ratio. This highlights the food rescue sector's crucial role in addressing food insecurity and creating broader societal benefits (Nicholls et al., 2012).

Food donors are typically commercial businesses, including supermarkets such as Woolworths, New World and Pak'n'save, catering businesses, cafes and restaurants (PMCSA, 2022). New Zealand businesses did not always receive tax breaks for donating surplus food. However, from March 2020 to March 2024, a temporary exemption allowed businesses to donate trading stock without being taxed as if it were sold. This encouraged donations during crises like COVID-19 and severe weather events. This tax exemption has since been made permanent (Moore Markhams, 2024), adding to the main motivations for donating excess product, such as lowering waste disposal costs and improving public

¹ The 12,900 tonnes have been calculated based on the data provided by AFRA and NZFN 2024 annual reports. AFRA reports 8,300 tonnes of food rescued in 20204. NZFN handled 5,595 tonnes, including rescued, donated and purchased. To calculate the food rescued, we used the used the CO2 emission reduction which is based on surplus food rescued. On this basis, food rescue is approximated to 4,900 tonnes.

image or reputation (Diprose & Lee, 2022). The Waste disposal levy, which was introduced under the Waste Minimization Act 2008, is a tax on waste sent to landfills. The funds generated are used for programs aimed at reducing waste and promoting resource recovery, such as composting and recycling. The levy has increased progressively over four years, rising from \$10 per tonne (set in 2009) to \$60 per tonne by July 2024. Further increases will occur, with the final amount being \$75 per tonne by July 2027 (Ministry for the Environment, 2022). The criteria have also changed, as the Levy has expanded to cover additional landfill types. This increase is prompting more and more commercial businesses to become food donors to reduce costs, as well as raising awareness of social needs to boost their corporate social responsibility image, particularly for large supermarkets, with this positive image often translating into increased sales (Miroso et al., 2016).

Impact of COVID-19 on the food rescue sector in New Zealand

In the section, we focus on the impact of COVID-19 during the period of the lockdowns. COVID-19 has had multiple repercussions on the food rescue sector. Our objective with this section is not to list all of them but present those that are the most relevant for the purpose of this project because of their long-lasting effects.

Increase demand for food assistance. The COVID-19 pandemic significantly amplified food insecurity in New Zealand, particularly during the Alert Level 4 lockdown, when the demand for food assistance doubled (Ministry of Social Development, 2021).

Disadvantaged communities were disproportionately affected (Martin-Neuninger & Ruby, 2020) with challenges being rooted in financial and physical access to food rather than a lack of supply (Gerrard, 2022). Services reported surges in demand for food of 300–400%, with some areas experiencing increases of up to 900% (Dombroski et al., 2020). The Ministry of Social Development (MSD) saw a sharp rise in the issuance of Special Needs Grants, growing from 30,000 per week pre-pandemic to 72,000 by April 2020 (Gerrard, 2022).

Becoming an ‘essential service’. Food rescue organisations were classified as "essential services" during lockdowns, enabling them to continue operating (Ministry of Social Development, n.d.-b). It was a recognition of the important role of food rescue organisations for the well-being of people and for society as whole. However, smaller organisations like free stores often struggled to meet the requirements for registration or confirmation as essential services, forcing some to suspend their operations (Clare,

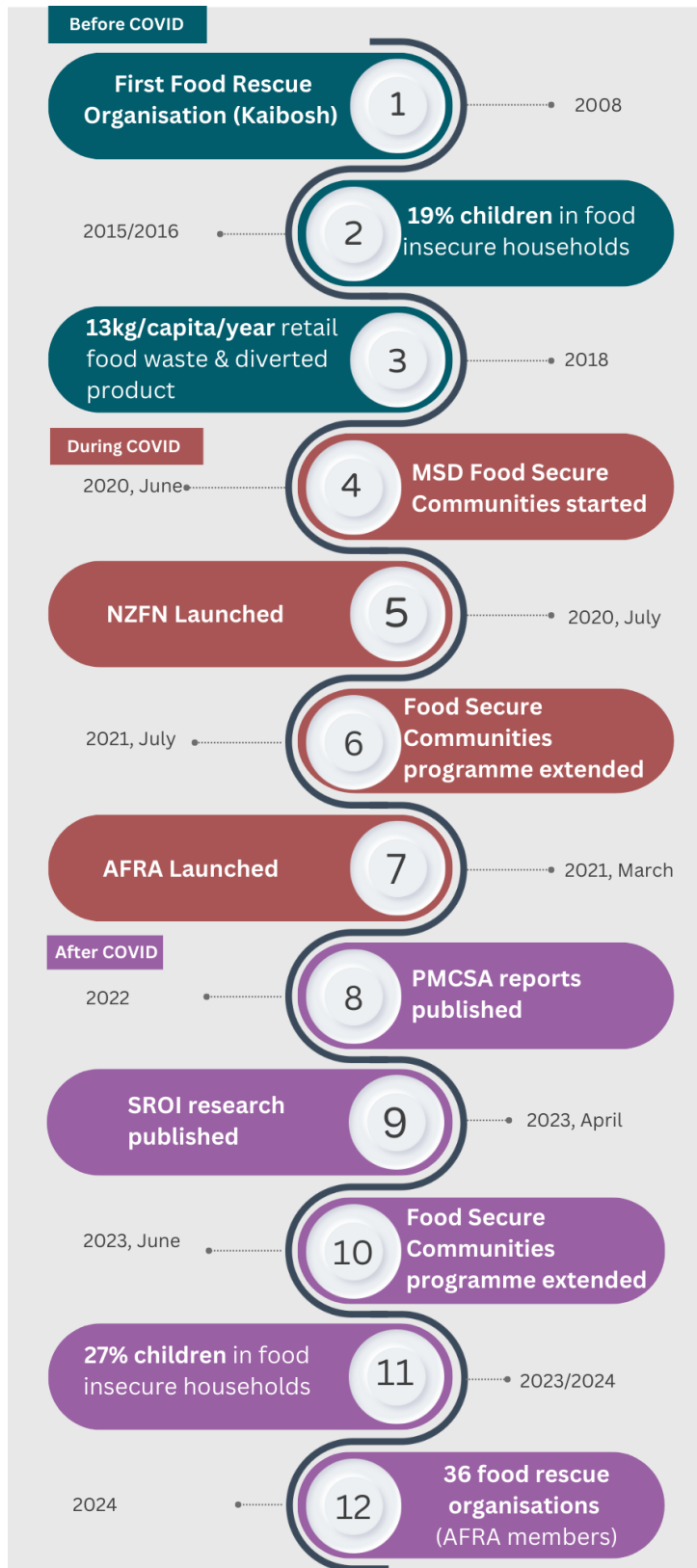
Diprose, et al., 2023). Some food rescue organisations received official recognition for their role in supporting New Zealand's national responses during the COVID-19 period. This was the case, for example, of Satisfy Food Rescue which received an award from the Prime Minister's office in 2023. Being an essential service was a recognition that food rescue played a fundamental function in the population's well-being.

