



FROM PERIL TO PROMISE

Towards a Socially Resilient Urban Village, the Case of Dongguan

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June 20th, 2023

Glossary

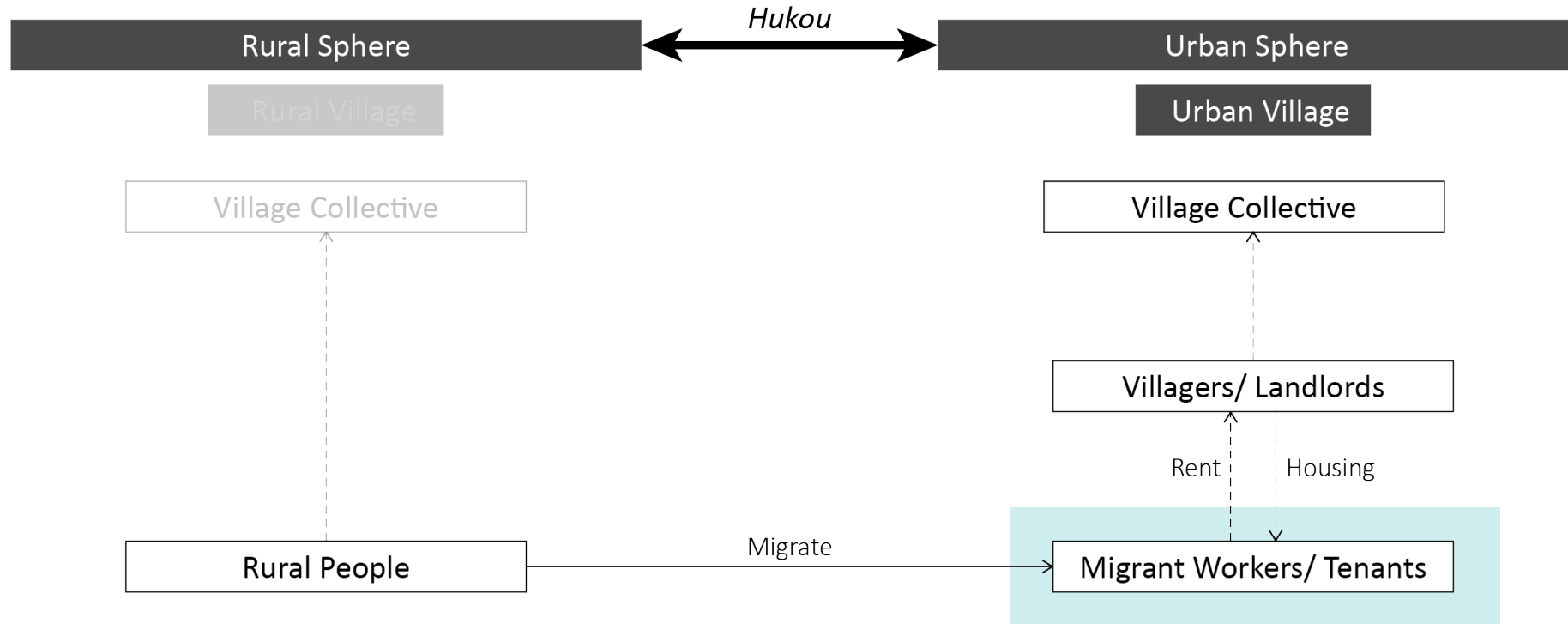


Figure 1 Glossary diagram

An aerial photograph showing a dense urban area with multi-story buildings in various colors (red, blue, white, orange) and a lush green forested hillside to the left. A semi-transparent grey box is overlaid on the left side of the image, containing the text for the Table of Contents.

Table of Contents

01 Introduction

02 Problem Definition

03 Methodology

04 Analysis

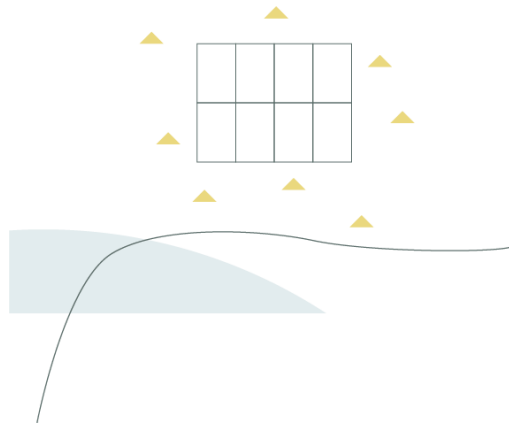
05 Redevelopment Proposal

06 Conclusion & Reflection

1

Introduction

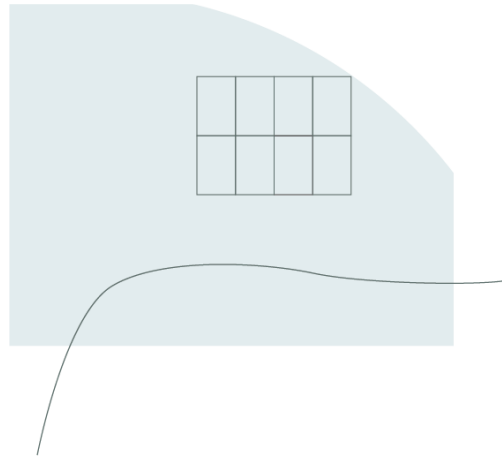
Formation of Urban Villages



Stage 1 - Rural Village

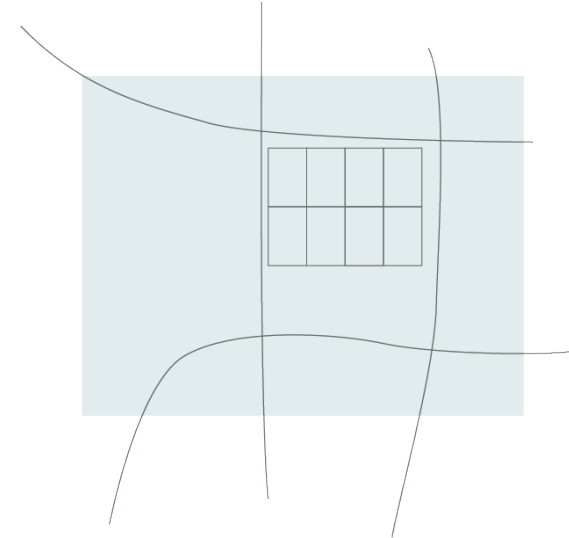
Village outside urban area with farmlands, households residential plots.

- ▲ Agricultural Fields
- Urban Area
- Household Plots



Stage 2 - Marginal Urban Village

Village has been encroached by urban area with farmlands get expropriated and turned to urbanized area.



Stage 3 - Urban Village

As the expansion of urban area, village has been surrounded by urban area.

Figure 2 Formation of Urban Villages

What Makes It Unique

Coexistence of rural and urban systems in urban village

	RURAL	URBAN VILLAGE	URBAN
Farmland	Owned by the collective	Farmland converted to urban land and becomes state-owned	-
Housing plot	<i>De facto</i> household ownership by villagers	De facto household ownership by villagers	State-owned
<i>Hukou</i> Status	Rural	Most rural, some may change to urban	Urban
Provision of social services and welfare	By collective	By collective	Government
Means of livelihood of native villagers	Mainly farming	Many have become landlords rely on rentals collected from migrants	Working
Migrants	Very few	Village housing becomes predominantly low-cost domiciles for large numbers of migrants	Many

Figure 3 Comparison among urban village, rural village and city (Buckingham & Chan, 2018)

Eyesore of Officials

An aerial photograph of a city, likely Hong Kong, showing a stark contrast between modern high-rise buildings and a dense, older residential area. The foreground is filled with a tightly packed grid of multi-story apartment blocks with varied facades and flat roofs. In the background, several tall, modern glass skyscrapers stand prominently against a backdrop of green hills under a cloudy sky. The text 'Eyesore of Officials' is overlaid in large white font across the middle of the image.

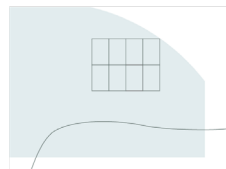


Vibrant Urban Sanctuary

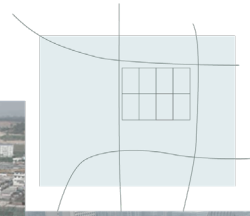
Urban Village & Housing Provision



Marginal Urban Village



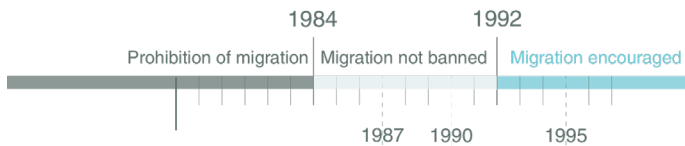
Urban Village



URBAN VILLAGE DEVELOPMENT



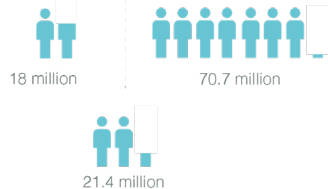
RURAL-URBAN MIGRATION POLICY



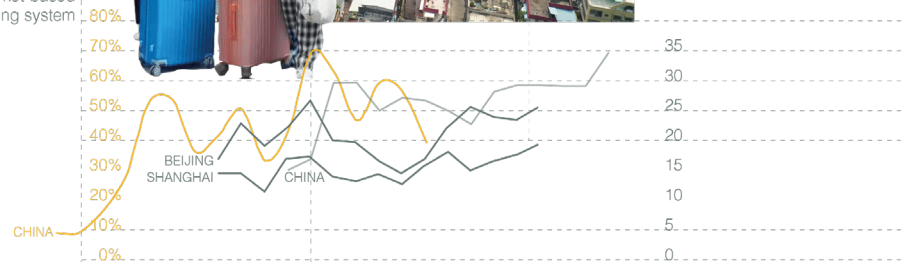
1978
Economic Reform
From a planned economy to a market economy

URBAN HOUSING PROVISION

RURAL-URBAN MIGRANTS



1998
Urban Housing Reform
From a welfare housing system to a market-based housing system



Reliance on Land Finance
(Land transfer fee/Local fiscal revenue)

Housing Affordability
(Price of a median home to the median annual household income Ratio)

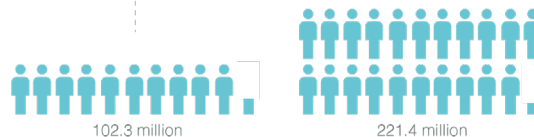



Figure 4 Urban Village & Urban Housing Provision



**“Enabling fast economic growth without the need for government expenditure on social welfare for the low-paid migrant workers”
(Wang et al., 2010).**

2

Problem Definition

A “Demolish-rebuild” Approach

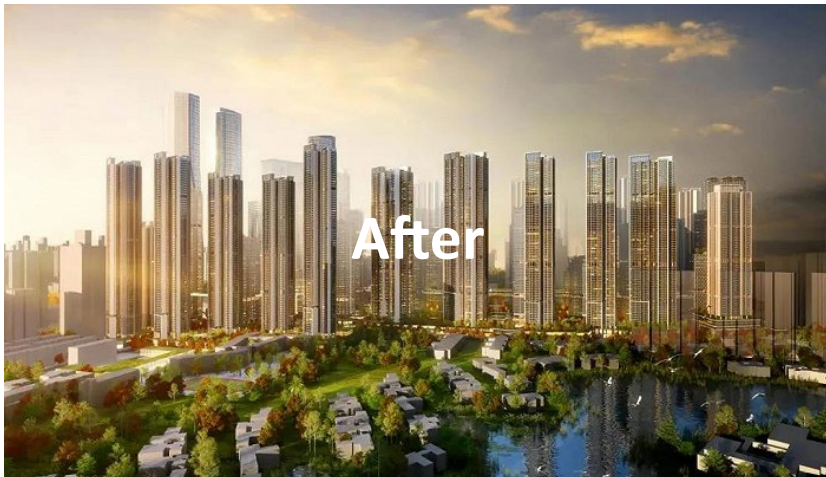
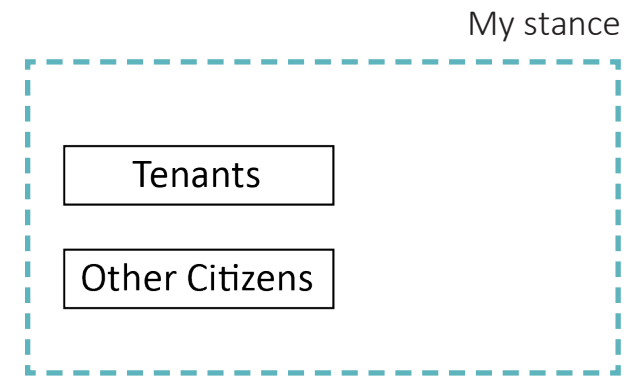
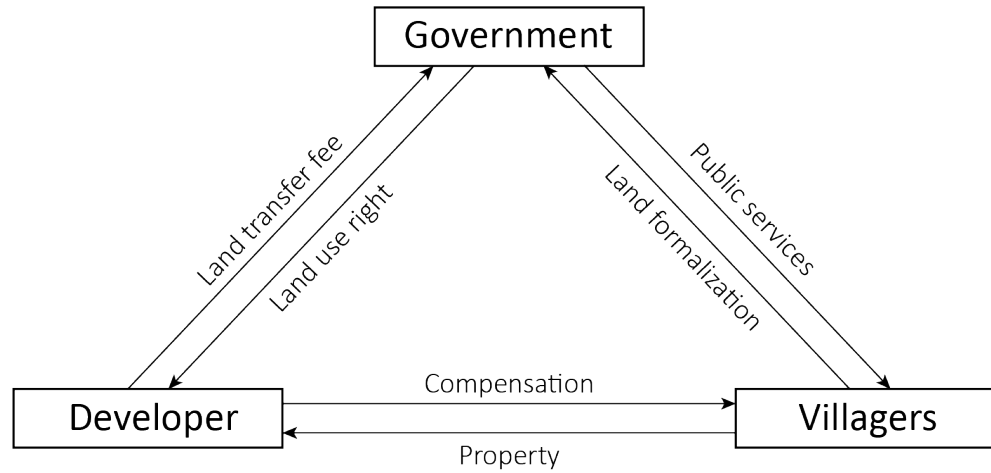


