

Stresses / Shocks



Rapid urbanisation



Food insecurity



Unemployment

Qualities of a resilient city



Robust city



Flexible city



Resourceful city

RESILIENT CAPE TOWN PILLARS

PILLAR 1:
People
Compassionate,
 holistically healthy city

PILLAR 2:
Place & Space
 Connected, climate
 adaptive city

PILLAR 3:
Economy
 Capable, job
 creating city

PILLAR 4:
Disaster readiness
Collectively,
 shock-ready city

PILLAR 5:
Governance
Collaborative,
 forward-looking city

Oranjezicht City Farm and Market: Building resilient urban communities through circular food systems



Purpose

The Oranjezicht City Farm (OZCF) is a non-profit farming project under the SA Urban Food and Farming Trust. The OZCF champions the local production of food, whilst at the same time celebrating culture and building community through urban farming.

Its flagship community farm is located in the neighbourhood of Oranjezicht, Cape Town where it leans on the involvement of community volunteers and paid staff to manage the community treasure.

To strengthen community cohesion, OZCF coordinated the establishment of the Oranjezicht City Farmers Market and also operate its “Bokashi Brigade” initiative to provide a food waste sink to surrounding households and small businesses.

The case study discusses:

- a model for small scale urban farming in an urban residential context;
- a community led place-making initiative that fosters social cohesion;
- a small decentralised solution to household and office food waste.

It is written for:

- Cities focused on building resilience through small-scale household organic waste diversion;
- Cities exploring urban farming as a place-making approach to building social cohesion;
- Entities exploring the establishment of community volunteering mechanisms with formalise structures that could contribute to building resilience in their local communities and cities;
- Neighbourhoods seeking to nurture community cohesion.

This case study is part of a series highlighting how Cape Town is building resilience in order to: **SURVIVE | ADAPT | THRIVE**

Cape Town’s Resilience Strategy is a commitment to ensure that the City thrives in the future regardless of what shocks and stresses it faces. Resilient Cape Town offers a roadmap for a 21st Century metropolis to enable the city to become more resilient to growing physical, social and economic challenges. It envisions Cape Town as a **compassionate, connected, and capable** city where Capetonians **collaborate** across households, communities and institutions, to build **collective** responses to the current and future social, environmental and economic challenges.





Background

The recent drought revealed how severe the impacts of climate change can be, causing significant disruption across a wide variety of city systems. Similar extreme climatic events are expected to become more frequent and intense in the future. The impacts of climate change, which can manifest as a variety of shock events, have the ability to be amplified by existing societal stresses such as poverty, food insecurity and a lack of social cohesion.

The City of Cape Town's Resilience Strategy highlights that: "Well-designed places can bring people together from different communities to improve social cohesion, they can create economic opportunities, they can reduce crime, and they can ameliorate shock events."

Whether the spaces are parks, central business districts (CBDs), markets, streets, rivers, public buildings, campuses, or sports fields, there are multiple opportunities to improve resilient placemaking.

Exploring the development of spaces that bring people together, like the provision of land to develop urban farms, and supporting the related economic opportunities like organic markets, presents opportunities for partnerships between community organisations, businesses and the City government.

To this end, The OZCF was established in September 2012 as an educational non-profit project under the wing of the Oranjezicht-Higgovalle Neighbourhood Watch. The OZCF is an educational non-profit project in Cape Town, South

Africa, celebrating local food, culture and community through urban agriculture. It is part of the SA Urban Food & Farming Trust, which works through food and farming to strengthen South Africa's urban communities and the ecosystems that sustain them.

In 2013, the OZCF founded the Oranjezicht City Farmers Market. The community market was established as a farmer-style market place for specifically independent local farmers and artisanal food producers to sell produce to the community.

Whether the spaces are parks, central business districts, markets, streets, rivers, public buildings, campuses, or sports fields, there are multiple opportunities to improve resilient placemaking.

The WCG supported the market in its second year with funding for a tent and bakkie, which was crucial infrastructure for growth. In 2017, the market was sold and has been operating as an independent private company using the OZCF brand under license.