Increasing funding. Before the COVID-19 pandemic, food rescue organisations and community organisations addressing hunger and food insecurity operated with minimal support from the central government (Gerrard, 2022). The Ministry for the Environment (MfE) provided assistance through its Waste Minimization Fund (WMF), although this was limited. Food rescue organisations relied on donations, sponsorships and grants (Clare, 2024). During COVID-19, funding for food rescue from MfE through the WMF increased dramatically. From 2010, when the fund was established, to 2019, less than a million dollars was allocated to food rescue initiatives. In contrast, funding for food rescue organisations exceeded a million dollars during the 2020 and 2021 funding rounds alone (Ministry for the Environment, n.d.). The focus on funding shifted from MfE to MSD, with central government giving MSD \$32million in funding in June 2020 for over two years to allocate through its Food Secure Communities Programme for AFRA, NZFN, Kore Hiakai and provide grants to community food providers (Gerrard, 2022). This funding was then extended by \$18.5million until June 2023, and in the 2024/2025 financial year funding was reduced to \$7.5million (Ministry of Social Development, n.d.-a).

Emergence of new actors. Kaibosh, Kiwi Harvest and Kore Hiakai Zero Hunger Collective were three of the major actors in the sector pre-COVID. Kore Hiaka might be qualified as a food relief (rather than rescue) organisation. It was established in partnership with the Ministry for Social Development, to advise on and eliminate food insecurity . During COVID, the increasing demand for food rescue led to greater government funding and the establishment of new actors in the field, small food rescue organisations but also national organisations including New Zealand Food Network (NZFN) and Aotearoa Food Rescue Alliance (AFRA) (Gerrard, 2022).

NZFN was launched in 2020 to manage the growing availability of bulk surplus food by acting as an intermediary, receiving large quantities from producers and distributing them to other food rescue organisations, beginning with 35 food donors and 39 food hubs in the first year (NZFN, 2021), which has since increased to 148 donors and 65 food hubs in 2024 (NZFN, 2024). AFRA began in 2021 with the objective of supporting food rescue organisations by creating an alliance to improve practices, share knowledge, and advocate

to the government and food donors on their behalf, beginning with 17 members and in 2024



had 36 food rescue organisations as members (AFRA, n.d.). Additionally, many smaller food rescue organisations operate outside of AFRA's membership, though identifying an exact number is challenging.

The rapid expansion of the food rescue sector has been driven by increasing awareness and social expectations to do something about food waste, and the introduction of The Food Act 2014, which provides "immunity for food donors." This legislation enables businesses to safely donate surplus food with reduced legal risks, encouraging greater participation in food rescue efforts (Miroso et al., 2016).

Figure 2: Timeline of key events before, during and after COVID-19 lockdowns

Figure 2 provides a visual representation of the **key events in the Food Rescue sector** that occurred before, during and after the COVID-19 lockdowns. Key events are described as any decisions made, documents or studies released, creation of major organisations, and statistics that reveal important data in relation to

food waste and food insecurity. The first food rescue organisation in New Zealand, Kaibosh, was established in 2008. Although informal food rescue organisations may have existed prior to Kaibosh, this marked the start of the sector. As of December 2024, there are 36 food rescue organisations part of AFRA (AFRA, n.d.). In 2015/2016, the New Zealand Government conducted the New Zealand Health Survey, showing that 19% of children were living in food insecure households in NZ (Ministry of Health, 2019). The survey made visible the problem of food insecurity in New Zealand. The percentage significantly increased after COVID, in 2023/2024, to reach 27% of the children (Ministry of Health, 2024). A study done on food waste in the retail sector estimated that in 2018, 13kg/capita/year of food waste and diverted product was produced (Goodman-Smith et al., 2020).

During the COVID-19 lockdowns which began in March of 2020, MSD began funding food rescue through the Food Secure Communities Program in June of 2020. New Zealand Food Network was launched using some of this funding in July of 2020, followed by another round of funding by MSD in July 2022 until June 2023 to help transition community food providers from the emergency response towards more sustainable food security outcomes. This was then extended in June 2023 until June 2024 to support increased demand and transition out of reliance on government funding (Ministry of Social Development, n.d.-a). The Aotearoa Food Rescue Alliance (AFRA) was launched in 2021 using this funding.

After the COVID period, several important reports were published, including the Prime Minister's Chief Science Advisor (PMCSA) Reports published through 2022-2024 which were influential, and have become reference documents due to being such a comprehensive and relevant report (see table 2). AFRA's Social Return on Investment report published in 2023 provided a major document trying to understand the impacts of the food rescue organisations.

Intermediary conclusion

There are several notable gaps in the literature regarding food waste and food rescue in New Zealand. The limited recent data on food waste, particularly at the retail level, makes it challenging to accurately see the changes over time in the impacts of food rescue organisations. Research has been conducted about the impact of the COVID-19 lockdowns on food rescue organisations (Clare, Miroso, et al., 2023), however there is limited research on the long-term implications and how organisations are adapting to

these challenges, which this report aims to address through the research question: How has COVID-19 changed the food rescue sector in NZ?

Methods

We conducted a qualitative research project with an explorative approach to examine changes in the Food Rescue industry in New Zealand since COVID-19. The study combines insights from secondary and interviews with individuals actively involved in the Food Rescue field.

Interviews

35 New Zealand based food rescue organisations were contacted via email to participate in the study, among which 18 accepted. All organisations are not-for-profit. We classified the organisation based on 1) their geographical coverage: national (all around New Zealand), regional (covers one region e.g. Waikato), multi-regional (covers more than one region e.g. Waikato and Auckland), and local (covers a singular city/town) and 2) their activities: networks, facilitator and food rescue organisations. From our sample, three organisations were national, four regional, one multi-regional, and nine locals. We interviewed one network organisations, one facilitator and 15 food rescue organisations. We also interviewed one expert, an academic researcher. Table 1 provides an overview of our sample.

Type of organisations	Type of Actors	Number of interviews
National, not for profit	Network	1
National, not for profit	Facilitator	1
National, not for profit	Food Rescue	1
Regional, not for profit	Food Rescue	4
Multi-Regional, not for profit	Food Rescue	1
Local, not for profit	Food Rescue	9
Research	Expert	1

Table 1: Overview the interview participants

Consent forms were obtained from participants prior to the interviews. Interviews took place over the period from November 2024 to January 2025. The average length of interviews was 46 minutes representing a total of 13.9 hours of interviews. The interviews were semi-structured, and the themes addressed included: perception and understanding

of the food rescue sector, presentation of their organisation and its activities in food rescue, impacts of their activities, community engagement, perceived changes in the sector since 2020 (COVID), professionalisation of the sector, infrastructure development, current and future challenges and opportunities they see in food rescue (see appendix 1 for the short interview guide). Interviews were conducted primarily online via Microsoft Teams, with one interview conducted in person. All interviews were recorded, transcribed, and analysed using thematic analysis to identify key themes. Each organisation was given a code, e.g. Int1, to ensure anonymity. Key quotes were used in the text as evidence of themes, further quotes can be found in Table 2 (see appendix 2).

Secondary data

We collected official reports published in New Zealand between the period 2022 and 2024 (see table 2), consulted food rescue organisations websites and some press articles between 2019 and 2024 (see graph below). The press articles were retrieved through the database Newztext. The increasing number of press articles on the subject shows its importance.

