Witsand informal settlement is based in a suburb of the City of Cape Town Metropolitan Municipality, South Africa. It is 40km from the City central business district (CBD). As of the last census, it had 4,689 residents. Although Witsand is a diverse, vibrant, and active community, it is characterised by a lack of formal tenure, insufficient public space and facilities, and inadequate access to basic services. The Witsand Leadership team has focused on improving conditions, service delivery, and the wellbeing of its residents, and have, in partnership with GreenCape and ThinkWiFi, co-designed wifi enabled solar street lights that provide both area lighting and internet connectivity.

This case study discusses:
- The concept of alternative service delivery – building resilience by extending the traditional boundaries of service delivery.
- A participatory case study of an informal settlement in the City of Cape Town.
- A partnership based co-design and empowerment approach built on community development and data collection.
- An innovation that promotes local resilience and accelerated socio-economic development in an informal settlement.

This case study is written for a diverse set of stakeholders, each playing a vital role in understanding and addressing the complex challenges of resilience and partnership in community co-design, as well as its impact on improved conditions, service delivery, and wellbeing in informal settlements.

It is written for:
- Cities focused on building resilience through innovation and partnership;
- Cities exploring asset based urban development as a mechanism towards alternative service delivery;
- Entities exploring the establishment of participatory co-design interventions;
- Communities seeking to promote community cohesion and service delivery.

Witsand Informal Settlement: Building resilient urban communities through innovation and partnership

Purpose

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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.
KEY INSIGHTS

- This multi-stakeholder cooperation allows for the culture of participation to develop, giving owners of the social challenge control over how technical systems are used, and which functionality underlies the usage of these systems.
- Embedding an action-orientated participatory approach to delivering interim basic services can address immediate and pressing day-to-day challenges within informal settlements and increase community “buy-in” and participation in the relocation process.
- An Asset-Based Community Development (ABCD) approach should be part of the wider relocation strategy and interim service delivery. This approach should focus on discovering and mobilizing the “assets” that are already present in a community.
- There is need for a dedicated national programme and fund to provide the necessary resources (human and capital) to stakeholders to undertake this duel approach to relocation.
- Co-design is not enough: A participatory co-design process is important, but it needs to be overlain with a typological data approach. This allows a more targeted approach to co-design and avoids unnecessary delays.

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.

PILLAR 2
Cape Town is a connected, climate adaptive city

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

<table>
<thead>
<tr>
<th>GOAL 2.1</th>
<th>GOAL 2.2</th>
<th>GOAL 2.3</th>
<th>GOAL 2.4</th>
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<tbody>
<tr>
<td>Grow partnerships that strengthen transportation systems and improve mobility</td>
<td>Engage communities and the private sector to improve public spaces</td>
<td>Build climate resilience</td>
<td>Innovate for improved conditions, service delivery, and well-being in informal settlements</td>
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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.

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.”
Background

According to conservative estimates, between 1.1 and 1.4 million households, or between 2.9 and 3.6 million people lived in informal settlements in South Africa in 2011. Each of these are characterised by a lack of formal tenure, insufficient public space/facilities, inadequate access to services and poor access ways. According to the City of Cape Town’s 2019 Resilience Strategy, there are at least 204 informal settlements in Cape Town. Many of these informal settlements exist in spaces where traditional services are not viable for many reasons (built on private land, inaccessible etc.) and are thus considered unserviceable.

Although the lack of infrastructure in these areas represents a challenge, it also offers a unique opportunity and has vast implications for how the infrastructure of the future must be conceptualised, designed and operated. This is especially true in a drive for local and global resilience.

In order to aid the government, and in some cases private land owners, and to empower citizens, an innovative, data-driven and community-led interim service delivery model must be realised which will provide interim services to communities that are in need. Interim alternative service delivery does not compete with traditional services but rather promotes the need for a diverse configuration of tools, institutions, actors, knowledge and values catering for a specific context in order to build local resilience.

This resilient urbanism embraces and builds upon the multiplicity of the everyday urban reality, exploring means of improving what already exists in an incremental way and creating a dynamic urban form that evolves from within.

Built on this thinking, un-serviced areas become spaces for innovation and resilience through the empowerment of communities. Co-design, social choice and the exploration of new approaches to innovative service delivery become the levers by which stakeholders can promote economic growth and development.

