



**By 2030 eThekweni will be Africa's
most caring and liveable city**



**International Symposium: Reimagining Inclusive Cities in the Covid -19 Era:
Upgrading Informal Settlements to Foster Resilient Cities against Future Pandemics**

INCREMENTAL INFORMAL SETTLEMENT UPGRADING IN DURBAN

22nd September 2021



Informal Settlements in eThekweni

- Over 587 urban informal settlements, 312,741 households.
- Nearly a quarter of the City's population.
- Continued urbanization and scarcity of well located land.
- Over 80 years to overcome just the informal settlement backlog by means of conventional housing delivery.
- Challenging topography, high densities and many settlements within environmentally sensitive areas
- **78% are category B1 (incremental in-situ upgrade with essential services) - 352 settlements, 246,348 hh**
- **Many are very dense (200+ du per hectare)**
- Less than 3% of households earmarked for relocation (due mainly to sites being unsafe for habitation)
- **41% of land is privately owned (only 18% city-owned)**



Settlement Overview –

The scale of the challenge is key

eThekwini Municipality

The scale of informal settlements in the Municipality is a key factor informing the Strategy. This has significant strategic implications including the impossibility of addressing the ‘backlogs’ by means of formal housing provision or comprehensive upgrading and the necessity for an optimized incremental approach.

Summary of settlements by National Upgrading Support Programme (NUSP) category

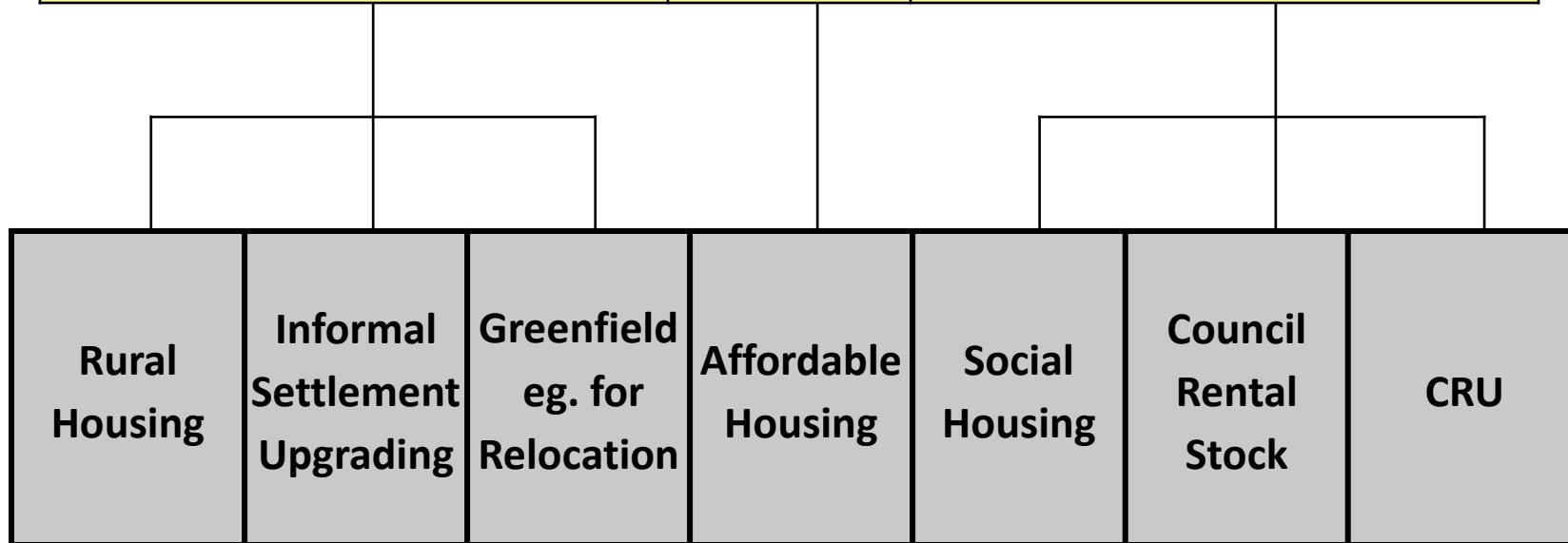
NUSP Categorisation	No. settlements	Est. households	% Settlements	% households
A (full conventional upgrading i.e. housing project)	56	22 131	9,5%	7,1%
B1 (Incremental upgrade with essential services)**	352	246 348	60,0%	78,8%
B2 (Deferred relocation with emergency services)	135,5	33 009	23,1%	10,6%
C (Imminent relocation)	34,5	10 954	5,9%	3,5%
Under investigation	9	299	1,5%	0,1%
	587	312 741	100,0%	100,0%