Title	Year	Publisher
Food Waste: A global and local problem	2022	Prime Ministers Chief Science Advisor
Food rescue in 2022: Where to from here	2022	Prime Ministers Chief Science Advisor
Preventing food loss and waste in Aotearoa New Zealand: Evidence for action across the supply chain	2024	Prime Ministers Chief Science Advisor
Beyond the Bin: Capturing value from food loss and waste	2024	Prime Ministers Chief Science Advisor
Food loss and waste in Aotearoa New Zealand: Towards a 50% reduction	2024	Prime Ministers Chief Science Advisor

Table 2: Influential published reports used in literature review

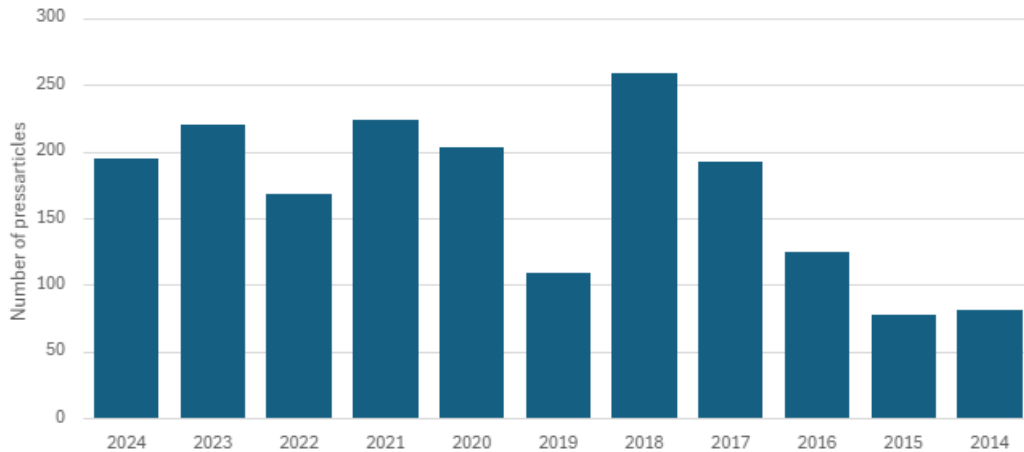


Figure 3: Press articles on food rescue in New Zealand published between 2014 and 2024

Results: mains changes in the sector

The food rescue industry in New Zealand has undergone significant changes since the COVID-19 pandemic, impacting both food security and waste reduction efforts. This section presents the main changes identified through our analysis.

Changes in the food rescue ecosystem

The food rescue ecosystem in New Zealand has changed a lot during the COVID-19 period. The map of actors in the Food Rescue sector displays the interconnectedness amongst the actors and the change that occurred before and after COVID 19. Before COVID, the sector was reliant on funding from grants, trusts, philanthropists, and a small amount from MfE. Food Rescue organisations worked predominantly in isolation, and gave to recipient organisations such as food banks, community kitchens and free stores, however there were fewer of these. The demand in the community (recipients) was also lower than post COVID.

The after COVID map displays how the sector expanded, with the creation of new major actors (AFRA, NZFN and Kore Hiakai), as well as an increase in food rescue organisations and recipient organisations. Funding was changed to be predominantly from MSD (“So with COVID came MSD funding, so MSD had never funded food rescue before COVID.” - Int9) rather than MfE, and the need in the community (recipients) had also increased (“Demand kind of went way up, it kind of had a peak. And then it came down a little, but it never got back to pre-COVID levels.” - Int 1).

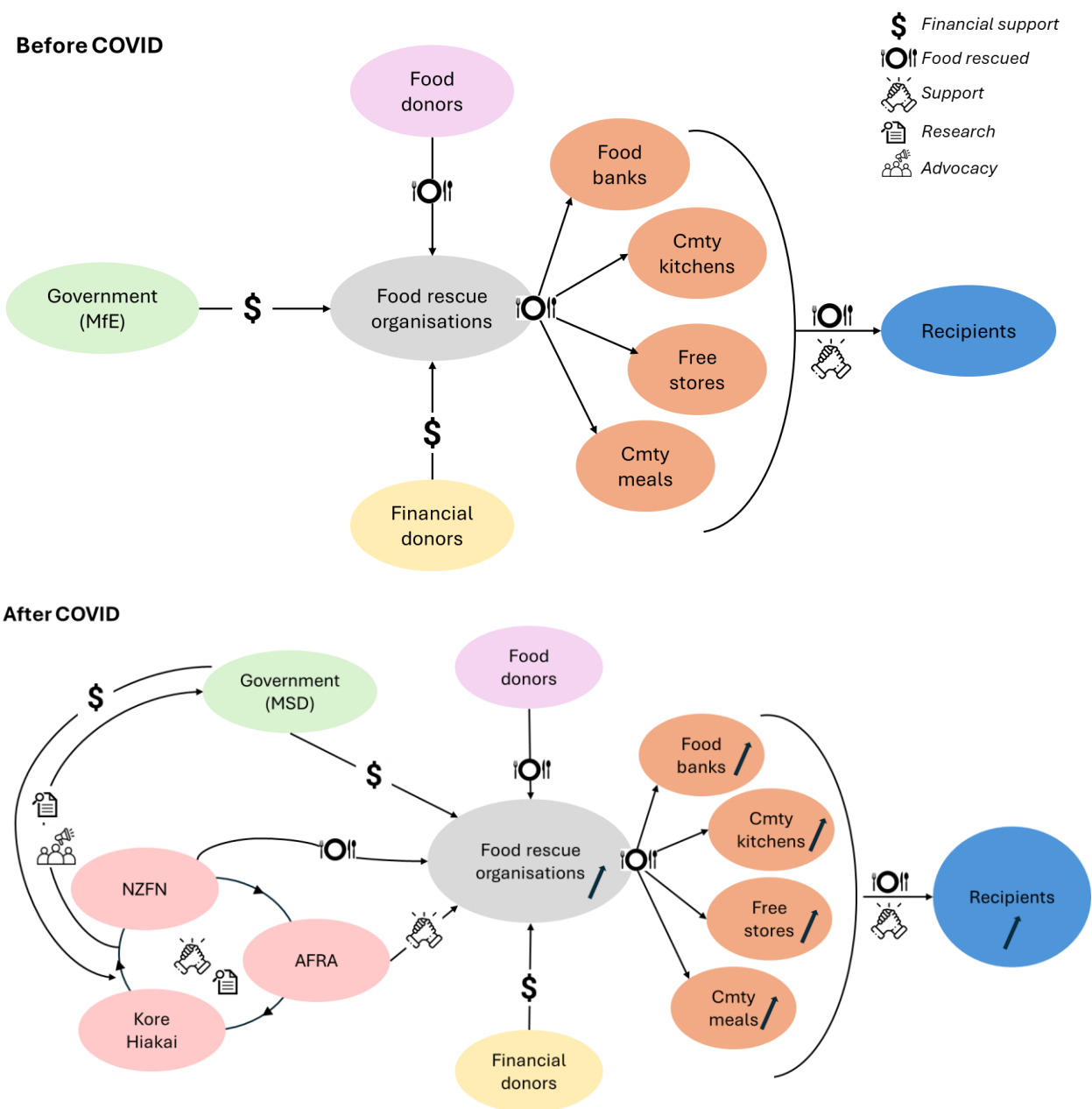


Figure 4: Map of Actors in the Food Rescue Industry before and after COVID-19 lockdowns

Funding shift

The pandemic brought about significant shifts in funding patterns for food rescue organisations. While government funding initially increased during COVID-19, making funding easy to get, the post-COVID has seen a large reduction in funding making

organisations rethink their activities (Newshub, 2024), do fundraising to cover operational costs (Manawatū reporter, 2023), or even shut down (Los'e, 2024).

