

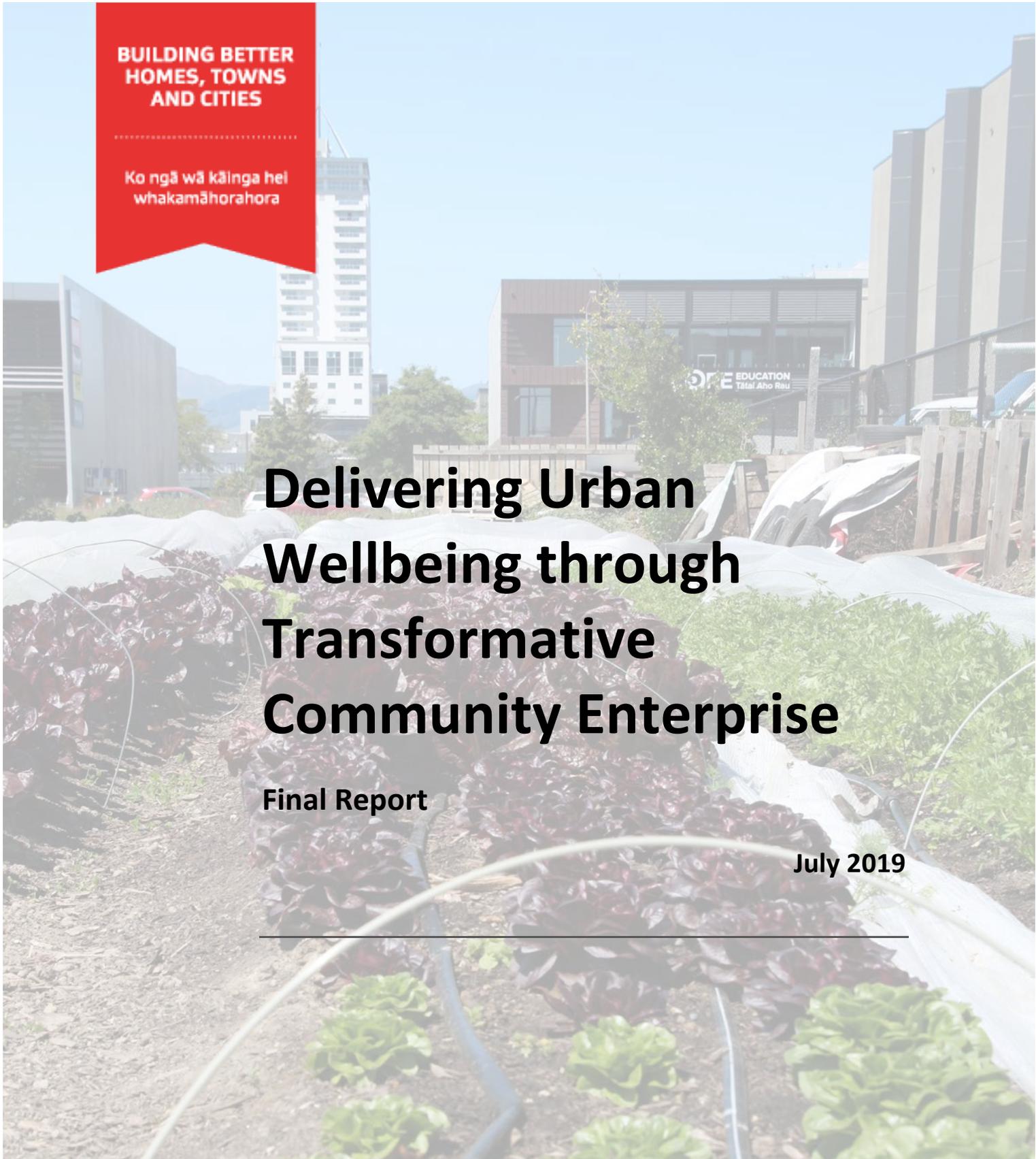
**BUILDING BETTER  
HOMES, TOWNS  
AND CITIES**

Ko ngā wā kāinga hei  
whakamāhorahora

# Delivering Urban Wellbeing through Transformative Community Enterprise

Final Report

July 2019



**BUILDING BETTER  
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National  
**SCIENCE**  
Challenges

## **Delivering Urban Wellbeing through Transformative Community Enterprise**

*Final Report*

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**Building Better Homes, Towns and Cities**  
***Project: Delivering Urban Wellbeing through Transformative  
Community Enterprise***

**July 2019**



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## Project Overview

Urban communities around the world are using farming and gardening to promote food security, social inclusion and wellbeing (Turner, Henryks and Pearson, 2011). In the New Zealand city of Christchurch, a recently formed social enterprise known as Cultivate currently operates two such urban farms. The farms, which use vacant urban land and green waste to grow and distribute locally grown food, are based around an innovative community form of economy that provides care and training for urban youth. The farms provide a therapeutic environment that is co-created by youth interns, urban farmers, social workers and community volunteers. Cultivate's urban farms are a valuable example of a creative urban wellbeing initiative that may be useful for other organisations seeking to promote youth wellbeing, hauora,<sup>1</sup> social development and urban food security in Aotearoa New Zealand and further afield. To document and measure the holistic impact of Cultivate, we collaborated with Cultivate staff, youth interns and other stakeholders to extend an already existing assessment tool: the Community Economy Return on Investment (CEROI). The CEROI tool was workshopped with urban designers, planners, and community practitioners to test its potential for documenting the non-monetary return of Cultivate's work, and then communicating this return to those involved in other urban wellbeing projects.

This report summarises the research and explains how we used the CEROI tool to document and measure the transformative social and environmental outcomes of Cultivate's activities. Cultivate is the site in which effort, relationships, money and materials are brought together. It is a site which produces a significant amount of food, but its benefits also extend to changed lives, changed relationships, and a more positive sense of Christchurch as a post-disaster city. These returns on Cultivate's activities are not captured by notions of profit, 'savings from helping young people to avoid the justice system', or even the production of 'good workers for the economy'. Instead, they might be described as 'something more'.

This research responds to the need to develop a language and an approach to thinking about value that helps us to represent this 'something more'. We show how the concept of return on investment from a community economies perspective can enable us to describe and document this return in a more holistic sense (especially in comparison to conventional financial accounting approaches). We also suggest that the Cultivate case study offers an important example of how mental wellbeing and access to therapeutic urban environments can be addressed through the work of a self-sustaining community enterprise. In offering this perspective, we acknowledge that further work is required to refine the CEROI tool, so that it can be used to support the work of other community and social enterprises.

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<sup>1</sup> Hauora is the te reo Māori term for health and wellbeing. It is more holistic than western concepts of health and encompasses physical, mental and emotional, social, and spiritual wellbeing (Durie, 1994).

## Introduction

Social enterprises have proliferated in post-quake Christchurch and across other parts of New Zealand in recent years. They typically seek to create more ethical social and environmental returns on investment, rather than just profit for shareholders. As one such social enterprise, Cultivate uses vacant post-quake land to grow vegetables and promote social wellbeing in Christchurch. Cultivate was started by an ecologist (Bailey Peryman) and social worker (Fiona Stewart) who wanted to create an environment where youth could learn new skills through meaningful work.

Cultivate currently operates two urban farms at different sites in Christchurch (Peterborough Street and Halswell Road) and employs administrative, farm, and social work staff. The urban farms are located on privately owned earthquake-cleared 'waste' land that is leased on a 30-day rolling cycle to the organisation. Cultivate collects green waste in Christchurch's inner city area, using an electric bicycle and trailer to pick up green bins in a part of the city where the council green waste collection is not available. Through composting, worm farming, and soil build up, this green waste is used as a resource to literally create the ground on which the enterprise is built upon in Peterborough Street. Vegetables grown on both farms are then sold to local businesses. Much of the equipment and infrastructure on the farms is made from recycled materials, including composting toilets, recycled sheds from quake-demolished homes, and repurposed containers, kitchen sinks, barbecues, pallets and more. The youth interns who work on the farms come from a variety of backgrounds and participate for different reasons; some have connections to the social welfare and justice system, while others are looking for a supportive environment to prepare themselves for life beyond school. Volunteers from the wider Christchurch community and beyond also regularly work on the farms.

Cultivate offers a form of collective, non-clinical and non-stigmatising mental health care which is significant given conventional mental health services in Canterbury and elsewhere in Aotearoa New Zealand are often struggling to meet demand. While the post-quake rebuild has kept employment in Christchurch at high levels and provided employment opportunities for many young people (Johnson, 2016; Ministry of Business, Innovation & Employment, 2017), the rebuild process is beginning to wind down and unemployment rates are starting to rise (Ministry of Business, Innovation & Employment, 2016). Increased incidence of serious mental illness is also evident across a variety of groups (but particularly young people), alongside a general increase in levels of mental distress ('subclinical' symptoms) that is worse in Canterbury than elsewhere in the country (Canterbury District Health Board, 2018; Fergusson et al. 2014; Nielsen, 2018; Spittlehouse et al. 2014). By offering the young people of Canterbury an opportunity to participate in an innovative social enterprise, Cultivate expands the capacity of the somewhat stretched Christchurch community to care for others. Cultivate draws on a variety of resources to gather what is needed to provide this care, including the time and energy of its staff and volunteers, funding from various agencies and supporters, donated land and other material resources. For each of its supporters and funders, Cultivate appears to be worth investing in because it is producing some form of value beyond what would normally be visible in a conventional financial return on investment calculation.