Figure 6 Before and After urban village transformation | Source: https://inews.gtimg.com/newsapp_bt/0/14213515127/1000 | <https://fang-community.leyoujia.com//pic/hsl/2018-06/05/b1ac5fc3-3e84-45d5-8aa4-ad5f7d2c1879.jpg?imageView2/1/w/720/h/405> | https://inews.gtimg.com/newsapp_bt/0/14213515497/1000

Current Mode of Redevelopment



Vulnerability of Migrants: Displacement



China / People & Culture

Migrant workers forced out as one of Shenzhen's last 'urban villages' faces wrecking ball

- Some 150,000 residents of Baishizhou have to leave by the end of September to make way for malls, hotels and high-end residential projects
- They worry about finding affordable housing in the city, and their children's education



Figure 7 Baishizhou | Source: <https://n.sinaimg.cn/spider20220608/400/w1280h720/20220608/b9ab-be9da7baeccb02b709f2f9c6b389e1e2.jpg>

Problem Case: Gangxia Village



Figure 8 Displacement in Gangxia | Source: <http://www.urbanus.com.cn/projects/gangxia-village/> | http://inews.gtimg.com/newsapp_bt/0/15246716952/641



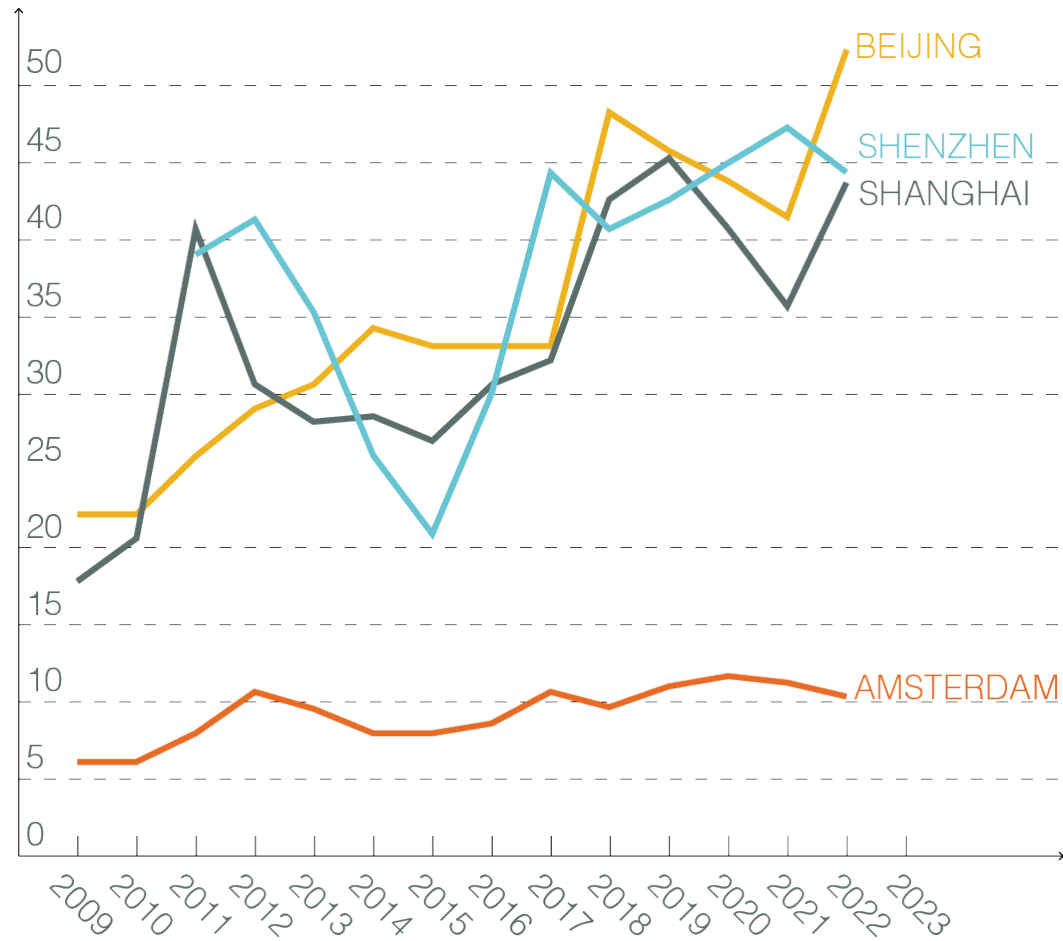
FAR 



Residents



Vulnerability of The City: Unaffordable Housing



Housing Affordability

(Price of a median home to the median annual household income Ratio)

Figure 9 Housing Affordability in cities of China | Data Source: <https://www.numbeo.com/property-investment/rankings.jsp>



I want to be a scientist!

2002



How can I afford a house?

2022

Figure 10 Change of the ambition of a rural youth

Drivers of Urban Village Redevelopment

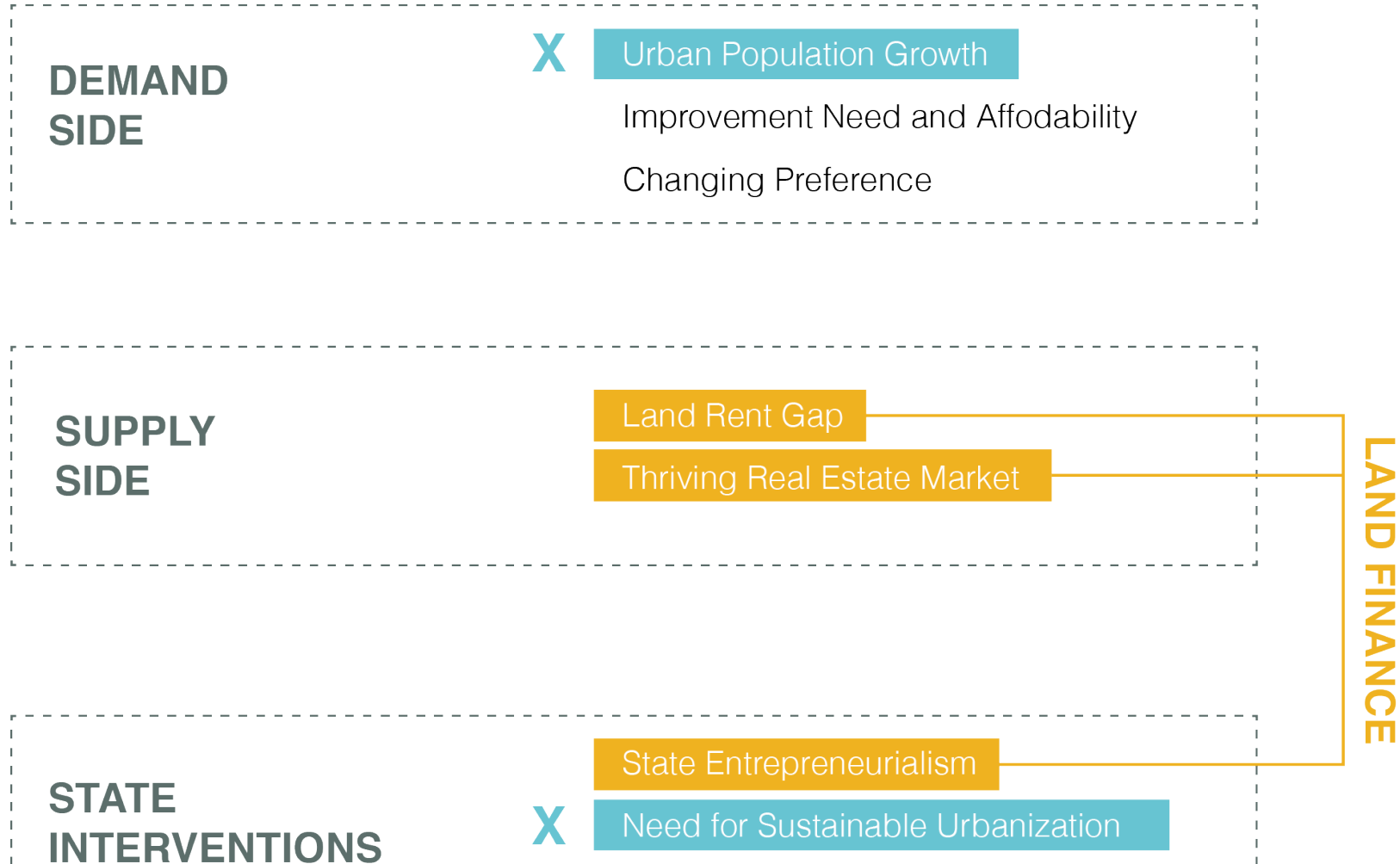


Figure 11 Drivers of Urban Village Redevelopment | Data Source: Jiang, L.; Lai, Y.; Chen, K.; Tang, X. What Drives Urban Village Redevelopment in China? A Survey of Literature Based on Web of Science Core Collection Database. Land 2022, 11, 525. <https://doi.org/10.3390/land11040525>

Land Finance as Institution

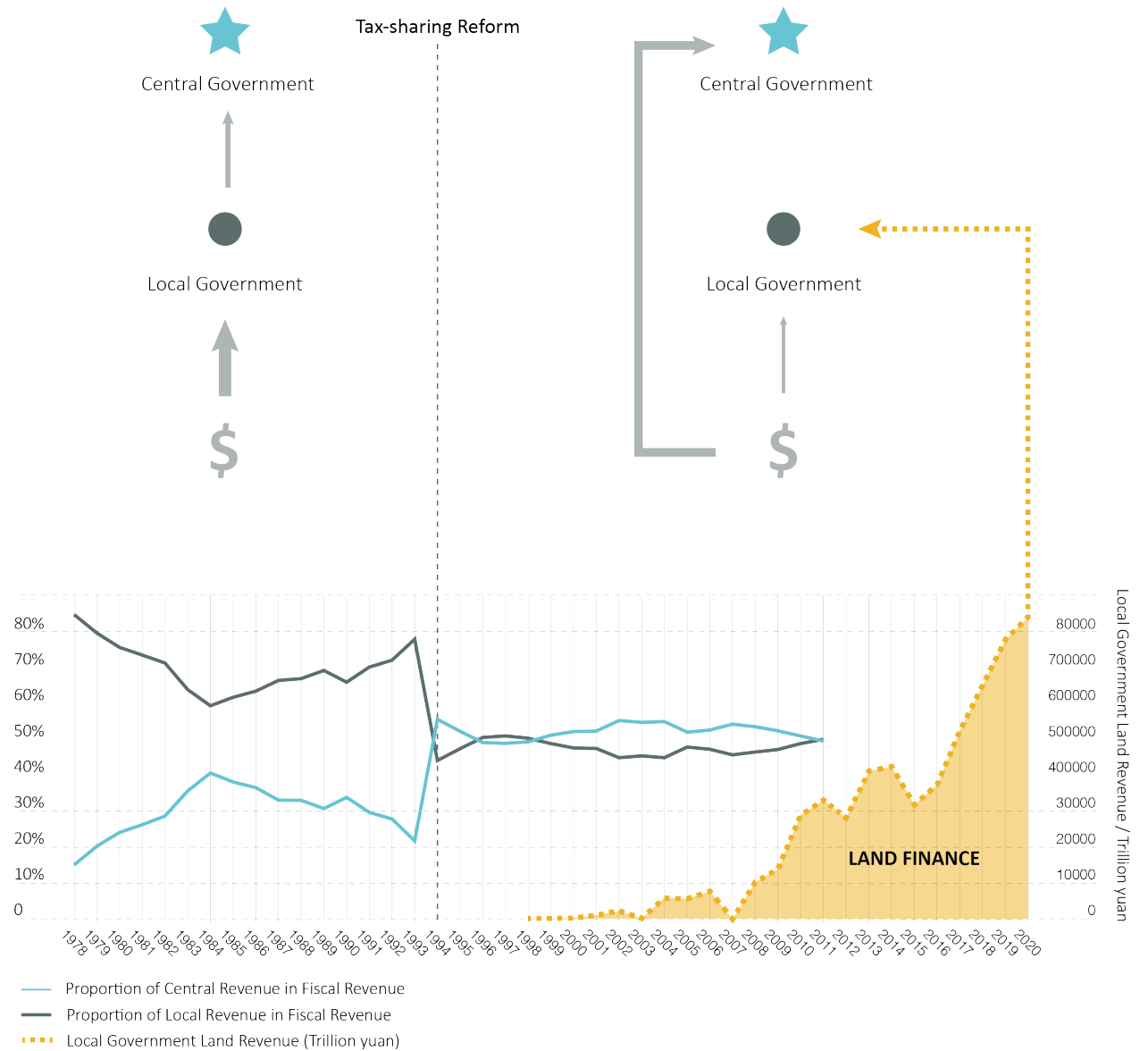


Figure 12 Land Finance | Data Source: https://pica.zhimg.com/80/8bc84d925075b3df4e62bbb556cedea9_720w.webp?source=1940ef5c

Research Question

Main Question

How can the urban village be redeveloped into a socially resilient community and reposition its role in the city?