“People went, oh, money scramble. Let's start a food rescue place... heaps of food places started during COVID”, many organisations reported a sharp decline in financial support in the post-pandemic period. Int3 highlighted this reduction, stating: “Government funding has gone from being around 26% of our funding...down to around 12%.” (Int15)

Another important change around funding is the focus of the funding, from the environmental to the social dimension. While prior COVID-19, the focus was on waste reduction with a mid to long term perspective, during COVID-19, the focus shifted to the social aspect with an expectation of immediate results: “The kind of applications that bring in money are the ones that are short, that are tangible... Getting food every day from the supermarkets, sorting and giving it to 20-odd organisations... it happens every day, it's very tangible. Something like reduced food waste, it's a bit more airy-fairy... tends to be an invisible sort of outcome” Int7. This shift is also reflected in the change of ministry funding the sector, from the Ministry for the Environment to the Ministry of Social Development.

The changes in funding have had important implications for the food rescue organisations. First, it has created a competitive space for organisations to receive funding as it has become a limited resource. Int15 described the challenges, explaining, “All the other funders who we have previously got money from don't necessarily have as much money as they had before COVID because of things like interest rate changes... and people who previously had government contracts now don't have government contracts.” The same interviewee noted, “You're trying to make the money go around everybody, and there's just not enough to go around.” Despite an extension of the funding program, some actors were not ready for the change whereas others had planned for the funding to stop.

Second, the reduction of funding has pushed organisations to seek alternative funding sources. Int12 told us that they are now considering fundraising in addition to other funding: “For funding this year, we're changing our strategy to do a lot more fundraising. So different kind of approach, but still the objective to put money in the bucket for kai receipts.” The organisation of Int14 has set up an individual giving opportunity that will begin this year for those who want to support their efforts but are unable to volunteer for whatever reason, so are still able to donate any amount they can: “I'm putting together a funding programme: become an *name of the organisation* flatmate”. The organisation of

Int11 also innovated to create activities bringing some profits to be able to self-fund other non-profitable activities.

“So what we've done to keep our doors open, the rescued food we get from New Zealand Food Network is distributed free of charge to the community, but what we have done is we source food at cost price and then we sell that food at below supermarket prices. So, we only add 20% onto a markup which gives us a break even so that we can keep our doors open.” (Int11)

The same interviewee reported that they have also opened other avenues for activities outside of the food rescue sector. The profits from these are put back into the organisation to fund food rescue.

“So what we have done besides the food, we've opened an op shop where we sell clothing. ... And we've also purchased an ear clinic ... that is run as a business. And all the profits of the ear clinic come into *organisation name* ... we also run an Airbnb bed and breakfast, and all those profits go into organisation name”. (Int11)

These changes underscore the challenges food rescue organisations face in balancing social and environmental objectives while navigating a constrained funding landscape.

Emergence of new practices

The COVID-19 pandemic served as a catalyst for significant changes and innovations in the practices and activities of the food rescue sector organisations. Int8 likened the impact of COVID-19 to “a steroid jab,” explaining that “the speed in which things had to happen was amplified.”

The COVID-19 pandemic stimulated the food rescue organisations to rethink their activities and practices. Due to the disruption in the flow of food and people, they could not continue as usual. To ensure continued support for vulnerable communities, they had to invent new ways of working and reaching the people.

“Through COVID, when everybody was on lockdown, we hopped in the cars, there were two of us and we dropped to about 300 households a week in plastic bags, which were not ideal, but they were, they were really suitable for hanging on fences, keeping food dry and things.” (Int13)

Questions such as ‘how do we reach the people during lockdowns?’, ‘how do we get the food?’ and ‘how do we store the food?’ became drivers for change in practices. For

example, the organisation of Int15 shifted “from an in-store model to a door-based service,” a change that ensured the service could continue during lockdowns and improved efficiency but limited customer choice. COVID lockdowns highlighted the need for additional funding to strengthen infrastructure, including improved storage facilities and transport logistics. These adaptations not only addressed immediate needs but also laid the foundation for more resilient food rescue systems in the future. However, with the cessation of this funding, many organisations now face difficult decisions, including downsizing staff and struggling to maintain operations. Int11 acknowledged this challenge, explaining, “Government funding gave us the funding to be able to set up the infrastructure... the key now, the challenge is how do we keep that infrastructure alive?”

Int10 also reported a shift in communities’ expectations around food after going from packaged food during COVID, then back to the rescued food post-COVID, noticing “It made people think they should expect to come here and get all this fully packaged, not damaged, not rescued product. And so when that stopped and we were back to rescued product, lots of groups were really irate about...And it had created a level of expectation in the community as well,” which is prompting them to look at ways of using this rescued food in other ways to reduce waste and address community resistance to less desirable items “long term, we’re sort of looking at maybe getting some bottling and cooking and vacuum packing going here.”

Innovative practices are continuing post-COVID as food rescue organisations are looking at doing things differently in order to reach the increased needs of the people with reduced resources. The question of “how do we continue to innovate with limited resources and funding?” has been raised many times by our interviewees. For example, Int6 is exploring other options to increase food sovereignty in the communities to support their food rescue efforts, however these have been put on hold due to funding issues.

“We did have some ventures into a seedling bank and some community gardens as well, which was a sort of offshoot that we felt supported what we did in the food space. But funding always comes down to it”. (Int6)

They also have future goals they want to achieve in the innovation space, but still need help to begin these projects “also, one of our dreams has also been to be able to, when we receive bulk produce, that we can cook and preserve.” Int16 is also exploring upcycling initiatives, such as turning surplus tomatoes into sauces and dehydrating kiwifruit skins, to extend the usability of surplus food, and wants to extend this nationwide to make it a mainstream, sustainable practice “create a national upcycling environment where we can

take some raw product and reprocess it and upcycle it into some product either for giveaway for low-cost food or for high quality value that can help be sustainable and sustain”. Int14 is also beginning new projects such as Gleaning as another food stream, but also to increase community engagement in the food rescue sector “that's another area that we're trying to develop is to get picking crews that will go around and work with some of our community groups ... like at risk youth, give them some opportunity to get some work experience and that sort of thing so.”

