# the Singapore WAY

**USE CASE** 

# **Roots in the Sky**

# Roots in the Sky:

# Transforming Rooftop Slums in Old Nairobi

### 1. Context Snapshot - A Captivating Story

• City Name: Old Nairobi Heights

o Country: Kenya

Population: 4.8 millionYear of Launch: 2023

In the heart of Nairobi, rooftops once filled with satellite dishes and laundry lines transformed into a desperate last refuge. As urban land prices soared and inner-city plots grew scarce, informal settlements began to grow vertically—slums on rooftops, with makeshift structures crowding the skyline. These shanty dwellings, precariously perched atop aging buildings, lacked sanitation, ventilation, and dignity. Children played next to water tanks; families slept under thin plastic sheets battered by wind.

It was not just a housing crisis. It was a crisis of visibility—the poorest were hidden above the eye line, out of policy conversations, off the grid. Until the mayor stood up and said: "No more invisibility. No more vertical neglect."

### 2. LOCAL LEADER'S Vision Statement

"If the ground betrayed them, we will give them roots in the sky. Dignity must rise with our skyline."

Mayor Wanja Mwangi

### 3. 10 Lessons from The Singapore Way Adapted to the City

Singapore Strategy	Local Adaptation
Smart Housing: Build upward, inclusively	Converted rooftop slums into modular green micro-communities
Long-Term Planning: Think decades ahead	Created vertical housing regulations for sustainability through 2040
Multiracialism: Diversity as strength	Mixed ethnic and economic groups in sky villages to foster unity
Public Engagement: Include everyone	Rooftop tenants co-designed new spaces using digital feedback booths
Sustainability: City in a Garden	Introduced rooftop farms with rainwater capture systems
Innovation: Solve practically	Prefabricated housing pods craned into place overnight, minimizing disruption
Pragmatism: Prioritize what works	Bypassed zoning deadlock using emergency housing decrees
Economic Inclusivity: Growth for all	Sky hubs include co-working spaces and childcare centres
Education Focus: Invest in people	On-site digital literacy and job training centers launched for youth
Rule of Law: Clear frameworks	New rooftop codes enforced via a mobile inspectorate app

### 4. The Local Plan

• Name of Initiative: Skyroot Nairobi

- Objectives:
  - Eradicate unsafe rooftop slums
  - Provide dignified housing within the central city
  - Foster inclusive, green urban villages above the skyline
- Key Design & Policy Tools:
  - Vertical Housing Regulation (VHR) Act
  - Public-Private Partnerships with crane & prefab innovators
  - Green Roofing Grants for retrofitting existing structures

### 5. Implementation Framework

Phase	Activities	Duration	Stakeholders
Phase 1	Pilot rooftop transformation (5 buildings)	3 months	City Planning Dept, tech startup VutuBuild, UN-Habitat
Phase 2	Scale to 100 rooftops, zoning reforms	6 months	Parliament, NGOs, Building Owners Association
Phase 3	Skills and services rollout	9 months	County youth ministry, digital skills partners
Phase 4	Green integration (gardens, solar)	12 months	Urban farmers' guild, green architects' consortium

### 6. Outcomes & Impact (18-24 Months)

### • Quantitative:

- 12,000 residents rehoused in 14 months
- Rooftop fire incidents dropped by 88%
- 45% of youth residents completed certified digital literacy programs

### Qualitative:

- Children now attend rooftop creches with solar lighting
- A grandmother who once lived in a tarpaulin hut now runs a tea shop in the sky
- Reconnected communities celebrate "Sky Festivals" every month

## 7. Challenges Faced & How They Were Overcome

Challenge	Solution or Mitigation
Resistance from landlords	Offered tax rebates for compliant upgrades
Legal ambiguity over rooftop ownership	Passed fast-tracked Rooftop Rights Act
Safety concerns during construction	Used modular, crane-lifted installation in under 4 hours per unit
Stigma around "rooftop slums"	Rebranded the spaces as "Skyroot Communities" with art and media support

### 8. LOCAL LEADER'S Reflections

- Mayor Wanja Mwangi

<sup>&</sup>quot;Leadership is not just about fixing what's broken—it's about seeing what others don't. They called them slums. We saw future villages in the clouds."