## Section 1: Ethnography and interview findings

Through participation as volunteers, ethnographic observation and interviews with staff and youth interns we sought to understand how people invested their time and energy in Cultivate, and how they experienced the value and outputs from their participation. Members of the research team visited the Peterborough Street farm weekly and participated in gardening alongside the interns, staff and volunteers for five months in 2017 and 2018. They also conducted interviews with interns and staff in early 2018. Interviews were recorded and transcribed, and transcripts read and analysed by the research team. The following section outlines key themes that emerged from Cultivate staff and youth interns. We have grouped the themes based on roles ('Cultivate staff' and 'Cultivate youth interns') as there were key differences in experience between people on the basis of their roles. The themes that emerged from the ethnographic observation, participation and interviews were then used to develop a return-on-investment (ROI) diagram and qualitative framework for CEROI assessment (see Section 2).

### Cultivate youth interns

In order to create a comfortable environment in interviews with young people, we did not question youth backgrounds in much depth, and young people did not volunteer this information. One young person identified as Māori, and others as Pākehā. Some youth did not wish to be interviewed. Youth were involved in the programme for a variety of reasons, some referred to community service and others addictions. Some referred to mental health or physical health issues that constrained their work opportunities. Others merely wanted to give the programme a go as a personal challenge or out of interest.

A key finding that emerged through the interviews and ethnographic work with youth interns was that working at the farms had helped them develop self-care skills in an environment that felt 'meaningful' and 'special' to them.

#### Theme 1: Developing self-care

Many youth interns spoke about how they had learnt important life skills around self-care and self-management through working at Cultivate. These skills included:

- Eating regularly (particularly breakfast and lunch) so that they could maintain focus on tasks
- Developing communication skills to better articulate their needs and concerns
- Learning to show up on time for work
- Gaining social confidence when interacting with people.

Youth described how these kinds of relatively basic self-care skills were encouraged through daily interactions and structured activities. For example:

- Cultivate staff regularly asked the youth interns whether they had eaten breakfast when they arrived at work.
- Youth interacted with vegetable preparation and cooking through daily tasks and being expected to help prepare the Thursday shared lunches.
- Youth were able to interact with other adults (volunteers, visitors) in relatively informal social situations both during work in the farms and at the Thursday shared lunches.

Youth described how as they learnt to care for themselves, they were then able to extend this care to other people and the non-human world. For example, some youth described how when they were feeling discouraged or tired, other interns would give them encouragement, or remind them to eat or drink so that they had the energy to finish a task. In turn, they would then be able to provide this support to others. Other youth described how learning about gardening and natural processes (like knowing how to compost and grow food) had prompted deeper changes in their personal values. For example, some described how they now cared much more about 'environmental issues' or food system politics after working at Cultivate, including the kind of food they were eating and how it was grown.

## Theme 2: Therapeutic environment

Many youth interns spoke about the physical and emotional significance of the farm environments. Youth described how working at Cultivate provided them with:

- 'Breathing room'
- A 'sense of home'
- A 'less stressed' place to be
- A sense of satisfaction by doing meaningful work
- 'A step towards happiness' through 'feeling good about helping'
- Exposure to 'a different side of life'
- Knowledge about food, plants and healthy eating.

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*"Now that I've started working here, my mind - I've focussed on things that really matter. It just distracts you from all of the bad stuff that you could be doing when you don't have anything to do you just get bored"*

*-- Intern*

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While youth expressed it in a variety of ways, a common theme was that the Cultivate sites were a 'special place' that provided them with the space and time to process their emotions and learn healthier behaviours. This therapeutic environment included the material aspect of the farms (the gardens, compost and plants, particularly of the Peterborough Street site), and the approaches that Cultivate staff used in their engagements with youth. For instance, youth described how the gardens enabled them to withdraw or be by themselves (e.g. if they needed to think or express what could be overwhelming feelings such as anger, embarrassment, sadness or frustration). Many youth mentioned the aesthetic of the Peterborough Street site as being peaceful, as well as being easy to access because it is located in the central city and more comfortable than the work-focused site in Halswell. Some youth also contrasted the experience of freedom they felt at Cultivate with the constrained environments they had previously been in, such as crowded classrooms and busy homes. In this way, care was not only provided by staff, but also by the farm environments.

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*"We've had this little program thing, and there's this little fitness thing. We end up turning the work that we do here into fitness and how we work our bodies and work our muscles when we are doing certain stuff"*

*-- Intern*

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## Summary

These findings suggest Cultivate is delivering a transformative experience for youth interns, while also changing urban food production and creating positive environmental changes at the local scale. Cultivate creates a unique environment that supports the youth interns to develop their capacity to care, work and maintain focus. These findings have implications in two broad

areas: 1) urban food security and planning, and 2) holistic, collective approaches to urban hauora and wellbeing (see Section 3).

The findings also illustrate some of the difficult challenges that social enterprises like Cultivate must negotiate in their attempts to foster more holistic benefits. These challenges related to balancing care for farm production with the often complex care needs of youth and volunteers, and planning for the future of farming when land tenure is uncertain. In the next section we draw on research data to develop a visual representation of the various investments (inputs) and returns (outputs) that Cultivate enables, and to explore how a more holistic return on investment could be evaluated. Given the care, labour and resources that are evidently invested by staff, customers, interns, volunteers, and financial supporters, this should help them answer the question “is it worth it?” with more than a feel-good story.

## Section 2: Co-developing the CEROI tool

Calculating a return on investment (ROI) is a common practice to ensure that the funds invested generate the desired outcomes. However, these reporting requirements are often unable to account for more holistic investments and returns, particularly those inputs and outputs which cannot be easily substituted for a monetary value. Such reporting requirements can also be onerous for organisations, taking up limited time and resources to legitimate efforts or secure funding (Loh & Shear, 2015). Finally, some impact-investors bring the same mentality to social enterprises that predominate in the for-profit corporate sector (Anderson and Dees 2006). The risk here is that private sector imperatives like cost-containment, staff-rationalisation or even impact-reporting requirements may serve to undermine the caring relationships and convivial practices crucial to the success of the social enterprise. Consequently, as social enterprises like Cultivate have emerged over the last few decades, there has been a growing emphasis on developing more appropriate metrics for measuring their performance.

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*The risk with monetary return on investment calculations is that private sector imperatives like cost-containment, staff-rationalisation or even impact-reporting requirements may serve to undermine the caring relationships and convivial practices crucial to the success of the social enterprise.*

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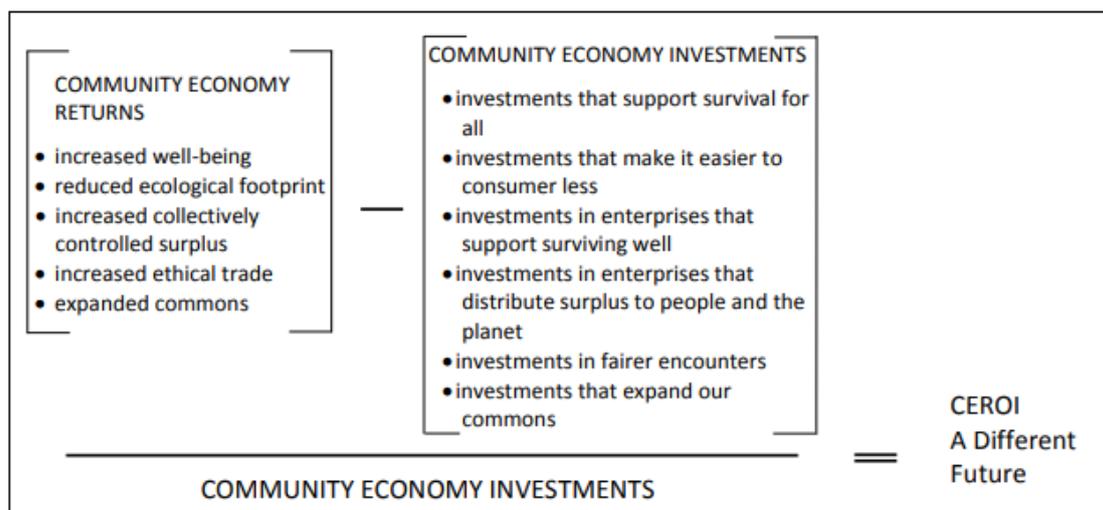
This research contributes to this work by elaborating upon an impact assessment tool: the Community Economy Return on Investment (CEROI, see Figure 2), initially described in *Take Back the Economy* (Gibson-Graham, Cameron, and Healy 2013). In further developing the CEROI tool, we sought to combine the best elements from three approaches to impact measurement: Social Return on Investment (SROI), Social Audit Accounting (SAA), and Development Impact Indicators (DII). Each of these can be summarised:

