



RESILIENCE  
TO NATURE'S  
CHALLENGES

Kia manawaroa –  
Ngā Ākina o  
Te Ao Tūroa

# WEBINAR: HE PITO MATA

Food system security and resilience

Presenter Slides



# Iti noa, He Pito Mata

*'From a small piece  
of uncooked kūmara,  
a whole community can be fed.'*



# Kore Hiakai Zero Hunger Collective

*Address the root causes of food related poverty  
Work together to create a food secure Aotearoa*



The biggest contributor to food insecurity in Aotearoa has been, and still is, colonisation.

A significant step towards creating food security in Aotearoa is honouring Te Tiriti o Waitangi.



# Resilience in our food systems starts with flipping our mindsets:

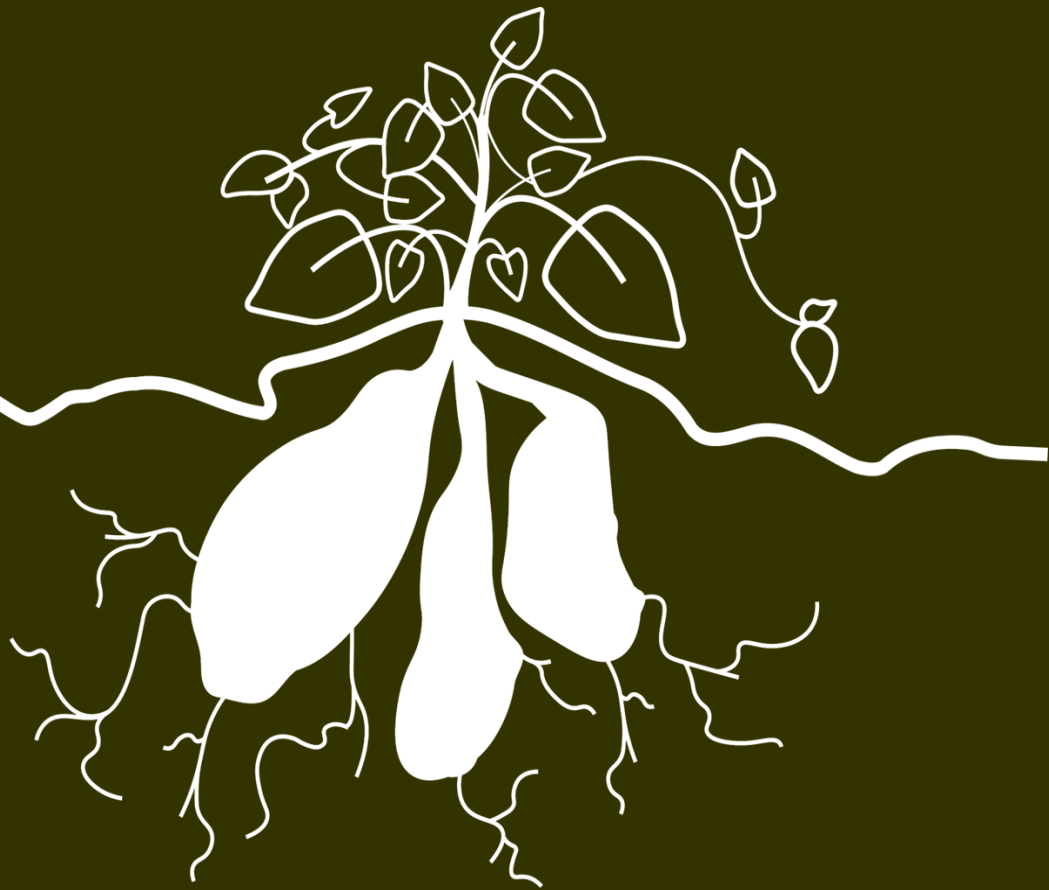
- from scarcity to abundance,
- from financial gain to wellbeing of all,
- from individual wealth to prosperity through connectedness and community,
- from extraction to deep listening,
- from hoarding to sharing knowledge and being curious together .