*** 35% of B1s are best located (inside PIC and urban zone) - 202 settlements, 97,113hh, 35% of all settlements, 31% of all hh.*

Housing Subsidy Programmes

LONG-TERM OWNERSHIP PROGRAMMES	RENTAL PROGRAMMES
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Objective: Address Informal Settlements	Objective: Address Affordable Housing	Objective: Rationalise Municipal Role As Landlord Of Rental Stock
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BREAKING NEW
GROUND (BNG)
HOUSES – LOW
DENSITY



BREAKING NEW GROUND (BNG) HOUSES – MEDIUM DENSITY



Emapheleni Phase 1 Housing Project built for adjoining informal settlement community in Cleremont



Incremental Services Approach

- Informal Settlement Programme
- Housing Spatial Prioritisation Model
- New Response to Informal Settlements
- Comprise a combination of the following:
 - **Water standpipes**
 - **Communal ablution/sanitation blocks**
 - **Solid waste removal and emergency access**
 - **Basic road access and footpaths with related storm water controls**
 - **Electricity on a pre-paid basis**
- Although no formal security of tenure initially provided to residents, their right to stay on the occupied site is recognised. Resulting in collective safety from eviction and the right to benefit in the incremental upgrading process.
- **Land not acquired up front** – not a pre-requisite, this unblocks and enables rapid delivery, land acquisition is slow & costly - addressed later.

Incremental Services - Progress

▶ Delivery to date:

▶ **Sanitation blocks:**

- ▶ 113,000hh in +370 settlements
- ▶ +1,507 units.

▶ **Electrical connections:**

- ▶ 226 setts fully electrified & 45 partially – serving +102,000hh

▶ **Water supply** (standpipes & via communal ablutions) to most settlements including 'relocation' settlements:

- ▶ at least 148,000hh within approx 231 settlements

▶ **Roads, footpaths & storm-water (RFS):**

- ▶ 26,500hh in 40 settlements
- ▶ 32km road, 27km footpaths

Incremental Services: Road and Footpaths



Incremental Services: Electricity and Communal Ablution Blocks



Improvements to Early Childhood Development (ECD) Centres in Informal Settlements



Incremental Services: Impact

- Ability to prioritise the rapid delivery of basic services to as many settlements as possible.
- Ability to potentially provide services to 10-15 households for each housing unit built.
- Acceptable engineering standards established in order to make effective use of the limited budget available.
- Road and footpath layouts will remain in place for final upgrade of settlement avoiding abortive costs.
- Opportunities for Emerging Contractors and alignment with the Expanded Public Works Programme providing employment.
- Caretakers/maintenance agencies employed from the local community for the Ablution Blocks.
- Livelihoods initiatives, LED and the provision of key social facilities to be addressed through parallel programmes.

Evolution of Upgrading Approach

- **eThekweni incremental upgrading / interim services programme since 2010** (recognising that formal housing delivery too slow and costly). Large scale provision of communal ablutions, electrical connections etc. but 'interim' (temporary services) approach not sustainable
- **Council resolution adopting and mandating an optimised / new approach in 2019** including:
 - National categorisation framework (A,B1,B2,C) adopted
 - Pipeline planning with prioritisation criteria mandated
 - Incremental planning arrangements mandated
 - Dealing with private land prioritised
- **City-wide Upgrading Strategy (Programme Description) drafted in 2020/21** finalised and adopted soon including (in line with national programme upgrading toolkit):
 - Differentiated pipeline approach (best located B1s, general B1s, B2s, Cs, emergency mitigations where households at greatest risk). Pipeline criteria now include strategic consideration (e.g. spatial change, building assets and land value capture) in addition to addressing service delivery backlogs.
 - Incremental planning, land use and tenure arrangements developed (detailed SOPs) as required by SPLUMA
 - Solutions for dealing with private land (informed by two Senior Counsel legal opinions and including SDF designation, use of statutory servitudes and landowners notices).
 - Optimised servicing approach
 - Transversal coordination arrangements between line departments.
- **Comprehensive informal settlement database** developed and enhanced in 2020/21 with improved data on every settlement and GIS linked (e.g. households, boundaries, categorisation, site constraints, services provided and deficits, various analytic fields).
- **Informal Settlement Incremental Upgrading Forum (ISIUF)** strengthened and expanded since 2018 with representation from all line departments continues to function well in coordinating the programme and has an adopted TOR.
- **Various enabling partnerships** and NGO/CSO collaborations strengthened including: SDI, PPT, UKZN, Green Corridor etc.