- SROI is an adaptation of the cost-benefit-analysis methods commonly used in the for-profit and public sectors. Its purpose is to measure the value of the benefits generated relative to the costs of achieving those benefits. To do this, social and ecological value is ‘translated’ into monetised terms by assigning ‘proxy’ values to inputs and outputs that may otherwise be invisible, using a process of market price substitution (Arvidson et al. 2013). This system is not useful for understanding a community economy return on investment, since many of the ‘returns’ and ‘investments’ are too complex for monetary calculations to be made without bespoke research into the inputs and outputs, and environmental and social consequences of each organisation.
- SAA was developed with and for the not-for-profit sector (social enterprises, community organisations) and takes as its starting point that ‘proving and improving’ organisational performance and effectiveness is the way to grow mission impact. As a result, the focus is on the enterprise itself – from a holistic perspective that encompasses financial, environmental and social dimensions (McNeill 2011). SAA is not sufficient to measure investments in wider community economies, which of necessity extend beyond individual organisations. The focus on organisational effectiveness is too narrow for understanding the intricate linkages between organisations, communities, and environments.
- DIIs have emerged out of monitoring and evaluation practices (M&E) that tend to involve describing project objectives then coming up with measurable indicators. The tendency is for these to measure against expected impacts rather than being able to catch unexpected outcomes. Recent research into M&E has argued that the process of developing monitoring frameworks and indicators should be undertaken with the affected community (Van Ongevalle, Huyse, and Van Petegem 2014). Because of the

focus on expected impacts and measurable indicators of outcomes, these often overlook *investments* of the local community, in time and energy, and whether these investments are worth it when compared to the outcomes. Pursuing the right indicators can become a goal in itself, even when the investment is not well-spent and does not contribute to community economy outcomes. For example, Dombroski and Do (2019) note how investing in more concrete canals in Vietnam has become a goal in itself even though this is meant to be an *indicator* of climate change resilience. As such, Do observed concrete canals that did not connect water bodies.

Like SROI, CEROI intends to capture the flows of matter, energy, labour, monetary and non-monetary investment in a place or process, and the benefits that come from this investment. However, unlike SROI, CEROI seeks to represent this value in a more holistic way than just market price substitution. Like SAA, CEROI attempts to generate shared values as a way of clarifying what is being invested in, and to frame the hoped-for returns. However, unlike SAA, CEROI emphasises how investments made in one context or organisation might generate benefits that accrue to a broader community, rather than just improve the performance of the organisation in focus. Like DIIs, CEROI attempts to develop meaningful context specific indicators, but with attention to a range of planetary and social concerns that may stretch beyond the community. What we would like to ensure with CEROI is that the findings in one context can be shared with others elsewhere in a spirit of co-learning.

To develop the details of the CEROI suitable for the specific context of Cultivate, we worked with Cultivate staff and others to clarify what values motivate cultivators (individuals), Cultivate (organisational), and the wider Christchurch community, as well as how these values translate into practices. The purpose was to **expand** what was visible to stakeholders as an investment into Cultivate’s success. The next step involved **including** Cultivators and other stakeholders in thinking about what counts as success (specifically what the return is to individuals, the organisation and the broader community when Cultivate thrives). The last step involved visually **communicating** how Cultivate contributes to the wellbeing of individuals, and the broader community. This approach is fairly simple, is not resource intensive, and could be applied relatively easily to other organisations and contexts. In what follows we describe these steps in more detail.



**Figure 1 Representation of a Community Economy Return on Investment**

Source: Gibson-Graham, Cameron and Healy (2013), reused under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International Licence.

## CEROI: Expanding what counts as investment, aligning value and practice

The first step in developing a way to assess return on investment was to analyse the in-depth interviews summarised in the previous section. We analysed these narratives to identify the values people shared, *and* the practices they engaged in that helped them achieve these values. We then organised a workshop with Cultivate staff, where we presented back to them the diverse **values** that were expressed through their interviews. Our understanding was that organisational values were distinct from more nebulous ideals. For example, an organisation might aspire to an ideal like ‘organisational diversity’, or ‘inclusion’ but, as we are treating it here, these things only become values when they are connected to regular practices aimed at actualization. Value-practices, a term we borrow from Daskalaki *et al* (2018), describes in this instance how individuals, Cultivate as an organisation, and the broader community invest in Cultivate as a shared enterprise.

**Table 1: Examples from value-practice exercise**

Individual/ Interpersonal		Collective/ Organisational		Place (Wider Community and Environment)	
Cultivators		Cultivate		Christchurch	
Value	Practice	Value	Practice	Value	Practice
<b>Respecting others</b>	Punctuality	<b>Non-hierarchical workplace</b>	Really listening attentively	<b>Supportive community</b>	Broccoli bonds
	Speaking with care		Providing flexible work conditions		Volunteers
<b>Attentiveness</b>	Eating breakfast	<b>Listening to youth needs</b>	Biomimicry (learning from and emulating the natural world)	<b>Real Food</b>	Feeding volunteers and youth good food
<b>Relationships</b>	Leaving people alone when grumpy	<b>Pragmatism</b>	Using organic methods where possible but not exclusively	<b>Balancing competing needs</b>	Providing an open day for community and volunteers

It was crucial to the development of CEROI that the identified value-practices came from participants themselves. What this co-production afforded was a more comprehensive understanding of what investments contributed to Cultivate’s success, as well as potentially innovative approaches that could be adopted by other organisations. These ranged from nuanced discussion of how Cultivate staff and youth engaged in self-care or dealt with interpersonal conflict, to how volunteer energies were accommodated, to how innovative approaches to finance connected with the broader community (see Table 1). For example, Cultivate issued ‘broccoli bonds’, a PledgeMe fundraiser where community investors helped to

capitalise the organisation in exchange for a fifteen percent return (e.g. a regular share of the harvest or help from Cultivate youth interns in their own gardens to the value of fifteen percent more than their cash investment).

## **Cultivate staff**

Cultivate staff included social workers, youth workers, farm managers and workers, and expertise in ecology. Staff came from a range of backgrounds, including working and middle class, settler family farms, immigrant families, small towns, very low and very high income urban areas. An underlying theme that emerged when speaking with Cultivate staff was the challenge of balancing multiple and often competing priorities (such as attempting to become financially self-sustaining while focusing on outcomes for youth). Two key inter-related challenges illustrate the difficult decisions an organisation like Cultivate and staff negotiate when attempting to foster more holistic returns on investment:

1. Caring for youth and farm: How to maximise farm production while also creating meaningful learning and support spaces for youth interns and community volunteers (especially for staff not trained as social/youth workers).
2. Caring for land and community: Deciding how much to invest in farm developments/improvements when tenure is not secure, and how to manage competing expectations in terms of 'organic' practices and the appearance of the farms.

### **Theme 1: Caring for youth and farm**

A number of Cultivate farm staff (particularly those hired with experience in farm management and production) described how different it was working for Cultivate in comparison to more conventional farming businesses. They noted how they could not treat youth interns or community volunteers as 'conventional' employees and instead had to adjust their expectations of both their behaviour and productivity. For example, staff described how they might have to spend an hour responding to a youth intern's emotional reaction or argument with another intern, or that they sometimes had to chat to a volunteer for half an hour, to offer support, rather than focusing more directly on their own farm work. They noted how this relational care work would limit their time working on the farm, in terms of their direct involvement in food production. From one perspective, this care work therefore had an impact on the financial sustainability of the enterprise. During our ethnographic work and interviews with staff, this emerged as a point of constant tension for staff. On the one hand they sought to welcome community volunteers, and to support and accommodate the needs of youth interns (some of whom had significant emotional needs and difficulty managing behaviour). But on the other hand, they were also responsible for ensuring the farm was productive, was able to meet its customer orders (e.g. from local cafes and restaurants), and that it could maintain its customer base. Cultivate farm staff described how balancing these aspirations and expectations could be quite challenging, especially as they had not been trained as youth or social workers.

To manage these challenges, both Cultivate (as an organisation) and individual farm staff adopted a number of strategies. A key value and priority for Cultivate's founders was that the urban farms (particularly Peterborough Street) would be connected to the wider community. This connection was fostered by having community volunteers working in the farm and visitors touring the farm. The number of volunteers and visitors would vary, but during our research we noted upwards of 5 volunteers on regular volunteer days, and large groups of visitors at other times (such as school groups or businesses on community service days, sometimes numbering more than 40 people). To ensure staff have enough time to focus on their key farming tasks, Cultivate restricted community volunteers and visits to Thursdays. A shared lunch is cooked for volunteers on Thursdays and volunteers are able to take home a large bundle of vegetables at the end of the day. There is a recognition that the farm work of staff may be reduced by these activities, so that they can focus on engaging with volunteers and visitors on this day.