Sub-questions

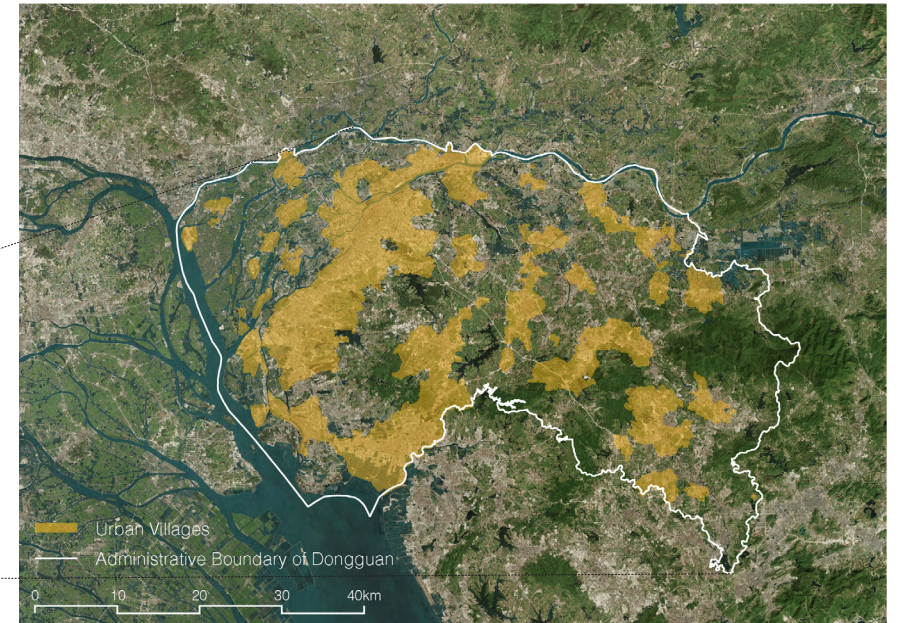
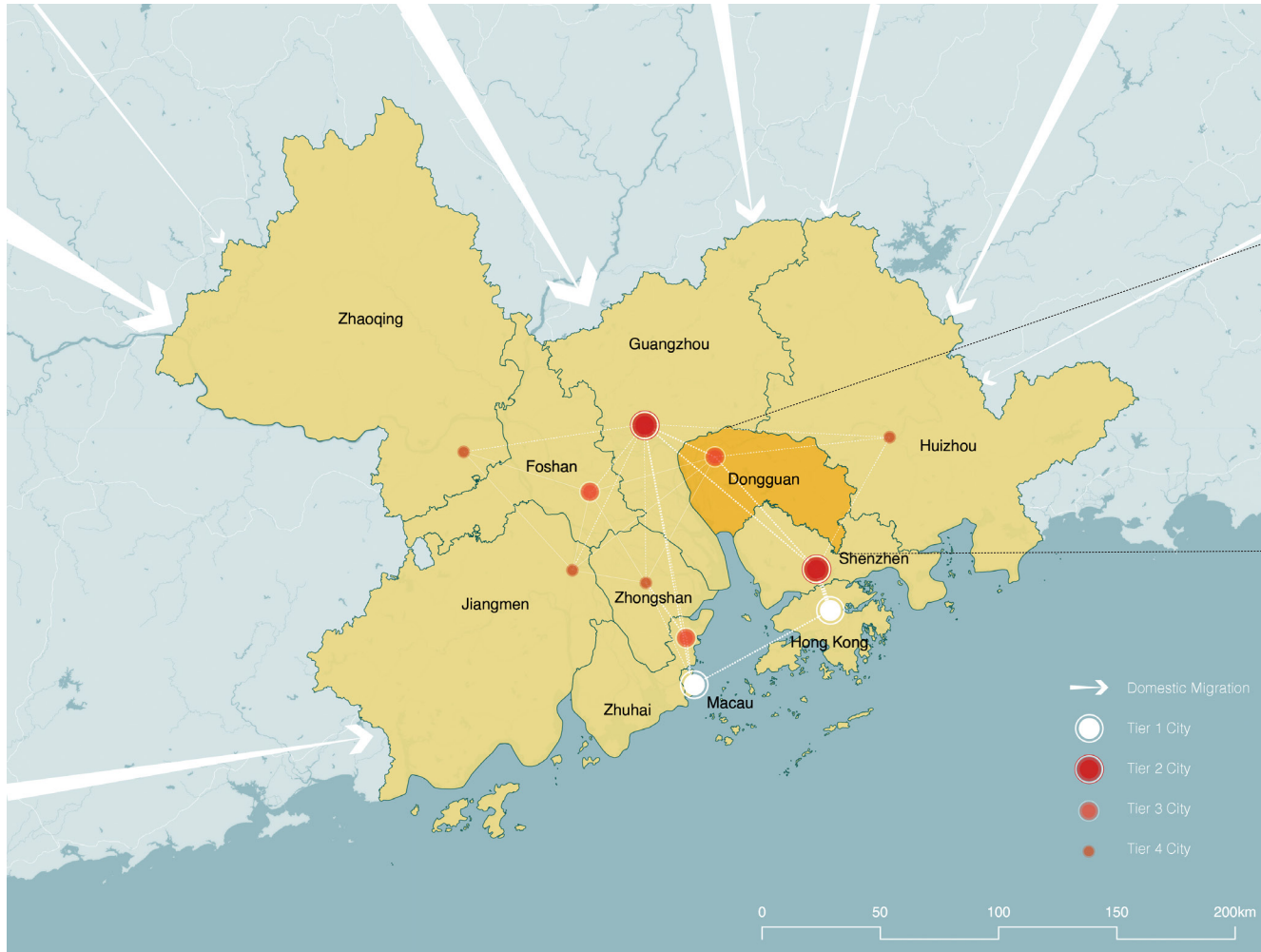
1 Community Scale

- RQ 1.1 What is social resilience in the context of urban village?
- RQ 1.2 How can governance facilitate the social resilience in urban villages?
- RQ 1.3 How can urban design facilitate the social resilience in urban villages?

2 City Scale

- RQ 2.1 What will be the new roles of urban villages in city?
- RQ 2.2 How does the planning of urban villages respond to their new roles?

Site of Study



Greater Bay Area (GBA), a megalopolis in South China with 71.2 million population (5% of China's total population), is made up of nine cities and two special administrative regions. It is the largest and most prosperous economic area in South China.

Figure 13 Dongguan in Greater Bay Area

MACRO: City of Dongguan

More than 800 square kilometers, or almost four times the size of Amsterdam, is taken up by urban villages in Dongguan.



Figure 14 Urban Villages in Dongguan | Data Source: Rural Construction Planning of Dongguan City (2018-2035)

Housing Landscape in Dongguan

Supply Side: Housing Type

Demand Side: Residents Type

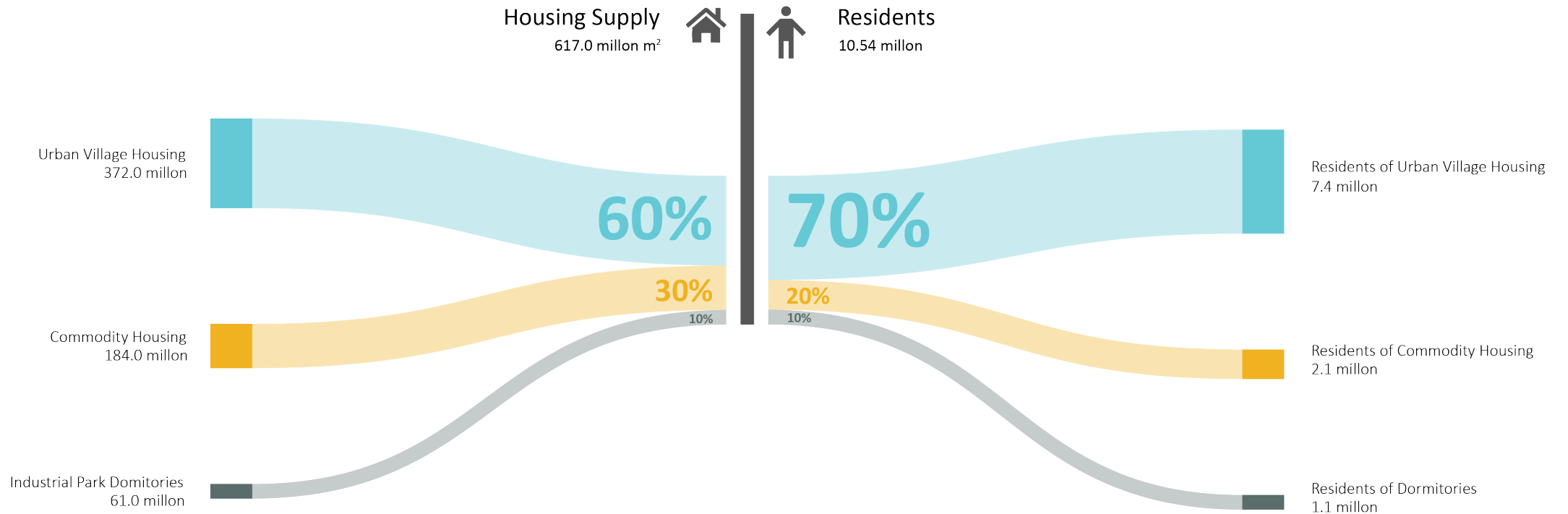
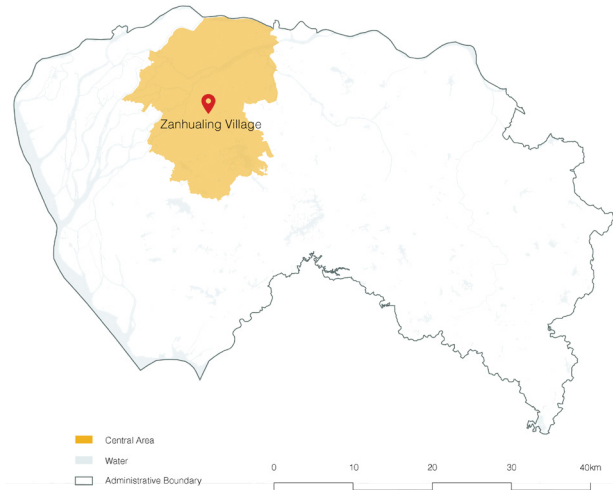