By 2019, the market supports 80 traders, 40 independent local farmers (including the OZCF), and welcomes between 6 000 -9 000 of visitors per week from all corners of the globe. It was rated one of the top 20 farmer's markets worldwide in 2019 by

the Independent (UK). The market plays a key role in consumer awareness about the local food system, and is a leader in innovative retailing practices to reduce food waste, packaging and plastic use. It also provides a range of business development support and mentoring for the artisanal food traders operating their small businesses and entrepreneurial ventures. The market and the OZCF continue to work together closely.

The OZCF established its Bokashi Brigade to receive food waste from households and small businesses. The ultimate purpose of the initiative is to provide a decentralised solution to community food waste whilst at the same time bringing community members together. The initiative leans on the Bokashi composting method that employs micro-organisms to anaerobically ferment food waste. These micro-organisms are applied to food waste (including problematic animal based products) via an inoculated wheat bran and/or sawdust. The two-week fermentation process breaks organic matter down in a process that reduces the generations of odours. The fermented/ partly-fermented organics are then dropped off by the generator at the OZCF for mixing into the onsite compost heap. The compost is mixed into the garden or sold to the community.

Since its establishment, the OZCF has expanded its urban farming support beyond just Oranjezicht, to over 20 other community gardens throughout Cape Town, including in Khayelitsha, Lavender Hill, Mitchell's Plain, Langa, Somerset West and others.



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KEY INSIGHTS

The OZCFs community-centric approach builds resilience by:

- ✓ Providing a space to educate residents on small scale organic food production.
- ✓ Increasing access to nutritious fresh vegetables for the community.
- ✓ Increasing the number of organic gardeners in the City bowl.
- ✓ Nurturing outdoor activities and healthier lifestyles.
- ✓ Building urban farming capacity for youth and adults.
- ✓ Connecting and fostering relationships among individuals, communities and NPOs.
- ✓ Improving under-utilised public green space to preserving / protecting undeveloped land.

Key lessons include the importance of:

- ✓ **Passionate leaders:** The OZCF project was founded on the premise of community. Its board members are volunteers, much of the support is provided by volunteers.
- ✓ **Locality:** The OZCF is located, used, and supported by community members of Oranjezicht and surrounding suburbs.
- ✓ **Land use:** In 2012, the OZCF entered into an agreement with the CoCT's Parks Department for the use of a disused community bowling green in the upmarket suburb of Oranjezicht. This allowed the OZCF to circumnavigate red tape associated with procuring land.
- ✓ **Section 18A registration:** The OZCF project is under the Section 18A PBO SA Urban Food and Farming Trust (PBO 930052666), OZCF is able to leverage the PBO status to attract tax deductible donations from individuals and businesses seeking to reduce tax liability whilst supporting community projects.
- ✓ **Commercial viability:** While the OZCF founded the OZCF Market, it has since sold the Market which has been operating as an independent private company using the OZCF brand under license. As the current owners of the market operate under the OZCF brand under license, they pay an annual licensing fee. These fees are used to operate the OZCF project. Other sources of revenue include allotment rental, the food waste service, Bokashi Bran sales and compost sales.

What is resilience?

In human terms, resilience refers to "the ability of an individual to recover from setbacks, adapt well to change and to keep going even when facing difficult circumstances".

Chronic stresses weaken the fabric of a city on a day-to-day or cyclical basis, for example, high unemployment, inadequate public transport systems, endemic violence, food insecurity and substance abuse. Acute shocks are sudden sharp events that threaten a city, for example, drought, fires, floods, diseases outbreaks and infrastructure failure.

Building resilience to shocks and stresses matters because disruptions or disasters of any sort, whether regional or distinctly local in scope, short or long in time scale, can be costly to those they impact. They can result in the loss of livelihoods, they can severely impact citizens' mental health, they can result in injuries and death, and they can drive apart communities.

A resilient Cape Town is a compassionate, connected, and capable city, where Capetonians collaborate across households, communities and institutions, to build collective responses to the current and future social, environmental and economic challenges. Embedding a circular economy view and extracting the economic value of builder's rubble in general, and bricks in particular, can help to mitigate the risk of running out of landfill airspace.