Individual staff described a range of strategies to manage these competing care priorities, many of which required learning new skills, particularly around boundary setting and self-care (to

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*Staff described how working alongside the youth interns and volunteers allowed them to have conversations that might not have been possible in a more conventional therapeutic encounter which usually involved sitting opposite someone in a room, and taking up roles of healthcare provider and client.*

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reduce the risks of burn-out). For example, one youth worker described how she used various tools to manage youth behaviour such as goal setting, regular de-briefs, and behaviour incentives, while also seeking regular feedback with farm staff on youth behaviour. Other farm staff described how they would use the physical space of the garden to help youth

interns manage their own behaviour. Youth workers, or 'people wranglers' as some were affectionately known, were supposed to communicate to interns their daily jobs and to manage any difficulties with motivation. However, these interactions did not always seem natural to farm staff or youth and they were not always possible. Farm staff also described that they tended to begin an interaction with a youth intern or volunteer by assigning them a farming task, and then once work had started they would chat with the intern or volunteer about other things. Staff described how working alongside youth interns and volunteers allowed them to have conversations that might not have been possible in a more conventional therapeutic encounter (which would typically involve sitting opposite a mental health professional, for a fixed period of time, in an enclosed room). While some farm staff noted their lack of experience in working with youth, they also recognised that they might have been some of the first adults youth interns encountered who were not trained teachers, social workers, or people somehow associated with government health or social services. The staff reflected that this different relationship might enable other kinds of relationships that went beyond the interns' usual experience with adults, particularly for those young people who were or had been in state care systems.

## **Theme 2: Caring for land and community**

The second challenge that Cultivate staff negotiate relates to caring for the land that the farm resides on. Staff described how having a very visible urban farm in Peterborough Street meant that energy and time was sometimes directed towards making the farm 'look good', rather than

being healthy and productive. There was a sense that urban communities can have certain expectations of what farms should look like that are unrealistic and at odds with more organic farm practices (particularly in relation to ‘weed’ management and other visual aspects of farming). Staff also described how the inherent insecurity of their tenure arrangement (a 30-day rolling lease) meant that farm investment decisions were often difficult. For example, planting trees and windbreaks and investing in infrastructure like glass houses would benefit the farm, but there also represented a significant and potentially risky investment when there was no security of tenure. While some farm staff saw the lack of security of tenure as a key limitation for farm production, others saw the insecure tenure as one way to foster experimentation, creating the potential to do things differently.

To manage these challenges, Cultivate decided to handle production differently between their two sites, leading to quite different care practices in each location. The central city Peterborough site is essentially their most ‘visible’ farm, and mainly



**Figure 2: The Kitchen Garden at Peterborough Street (visible to the street)**

grows micro-greens and other relatively quick growing produce. Here, more effort goes into maintaining the aesthetic of this site (including planting flowers and herbs) than the less visible suburban Halswell site. The Halswell site primarily produces root vegetables and there is less effort put into maintaining an aesthetically appealing ‘garden’ and more focus on caring for soil quality. At a strategic level, Cultivate are also looking to secure a longer term site and at the time of the research were involved in discussions with various partners to implement this. Finally, staff described their farming approach as ‘organic-ish’. So, rather than attempting to achieve organic accreditation and implement fully organic production systems (which would be challenging for a number of reasons, but particularly because of the insecure land tenure and previous non-organic land uses), farm staff used organic principles and practices where possible. These ‘organic-ish’ practices still care for land and community by reducing chemical use and caring for soil, although they did not enable Cultivate to command as high a premium for their vegetables as would be possible for organic certified produce.

## CEROI: Including others in determining what success looks like

The second step involved working with Cultivate to determine what success might look like: specifically, how to measure and demonstrate a holistic ‘return on investment’ which includes a non-numerical way of assessing and representing each of the identified values. To do this we drew on our familiarity with a profound shift in assessment that has taken place in education. In recent years, education has moved away from *test scores* based on collating numerical information about performance in order to compare students. In many places, the shift has been towards *describing* standards and assessing to what extent people meet those standards (see (Rust, Price, and O'DONOVAN 2003). This involves educators being clear about the ‘learning outcomes’, and being clear what it looks like when these outcomes have been achieved. In order to make these outcomes meaningful, some educators include students in determining what success looks like, by co-constructing the assessment criteria with their students.

We conducted a similar exercise with Cultivate Staff, youth participants and members of the broader community (see Figure 3). We focused on three questions that we adapted from shared concerns that community organisations all over the world have articulated in various ways (see Gibson-Graham, Cameron and Healy, 2013 for further discussion of these shared concerns):

- What attributes does a good worker from Cultivate have? What would be the behaviours of a care-full Cultivator (both staff and youth interns)?
- What would a thriving Cultivate look like organisationally, relationally, financially, environmentally?
- What would the broader Christchurch community look like if Cultivate and all the Cultivators were at their best?



Figure 3: Value-practice exercise in progress

While these questions do not match exactly to the key concerns identified in Gibson-Graham et al.'s (2013) CEROI diagram, we decided to edit these to be more specific to the particularities of Cultivate, and to enable greater immediate participation without long explanation as to what these concerns might mean. Although these questions do not mention the key concerns Gibson-Graham et al. identified, we can see that these map on in some ways as shown in Table 2.

**Table 2: Using CEROI shared concerns for Cultivate<sup>2</sup>**

Summary of shared concern	Application to Cultivate
<p>1. <i>Surviving together well and equitably</i></p> <p>What do we really need to live healthy lives both material and psychically? How do we take other people and the planet into account when determining what is necessary for a healthy life? How do we survive well?</p>	<p>Individual scale:</p> <p>What attributes does a successful graduate from the Cultivate ‘program’ have?</p> <p>What would be the attributes of a care-full Cultivator (both staff and interns)?</p>
<p>2. <i>Consuming sustainably</i></p> <p>What materials and energy do we use in the process of surviving well? What do we consume?</p>	
<p>3. <i>Encountering others in ways that support their well-being as well as ours</i></p> <p>What types of relationship do we have with the people and environments that enable us to survive well? How do we encounter others as we seek to survive well?</p>	<p>Organisational scale:</p> <p>What would a thriving Cultivate look like organisationally, relationally, financially, environmentally?</p>
<p>4. <i>Distributing surplus to enrich social and environmental health</i></p> <p>What do we do with what is left over after we’ve met our survival needs? How do we make decisions about this excess? How do we distribute surplus?</p>	
<p>5. <i>Caring for commons</i></p> <p>How do we maintain, restore and replenish the gifts of nature and intellect that all humans rely on? How do we care (maintain, replenish, grow) for our (natural and cultural) commons?</p>	<p>Wider community scale:</p> <p>What would the broader Christchurch community look like if Cultivate and all the Cultivators were at their best?</p>
<p>6. <i>Investing our wealth in future generations</i></p> <p>How do we store and use our surplus and savings so that people and planet are supported and sustained? How do we invest in the future?</p>	<p>How do Cultivators and supporters measure and evaluate what is working well and what to invest in to secure a different more equitable, sustainable future?</p>

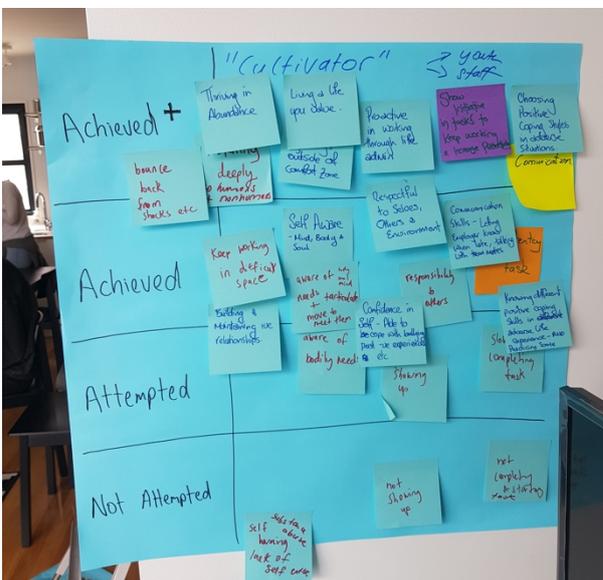
We asked participants to elaborate their criteria for success, failure, and gradations between (see Figure 4) with reference to individual cultivators, Cultivate as an organisation, and Cultivate’s relationship with the wider community. We used the concepts common to education of ‘not attempted, attempted, achieved and ‘achieved plus’, focusing on describing what ‘achieved’ would look like.

We took away this draft assessment criteria, then analysed it to create a shared set of criteria for assessing whether or not Cultivate was putting into practice what it valued, as well as

<sup>2</sup> Source: Dombroski, K.; G. Diprose; D. Conradson; S. Healy; and A. Watkins. (2018), *When Cultivate Thrives: Developing Criteria for Community Economy Return on Investment*. Christchurch, NZ: National Science Challenge 11 Building Better Homes, Towns and Cities.

whether or not these values produced results worthy of these investments. During this phase we shifted from the educational language of ‘achieved’, ‘attempted’ and so on into names inspired by the plants themselves, creating a different set of criteria that could help identify processes that worked: Mature, Thriving, Growing, and Wilting.<sup>3</sup> In the course of a workshop with staff, youth interns and others, we explored what it looks like when a value is actualized (mature), what it looks like when things are nearing fruition (thriving), areas where progress is made but where there is a need for further nourishing (growing), and finally what it looks like when a value is failing to be actualized altogether (wilting). Table 3 provides a description of some of the criteria.

The development of the criteria (or indicators) allowed us to articulate what a mature (or thriving, growing or wilting) Cultivator, Cultivate, and Cultivate land and community might look like. The development of the matrix allows us (and others involved with Cultivate) to assess what ‘returns’ have accrued to Cultivators, Cultivate and the wider community in a more holistic way that connects to the values and goals of the organisation (see Dombroski et al. 2018 for more detail).