Figure 15 Housing Landscape in Dongguan

MICRO: Zanhualing Village



- ★ Dongguan Municipality
- Urban Green
- Water

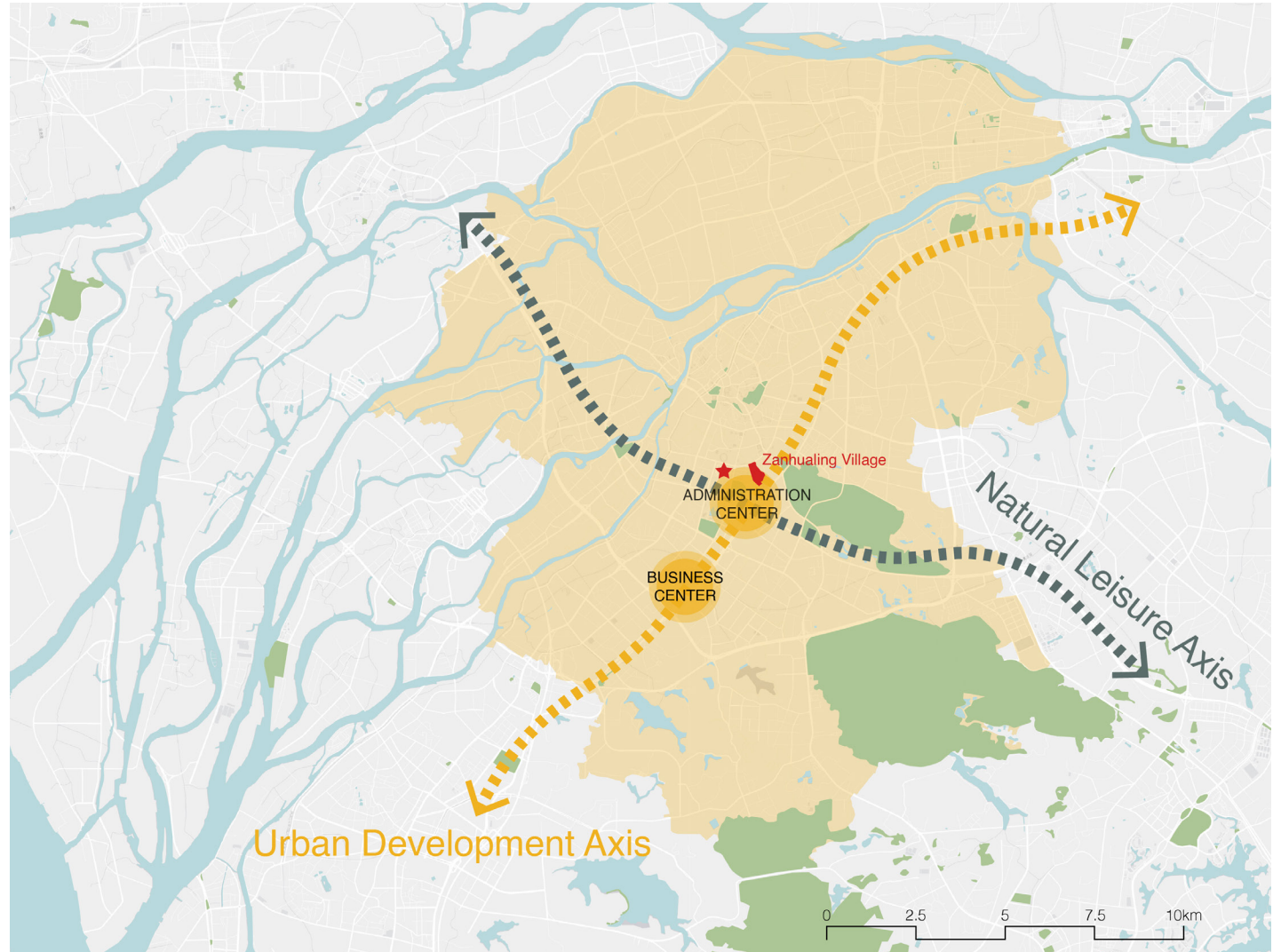
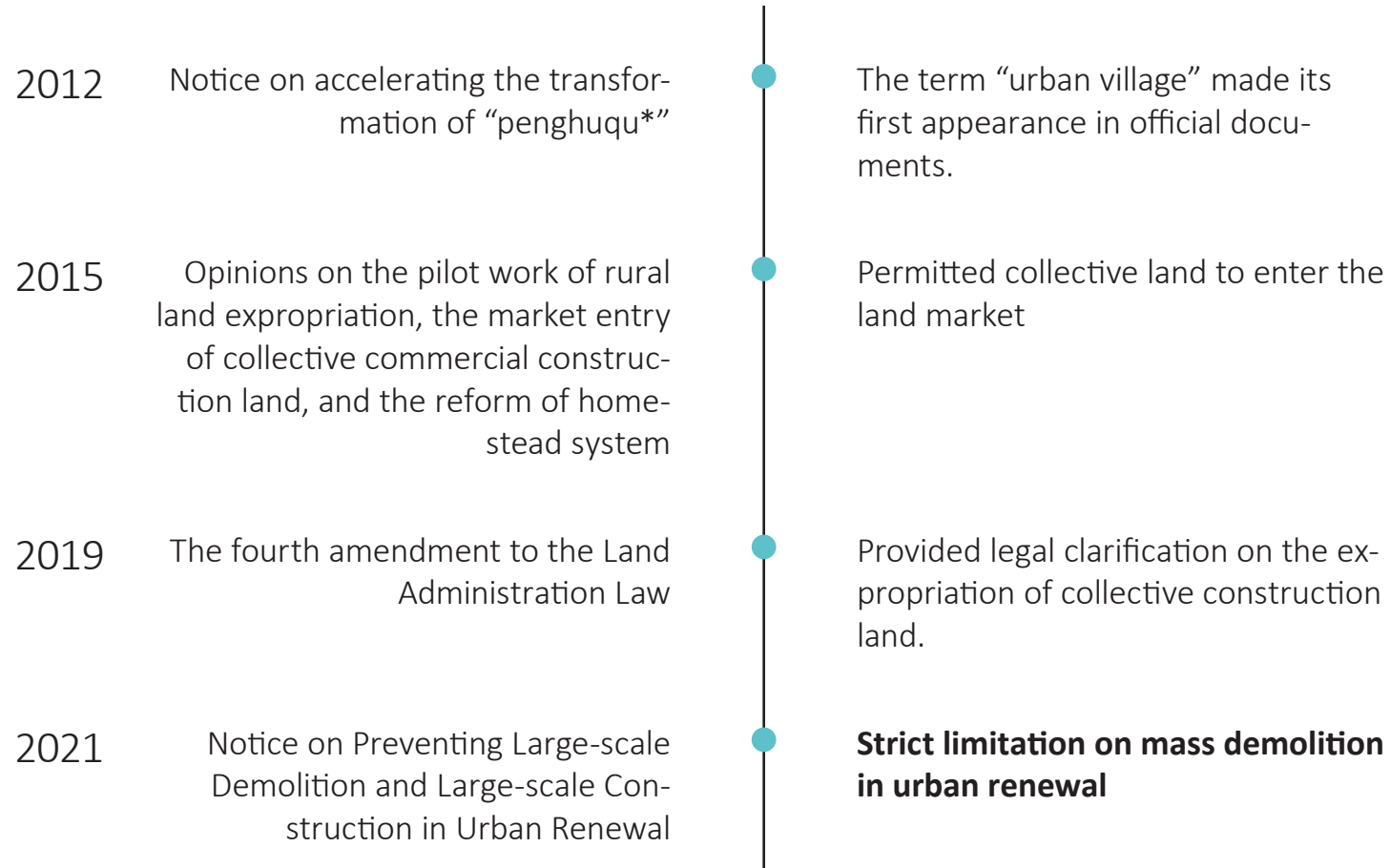


Figure 16 Zanhualing in Dongguan | Data Source: Master Plan of Dongguan (2016-2030)

Urgency



* penghuqu: commonly translated to “shanty town”, refers to neighborhoods characterized by dilapidated physical conditions. Urban villages are also classified as one of the types of penghuqu due to their poor living conditions and infrastructure.

Urgency

POLICY

Notice on Preventing Large-scale Demolition and Large-scale Construction in Urban Renewal (August, 2021)

“Strictly limiting mass demolition in urban renewal”

ECONOMY

Redeveloping urban villages with traditional model is not profitable for developers giving the decline of real estate market

SOCIETY

Affordable housing is needed to support the industrial development

“150,000 affordable housing gaps before 2025 in Dongguan”

3 Methodology

Methodology

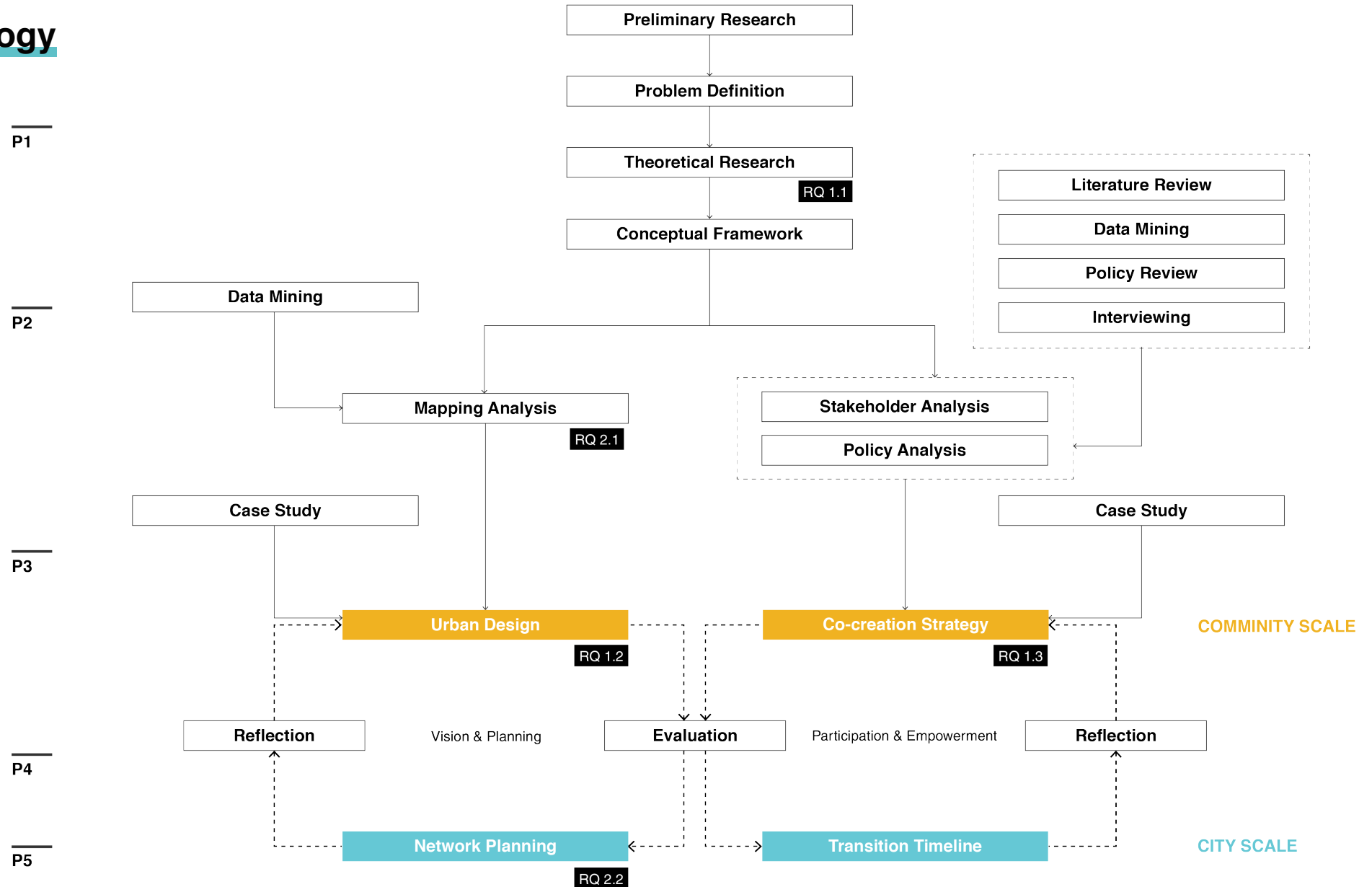


Figure 17 Methodology

Theoretical Framework

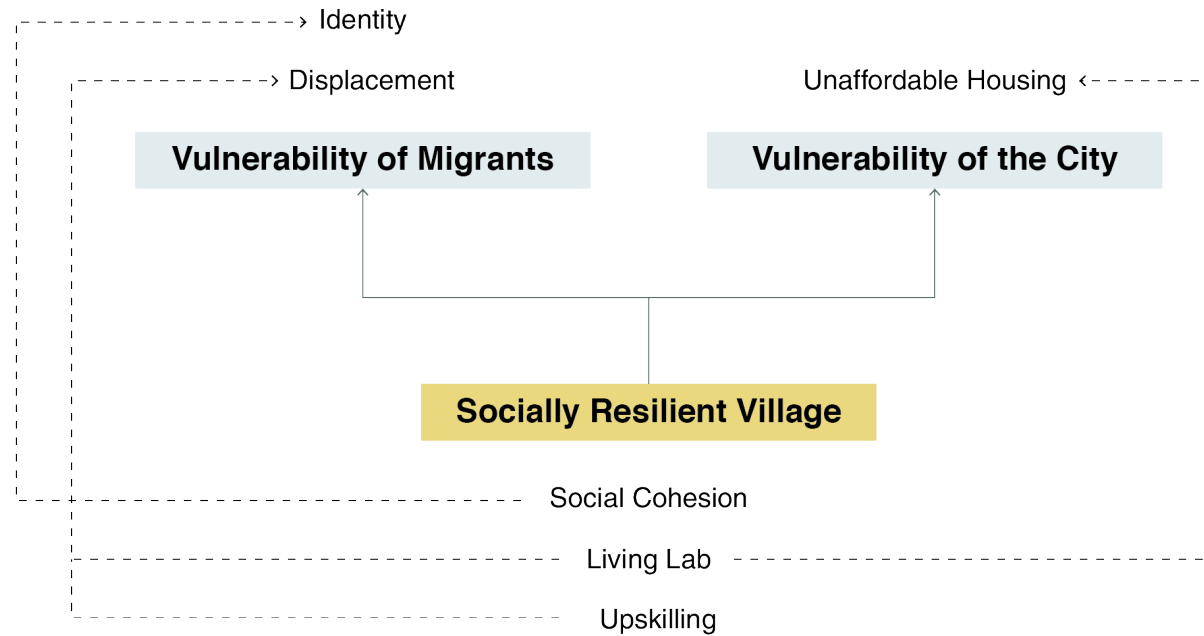


Figure 18 Theoretical Framework

Social Resilience



Housing



Employment



Identity



Public Space

With the theory of social resilience and vulnerability in consideration, as well as the reality in urban villages, a set of social resilience indicators consisting of housing, employment, identity, and public space is established.