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PILLAR 2

Cape Town is a connected, climate adaptive city

VISION

Capetonians work together to create place-based responses to shocks and stresses.

GOAL 2.1

Grow partnerships that strengthen transportation systems and improve mobility

GOAL 2.2

Engage communities and the private sector to improve public spaces

GOAL 2.3

Build climate resilience

GOAL 2.4

Innovate for improved conditions, service delivery, and well-being in informal settlements

ACTION: 2.2.1

Grow the Urban Regeneration Programme to all parts of the city.

DESIRED OUTCOME:

Infrastructure improvements in large urban areas like CBDs, including transport linkages, safety enhancements, and trading and leisure spaces, created in partnership with local stakeholders, which result in multiple resilience dividends including improved safety and economic opportunities, and adaptive capabilities to flooding and heat waves.

PILLAR 3

Cape Town is a capable, job creating city

VISION

Capetonians turn the challenges of resource constraints and rapid technological change into new opportunities.

GOAL 3.1

Foster green economic growth

GOAL 3.2

Enable enterprise development in the informal economy

GOAL 3.3

Connect the workforce with a changing economy

GOAL 3.4

Collaborate with businesses to achieve a resilient local economy

ACTION: 3.4.1

Offer support services to retain existing businesses and to prevent them from closing down.

DESIRED OUTCOME:

The retention and ultimately the expansion of existing businesses in Cape Town through appropriate support services that sustain the local operation of businesses through difficult economic periods.

WHAT IS THE GREEN ECONOMY?

The working definition for the green economy as it relates to Cape Town is: "expanded economic opportunities created through the provision of goods and services and the use of production processes that are more resource efficient, enhance environmental resilience, optimise the use of natural assets and promote social inclusivity."





The OZCF has demonstrated qualitative and quantitative impact, including:

- 1. Food Waste Diversion from Landfill:** Currently, the OZCF receives an estimated 100 buckets per week of food waste. At 15 to 20kgs per bucket, this equates to roughly 1.5 – 2 tonnes week or 78-100 tonnes per annum. Such support assists the CoCT in meeting its mandate of 100% organic diverted landfill by 2027. The Western Cape's Department of Environmental affairs and development planning has implemented an organic waste diversion plan, which aims to divert 50% of organic waste from landfill by 2022, and 100% by 2027. This will require municipalities to set annual targets, and to identify and implement procedures to meet these targets.
- 2. Landfill Airspace:** At R508 (excl. VAT) per tonne in 2019/20, the CoCT has the highest landfill gate fee in South Africa compared to other metropolitan areas. This price per tonne could be seen as a monetary representation of landfill airspace. As such, the diversion of 78-100 tonnes of organics per year saves the CoCT 78 – 10 tonnes of airspace after moisture extraction. This equates to R3,960 - R5,080 (excl. VAT) per year of airspace¹. Airspace that ultimately will have a higher future price.
- 3. Soil Generation:** Assuming that an additional 39 – 50 tonnes of garden clippings are mixed to the 78 – 100 tonnes of food waste, and assuming that 10% of the weight of food waste is retained after moisture loss, the composting process should result in the generation of 11.7 – 15 tonnes per annum of nutrient rich compost that would otherwise have been landfilled.
- 4. Job Creation:** Through its various innovative means of revenue generation and volunteer support, the OZCF has been able to support 3 FT-equivalent positions shared by 4 people. There's an additional FT position supported by the Trust, independent of OZCF's income.
- 5. Sense of Community:** The most important impact of the OZCF has been its ability to unite its community and nurture a sense of place. Though such impacts cannot be shown in numbers, there is no doubt that the project has been successful in create a sense of place and community.