In the context of interim alternative service delivery, there are few examples of successful and replicable models. One of the main reasons for this is that projects do not incorporate an equitably balanced approach to address the problem holistically. These are the three vital lenses:

1. Social inclusion and mobilisation of the affected community;
2. Customised technical design (right technology for the context and the need);
3. Financial sustainability and affordability of the interventions.

Critical to incorporating these lenses successfully is the undertaking of in-depth community mobilisation. Mobilisation is the process of engaging communities to identify their priorities, resources, needs and solutions in such a way as to promote representative participation, good governance, accountability and peaceful change.

At the core of this process is participatory co-design. Communities know their own contexts better than anyone else. Engaging communities creatively helps them appreciate their own strength (assets) as a unit and empowers them to help design their own solutions; encouraging community buy-in and support in the process. It helps stakeholders with gaining inherent knowledge on current systems that are in place and what would work for a community. This is critical to the success of any service delivery project.

This Asset-Based Community Development approach was implemented to develop an alternative service delivery model for an informal settlement in the City of Cape Town.

The average person has been living in Witsand for 6 years (longest, more than 30). As many as 80% of school age children (0-18) are not in school, while 38% of the respondents are unemployed. The income in Witsand ranges between R1100 and R2200 per actively employed person per month. Households are spending upwards of R2600 per month on basic necessities, including food (+-25%), transport (+-20%) and data/cellphone costs (10%).

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**Stresses / Shocks**
- Rapid urbanisation
- Unemployment

**Qualities of a resilient city**
- Robust city
- Flexible city
- Resourceful city
Solution

GreenCape has been working in Witsand since 2018. This foundational work focused on creating a strong social foundation for service delivery, building an inclusive platform for local community members to express infrastructure preferences, and to understand the communities’ propensity to pay for infrastructure services while also mapping existing infrastructure assets. From this process, the Witsand community prioritised area lighting and connectivity as their most pressing energy service-related needs.

These priorities were corroborated by the data for the area. Witsand has no area lighting and the majority of people have experienced criminal activity in the area. Households are spending upwards of 10% of their total income on data/cellphone costs.

ThinkWifi, a local service provider, provided a unique solution to the challenge in Witsand. ThinkWifi is building world-class public wifi infrastructure to provide free, uncapped wifi in communities, townships, universities and transportation hubs across South Africa. Their innovative business models allow for both the infrastructure and the connectivity to be funded without the end user paying a cent.

They are currently active in 125 locations across Langa, Khayelitsha, Gugulethu, Delft, Elsies River, and Philippi. It is their mission is to empower people, to work with local communities to find employment solutions and to work with organisations to bring digital skills education to each of these communities.

Their ultimate aim is to close the digital divide whilst laying the foundations for the 4th industrial revolution for all under-served communities in South Africa. Through a co-design process with GreenCape and the Witsand leadership, the concept of adding a solar light to the wifi connection points was discussed. ThinkWifi had already started the process of embracing this innovation into their service offering.

Impact

Through a partnership between a diverse group of stakeholders (Non-profit organisation, an internet service provider and a group of community leaders), from different backgrounds and contexts an innovative solution has turned the lack of infrastructure in Witsand into a unique opportunity. The community for the community to access education, skills development and the potential benefits of the 4th industrial revolution. Combined with this new connectivity the community is now also provided with much needed area lighting. - The lack of effective public lighting plays a major role in creating unsafe areas where crime can thrive. Informal settlement residents are at risk due to the darkness many people must face when accessing public transport early in the morning and late at night.

We are excited to partner with GreenCape to help solve some of the connectivity and lighting challenges in the areas we operate in. To date we have deployed more than 50 of the solar lights around our wifi Hotspots, and will continue to roll this project out in existing areas, as well as install more lights in new areas, like Witsand. These solar lights not only provide area lighting, they also enhance safety and security in the surrounding area. We have found that combining our lighting Lollipops with wifi greatly improves conditions in an area and has created a demand for these services, especially with the current load shedding challenges in South Africa. We have also seen micro-business start to evolve around these Think light stations, which enable them to stay open after hours, furthering our vision to create local economic empowerment opportunities in the communities we serve,” – Janine Rebelo, CEO, ThinkWifi

For more information and support contact GreenCape’s skills development desk: info@greencape.co.za or call (021) 811 0250. Additional resources on improving skills development are available from: www.greencape.co.za/content/focusarea/skills-development