*We have this, because we have each other.*

# Ten tips to move us towards food security & resilience

1. Be willing to give away power, and therefore control.
2. Te Tiriti o Waitangi is our superpower – it shows us how to behave and invites us into deep relationship. Do not be afraid. (Tangata Tiriti - Remember step one.)
3. Know what we're talking about. If its food security, resilience and sovereignty, don't let other things creep in pretending they are these!
4. Remember it's a system, or a series of systems, so its complex, but Papatūānuku is central to it all.
5. Have a plan. Begin it now. Creating a plan means investing in relationships.
6. Stick to your knitting while you collaborate. When we collaborate and do what we do best, everyone wins.
7. Constant communication, connectedness and diversity are essential to get us there. (*aka radical inclusion*)
8. It's not about the money. It is about prosperity. (Remember step one)
9. Don't believe the lies – we have abundance, even when they tell us there is scarcity.
10. Lastly, we are not there until we are all there. (Again, remember step one.)



Imagine ...

...a food secure Aotearoa

for all

# Food security exists when ...

all people, at all times,

have agency and access (physical, social & economic)

to sufficient, safe, sustainably sourced, nutritious food that meets their food preferences

(including cultural) and dietary needs

for an active and healthy life







# Constant communication, connectedness and diversity *(aka radical inclusion)*

- Listening is an artform – *cultivate this artform*
- Communication, communication, communication
  - Relationships are the key – *invest deeply in relationships*
  - who is not at your table? Whose voice needs to be heard?  
Invite them to your table.

# We are not there until we are ALL there!

Remember ...

- All people, at all times
- Te Tiriti is the foundation
- We are community.
- Be a good ancestor – *it is all about relationships, even with people we have not met yet.*
- Kūmara grow as connected community.



A food secure Aotearoa  
where we all have enough  
and are enough



*Ngā mihi maioha – Kore Hiakai Zero Hunger Collective*

Want to connect to us [www.zerohunger.org.nz](http://www.zerohunger.org.nz) [Tric@korehiakai.org.nz](mailto:Tric@korehiakai.org.nz)

Want to be part of the Collective?

(be aware it can be an uncomfortable journey at times)

reach out to Tric (Trish) – [Tric@korehiakai.org.nz](mailto:Tric@korehiakai.org.nz)



# (Re)creating food resilient communities for disaster readiness, response and recovery

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Akoraka Tūhono| Associate Professor, Te Whare Wānaka o Aoraki



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# Introduction



<https://roddonaldtrust.co.nz/spot-the-tops-te-ahu-patiki-photo-competition/>



Photo: Hamish Rennie







<https://www.stuff.co.nz/national/nz-earthquake/86556635/investing-in-lifelines-the-need-for-new-civil-defence-thinking>

<https://www.rnz.co.nz/news/national/484291/widespread-devastation-gabrielle-in-pictures>





Cyclone Gabrielle left thousands displaced in Hawke's Bay. Photo: RNZ / Angus Dreaver

<https://www.rnz.co.nz/news/national/484422/cyclone-gabrielle-where-to-donate>

<https://www.stuff.co.nz/stuff-nation/131275344/what-are-you-doing-to-help-after-cyclone-gabrielle>