Conceptual Framework

The primary objective of this project is to create **Zanhualing Village as a pilot project** for an innovative approach to urban village redevelopment that could improve the community's social resilience in terms of identity, housing, employment, and social network.

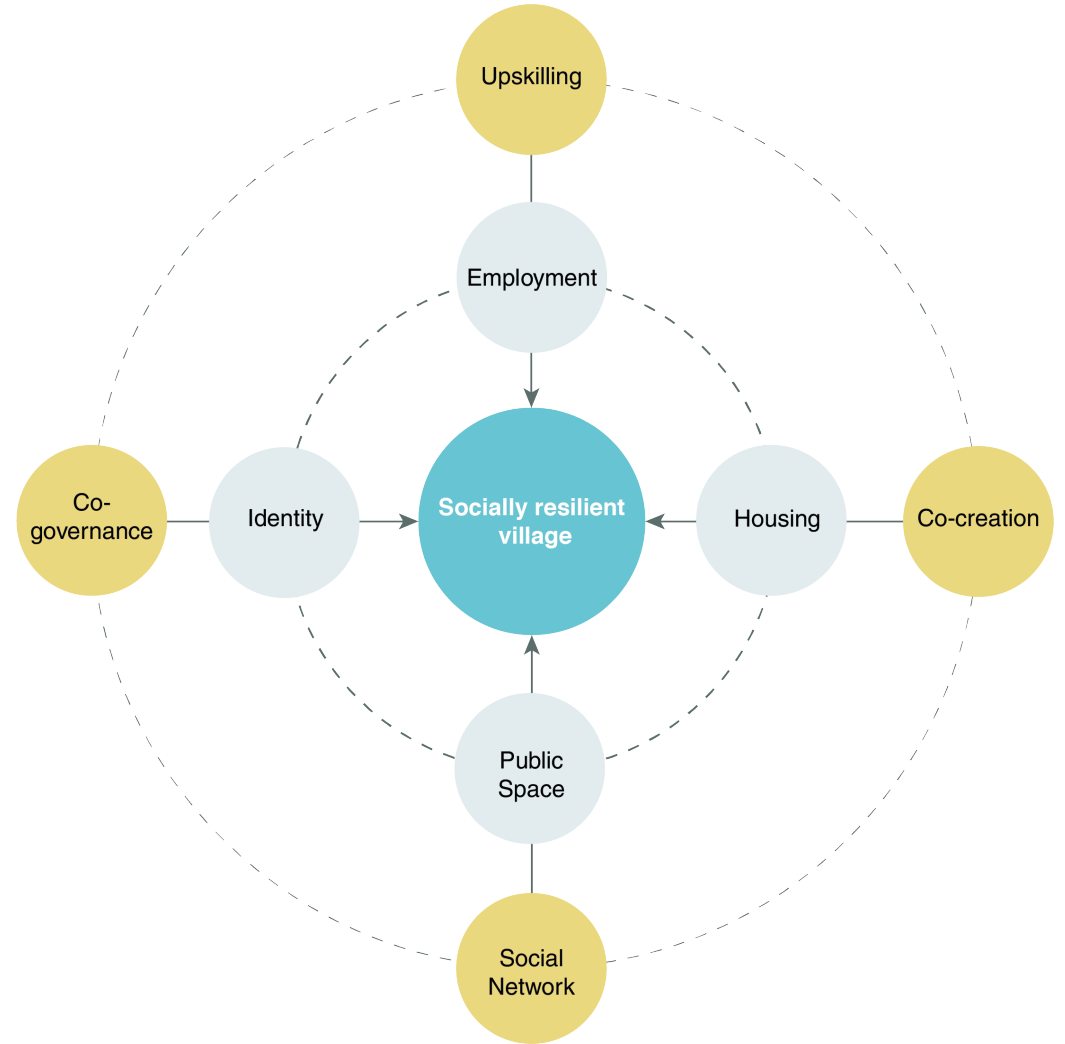


Figure 19 Conceptual Framework

Scale of Analysis

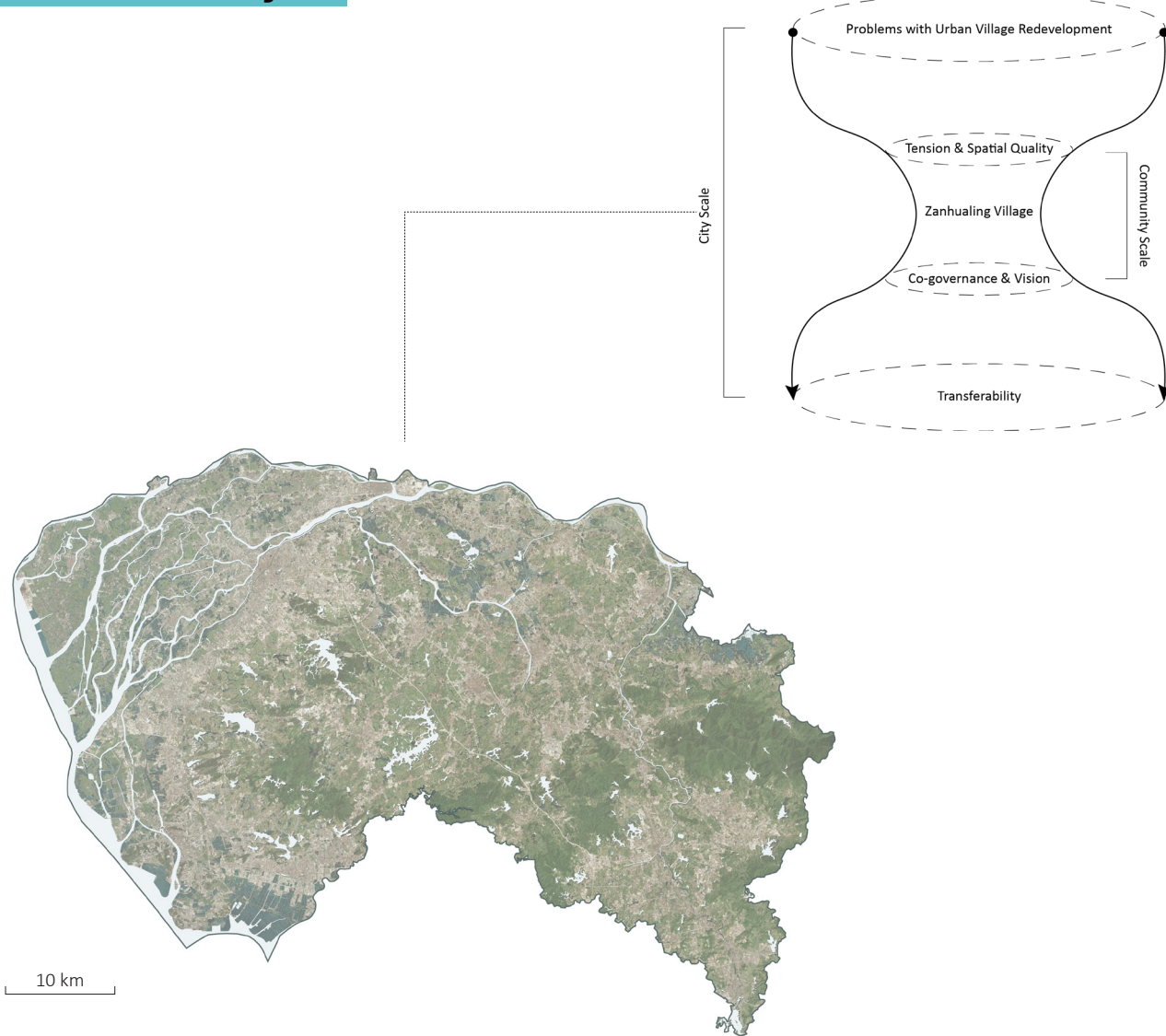


Figure 20 The City of Dongguan



Figure 21 Zanhualing Village

4 Analysis

MACRO: City of Dongguan

Affordable Housing Demand

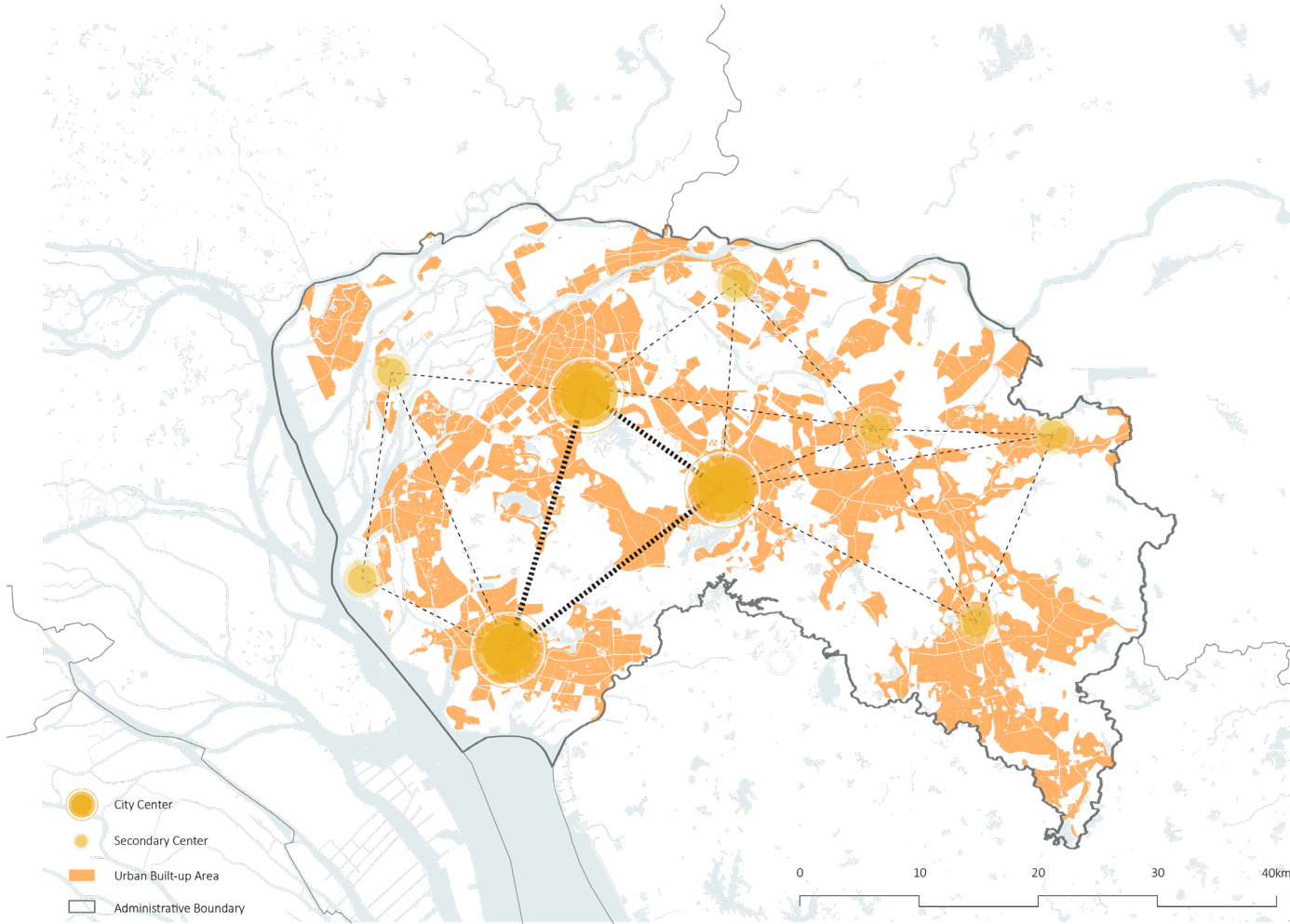


Figure 22 Urban Structure of Dongguan

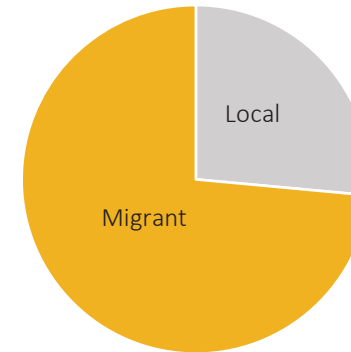