Optimized Approach to Upgrading

- **INCLUSIVE & CITY-WIDE** – reaches ALL informal settlements
- **INCREMENTAL** – improvements over time
- **IN-SITU** – relocations a last resort
- **PARTNERSHIP BASED** – municipality, communities, CSO/NGOs, universities etc.
- **PARTICIPATIVE** – communities are co-drivers
- **PROGRAMMATIC & AREA-BASED** – as opposed to project-delivery focussed
- **DIFFERENTIATED** – addresses a range of key local priorities, not one-size fits all
- **FLEXIBILITY** – statutory and regulatory, working with not against informality



Key elements of Strategy

- **Rationale** – Why current approach of state-funded housing and formalisation is not a sustainable solution and hence the need for an optimised, city-wide, incremental approach (given the scale of settlements and various constraints - fiscal, land, bulks etc.)
- **Differentiated pipeline approach with prioritisation criteria** utilising a new pipeline tool and the enhanced dataset in order to establish an optimised pipeline and more viable long term 'theory of change', addressing not only services backlogs but also spatial change and long term asset-building.
- **Incremental planning arrangements** appropriate to the pipeline category and as informed by two Senior Counsel opinions, including IDA1 or IDA2 for B1s and TDA for B2s, SDF for all settlements as per their categorisation. These, together incremental tenure arrangements, are key in unlocking owner-driven housing investment over time.
- **Tenure security** initially via administrative recognition of all settlements based on their categorisation but potentially extending to alternative forms of individual tenure e.g. municipal certificates of occupation.
- **Optimised incremental services provision** appropriate to the pipeline category of the settlement including a mix of shared and individual services (e.g. B2s not necessarily getting same level and type of services as B1s).
- **Provision of services on private land** in advance of land acquisition subject to new prescribed processes and as per two SC opinions which afford greater protection to the Municipality.

Strategic Pipeline Priorities

- ***Achieving a minimum level of acceptable services*** to all informal settlements whilst at the same time minimising relocations and doing so in a manner which is as cost-effective and well-prioritised as possible with water, sanitation, electricity, and solid waste removal being some of the most pressing priorities.
- ***Responding proactively to high risk situations*** where there is a high risk of loss of life due to fire, flooding or other severe and imminent threats by addressing or mitigating these threats.
- ***Spatial restructuring*** of the City to make it more efficient, inclusive and sustainable e.g. making optimal use of limited, well-located available land and establishing a better urban form for the future and including optimised services and reworking of space in best located B1 settlements;
- ***Building assets and land value capture*** e.g. by servicing well-located settlements and establishing incremental tenure and planning arrangements which unlock owner-driven housing improvements.
- ***Initiating incremental planning and tenure arrangements*** which improve tenure security, include settlements into municipal planning frameworks and which can unlock people's ability to invest in their own housing improvements rather than relying on government;
- ***Optimising the use of limited fiscal resources*** for both capital and ongoing operating, maintenance and recapitalisation of assets (through better prioritised investment);
- ***Mitigating or removing severe and imminent safety threats*** to those households affected (e.g. severe flooding or slope instability, active railway or fuel line reserves; fire);
- ***Reducing environmental and other public harm*** and negative impacts to the general public including neighbouring (formal) communities.