Our goal in co-generating assessment criteria is that they could be applied to other organisations, though the criteria we have co-developed in this instance are uniquely suited to Cultivate. While the matrix provides a way of actually assessing the returns, it does not communicate quickly and clearly to potential or current stakeholders what benefits may be realised as a result of their investment.

**Figure 4: Co-creating descriptive criteria for a successful Cultivator**

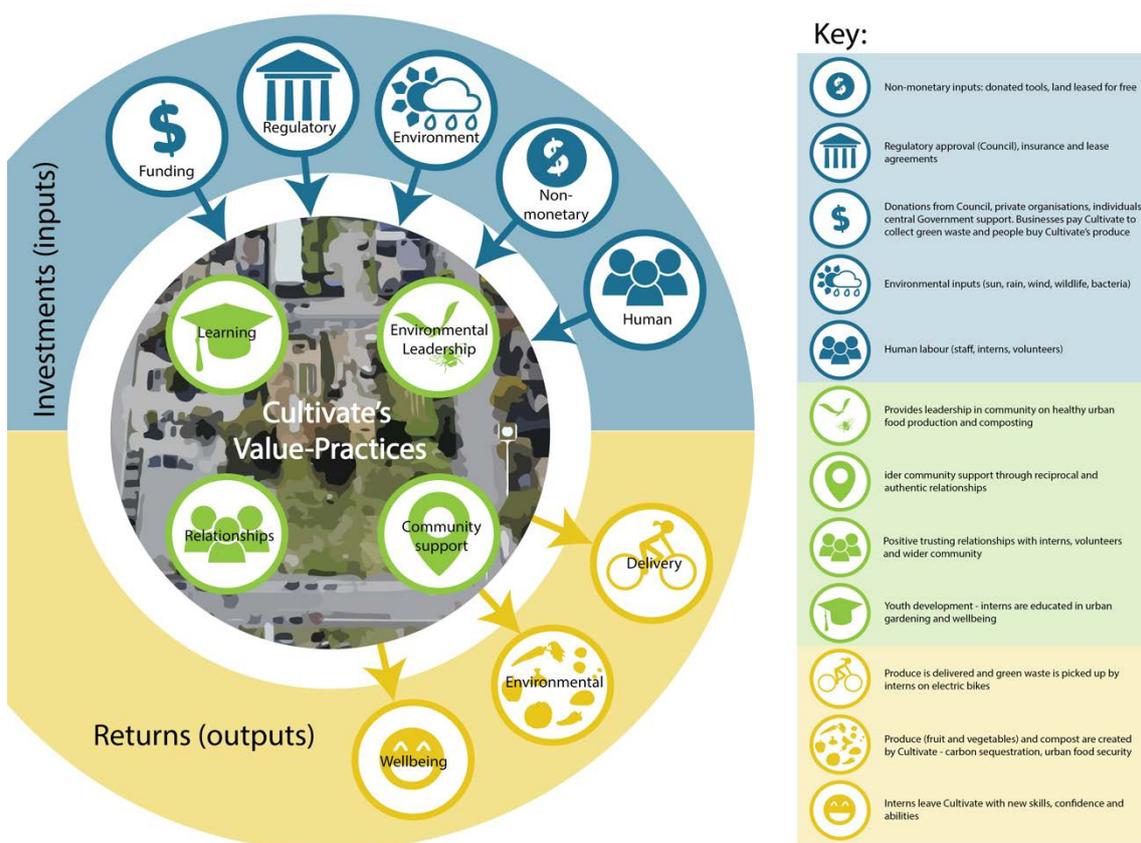
<sup>3</sup> In our Community Resource Kit drafted to share this methodology (forthcoming), we returned to the language of ‘attempted’ and ‘achieved’ since many organisations may not connect with the plant language.

**Table 3: Co-produced assessment criteria**

<b>Criteria</b>	<b>Cultivators (individuals)</b>	<b>Cultivate (organisation)</b>	<b>Christchurch (community)</b>
<b>Mature</b>	Self-aware; able to effectively care for and manage self and others; able to articulate emotional and physical needs and move to have them met in a healthy way; can focus on and complete tasks unsupervised to a high level of quality	Able to listen deeply; effectively models what it means to be in a healthy community through attunement to the needs of youth workers, volunteers, cultivators, customers, investors and other stakeholders	Has the resources and community endorsement to lead the way environmentally; is an integral part of the connected local and organic food community puzzle; increasing carbon sequestration
<b>Thriving</b>	Self-aware; able to care for and manage self and relationships with others; able to articulate emotional and physical needs; can focus on and complete tasks; empowered to act in the world	Able to listen; often models what it means to be in a healthy community through attunement to the needs of youth workers, volunteers, cultivators, customers, investors and other stakeholders; maintains clear behavioural expectations and processes	Developing the resources and community endorsement to lead the way environmentally; building capacity to be part of the connected local and organic food community puzzle
<b>Growing</b>	Developing self-awareness and can sometimes articulate emotional and physical needs; completes some tasks; has a developing sense of personal agency; developing appreciation for environmental and food issues	Some capacity to listen and model what it means to be in a healthy community; developing clear behavioural expectations and processes; developing the capacity to care for and respond to some concerns	Identifying some resources and building community endorsement; developing connections with local and organic food community; developing carbon sequestration practices
<b>Wilting</b>	Not yet listening or reflecting on behaviour; not yet articulating emotional and physical needs; not yet able to care for or respond to others; not yet completing tasks	Limited or no capacity to listen; not yet able to model what it means to be in a healthy community; no clear behavioural expectations and processes; not yet able to care for and balance multiple concerns	Limited resourcing and little community support; undeveloped connections with local and organic food community; reducing carbon sequestration; tick-box/bureaucratic relationship with funders/supporters

## CEROI: Communicating the impact of investment

In our ongoing work with Cultivate and designers we have been experimenting with ways of visually communicating the CEROI evaluation tool. Figure 5 is one attempt to represent the various investments (inputs), returns (outputs) and value-practices of Cultivate. While we have created separate categories, this is just to help separate specific processes into more discrete categories. We acknowledge that many of the categories shown in Figure 5 are interdependent. For instance, 'relationships' are an important part of 'learning' and 'environmental leadership' is connected to 'community support'.



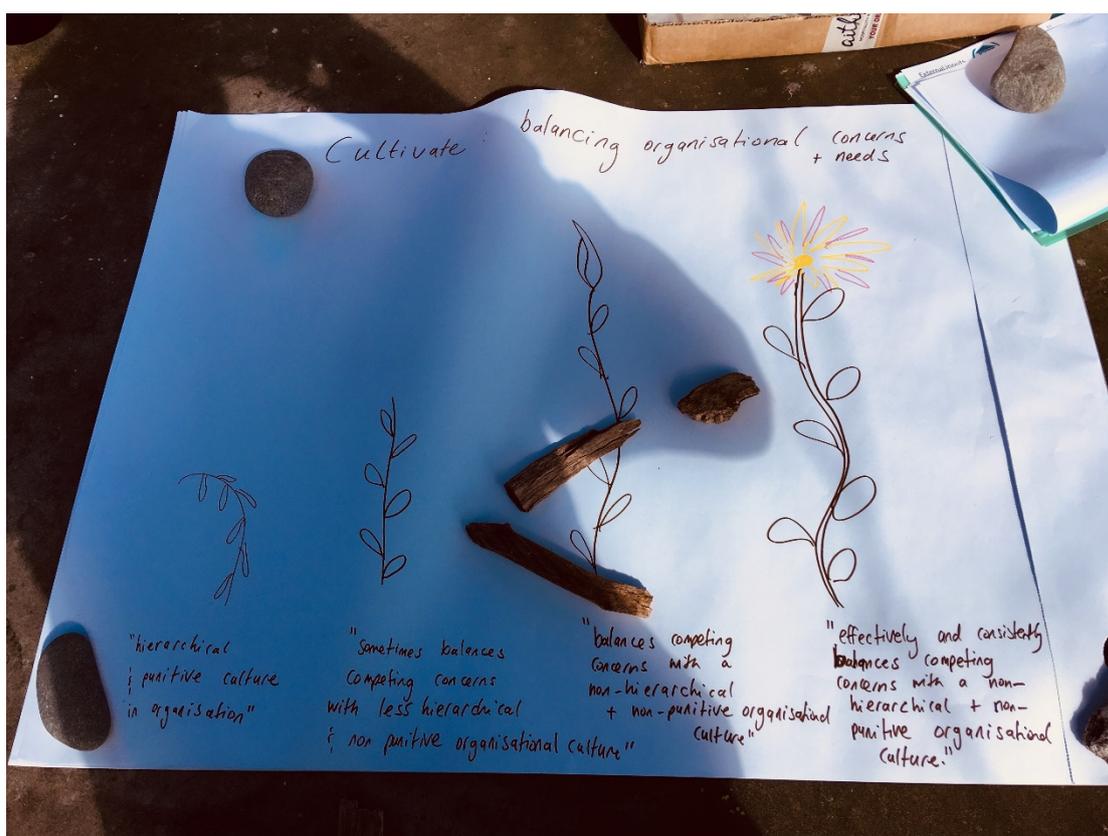
**Figure 5: Representing investments and returns for Cultivate**

In areas like health and wellbeing, practitioners and designers have been experimenting with simple ways people can evaluate what are often subjective experiences using diagrams. Our final step involved various focus groups where we asked Cultivate staff, youth and volunteers to use a diagram to rate how they thought Cultivate was performing against the different criteria of the matrix (see Figure 6). We asked participants to place garden objects on the image they through best represented their evaluation of Cultivate. Participants moved around different criteria, indicated how they thought Cultivate was performing, and then discussed their responses with others. While the exercise prompted much discussion, feedback from participants noted the following:

- There were too many co-developed criteria

- It was sometimes hard to know how to evaluate something as this depended on one's role/position in the organisation (ie. youth interns didn't necessarily know much about the financial sustainability of the organisation)
- The metaphor for the criteria (wilting, growing, thriving, mature) indicated linear development, when their experience of life (including at Cultivate) was more cyclical.