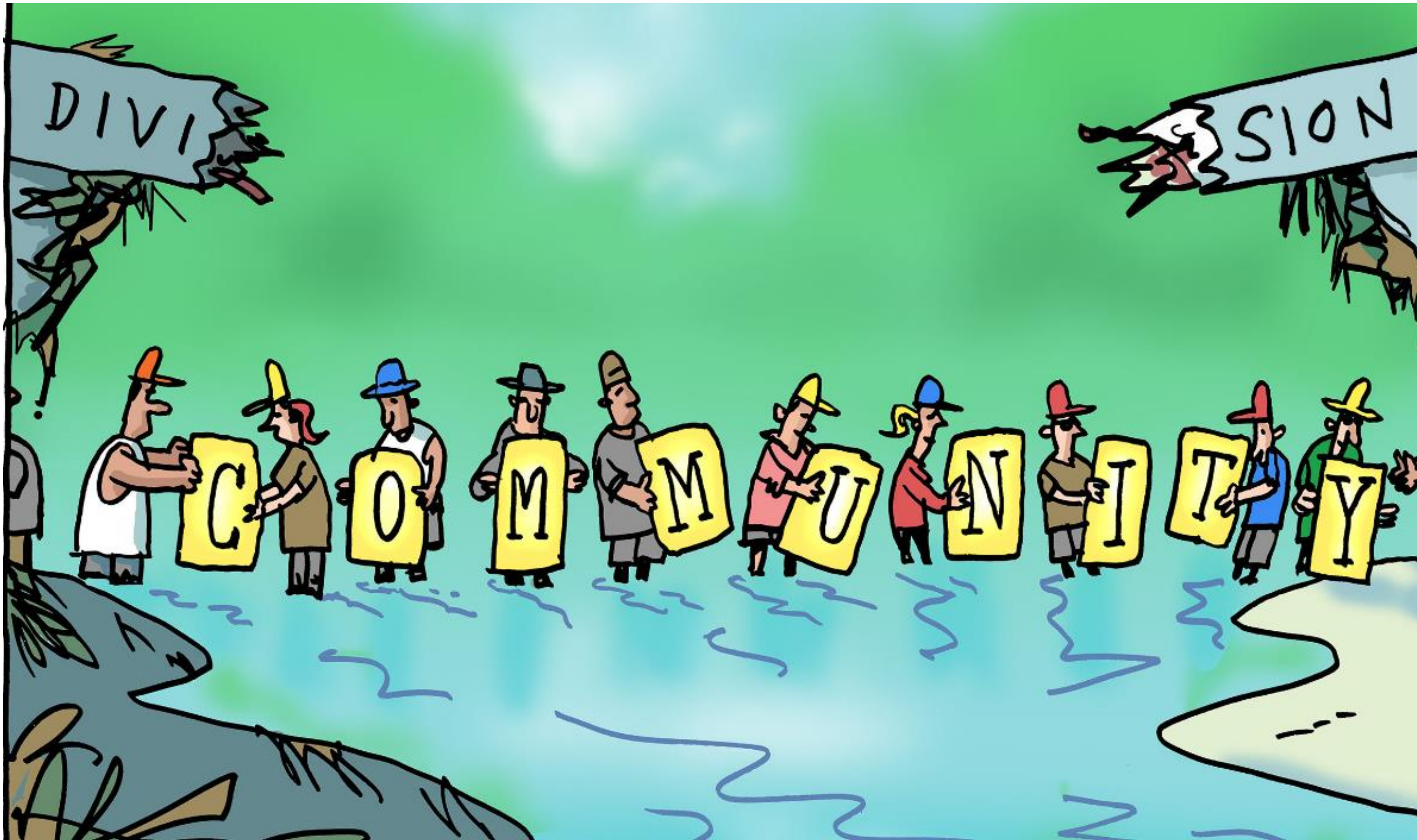
The clean-up in Wairoa following Cyclone Gabrielle continues. Photo: RNZ / Jonty Dine

<https://www.rnz.co.nz/news/national/484465/wairoa-residents-still-coming-to-terms-with-destruction-of-cyclone-gabrielle>



CHRIS SKELTON/STUFF





Creator: Slane Cartoons

<https://www.farmersweekly.co.nz/special-report/cyclone-gabrielle-after-the-flood/>





<https://www.stuff.co.nz/national/131122360/the-sikh-volunteers-quietly-cooking-thousands-of-meals-for-flooded-aucklanders>



The marae served more than 10,000 meals over the past week. Photo: RNZ / Max Towle

<https://www.rnz.co.nz/news/national/318520/%27we%27re-here-to-help,-we%27ll-help-anybody%27>



# Community resilience

- Community resilience:
  - “*the collective ability of a neighbourhood or geographically defined area to deal with stressors and efficiently resume the rhythms of daily life through cooperation following shocks*” (Aldrich & Meyer, 2015, p. 255).
- Being able to ‘bounce back’ (or bounce forward) from shocks and respond effectively to slow-onset change
- Community resilience is both an *outcome* and a *process* which builds community capacity from within
- Building community resilience need to consider both ‘hard’ and ‘soft’ infrastructure
- → ***food is a central component***

# Community resilience

- Central attributes of a resilient community include social, economic, cultural and institutional factors, e.g.:
  - Knowledge and education;
  - Resident involvement in decision making;
  - Communication, planning and organisational skills;
  - Network development capability;
  - Diversity of local economic activities
  - Social capital
  - an intangible resource that *binds individuals and communities together* and which, when utilised, enables the facilitation of coordinated actions, mobilisation of resources, pursuit of shared objectives and collective resolution of problems (Putnam 1995).