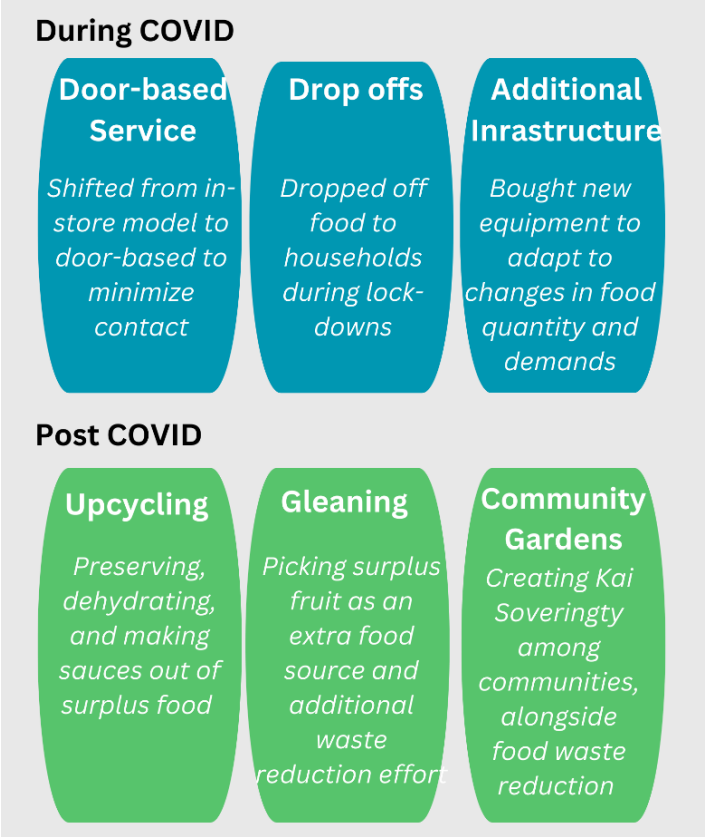


Figure 5 – Examples of new practices that emerged during and after COVID 19

However, as good as these initiatives are, the participants expressed concern about their capacity to accommodate those changes and continue to innovate in the future. If the increased funding during the COVID-19 period helped them invest in new infrastructure and provided them with some financial resources to develop new practices, the situation after COVID-19 brings new challenges.

The need for sustainable infrastructure solutions remains a pressing issue post-COVID, as these resources are critical to ensuring the success and longevity of food rescue efforts in reducing food waste from food rescue. The question of how they will keep their operations going smoothly and at the scale currently needed to address the large amount of food waste they are seeing, and then continue to create new initiatives to support food rescue efforts is an ongoing question.

The importance of infrastructure, particularly refrigeration and freezer storage, is crucial for reducing food waste and maintaining operations, with Int4 sharing the difficulties they faced without proper refrigeration: “It is kind of impacting our deliveries. We can’t keep things in the chiller. Or we have had tomatoes come, and I’ve just had to straight away get them all out, like pallets.” There is a lost opportunity in the sector if resources are a limiting factor in operations, and this is seen in Int7, who had to reduce the amount they were collecting “We’ve actually narrowed those activities due to resource constraints, namely people, to simply collecting food from supermarkets.”

Signs of professionalisation

As the food rescue sector is expanding-- number of actors, types of actors and demand for food rescue--, we see signs of professionalisation such as standardisation, unification and request for accountability and measurement. The creation of the Aotearoa Food Rescue Alliance (AFRA) and New Zealand Food Network (NZFN) have played a central role in the process. Those two formal national organisations have contributed to create inter-organisational structures, reinforce networks, increase interactions among organisations, and provide a mutual awareness of the field (by the members and other stakeholders). Although most of the participants recognised an ongoing process of professionalisation, the understanding of what it is and what it means remains vague and varies among them. They also raise a few challenges associated with professionalisation. Int2 described professionalisation as a “double-edged sword,” noting, “it creates an image... but doesn’t address systemic issues.” This sentiment reflects a concern that while professionalisation

improves perceptions and operations, it may not tackle underlying structural problems in the food system.

Setting standards

NZFN and AFRA are actively working to create unified data platforms for food rescue and food loss to standardise measurement and reporting across the sector. According to an interviewee, it will help to have a more standardised way of reporting and thereby enabling comparison between organisations, noting the difficulty of inconsistent measurements: “It's really difficult. Because some talk about families, some talk about people. Some talk about food parcels that we give out. So, the measurements are trying to help standardise into numbers of people ... It's much easier to picture and understand” (Int16). Int3 emphasized the importance of professionalism, stating, “100% positive... we need to ensure that what we're giving out is safe for people to eat.” This move toward standards and adherence to best practices, especially in food safety, has become a core focus across organisations, representing the responsibilities food rescue groups have”. Int6 said the templates from AFRA have been helpful in them getting set up with good practices and continuing these “So we are members of the Aotearoa Food Rescue Alliance. So we use a lot of their templates I suppose, to support what we do because they've looked at a lot of good practice. It's great.” While standardisation has brought benefits, our participants also highlighted some challenges, including adding complexity and potential detachment from local communities. Int8 emphasized the importance of balancing standardisation with core values, stating, “I think we can really be professional without being corporatised. It's really important that we are professional in what we do, but it's also really clear you have strong organisational values and a clear mission.”

Creating a sense of unification

Our interviewees highlighted the importance and need to work together and be, to a certain extent, united to have a voice, to have more resources and be recognised.

“We're all working collaboratively towards food security... So we're a part of the larger cycle of support out there and I think that's a really big factor that you have to have if you want to look at food security, it has to be collaborative. There's never just one person that's coming along or one organisation fixing everything... I think it's never just one solution, it's yeah, it's all Mahi Tahi (work together). It's about a collaborative approach, yeah.” (Int6)

“I believe what is needed is an intensive, intentional collaboration in small towns like [name of the city] where we all come together, we pool our resources, and we deal with the issue where it deals with a far broader scope of people in need.”

(Int14)

“working together provided a more powerful voice for advocacy as well as certain types of funding [...] there are clear benefits from coming together and having a single voice when we need one. Having a place to share. (int7)”

One of our participants spoke about the pivotal role of AFRA in unifying the sector: “Having an overarching body unified the sector and kind of brought everyone together. There was a shared vision and a shared goal, and there was someone who was driving that.” (Int18)

Despite the benefits of working in unity, the interviewees also mentioned the risk of losing the connection with the community and being locally grounded.

“That connection to communities is important, and that relationship stuff is important. Even in times when there isn't an emergency, because that's what you can build on when there is one.” (Int10)

The importance of collaboration and respecting local needs was emphasized across multiple interviews. For example, Int6 highlighted how New Zealand has many different communities all with very individual needs “There's always a risk in a universal owner or universal driver of something, because honestly, on the West Coast, we have so many different variances here that I mean the geography is different, the demographics, there's so many differences here.”

Showing evidence of impact

The sector is increasingly being asked to show evidence of its impact. Impact measurement reflects a shift in how organisations are evaluated and funded.

“Government and non-government funders are maturing in a way that they're actually going to want to see evidence of impact. And I'm pleased about that because ...there's lots of types of waste, and economic waste is actually a form of waste. So the funders are wanting to be clever and fund the things that are making a big impact. So community groups are going to have to step up in regards to their knowledge of how to collect data, how to use data to tell stories.” (Int8)

The current lack of metrics for measuring food rescue's impact was presented by certain interviewees as a barrier to progress: “We actually needed to create a baseline in New

Zealand to track progress. How can you track progress if you don't know what you're dealing with from the beginning?" (Int18)

Many organisations started to develop impact metrics to demonstrate their contributions, particularly in waste reduction, emissions, and social impact, more than before the COVID-19 pandemic, and see in this tool a way to improve their activities and receive funding.