This feedback is useful in terms of further refining the assessment criteria, the metaphors involved, and the visual tools used in relation to evaluating Cultivate. Our plan is to use this feedback as we develop the tool further with other organisations.

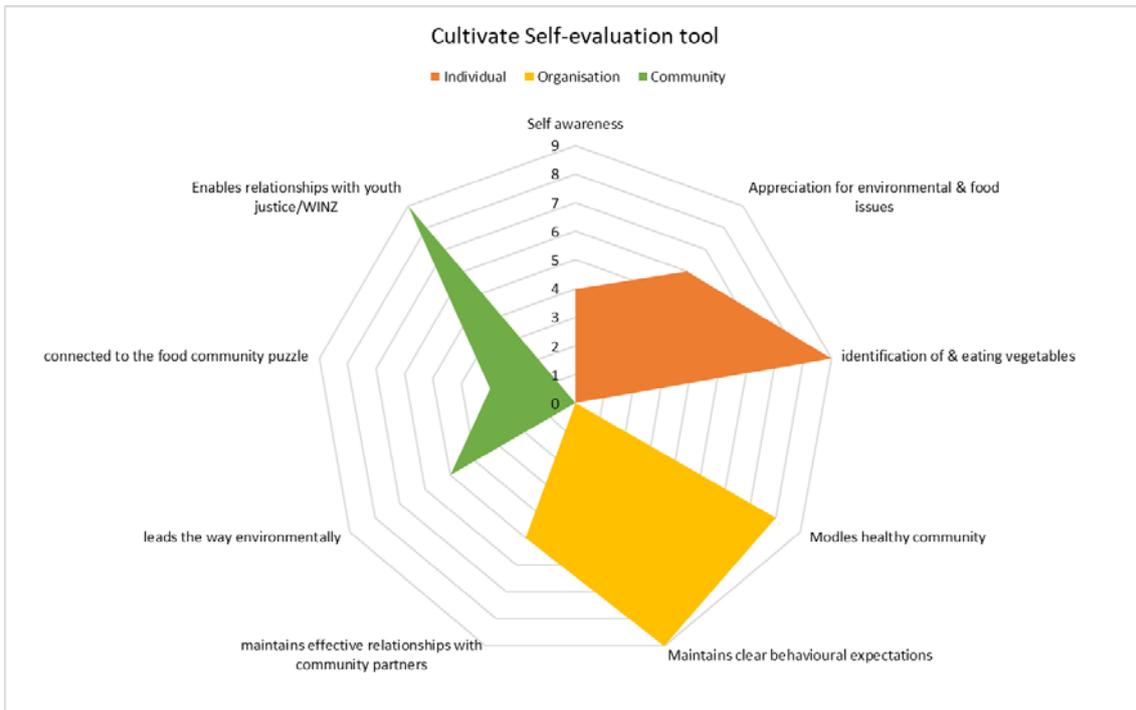


**Figure 6: Evaluating returns against co-constructed criteria**

While we have not taken the development of the tool any further, there are a variety of ways participants' feedback could be collated to create simple snapshots of ROI for different criteria. We have experimented with different visualisations for communicating an ROI in brief. Figure 7 is one example, which is not using a calculation here but is associating 0-9 with different aspects of the wilting to mature scale. When a certain aspect is 'mature' the colour block will touch the edge of the spider graph (here this is displayed as '9'). The idea is that over time, different visual images can be collated allowing organisations to quickly compare the pattern that emerges.

Please note we do not use actual assessments of Cultivate in this report, as that is most appropriate for our conversations and reporting to the organisation itself. Our goal is to use our experience with Cultivate to develop a step by step methodology for other organisations to assess their CEROI and communicate it, and a methodology that is more general and goes

beyond the criteria relevant only to an urban farm. We plan to continue to test these communication tools with other organisations and stakeholders, including Cultivate, in a further project.



**Figure 7: Communicating ROI Spider Graph example**

As part of this commitment to continue testing the process and communication tools, we have drafted a community resource kit *Measuring what matters: A community resource kit for developing and using a 'Community Economy Return on Investment' tool*. While this tool still requires some testing and design work, it is our intention for this to be used by communities to follow a similar assessment process to what we have done with Cultivate, and to assess against their own goals. In September 2019, we have booked a team to film a short film introducing the process, which will direct communities to the resource kit available online. This will be distributed through hubs such as [www.communityresearch.org.nz](http://www.communityresearch.org.nz), [www.communityeconomies.org](http://www.communityeconomies.org) and the NSC11 website among others. The community resource kit will provide clear instructions for communities is currently in draft form, with plans for further refining in order to release in conjunction with the film in December 2019.

## Section 3: Implications

Through developing evaluation criteria for the CEROI tool outlined in Section 2 we observed how Cultivate staff, youth interns and others essentially went through a social-learning process that involved exploring the stocks and flows of investment, checking in on results, discussing, and at times reforming organisational processes, resolving difficulties, and exploring new opportunities. In what follows we outline implications from this research for three broad areas. These roughly correspond to our three impact areas as stated in our project proposal: collective care for youth mental health; CEROI tool development; and urban planning impacts.

### **Investing in collective care and therapeutic environments for youth mental health**

Our in-depth ethnography, interviews and workshops revealed a community enterprise with care at its heart. Not only did Cultivate as an organisation deliberately set out to combine ecological restoration and care *of* the land with care *for* youth, but it works across different temporal and geographical scales to care *with* a variety of others. As Joan Tronto has argued, care is:

*a species activity that includes everything that we do to maintain, continue, and repair our 'world' so that we can live in it as well as possible. That world includes our bodies, ourselves, and our environment, all of which we seek to interweave in a complex, life-sustaining web (1993, 19,20:19, 20, italics in original. ).*

Cultivate's transformative care work is not only caring for the land, or a particular group of youth, but to educate and transform young people, volunteers, and the wider community in caring together for socially and environmentally sustainable futures. And Cultivate is not the only organisation caring in this instance: the care work that Cultivate undertakes is enabled by a other care-full investments in infrastructure, in community work, and in our urban and peri-urban environments. For example, some Cultivate interns were paid by the Ministry for Social Development, while the social enterprise Life in Vacant Spaces coordinated the use of land that the farms rely on (Dombroski, Diprose, and Boles 2019). Finally, humans are not the only beings caring in this instance: it was clear that the multispecies space of Cultivate's farms were providing intangible care for the mental and physical health of interns and staff – from worms, bees, birds, microbes, plants and trees and more. In other work, we have described what is made here as a 'commons', a space, knowledge or resource that is shared with others, cared for collectively, and benefits a wider community (Dombroski, Diprose, and Boles 2019; Dombroski, Healy, and McKinnon 2019; Gibson-Graham et al. 2017; Gibson-Graham, Cameron, and Healy 2016; Healy 2014). What strikes us here is that this commons is not only cared for and made by humans, but includes the important care work that other species perform in human lives, often unacknowledged. We hope also to examine this further in our refinement of the CEROI.

### **Approaches to evaluation and the CEROI tool**

All over the world, social enterprises are experimenting with different types of transformational organisational approaches that attempt to bring us closer to a more sustainable and just world. This transformational agenda extends to how we track progress and measure impact in ways that are holistic and meaningful, yet easily communicated. Social enterprises like Cultivate may model a way forward for holistic wellbeing and hauora, yet this may not be evident to others

unless such enterprises are able to easily identify, measure and communicate their impact and return to their wider community – and beyond.

We see in Cultivate an exemplar social enterprise pursuing what Gibson-Graham (2006) refer to as an ethic of community economy - an economy which affirmatively acknowledges humans shared inter-dependence with each other and the non-human world. In our view, this inter-dependence implies an integral relationship between distinct investments and 'returns' for Cultivate staff, youth interns, and the wider community. In this sense Cultivate (and many social enterprises) are a kind of continuous relational care experiment. For youth interns, Cultivate provides a space where they can feel supported to develop important self-care and other practical skills. For Cultivate the organisation, success means continuity through time, maintaining urban farms as a space for fulfilling its vision —directed at both young people and the broader community. In turn, the key to this stability through time is the development and maintenance of supportive relations with the broader community.