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# Limiting community resilience

- Concept often used **without considering dynamics of power, inequity and politicisation of the term** (e.g., Uekusa & Cretney, 2022)
- Inequitable distribution of resources and support
- Overlooks existing barriers – of access, language – and historical/colonial injustices
- Networks and social capital may consolidate privileged positions



<https://www.facebook.com/photo/?fbid=10163283406298849&set=p.10163283406298849>



# Facilitating food resilience in communities in Waitaha Canterbury



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Retrieved from <http://www.coga.org.nz/garden-directory/sumner-van-asch/>



<https://www.patakai.co.nz/christchurch-pantries.html>



Retrieved from <https://www.stuff.co.nz/the-press/news/north-canterbury/122612375/couple-who-refused-to-be-redzoned-have-more-grey-hair-but-no-regrets>





# Growing food – growing community

- Explored community food ventures around Waitaha Canterbury - community gardens, harvest festivals, or other collective food enterprises
- Role of disasters in their emergence – e.g., Community gardens



# Impetus for development post-earthquakes

- Availability of land – a place in transition
  - *We're a little bit sneaky in that we originally got permission to plant thirty trees and we planted sixty-five*
- It's primarily about community and connections
  - *I think the key motivation was the **food security issues after the earthquake** and **the need for people to connect with each other**. ...I think at that time it was just really nice to come back to the garden and have this as a sort of really grounding, literally **grounding space for people** to connect with and carry on gardening when their own gardens were out of action*



# Connecting communities enhances food resilience

*It's always about the people; it's not always about the food*

*So, I think we are fully understanding that sometimes your entire garlic crop will get harvested because somebody thought that they were leeks or you know, somebody will mow over your prize patch of strawberries.... So those things happen, and I think if we got overly caught up in the fact that it's about food production, I think you lose the interest and involvement of the people.*

*So all of those “disasters” ... We just tend to laugh at and go 'that's okay, because they were really happy picking all that garlic, that's absolutely fine'.*

# Connecting communities enhances food resilience

## Providing learning opportunities

*We're getting the people who are coming back to nature; they're coming back to gardening from having never grown up with parents having gardens.*

*We want to provide opportunities for people to come and **gain knowledge**.... We want to inspire people to at least try and grow their own food and **with a little bit of education they'll be more successful**, and success is a great motivator to keep going*

*People not only said that they wanted a food forest, but **they also wanted to learn**... they said that they wanted to actually have a place where they could learn, swap seeds and that sort of thing*

# Different communities have different needs

*I do think that would be different if it was in a different location perhaps, because we all have the benefit of having large backyards in this town. So a lot of people that are gardeners have their own garden. They don't really see the point of coming down to a community garden when they can supply their own needs*

*It's the local people who are struggling to put food on the table. Local gardeners who are probably gardening on their own and struggling to take the next steps in development in growing food. People who are isolated in the community and might be new to the community and might be looking at ways to get to know people and built connections.*



## From contracts...

*Graham has a plot, and Keith has a plot, and there are a couple of others. So these plots here are all what we call individual plots for groups and individuals... On the far side is the community plot. The reason why I do it is a bit of that we also sell.*

*We have a vegetable distribution policy which basically [means] anyone who's involved in volunteering can take what they need or take some for family and friends in need and that all the other produce basically gets distributed to communities.*



## ... to transformative action

*'You have to do some work ... first before you actually have food'. We've never said that. And that's where the difference is ... because the garden is open, it's more about foraging. So we don't grow rows and rows of lettuces and that kind of stuff. We grow many different types of things at different stages for people to be able to forage.*

*We hold no ownership over the produce that's grown [here], so people are free to harvest it whether they're engaged in what we're doing or not. We are quite happy that our level of trust and faith in the community has been repaid with good behaviour generally speaking....*



# Post-pandemic: shifting priorities

- Increasing focus on food security, food sovereignty and community resilience:
- *I think when we first started, we were very much production focused; how can we grow as much food as possible. We realised that that's probably not our role. We've realised that we're more about education, empowerment, inspiration and probably the core of the project now is about **community wellbeing through the vehicle of food***
- *New Zealand is a country that grows enough food for 20 million people so it's not a shortage of food in New Zealand, it's the supply chains and distribution that create a lot of the issues. So actually, the issues now are around **food accessibility, food justice and food sovereignty.***