Solution

Building community around urban farming, as an approach to place-making, draws together various themes relating to resilience in the Cape Town context. The community building aspect speaks to drawing people together around the practical household needs of healthy food and organic waste disposal, to encourage social cohesion. In light of

climate change-related shocks, like the recent drought, ongoing food security is of crucial importance to Cape Town's resilience. Forming spaces where food is produced sustainably in an urban environment could indirectly contribute to localised community food security. The impact on food security comes from bringing together members of a

community that develops high levels of awareness and agency regarding food, and can make choices collectively that can improve household food and nutrition security. Offering a product and service to households and small businesses presents an accessible organic waste disposal solution that builds resilience to climate change.



¹ This excludes the treatment costs of the leachate generated under landfill conditions.

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Urban farming projects like the Oranjezicht City Farm help to build community and economic resilience in Cape Town, in at least four ways:

1. Modelling voluntary based and community-based solutions for mitigating systemic stresses

Much of OZCF success has been a journey of organic growth guided by passionate volunteers, and through the leveraging of a set of mechanisms that build resilience. In addition to the food grown by the Farm for community consumption and commercial purposes, the OZCF offers 5 – 8m² allotments for use within the farm for use by individuals and families who do not have access to their own gardens, thereby creating the space for people living in an urban environment to grow their own food. The OZCF has to date established 26 garden allotments for community members to rent for 6 months, with an option to renew. Cost of rental for a 6m² plot are R4500 for rental with a R3900 for renewal and includes a number services offered by the OZCF staff. Although the requires the renter to maintain the allotment themselves, OZCF does also provide an additional maintenance fee.

2. Creates economic opportunities for SMEs through the Oranjezicht City Farm Market

The Oranjezicht City Farm Market is located at the V&A Waterfront. It is open on Wednesdays, Saturdays and Sundays. It was developed as a community market for independent local farmers and artisanal food producers and has grown into the largest market of its kind, in 2019 supporting over 40 local small farmers and 80 artisanal food traders with from 6 000 to 9 000 people visiting each weekend. The market plays a key role in consumer awareness about the local food system, and is a leader in innovative retailing practices to reduce food waste, packaging and plastic use. It also provides a range of business development support and mentoring for the artisanal food traders operating their small businesses and entrepreneurial ventures.

3. Providing an easily accessible eco-system where households and local businesses can responsibly dispose of organic waste through the OZCF Bokashi Brigade initiative

Bokashi composting uses a selected group of micro-organisms to anaerobically ferment organic waste. Households and local business can bring their kitchen waste, layered with Bokashi (available for purchase from the Farm), to the Farm to be used as fertiliser for the soil. Initially the service of receiving food waste was offered for free. However, to recover labour costs associated with composting, the OZCF introduced a clip card payment system. Each clip of a ten-clip-card equates to a single 20L bucket of food waste. Households are charged R100 per clip card (R10 per clip/bucket) whilst businesses are charged R200 per clip card (R20 per clip/bucket). The OZCF provides its patrons the option to purchase Bokashi bran produced by the OZCF itself. To recover costs associated with brand manufacturing, OZCF charges R110 per 1kg bag. Each bag lasts a family of four a month. The OZCF generates between 11.7 – 15 tonnes of nutrient rich compost per year at its onsite composting operation. This compost is subsequently bagged and sold to its community members at R30/10kg. These funds are fed back into the operation of the garden.

4. Through the support, innovation and advocacy work of the SA Urban Food & Farming Trust

The Trust partners with other organisations and social entrepreneurs to strengthen households, community food gardens and food hubs, and the links between them. SAUFFT provides training, mentoring, networking, market access, fundraising and other support as part of its partnership approach. The SAUFFT conceptualises, designs, tests, conducts research and pilots innovative programmes, methods, models, and principles that can improve outcomes and scale impacts, substantiated by reliable data. Through communications programmes and events, workshops, networking, facilitation and other forms of stakeholder engagement SAUFFT raises awareness, facilitates conversations, and motivates policy changes and shifts in social norms.

For more information and support contact GreenCape: info@greencape.co.za or call (021) 811 0250. Additional resources relating to waste and sustainable agriculture are available from: www.greencape.co.za

Oranjezicht City Farm: website: www.ozcf.co.za, email: Cityfarm@ozcf.co.za

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