Developing a CEROI methodology and tool helps to clarify how social enterprises like Cultivate can play a key role in sustainable and just societies and economies, both through their efforts, and by also providing a template for how we might reimagine the values, practices, and measure-of-success for enterprises of all types. While measures like 'how many breakfasts have been eaten by youth interns', 'how much compost is produced', and how many food miles are avoided through local urban farming' are important measures of tangible 'outputs' for an organisation like Cultivate, the CEROI process we have used went further, or perhaps, deeper. The process enabled Cultivate to clarify the key value-practices that actually sustain it. Indeed, the exercise itself prompts organisations to think more about their interactions with certain values and with other organisations and environments, thus the co-production path is a useful exercise that is not only for information gathering but for shaping organisations and communities in intentional engagements internally and externally.

For the research team, next steps are to develop a follow-up project using the community resource kit and the CEROI process outlined here with other organisations focused on urban wellbeing, to explore how transferable and useful the approach is, and whether organisations can use the resource kit themselves or require support from a community economies facilitator. We are communicating with other community economies researchers working on urban food, transformative social and solidarity economy enterprises, and environmental care organisations. Beyond urban wellbeing, Drs Dombroski and Healy are contributing to a project proposal using a similar methodology with maternity care providers in the Australian health system, while Drs Dombroski and Diprose are in discussion with members of the New Zealand Winegrowers about using this to explore the social and environmental goals and impacts of organic vineyards. The newly incorporated Community Economies Institute has shown interest in developing CEROI further with additional projects in the Pacific, Asia and Australia. We are actively looking for opportunities to test our methodology with other community enterprises in Aotearoa New Zealand.

### **Constructing urban environments for food security and holistic hauora and wellbeing**

The research findings and CEROI process have implications for urban planning and design, which could better foster food security and hauora/wellbeing for people. The research findings support work that points to the importance of non-human life (including water, soils, plants and

insects), therapeutic landscapes, and indigenous understandings for promoting human and non-human wellbeing in urban spaces (see for instance; Barton and Pretty, 2010; Dyer, Hinze and Dyer, 2018; Moores et al, 2018; Kiddle, Gjerde and Thomas, 2017; Souter-Brown, 2014). The research also connects to work around nature/wilderness/green therapies, and other holistic therapeutic practices that shift the focus from an individual and therapist, to an encounter between people and the non-human world (see for instance; Maller et al, 2006; Parr, 2007). The findings from Cultivate demonstrate that these encounters with the non-human can be effectively fostered within urban contexts in ways that build community connections through negotiating the access, use, care and responsibility for an urban farm.

The research team presented the findings to a group of urban designers and planners<sup>4</sup>. Participants suggested that for social enterprises like Cultivate, the design choices that foster social interactions are vital. For example, in a walking tour to a Cultivate site, participants described how some of the design choices at the Peterborough Street site were crucial in fostering a sense of openness and play with the surrounding streets. These design choices included the visually transparent fences around the boundary and the bright yellow-orange shed on the site. It was suggested that these kinds of design choices shaped the benefit and care of the site by inviting the wider community to observe and at times, participate in the urban farming process. This connects back to the staff comments on the extra work it took to maintain the Peterborough site as a contact point with the community, indicating that this 'design' choice is intentional. Workshop participants suggested that one applied and useful outcome of the research would be to encourage planners, designers and developers to think beyond the 'boundary' of a community 'commons' in terms of access, use, benefit, care, responsibility and ownership. It was noted at the workshop that while the design of some urban projects considers how built forms connect to the surrounding urban environment, there is less consideration of how design choices can promote social practices that connect across different urban sites.

One practical outcome from this research could be to consider how Council design guides (while imperfect) can be more open ended to foster better urban environments and urban food security. While it was noted that design guides tend to focus on the minimum acceptable standard and can constrain innovative designs because the diagrams and language used can shut down possibility, design guides can also encourage people to start a conversation and slow down the planning process to consider social and cultural values. The Te Aranga Principles in the Auckland City Council Design Manual (see Auckland Council, 2019) were noted as an interesting example that has tried to move away from prescriptive design guides. Other participants suggested that the best kinds of urban environments are often characterised by simple planning rules that foster 'flexible spaces' (see for instance; Carr and Dionisio, 2017; Wesener, 2015). Simple principle based planning regimes can enable transformative projects like Cultivate to flourish because they tend to be 'loose enough' to allow for creative experimentation allowing people and communities to personalise projects that create a sense of meaningful place development and attachment. For the research team, next steps include exploring how planning rules, urban design guides, and council bylaws could work to enable more urban food projects in Aotearoa New Zealand to promote wellbeing and hauora.

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<sup>4</sup> We would like to thank the following participants for their helpful feedback Dr Rebecca Kiddle (Victoria University), Dr Morten Gjerde (Victoria University), Dr Rita Dionisio (University of Canterbury), Michael Fisher (Christchurch City Council) and Rachael Welfare (Life in Vacant Spaces).

## Conclusion

Our short project has come a long way in thinking about how commons might support care for youth and environment in an urban area. We expect to further analyse the interviews and ethnographic data for future publications, and to use what we have learned here to apply for further funding. As we conclude our project, we take note of some of the peer reviewers' and workshop participants; suggestions to help us prepare for future work in this area.

While Cultivate is an organisation with staff and interns of mostly Pākehā/New Zealand European backgrounds, many of the ideas around caring and commons are present in Māori tikanga. In future work, we could explore the connections with mātauranga Māori in order to learn from well-established Indigenous modes of connecting with land and place.

We also plan to return to Cultivate to work on a useful output from this project in terms of assessing and communicating the assessment in a way that the organisation might use. However, we have not included this in the report, which is more about the process of developing the CEROI assessment in order to test it with a range of enterprises.

A further step is to work with other organisations and projects to further develop and test our Community Resource Kit, which helps organisations to develop their own assessment criteria. As discussed in previous sections, various members of the team are working in the fields of community organisations and healthcare to implement and further test our CEROI tool.



**Figure 8: Images from Cultivate**

Clockwise from top left: Staff and interns planting out seedlings; interns and staff working the soil at the Halswell site; the diagram from the Cultivate website explaining their service to customers; volunteers from a local business shifting bark mulch.

# Appendix One: Project outputs as at June 2019

## Quality Assured Papers<sup>5</sup>

Healy, S., Dombroski K., Diprose G., Conradson D., McNeill, J. and Watkins A. (2019) More than monitoring: developing impact measures for transformative social enterprise. Paper prepared and accepted for the United Nations Inter-Agency Task Force on Social and Solidarity Economy (UNTSSE) 2019 forum: *Implementing the Sustainable Development Goals: What Role for Social and Solidarity Economy?* Geneva: UNTSSE. <http://unsse.org/knowledge-hub/more-than-monitoring-developing-impact-measures-for-transformative-social-enterprise/>

Dombroski, K. (forthcoming). 'Caring labour: redistributing care work' in JK Gibson-Graham and K Dombroski (eds) *The Handbook of Diverse Economies*. Cheltenham: Edward Elgar.

## Stakeholder Workshops

"Delivering urban wellbeing through transformative social enterprise": Urban Design Workshop. Held at Core Education Ltd Buildings, Kilmore Street Christchurch. November 2nd 2019. (Included stakeholders from Life in Vacant Spaces and the City Council, as well as Māori and Pākehā urban designers from the University of Canterbury and Victoria University of Wellington).

## Peer Reviewed Reports

Dombroski, K., Diprose, G., Conradson, D., Healy, S., and Watkins, A. (2018). *When Cultivate Thrives: Developing Criteria for Community Economy Return on Investment*. Christchurch, NZ: National Science Challenge 11 Building Better Homes, Towns and Cities.

Dombroski, K., Diprose, G., Conradson, D., Healy, S., and Watkins, A. (2019). *Delivering Urban Wellbeing through Transformative Community Enterprise*. Christchurch, NZ: National Science Challenge 11 Building Better Homes, Towns and Cities.

## Resource kits

Dombroski, K., Watkins, A., Healy, S., Diprose, G., and Conradson, D. (Forthcoming). *Measuring what matters: A community resource kit for developing and using a 'Community Economy Return on Investment' tool*. Christchurch, NZ: National Science Challenge 11 Building Better Homes, Towns and Cities.

## Films and media

Savill, M., Dombroski, K. and Diprose, G. (In progress) *Measuring what matters*. (Film in progress that will briefly introduce our community resource kit).

Project blog: [www.urbanwellbeing.wordpress.com](http://www.urbanwellbeing.wordpress.com)

Newth, K. (forthcoming) 'Exploring the holistic benefits of urban farming' in the UC Research Report 2019. (A summary of our work and an interview with Kelly Dombroski).

## Presentations

Diprose, G. 2019. 'Broccoli Bonds', Composting and Urban Food'. Presentation at the Institute of Australian Geographers Conference. University of Tasmania, Hobart. July 9-13.

Healy, S. (2019) More than monitoring: developing impact measures for transformative social enterprise. United Nations Inter-Agency Task Force on Social and Solidarity Economy

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<sup>5</sup> Further academic papers are in planning stages but we have prioritised outputs for practitioner audiences first.

(UNTFSSSE) 2019 forum: *Implementing the Sustainable Development Goals: What Role for Social and Solidarity Economy?* Geneva: UNTFSSSE. June 25.