Figure 23 Population Composition of Dongguan

Population: 10.54 million

Local population: 2.79 million

Industrial Transformation Demand

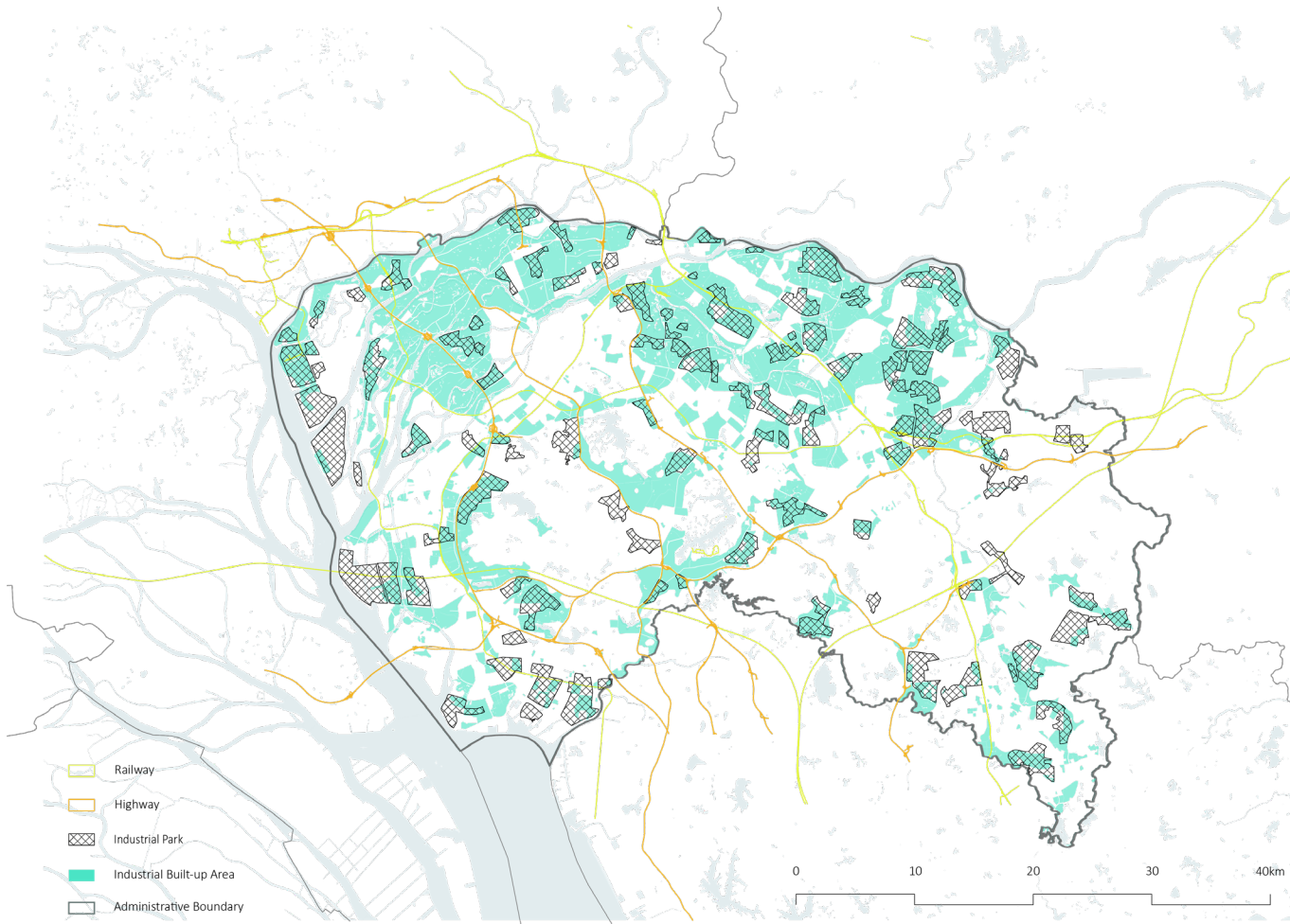


Figure 24 Industrial Distribution of Dongguan

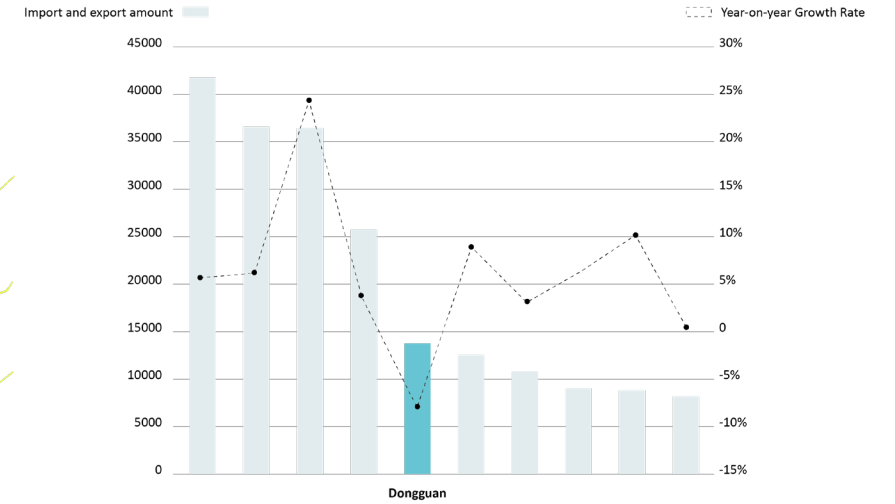


Figure 25 Top Ten Import and Export Cities in China

Ecological Preservation Demand

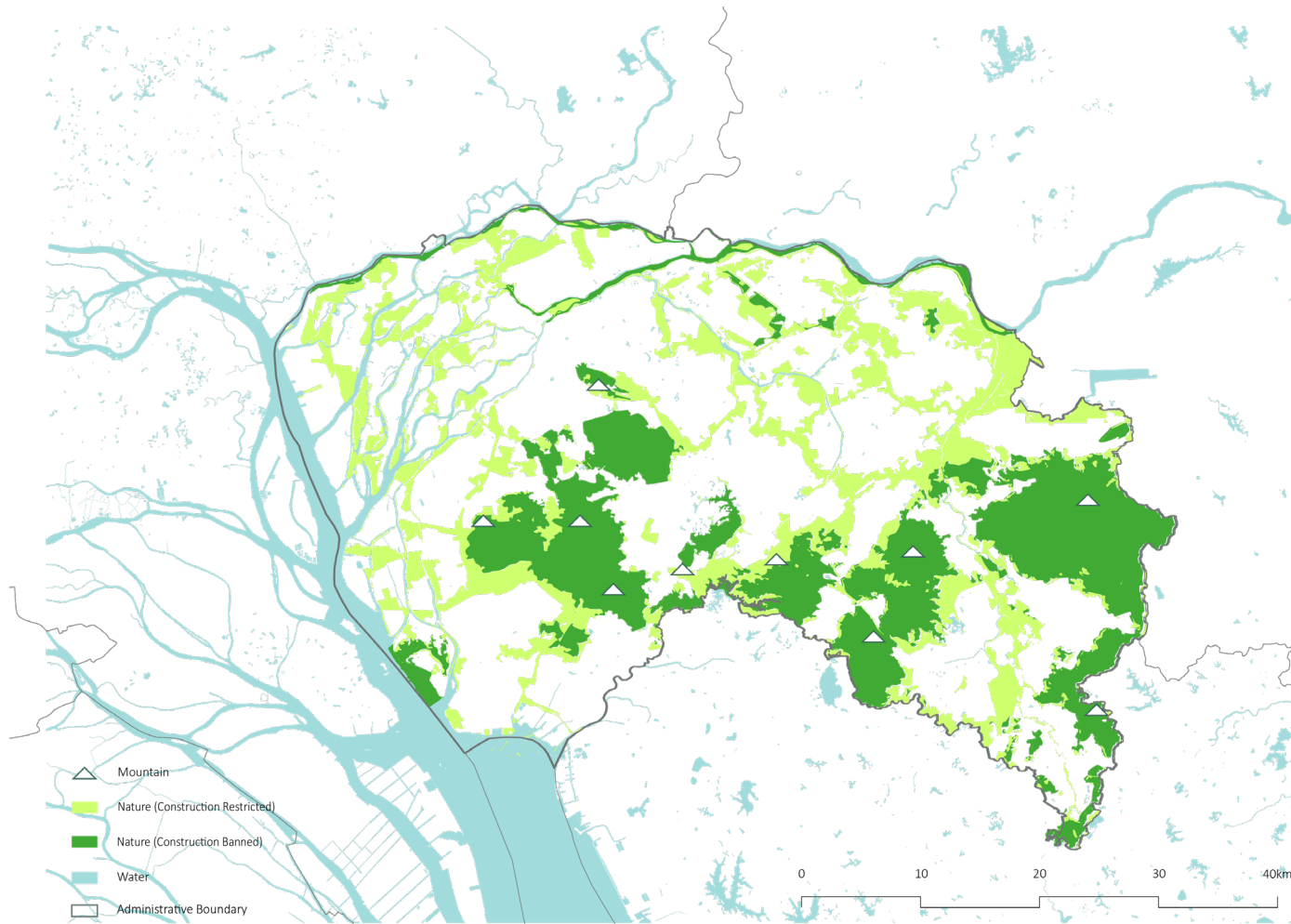


Figure 26 Ecological Preservation Area of Dongguan

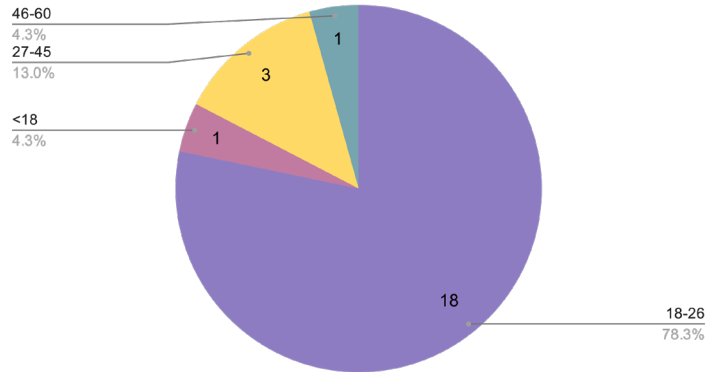
MICRO: Zanhualing Village



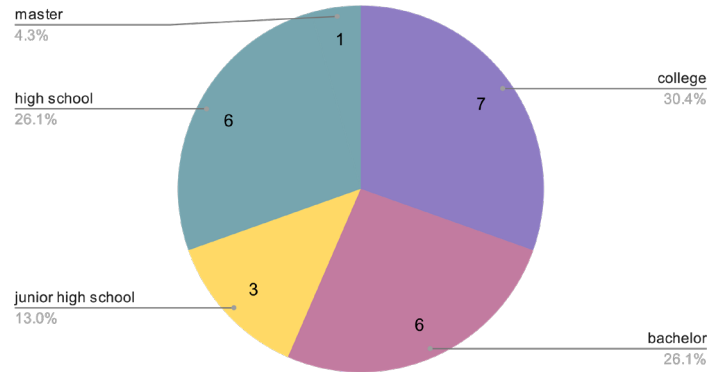
- Lack of openness and access to public transport
- Cutting off the potential connections
- Lack of educational facilities in surrounding areas