“...data project ...having a common set of metrics that actually tell the story of what is actually happening. So like being able to basically ask questions like what is the problem we're trying to solve, what is the size of the problem? Who is actually involved in the resolution of this problem? and to what extent is that problem being solved? ... That way you can actually have a fact-based discussion on problem, solutions and gaps, and who's contributing.” (Int7)

“We also have done our Greenhouse gas emissions profiles with My Imprint. So we got third part looking at all the power we use, all the fuel we use, all our waste strains, all the food we rescue, so we know where we are” (Int8)

However, the requirement for more measurement adds another reporting layer and comes with additional operational costs, putting more pressure on the food rescue organisations which are already working with restrained resources.

“It (Food rescue) is absolutely a philanthropic operation and every time you add a layer of complexity, you're adding cost. And it will just reduce the amount of people operating in this space” (Int12).

Showing evidence of impact is not easy for all organisations especially because they have different roles and function in food rescue. Measuring impact might be easier for certain organisations than for other. For example, Int10, a food rescue organisations supporting the front line, raised this concern: "I think that's our challenge is ...it's really hard like we're supporting organisations to do their work and they've got the individual stories that carry a lot of power and weight for people in terms of donations and stuff, but they don't understand that what we do is supporting them to do what they do ... I think that's where the challenge of food rescue organisations can be in that you don't have that profile.”

Questioning the purpose

As COVID –19 exacerbated food insecurity, food rescue organisations are deeply concerned about the issue and feel somehow deprived when it comes to addressing the

root cause of the problem. As a result, many of our interviewees raised concerns about the very purpose of the sector. They pointed out that the food rescue sector cannot, on its own, solve the food waste and food insecurity issues.

Food rescue has been described as a 'band-aid' or an 'in-the-meantime' solution to a systemic problem in New Zealand (Poppendieck, 1999). Int2 and Int10 stressed that food rescue should not be seen as a long-term solution to food security, but rather as part of a sustainable food system.

"Food rescue isn't part of food security." (Int10)

Additionally, Int17 spoke about how their food banks are seen by the government as more of a cost-effective solution to surplus food and social funding over food grants, stating "I think that food banks are an admission of failure of the welfare system" and "Food Rescue is absolutely not enough, and food donations from the public are also going down. So I'm really concerned about what will happen". As Int2 said, "Food rescue is an environmental problem, not a solution to food security,"

This depicts the challenges faced in the sector of the systemic issue that food insecurity is not going to be solved through food rescue or food banks, but rather through change to systems and processes in the wider social development space.

Additionally, Int15 pointed out the dilemma of reducing waste while ensuring a sufficient food supply: "In some ways, we've built ourselves into a bit of a conundrum. We want to reduce waste, but if we do that, we actually don't have enough food to give people." Reducing food waste is a main goal for many companies, which is a great achievement for the environment, however, this then takes away an avenue of food that is feeding those who are unable to access food from other avenues for whatever reason.

Int16 brought up the challenge of capitalism and how there is a lack of community so individuals are being left on their own: "but once civilization came along, that's when inequality started to go. The haves and the have nots. When you bring in real capitalism and real meritocracy, suddenly you don't give a s**t about your next door neighbour".

These insights suggest that while food rescue is crucial, systemic changes are needed to tackle the challenge of reducing surplus food and improving food security.

"We should focus on systemic change...rather than strengthening what we currently do." (Int2)

Discussion

The food rescue sector in New Zealand has undergone significant transformation since the COVID-19 pandemic, as organisations have navigated an evolving landscape characterised by rapid adaptation, funding challenges, introduction of standards, and systemic limitations. The results highlight three key challenges the sector:

- How to deal with multiple paradoxical tensions in the sector?
- How to build resilience in the food rescue sector?
- How to navigate the multiple purpose of food rescue?

We discuss each of those challenges below and consider the implications for the sector.

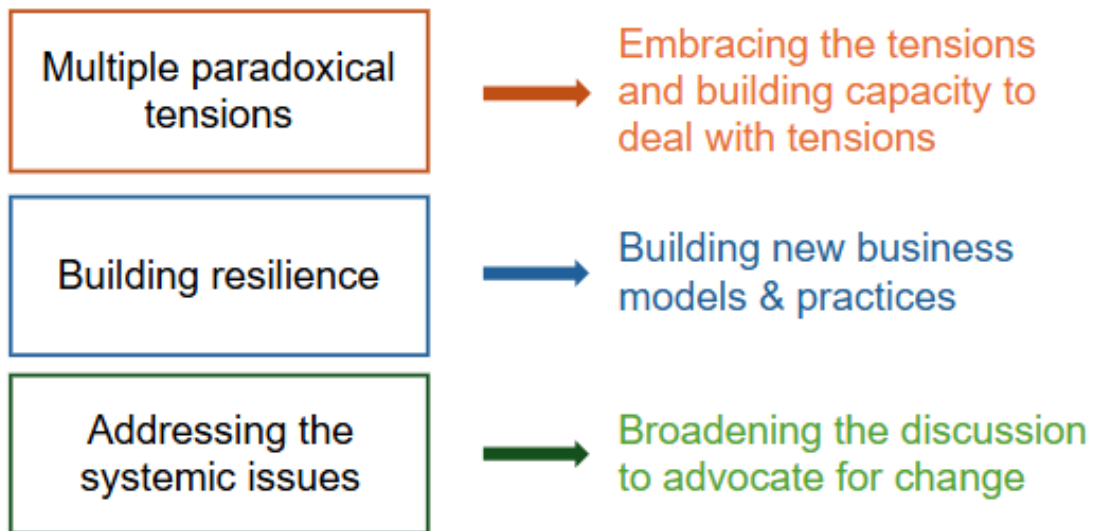


Figure 6 – Emerging challenges for the food rescue organisations

Dealing with multiple tensions

Through our analysis five paradoxical tensions emerged. Those tensions are not associated with specific organisations or types of organisations but are present at the sector level. They may be felt or lived differently by each organisation, depending on the size, type or resources, but they all face them.

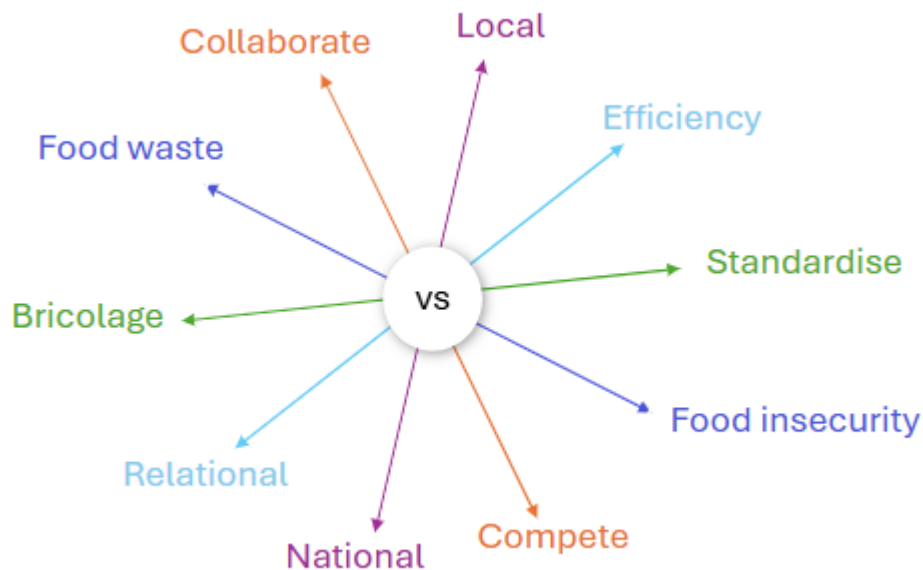


Figure 7 – Paradoxical tensions in the food rescue sector

Compete vs Collaborate

One tension is around the question of organising the food rescue sector. The balance between competing and collaborating among organisations is a common tension. Actors recognise the need to collaborate to foster shared resources and expertise but at the same time they are competing for resources. Some organisations believe that sharing knowledge and resources and joining forces to collaborate to make a larger impact was important, and that no one should be working in isolation in this sector. However, contradicting that, competition for funding and resources is an ongoing challenge, causing some organisations to have more of an individualistic mindset. This tension links into the debate around having either local or national organisations.