Differentiated Pipeline Breakdown

	No. of settlements	No. of households	% of Settlements	% by households
Best-located B1 settlements	202	97 113	35%	31%
General B1 settlements	150	149 235	26%	48%
B2 settlements	136	33 009	23%	11%
Category C settlements	34	10 954	6%	4%
Total incremental upgrades	522	290 311		
Category A conventional housing	56	22 131	10%	7%
Total informal settlement pipeline	578	312 442	100%	100%
Work in progress (Not yet categorised)	9	299		
TOTAL	587	312 741		

Pipeline Prioritisation framework & criteria

The approach is informed by a range of well-established prioritisation criteria. The Municipality has already approved the following broad prioritisation criteria (as per Council Resolution of September 2019):

- **Vulnerability:** extent of health and safety threats, using net density as one of the means to apply this criterion.
- **Services Deficit:** the various components of Incremental Services that are absent or lacking due to inefficient ratios/thresholds of household numbers relative to service points.
- **Population Coverage:** the larger the settlement in terms of the number of households, the greater the efficiency of delivery and return on investment.
- **Age of Settlement:** how long have people been waiting for services.
- **Community Readiness:** how stable the community and leadership are and their appetite to embrace the new, incremental approach.
- **Location:** how well located the settlement is, noting the importance of addressing spatial inequality and inefficiencies and the constraints relating to over-extending the reach of the municipality's bulk infrastructure networks.

In addition to the six settlement-level criteria outlined above, the following broader strategic criteria have also been factored in:

- **Reducing and eliminating overall services deficits** in a manner which is as cost-effective and well-prioritised as possible with water, sanitation, electricity, and solid waste removal being some of the most pressing priorities.
- **Responding proactively to high risk situations** where there is a high risk of loss of life due to fire, flooding or other severe and imminent threats.
- **Spatial restructuring** of the City to make it more efficient, inclusive and sustainable e.g. making optimal use of limited, well-located available land and establishing a better urban form for the future.
- **Building assets and land value capture** e.g. by servicing well-located settlements and establishing incremental tenure and planning arrangements which unlock owner-driven housing improvements.

Current Innovative Upgrading Initiatives

- Durban's **Resilience** Strategy: Collaborative Informal Settlement Action
- UKPF **Data** Gathering and Integration Project – Informal Settlement Information Management System (ISIMS)
- National Treasury's City Support Programme (CSP): Technical Support for the **Innovative Upscaling** and Upgrading of Inf Setts via an incremental, in-situ, **participative and partnership-orientated** fashion
- Infrastructure Improvements for **Early Childhood Development** (ECD) Centres in Inf Setts
- **Grassroots Approaches Towards Self-Reliance** in South Africa: the Isulabantu Project (Inf Setts Upgrading Led by the Community)
- iQhaza Lethu (European Union (EU) funded) Inf Setts **Incremental Upgrading** and Integration Partnership Programme
- **Private Sector** Partnership: Blackburn Village Social Sustainability and Innovation Program (SSIP)
- African Forum on Urban **Safety** (AFUS)
- **Memorandum of Agreement** (MOA) entered into between City & member organizations of the South African Shack Dwellers International (SASDI) Alliance

Work in Progress

- Establishment of the **Informal Settlement Upgrading Technical Forum** - Alignment of service interventions and budgets.
- Upgrading of **Informal Settlements Programme (UISP) Grant**: Allocation R686m to eThekweni for 2021/22.
- Preliminary **categorisation** of settlements as per National Upgrading Support Programme (NUSP) guidelines completed.
- Development of a **Project Pipeline** underway to ensure appropriate selection of settlements using criteria based on vulnerability, services deficit, location, age of settlement etc.
- Water and Sanitation Learning Exchanges to explore more **sustainable sanitation solutions** to informal settlements.
- Investigations underway to operationalise alternative tenure, land rights and incremental planning solutions for informal settlements in order to address the provision of **essential services on private land**, ensure **Planning compliance** and provide **greater functional tenure security** to residents.