Vulnerability - Identity

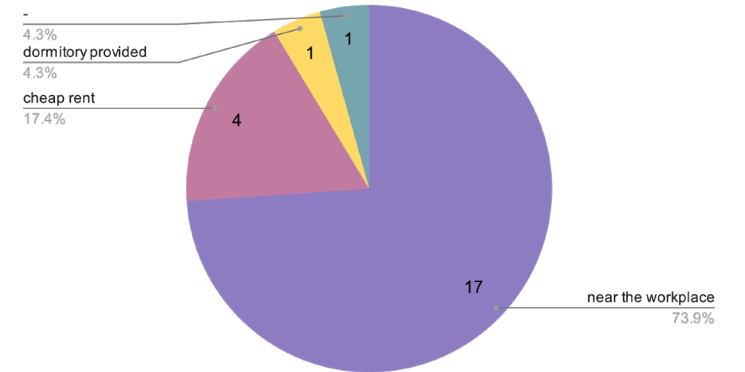
Age Group



Education Level

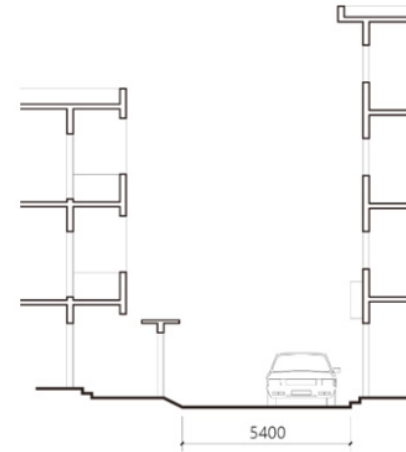
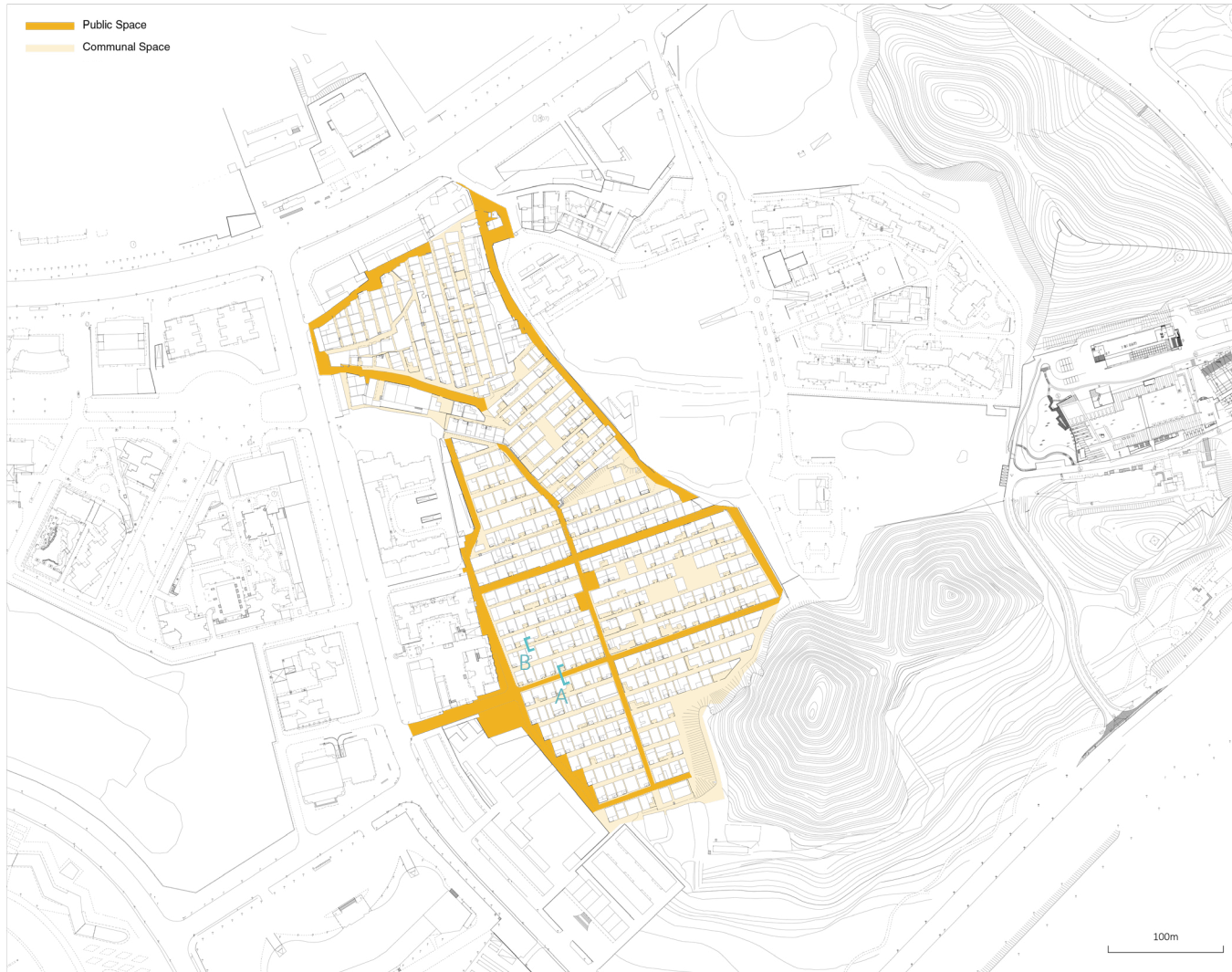


Reasons of Living Here

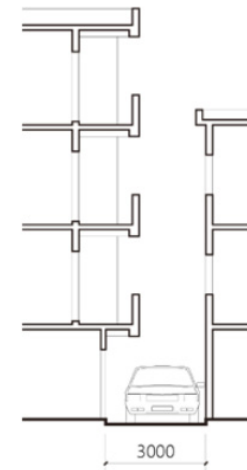


Most of the tenants are young, with proper education, and they choose to live here for the central location and cheap rent.

Vulnerability - Public Space



Section A - Public Road



Section B - Communal Road



Stacking Sundries



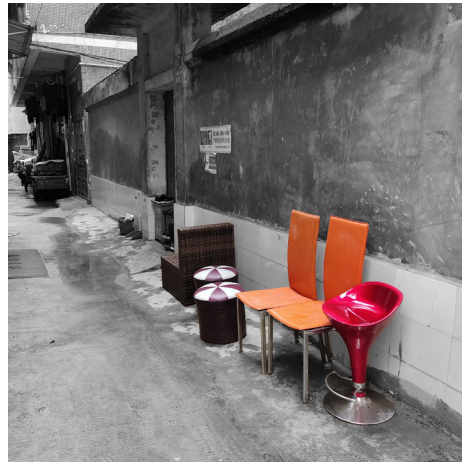
Living Space



Hanging Clothes



Stall

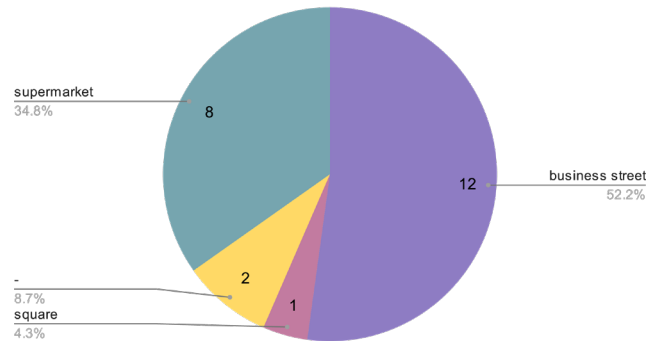


Outdoor Furniture

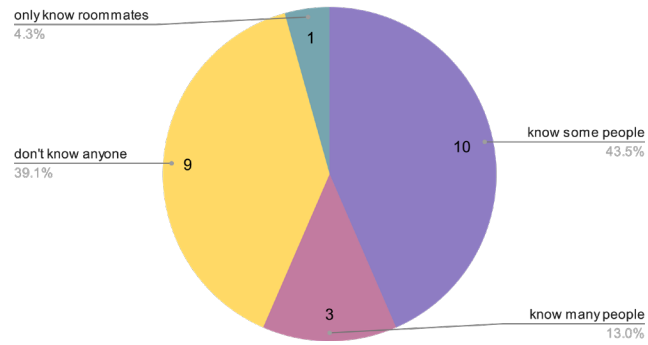


Parking

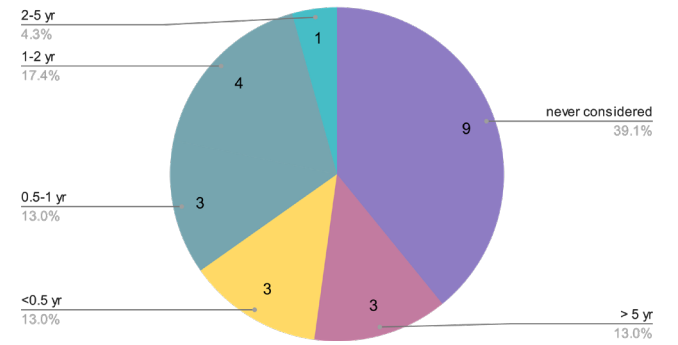
Most Visited Public Spaces



Familiarity with Neighborhoods

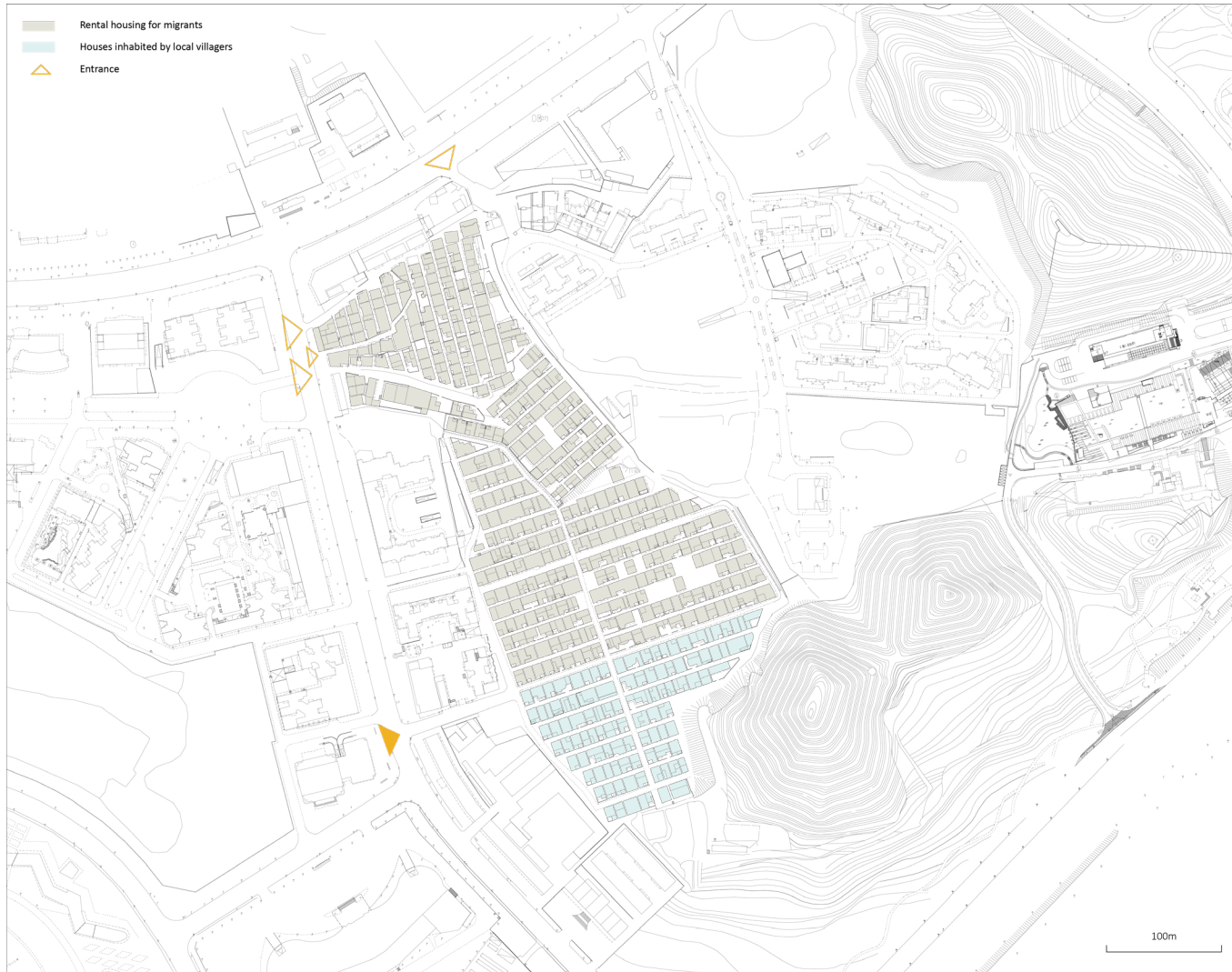


Estimated Stay Length



The public spaces are underused;
The interaction among people is lacked.