Local vs National

Larger and smaller organisations have differing competencies that require them to run slightly different operations, with larger organisations having more ability to deal with large amounts of food as well as the financial and operational strength to implement standards

and practices. However, smaller organisations take on smaller amounts of food and are able to bring this food directly to the people in their communities, creating interaction and a sense of unity amongst community members. These are complementary competencies of larger and smaller organisations, suggesting that having different types of organisations in the food rescue sector is important for community connection. Differencing views do point out that the government may find it easier to fund just one organisation than lots of smaller ones, suggesting that smaller organisations may shut down if funding is diverted to larger organisations. This is where tensions arise amongst the larger and smaller organisations who both see the benefits and competencies, they each bring to the sector, holding differing views on whether food rescue should involve just one large overarching organisation set up in different communities, or have lots of different organisations tailored to each community, bought together by an overarching support group like AFRA.

Environmental vs social

Tensions around the question 'What is our purpose?' were also identified. Most food rescue organisations have two main goals that they are striving to achieve, being 'reduce food waste' and 'decrease food insecurity'. This brings up the tension of whether food rescue is an environmental or social issue. Some organisations focus mainly on the environmental side, using food rescue as a way to reduce carbon emissions and reduce the amount of food sent to landfill. However, some organisations focus on the social side, seeing food rescue as a way to help feed people in their communities. Most participants agreed that food rescue was not the solution to food insecurity, however those organisations focused mainly on the social side saw it as an important part of food provision for those needing it, especially since the increased need post-COVID. Although they did want to reduce food waste, if food surplus decreased then this would have a huge impact on the families relying on this rescued food. Controversially, those organisations focused on waste reduction were passionate about reducing this food surplus, and spoke about how ideally there are other ways in which those relying on food rescue could get their food.

Bricolage (improvisation) vs Professionalization

Organisations within the sector often differ significantly in their operational models and underlying philosophies. At one end of the spectrum, some organisations adopt a more informal "bricolage" approach, characterised by flexibility, improvisation, and a pragmatic problem-solving mindset. These organisations prioritise adaptability, using available resources creatively to address immediate challenges. This model often thrives in contexts

where unpredictability is high, such as regions in New Zealand where environmental, supply, or demand fluctuations require rapid and innovative responses. Rather than being disorganised or inefficient—a common misconception—these organisations are often highly responsive, with their focus firmly on maximising impact rather than adhering to rigid structures or generating financial returns.

At the other end of the spectrum, some organisations operate with a more professionalised, business-oriented approach. These entities emphasise structured decision-making, adherence to standards, and procedural consistency. They often diversify revenue streams through paid partnerships, consultancy services, or the sale of value-added products, such as repurposed surplus resources. By incorporating entrepreneurial strategies, these organisations aim to achieve financial sustainability while simultaneously scaling their social or environmental impact. This dual focus on profitability and purpose enables them to maintain greater independence and resilience, particularly in uncertain funding environments.

It is important to note that organisations rarely exist entirely at one extreme or the other. Most operate along a continuum, balancing the tension between adaptability and professionalisation based on their specific context and objectives. The bricolage approach allows for innovation and responsiveness, while professionalisation can provide stability and long-term viability. The coexistence of these diverse models highlights the evolving nature of the sector. While some organisations prioritise pure philanthropy and grassroots adaptation, others demonstrate how entrepreneurial strategies can complement and amplify social goals. Understanding and navigating this spectrum is essential for organisations as they determine how best to align their operational philosophy with their mission, resources, and the needs of the communities they serve

Relational vs efficient

Finally, the questions of ‘with whom do we engage?’ and ‘How do we engage?’ were prevalent throughout our interviews. The tension here is between being more relational versus being more efficient. It related to the question around having overarching larger organisations or many small and local organisations to address food insecurity and food waste. Should organisations focus on more community engagement, interacting and building relationships within communities at a grassroots level or would being more efficient and being able to do more with less resources and funding be a more effective strategy? This tension is important to balance correctly, especially in the New Zealand context, where each community is very different demographically and geographically, with

cultural perspectives and the role of Māori values such as manaakitanga (hospitality) and kaitiakitanga (guardianship) being central to food practices in many communities. Both sides have their pros and cons, and most organisations were able to see these, but all participants had differing opinions on how much to one side the sector should lean into.

This tension is further exacerbated by the debate surrounding standardisation of practices in the sector. Organisations like AFRA promote standardised practices to improve efficiency and consistency. However, these efforts sometimes clash with the desire to maintain localised, community-driven approaches. The push for professionalisation highlights differing perspectives on whether food rescue should prioritise overarching coordination or remain deeply rooted in specific communities. These tensions underscore the complexities of aligning social and community engagement with the efficiencies and costs of running charitable organisations.

These reflections underscore the need for a balanced approach that values both the efficiencies gained through centralization and the unique strengths of localised efforts. While standardisation can unify practices and improve accountability, it must be implemented with flexibility to accommodate the diverse needs and characteristics of different communities. Organisations don't want to lose the value of what they are doing, which is predominantly out in the communities, so too much time spent on writing and reporting rather than helping is a deterrent for some organisations when it comes to standardising practices. Prioritising collaboration while preserving the grassroots connections that drive meaningful change will be essential in fostering a sustainable and inclusive food rescue sector that meets the unique challenges and opportunities across New Zealand.

IMPLICATIONS

Organisations do not fall strictly on one side of these tensions but instead exist along a continuum, navigating a blend of priorities and approaches. This underscores the need to look for a careful balance to manage competing ideas and operations effectively. Failure to navigate these challenges may lead to fragmentation, inefficiency, or the creation of competition between organisations. However, embracing these tensions as opportunities for innovation and collaboration can drive positive changes amongst the actors, ensuring that the food rescue sector remains resilient, inclusive, and impactful in addressing food insecurity and waste.

Building Resilience: Challenges and Opportunities

Resilience is critical for the sustainability and growth of food rescue organisations. Building resilience involves addressing various challenges and adapting to change, including funding shifts, changing business models and implementing new practices. A major hurdle is reliance on a single source of funding, which can leave organisations vulnerable to financial instability. With government funding being in a stop and go dynamic, it is becoming important for organisations to adapt their business models and diversify their income streams. This will enable them not to be dependent on government's funding and continue operating at the scales they currently are.