iQhaza Lethu – Main objectives

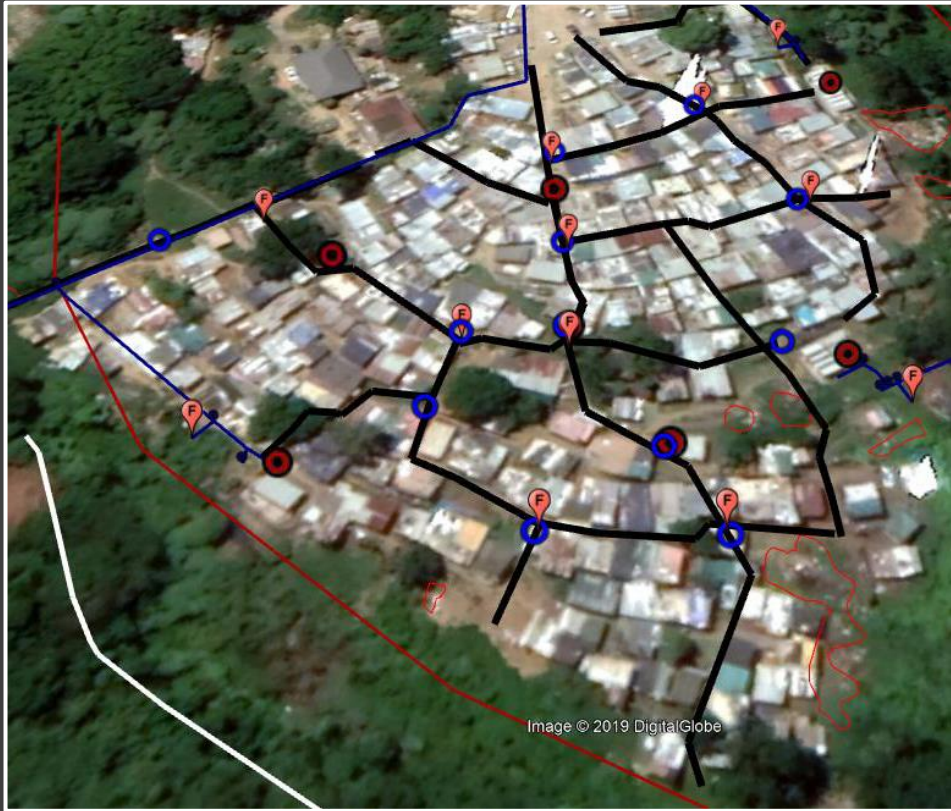
- **CAPACITY:** Develop and mobilise new capacity and strengthened upgrading partnerships. Strengthen institutional arrangements (transversal coordination and IGR).
- **PROGRAMME:** Develop improved upgrading programme systems and processes including establishing: stronger consensus on the incremental approach; enabling legal, statutory and regulatory flexibility; better funding instruments.
- **PILOTS:** Undertake 10 incremental upgrading pilot projects in order to operationalise a stronger incremental approach – includes participative planning, enumeration, technical studies, upgrading plans.
- **LEARNING:** Evaluate, refine partnerships, methods, systems and policies and disseminate learning for upscaling and mainstreaming.
- **SCALING UP:** Lay the platform for scaling up and speeding up incremental upgrading and producing better upgrading outcomes.

PROGRESS SNAPSHOT:

- New capacity and skills, strengthened partnerships and institutional arrangements
- 10 integrated incremental upgrading plans – 10 settlements, 8,952hh
- 2022/22 UISP Business Plan funding for all 10 pilots
- New integrated services frame approach
- New protocol for funding services on private land ahead of land acquisition – informed by two senior counsel opinions
- Progress with incremental planning solutions
- New alternative, densified housing typology
- 3 pilots for Covid-19 de-densification via re-blocking – 150 alternative typology relocation units
- Household survey (enumeration) and structure mapping of all settlements



Alternative servicing approach for dense, best-located B1 settlements. Why is an alternative approach needed? E.g. Parkington



- **Significant numbers of these settlements**
- **High level of vulnerabilities** - typically the most vulnerable e.g. fire, disease, overcrowding, squalid living conditions.
- **Most are old, well established and in prime locations** (work, social services).
- **Incremental services approach currently 'reactive'** – CABS on edges, minimal footpaths on existing alignments, no reworking of space, limited/no internal water and sanitation.
- **Conventional upgrading not possible** due to densities, non-qualifiers, lack of alternative land, steep slopes, geotech., costs and other factors
- **Settlements are developmentally 'locked'** UNLESS there is an alternative approach
- **COVID-19:** need to open up space for better W&S services + reduce queuing at communal taps and toilets

Parkington,

Informal settlement, eThekweni
municipality, Ward 34,
Incremental Upgrading Service
Upgrading Concept Plan



PPT
Project Preparation Trust
1998-2003

"iQhaza Lethu"

An informal settlement upgrading
partnership initiative co-funded by
the European Union