# Post-pandemic: shifting priorities

*In terms of what we're finding now is that particularly after Covid we had a lot of people coming to us and wanting to learn, and it's the younger [people]; the 20-year-olds are all coming to us and saying: 'we want to come and learn how to grow food'. But what we've realised is that they don't want to learn how to grow food the normal, traditional way, which are so labour intensive. They want to grow food more sustainably. So, it's like the garlic, the nasturtium that keeps the bugs away.*



# Facilitating a more food resilient future

Provide access to land

*I look at a lot of parks are called reserves, so why are they called reserves? What are they reserved for? So why don't we actually reserve them for growing food?*

*We're quite keen to also try and push the Council to allow us to open up more areas of the park, even on a short-term basis to allow us to get more crops in*

*[Councils need to] empower the community to come together to decide how they can create a sense of place in their public spaces and always plant some fruit trees. Who doesn't love an apple on their way when they are wandering through a park? Or a handful of raspberries or something?*



# Facilitating a more food resilient future

Activate spaces for events that enhance food resilience

Festivals and events showcasing food

- Harvest festival
- Food sharing – pātaka kai, communal events

Offer community courses

- Gardening, pruning, composting
- Cooking, preserving

- *ONE SIZE DOESN'T FIT ALL – START WITH THE COMMUNITY*



<https://www.pncc.govt.nz/Community/Community-projects-and-programmes/Create-a-community-pantry>



# Conclusions

- The term 'resilience' is frequently heard during disaster response and recovery, but it is important also for disaster preparedness
- Food is central to community resilience
- Strengthening 'soft' infrastructure is as important as [more important than?] 'hard' infrastructure
- Communities are culturally, socially and economically diverse, with different needs and access to resources



<https://www.facebook.com/photo.php?fbid=544476144380679&set=pb.100064548947958.-2207520000&type=3>





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# Food (in)security and resilience in Aotearoa

Gradon Diprose, Manaaki Whenua –  
Landcare Research



Manaaki Whenua  
Landcare Research

RESILIENCE  
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National  
**SCIENCE**  
Challenges



# What is food rescue?

Collecting and redistributing edible food that would otherwise end up in the landfill, as animal feed or be composted

3 broad ways food rescue operates in NZ:

- Community hub
- Free store
- Mixed model







# Debates about food rescue

## Critics argue:

- Can be used to justify welfare retreat and austerity
- Only addresses symptoms rather than underlying causes of both food waste and food insecurity
- Mis-directed charity that distracts from wider food system change

## Advocates suggest:

- We need **both** revolutionary change and food redistribution now
- Food rescue is a useful practice 'in the meantime'
- Food rescue may prompt changes in wider food systems and people





# Previous Govt's action on food insecurity

2020 - Ministry Of Social Development invested \$32M over 2 years to address food insecurity. This included funding for 3 national organisations:

- New Zealand Food Network
- Kore Hiakai Zero Hunger Collective
- Aotearoa Food Rescue Alliance (AFRA)





# Our Research - SROI

How do we know we're having an impact?

We measured it

And found out that for every \$1 we invested in food rescue we generated \$4.50 of value



Contents lists available at [ScienceDirect](#)

Food Policy

Journal homepage: [www.elsevier.com/locate/foodpol](http://www.elsevier.com/locate/foodpol)

Measuring the impact of food rescue: A social return on investment analysis

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# SROI findings

SROI – every \$1 invested in food rescue created \$4.5 of value, but what does this mean?

1. Food rescue organisations create re-distributive infrastructure in place
2. Rescued food is becoming vital to many social service providers operational models
3. Food rescue can help shift stigma and whakamā associated with food insecurity
4. Food rescue connects to key matters of concern – waste and social justice





# Our research - food rescue and recent extreme weather

Food rescue groups were very busy after recent extreme weather events

- Played a key role in 'filling the gaps' during and after events
- Worked with local partners (e.g. marae and Civil Defence) to provide food and supplies to emergency accommodation/welfare centres
- NZFN coordinated storage and delivery across the country from major donors – supplementing the 'official response'
- **Food rescue is already playing a role, in emergency response and recovery – this could be more strategic**





# The future of food rescue?

Food rescue is probably here to stay...

- How could food rescue play a more strategic role in emergency management and national food security?
- How can food rescue support wider food system shifts?



# References



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