Dombroski, K. (2019) *Caring commons, cultivating commoners*. People, Cities, Nature Christchurch Workshop on Indigenous Restoration.  
<https://www.peoplecitiesnature.co.nz/resources/christchurch-ecological-restoration-workshop> June 7.

Dombroski, K. (2018) 'From *Homo Economicus* to *Homines Curans*: Cultivating commoners in urban gardens' Building Research Association New Zealand Roundtable *Towards Sustainability Transitions in the Anthropocene: beyond behaviour change?*, Royal Society Te Apārangi Wellington, August 6.

Dombroski, K. (2018) 'Cultivating Commoners' with S. Healy and G. Diprose. Presented at the New Zealand Geographical Society and Institution of Australian Geographers joint meeting, Auckland University, in a session organised by S. Healy and K. Dombroski *Care, Affect and Everyday Politics*, July 11-14.

Dombroski K.(2018) *Cultivating Urban Commons for Youth Wellbeing*. Jahangirnagar University, Bangladesh: Jahangirnagar University Department of Planning Seminar Series, April 18.

## References

- Anderson, B.B., and Gregory Dees, K. (2006). 'Rhetoric, reality, and research: Building a solid foundation for the practice of social entrepreneurship', in *Social entrepreneurship: New models of sustainable social change*: 144-68. Oxford University Press: Oxford, Melbourne.
- Arvidson, M., Lyon, F., McKay, S., and Moro, D. (2013). 'Valuing the social? The nature and controversies of measuring social return on investment (SROI)'. *Voluntary Sector Review* 4 (1): 3-18.
- Auckland Council. (2019). *Auckland Design Manual: Te Arananga Principles*. Retrieved from [http://www.aucklanddesignmanual.co.nz/design-subjects/maori-design/te\\_aranga\\_principles](http://www.aucklanddesignmanual.co.nz/design-subjects/maori-design/te_aranga_principles)
- Barton, J. and Pretty, J. (2010). 'What is the Best Dose of Nature and Green Exercise for Improving Mental Health? A Multi-Study Analysis'. *Environmental Science and Technology*, 44(10): 3947-3955. DOI: 10.1021/es903183r
- Canterbury District Health Board. 2018. *Annual Report 2017-18*. Retrieved from <https://www.cdhb.health.nz/wp-content/uploads/8657dcc7-canterbury-dhb-annual-report-2017-18.pdf>
- Carr, J., and Dionisio, M.R. (2017). Flexible spaces as a 'third way' forward for planning urban shared spaces'. *Cities*, 70: 73-82. <https://doi.org/10.1016/j.cities.2017.06.009>
- Daskalaki, M., Fotaki, M., and Sotiropoulou, I. (2018). 'Performing Values Practices and Grassroots Organizing: The Case of Solidarity Economy Initiatives in Greece'. *Organization Studies*: <https://doi.org/10.1177/0170840618800102>
- Dombroski, K., Diprose, G., and Boles, I. (2019). 'Can the commons be temporary? The role of transitional commoning in post-quake Christchurch'. *Local Environment*, 24(4): 313-328. <https://doi.org/10.1080/13549839.2019.1567480>
- Dombroski, K., Diprose, G., Conradson, D., Healy, S., and Watkins, A. (2018). *When Cultivate Thrives: Developing Criteria for Community Economy Return on Investment*. Christchurch, NZ: National Science Challenge 11 Building Better Homes, Towns and Cities.
- Dombroski, K., Healy, S., and McKinnon, K. (2019). 'Care-full Community Economies', In *Feminist Political Ecology and Economies of Care*, ed. W. Harcourt and C. Bauhardt, 99-115. London: Routledge.
- Durie, M. H. (1985). 'A Maori perspective of health'. *Social Science & Medicine*, 20(5), 483-486.
- Dyer, M., Hinze, A. and Dyer, R. (2018). *Building Research Capacity in Communities: Community Workshop Feedback Report #1*. Waikato, NZ: National Science Challenge 11: Building Better Homes, Towns and Cities.
- Fergusson, D. M., Horwood, L. J., Boden, J. M., and Mulder, R. T. (2014). 'Impact of a major disaster on the mental health of a well-studied cohort'. *JAMA Psychiatry*, 71(9): 1025-1031.
- Gibson-Graham, J.-K.; J. Cameron; and S. Healy. (2013), *Take back the economy: An ethical guide for transforming our communities*. University of Minnesota Press.
- Gibson-Graham, J.K. (2006), *A Postcapitalist Politics*. Minneapolis and London: University of Minnesota Press.
- Gibson-Graham, J.K., Cameron, J., Dombroski, K., Healy, S., Miller, E. and Community Economies. (2017). 'Cultivating Community Economies: Tools for building a liveable world'. In

- Next Systems Project*. Retrieved from <https://thenextsystem.org/cultivating-community-economies>
- Gibson-Graham, J.K., Cameron, J., and Healy, S. (2016). 'Commoning as a postcapitalist politics', In *Releasing the Commons: Rethinking the Futures of the Common*, ed. A. Amin and P. Howell, 378-390. London: Routledge.
- Healy, S. (2014). 'The biopolitics of community economies in the era of the Anthropocene', *Journal of Political Ecology* 21:127-221.
- Johnson, A. (2016). *Addressing New Zealand's Youth Unemployment*. Auckland, New Zealand: Salvation Army Social Policy & Parliamentary Unit. Retrieved from <http://www.salvationarmy.org.nz/sites/default/files/uploads/20161019TSA-Youth-Report-FINAL.pdf>
- Kiddle, R., Gjerde, M. and Thomas, A. (2017). 'Imagining Decolonised Cities'. Presentation retrieved from <http://sustainablecities.org.nz/wp-content/uploads/Imagining-decolonised-cities.pdf>
- Loh, P., and Shear, B. (2015). 'Solidarity economy and community development: emerging cases in three Massachusetts cities'. *Community Development*, 46(3): 244-260. DOI: 10.1080/15575330.2015.1021362
- McNeill, J. (2011). 'In the pursuit of social impact—towards a 'joint stewardship' approach to financier relationships in social entrepreneurship and social enterprise'. Paper presented at the 3rd International Social Innovation Research Conference (ISIRC), London.
- Maller, C., Townsend, M., Pryor, A, Brown, P., and St Leger, Lawrence. (2006). 'Healthy nature healthy people: 'contact with nature' as an upstream health promotion intervention for populations'. *Health Promotion International*, 21(1): 45–54, <https://doi.org/10.1093/heapro/dai032>
- Ministry of Business, Innovation & Employment. (2017). *Quarterly Canterbury Job-matching Report – September 2016*. Wellington, New Zealand: Ministry of Business, Innovation & Employment. Retrieved from <http://www.mbie.govt.nz/info-services/employment-skills/labour-market-reports/canterbury-labour-market>
- Ministry of Business, Innovation & Employment. (2016). *Quarterly Canterbury Job-matching Report – March 2016*. Wellington, New Zealand: Ministry of Business, Innovation & Employment. Retrieved from <https://www.mbie.govt.nz/assets/d5b24f1e2a/canterbury-job-matching-report-march-2016.pdf>
- Moores, J., Batstone, C., Simcock, R. and Ira, S. (2018). 'Activating WSUD for Healthy Resilient Communities – Discovery Phase: Results and Recommendations'. Building better Homes, Towns and Cities. Retrieved from [http://www.buildingbetter.nz/publications/contestable\\_research\\_projects/Activating\\_WSUD\\_Phase1\\_report\\_2018.pdf](http://www.buildingbetter.nz/publications/contestable_research_projects/Activating_WSUD_Phase1_report_2018.pdf)
- Nielsen. (2018). The Canterbury Wellbeing Survey May 2018. <https://www.cph.co.nz/wp-content/uploads/CantyWellbeingSurveyMay2018.pdf>
- Parr, H. (2007). 'Mental Health, Nature Work, and Social Inclusion'. *Environment and Planning D: Society and Space*, 25(3): 537-561.
- Rust, C., Price, M., & O'Donovan, B. (2003). 'Improving Students' Learning by Developing their Understanding of Assessment Criteria Processes'. *Assessment & Evaluation in Higher Education*, 28(2), 147-164.

Souter-Brown, G. (2014). *Landscape and Urban Design for Health and Well-Being: Using Healing, Sensory and Therapeutic Gardens*. Taylor and Frances Ltd, London, United Kingdom.

Spittlehouse, J. K., Joyce, P. R., Vierck, E., Schluter, P. J., and Pearson, J. F. (2014). 'Ongoing adverse mental health impact of the earthquake sequence in Christchurch, New Zealand'. *Australian & New Zealand Journal of Psychiatry*, 48(8): 756-763.

Tronto, J. (1993). *Moral boundaries: A political argument for an ethic of care*. Psychology Press, New York.

Turner, B., Henryks, J., & Pearson, D. (2011). 'Community gardens: sustainability, health and inclusion in the city'. *Local Environment*, 16(6), 489-492.

Van Ongevalle, J., Huyse, H., & Van Petegem, P. (2014). 'Dealing with complexity through actor-focused planning, monitoring and evaluation (PME)'. *Evaluation*, 20(4), 447-466.

Wesener, A. (2015). 'Temporary urbanism and urban sustainability after a natural disaster: Transitional community-initiated open spaces in Christchurch, New Zealand'. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, 8(4), 406-422.