Proposed upgraded services

Roads	
Footpaths	
Lighting	
Water pipes	
Sewer pipes	
Water hose points	
Standpipe Drainage Facility	
Existing Sewer pipes	
Existing communal ablutions	
Mini communal ablutions	
Solid Waste bins	
Solid Waste Containment area	
Bridge	
Project Boundary	
Fire Hydrant	

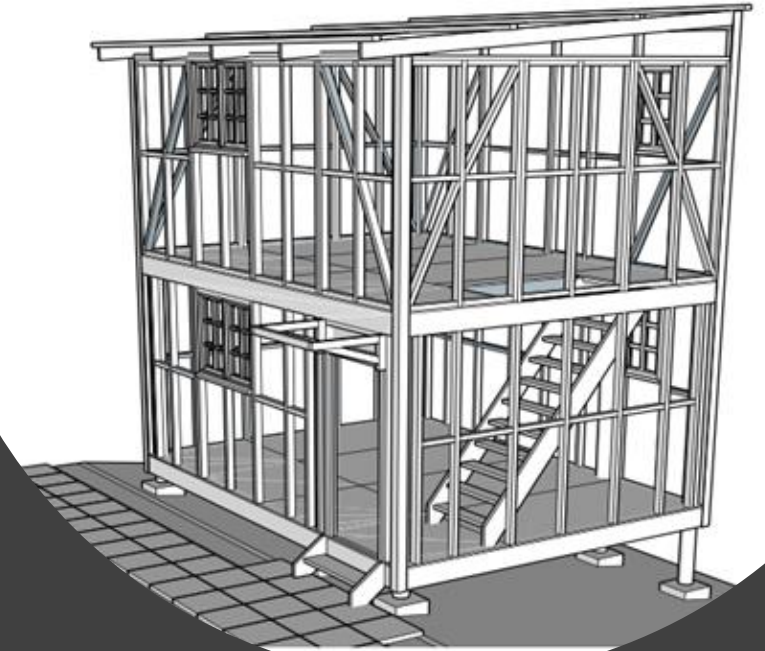


Date : February 2020
Drawn by : iQhaza lethu - team

LIFT Housing Unit

(Lightweight, Improved, Fire-safe, Timber-frame)

- **Alternative typology** developed in collaboration with HSRC and team of architects, engineers, fire safety specialists and so as to meet national building standards.
- **Double-story, low-cost, lightweight**, timber-frame structure, micro-pile foundations, external metal cladding, internal insulation cladding.
- **Locally-built** using locally-available materials and familiar building methods.
- Can function effectively on **steep slopes**. Conventional upgrading not viable on steep slopes on these sites – conventional 'BNG' housing would mean massive relocations + destabilize the slope; conventional multi-story walk-ups (flats) not viable because of high unit costs.
- Scarcity of **well-located land** in eThekweni. Most dense settlements are well-located but the land is steep.
- Units enable a **more functional alternative urban form** on eThekweni's typically steep sites – double story, so optimise limited land availability.
- Long term objective is to **imbed within communities a different way of building for themselves** (either organically or via with PHP support).



Demonstration LIFT
(‘Indlulamithi’) house at
Parkington Informal
settlement.

150 of these are to be built on three emergency relocation sites in 2021 in order to open up space for services (de-densification) within the adjacent settlements through partial re-blocking. The purpose is to enable establishment of a services frame within the settlements.

In the long term it is hoped that people can build houses like this for themselves once they have basic services and tenure security.



What can we expand on?

- Meaningful and effective community mobilisation, involvement and upliftment. Building ‘social capital’, ‘self-help’ and resilience, sustainable livelihoods processes, reblocking etc. – thereby decreasing dependency and vulnerability.
- Capacity for innovative and effective Participatory Planning and Development.
- Effective demand management - understanding that not all informal households require the same product and tenure option.
- Promoting and facilitating innovative and incremental infrastructure and top structure designs and development.
- Providing building support and home owner education.
- Cultivating and developing partnerships with CBOs, NGOs, Universities etc.
- Achieving transversal institutional coordination and management within and outside of the metro.
- Investigating and designing models for incremental and self-build development – pay attention to high density housing.
- Facilitating co–production in the development process – explore alignment of government investment, community savings and sweat equity, private sector social responsibility.
- Exploring local economic development initiatives and expanding early childhood development centres.

THANK YOU