The choice of business model is deeply intertwined with funding sustainability. Diversified funding approaches, such as partnerships with businesses, grants, and community-driven initiatives, can provide a more stable financial foundation. A resilient business model not only sustains current operations but also positions organisations to adapt to future challenges and opportunities. Innovating new practices and activities which can increase their food supply as well as generate more revenue is an important way to mitigate the risk of becoming insolvent. New initiatives help to create new opportunities not just for the charities, but also for the communities, with lots of organisations coming up with ideas to involve the communities in ways that increase education, awareness and passion for food and food waste. Enhancing capacity through training, infrastructure development, and stronger networks is essential for long-term resilience and trust from local communities. While restructuring and growth may be necessary, it is equally important to ensure that these changes align with the core values and missions of the organisations. Striking this balance is key to fostering resilience in a rapidly changing landscape.

IMPLICATIONS

Building resilience in the food rescue sector enables organisations to remain adaptable to change and secure a stable foundation. Their ability to innovate puts them in a unique position to grow and quickly respond to community needs, while larger systemic changes, which take longer to become ingrained in society, are being discussed and hopefully implemented. Resilient organisations are better positioned to advocate for systemic change, influence food policy, and promote environmental sustainability, ultimately leading to lasting benefits for both the community and the wider food system.

Navigating the multiple purposes

Food rescue is part of a much broader conversation about systemic issues, including food waste, food insecurity, and the role of government and businesses in addressing these problems. It is a complex and contradictory sector (Watson, 2019) where organisations face fundamental questions about their identity and purpose: Are they merely alleviating the symptoms of systemic failures, or are they catalysts for deeper change? As Alakavuklar (2024) highlighted, food insecurity and food waste are but an indication of deeper and structural problems.

This tension between immediate relief efforts and long-term systemic reform is evident in the sector. While food rescue plays a vital role in addressing urgent food shortages, it is widely acknowledged that it cannot serve as a long-term solution to food insecurity. Instead, it is often viewed as a temporary measure to address immediate needs, with many organisations criticising the growing reliance on food banks as symptomatic of a failure in the welfare system.

As demand for their services grows, food rescue organisations are confronted with existential questions: What is their primary role? Should they focus on reducing the environmental impact of surplus food heading to landfills, or should they prioritise their social role in alleviating hunger? For many, the answer is both. However, this dual purpose brings its own challenges, as they grapple with the reality that food rescue alone cannot solve the issues of overproduction and food insecurity. It brings another questions: Are they complicit in maintaining the system that created the need for their existence (Watson, 2019)?

Conversations about the future of food rescue often circle back to the sector's long-term sustainability. Many organisations acknowledge that food rescue will remain necessary as long as food surplus and overconsumption persist. However, they question whether their current roles should evolve and whether they should push harder for systemic reforms. The dichotomy between being environmental advocates or social service providers adds another layer of complexity. The goal of reducing food waste often clashes with the need to ensure a sufficient food supply for those in need. While reducing surplus food is crucial for environmental sustainability, it risks limiting the availability of resources for food-insecure populations.

IMPLICATIONS

The implications of food rescue organisations grappling with unclear identity and purpose are significant. Without a clear sense of direction, organisations may struggle to define their strategies and priorities, which can undermine their effectiveness. These concerns highlight broader systemic challenges, such as consumerism, and the erosion of community support, that exacerbate food insecurity. To truly address these issues, policy changes and conversations around, and engagement with larger systemic factors are necessary. Food rescue cannot be a standalone solution; comprehensive, systemic change is required to tackle both the environmental impacts of food waste and the root causes of food insecurity.

Conclusion

The interconnected tensions within the food rescue sector highlight systemic risks and opportunities that demand urgent attention. However, the sector needs to embrace these tensions and work with them. The sector's diversity, while a strength, often leads to fragmentation, as differing priorities, operational models, and resource constraints hinder collective progress. This lack of alignment poses a risk of stagnation, particularly if the sector fails to advocate for systemic change. If there is no advocacy for change, then this is a risk in itself as the current landscape of food rescue needs to change and evolve to increase sustainability. Without a clear vision or unified approach, there is a danger that food rescue will evolve into a modernized form of food banking—addressing neither the root causes of food insecurity nor the environmental impacts of food waste. This outcome could entrench existing issues rather than solving them, limiting the sector's ability to drive meaningful change. Conversely, systemic change represents a transformative opportunity. Advocating for policies and practices that reduce food surplus and address food insecurity sustainably could realign the sector's goals with broader social and environmental imperatives. However, achieving this requires the sector to develop clear levers of influence and prioritise collaboration over competition. Balancing community-driven engagement with operational efficiency and grassroots adaptability with professionalisation will be key to overcoming these challenges. By embracing these tensions as opportunities for innovation and advocacy, the food rescue sector can position

itself as a driving force for systemic change rather than a reactive solution to immediate challenges.

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Appendices

Appendix 1 - Interview guideline

- Role and responsibilities of the respondent in the organisation
- Perception and understanding of the food rescue sector
- Presentation of the organisation and its activities in food rescue (activities, funding, networks, standards used)
- Perception of the impacts of the activities of the organisation
- Engagement and relationship with the local community(ies)
- Perception of the changes in the sector during COVID and after COVID
- Perception and understanding of the professionalisation of the sector
- Focus on infrastructure developments
- Reflection on the current and future challenges and opportunities in food rescue
- Open final question about any reminding points they may want to address

Appendix 2 –Illustrative quotes per themes

Themes	Illustrative quotes
Funding Shifts	<p>“I was able to go to oil and gas companies who gave us some funding ... that landscapes changing because ... that sector has been decimated a little bit with the different government policies” - Int14</p> <p>“the funding sources have changed quite considerably. And this I believe as a result of the COVID measures that were taking place at the time we were formed. So I mean, at the start we got funding from probably 3 organisations ... MSD, the Council and Ministry for the Environment ... By the time I came on board, it was quite clear that that wasn't going to continue. And so this last year, our entire funding has been through grants, you know, grants from philanthropic organisations” -Int7</p>
Emergence of New Practices	<p>“So they weren't allowed in the hall at all because anyone could come, whether they had been jabbed or not so. So what we used to do was we'll take their bag at one door and then a volunteer will go through, fill up their bags and we'll give it back to them at another door So that was sort of the effect that COVID had on us there. It changed the way we did our did our free stores and that's still how we do it today.” int14</p> <p>“We’ve started a project...going out directly to growers in Kapiti and Horowhenua and getting their excess stock.” - Int3</p>
Standardisation of the Sector	<p>“we kind of knew that Aotearoa Food Rescue Alliance was wanting to get established. You know that the food rescue movement was wanting to kind of get together. We knew that there was this proposal for New Zealand Food Network... And we also knew that demand was unlikely to go away” int17</p> <p>“Professionalization...definitely think it has an impact I think it's a good thing I think for on the whole, I think it's a good thing. It's definitely pulled us up to a higher standard” - Int15</p>
Questioning the purpose	<p>“I say food rescue isn’t part of food security. If you can keep food rescuers, it's part of the food system and it's there to support community. But it should never be relied on. Because actually food security is having the power to choose as well, so not having to have rescued food, I think Food Rescue is part of the food system and it's about making the food system responsible and sustainable. But it's not part of food security. ” - Int10</p> <p>“And you know the reasons that people are in food poverty are multi layered. You always have to start with the education, but then you've got the food waste side of it. Where you only have to stand in a supermarket for 10 minutes and watch someone in the fresh produce area. They will pick up something and find a tiny blemish on it and put it back.” - Int5</p>



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