Housing



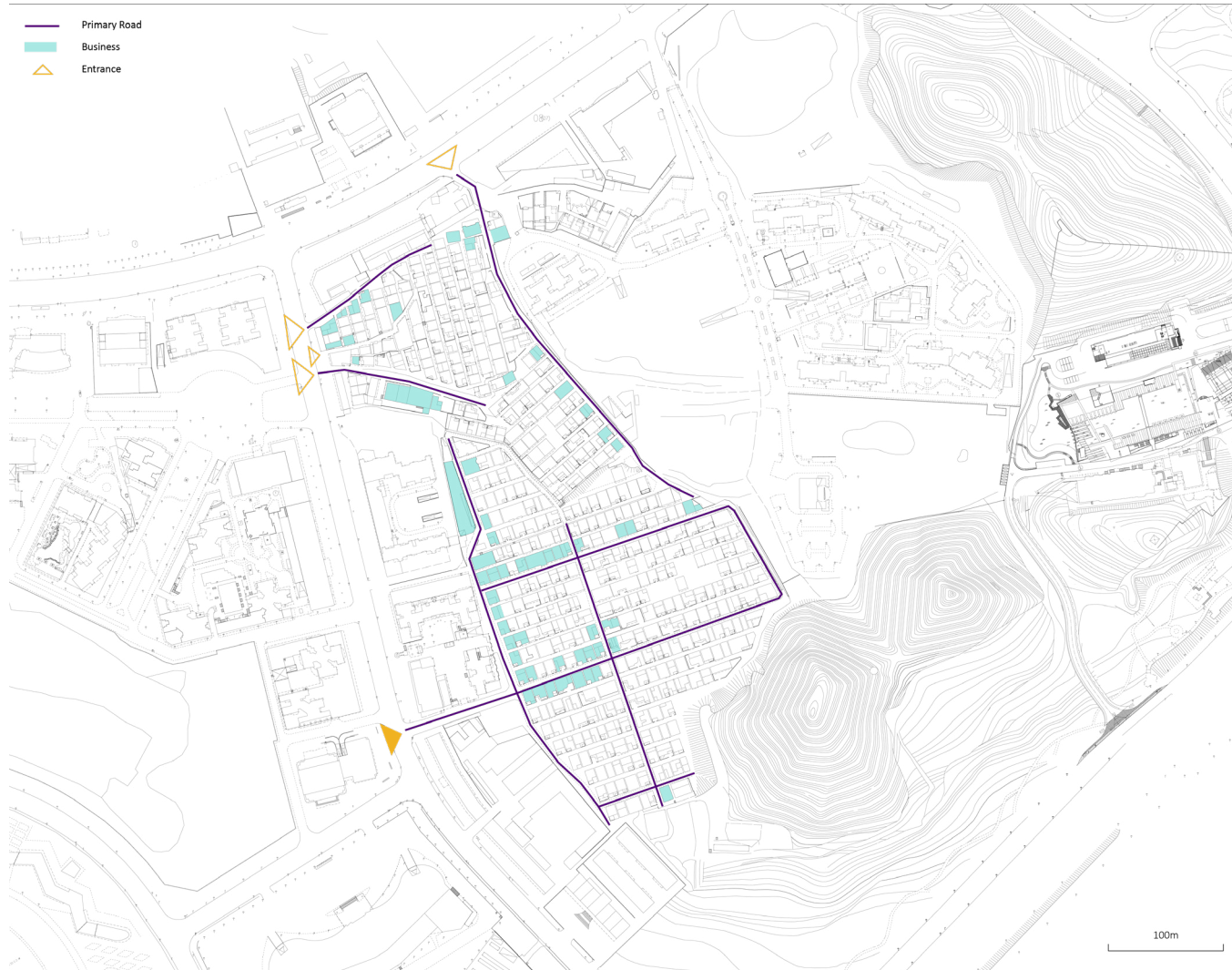
Rental housing for migrants



Housing of villagers

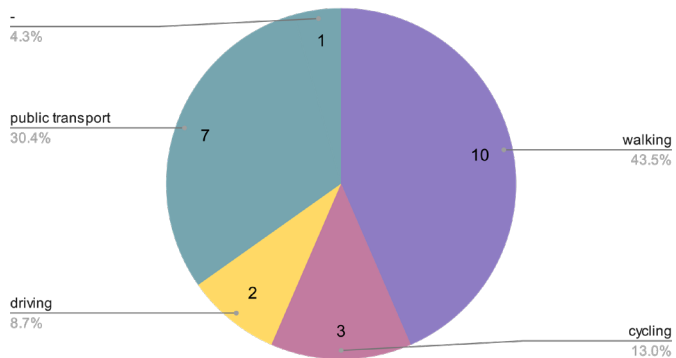


Employment

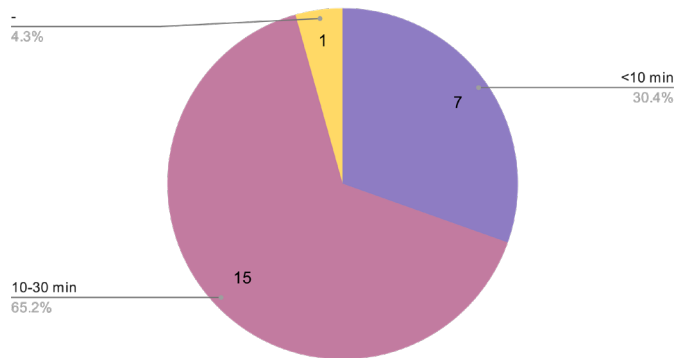


Weak local business

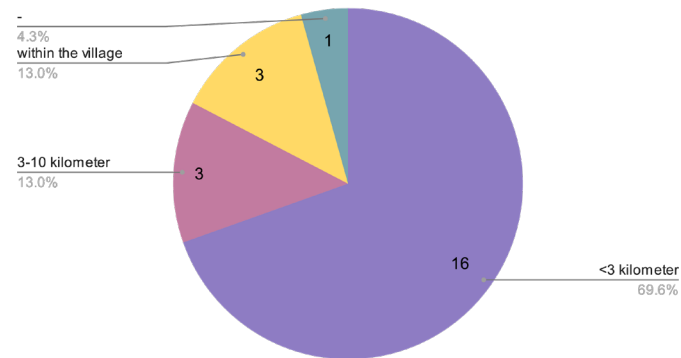
Commuting Mode



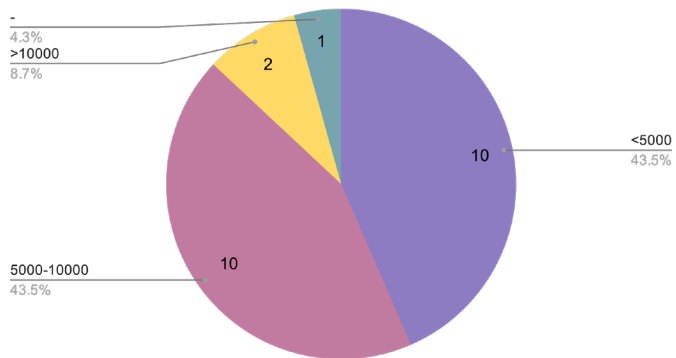
Commuting Time



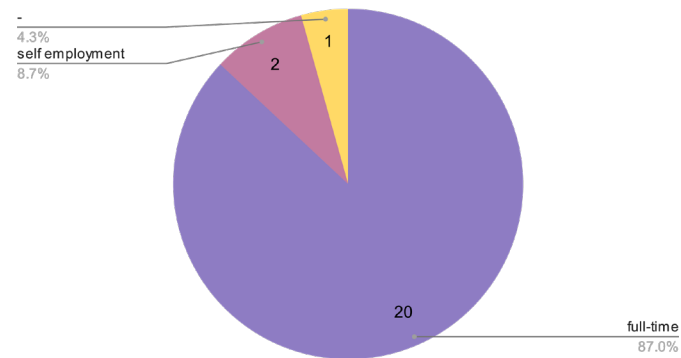
Distance from Workplace



Income Level



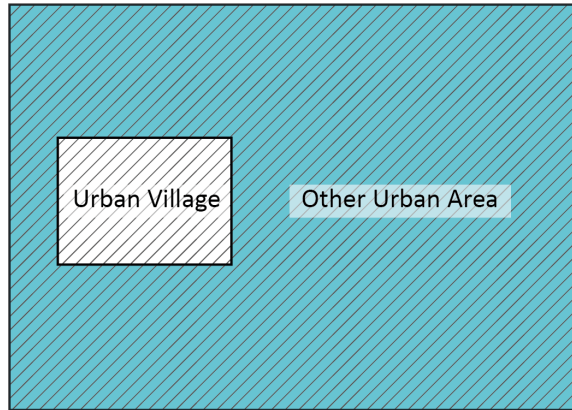
Job Type





Most of the respondents have a full-time job and relatively low income.

Most of them work within 3 kilometers outside the village and rely on public transportation and walking for commuting

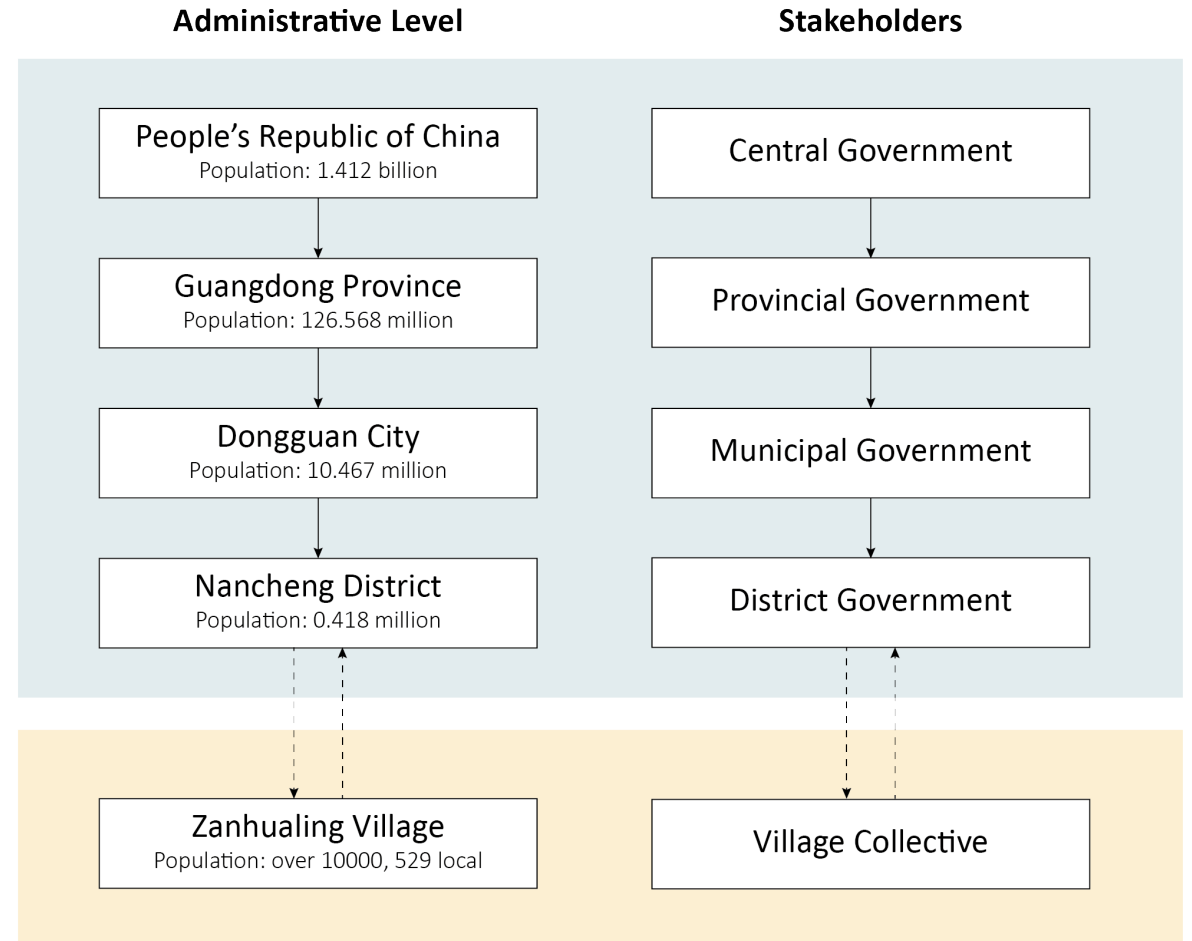
Governance in Urban Villages

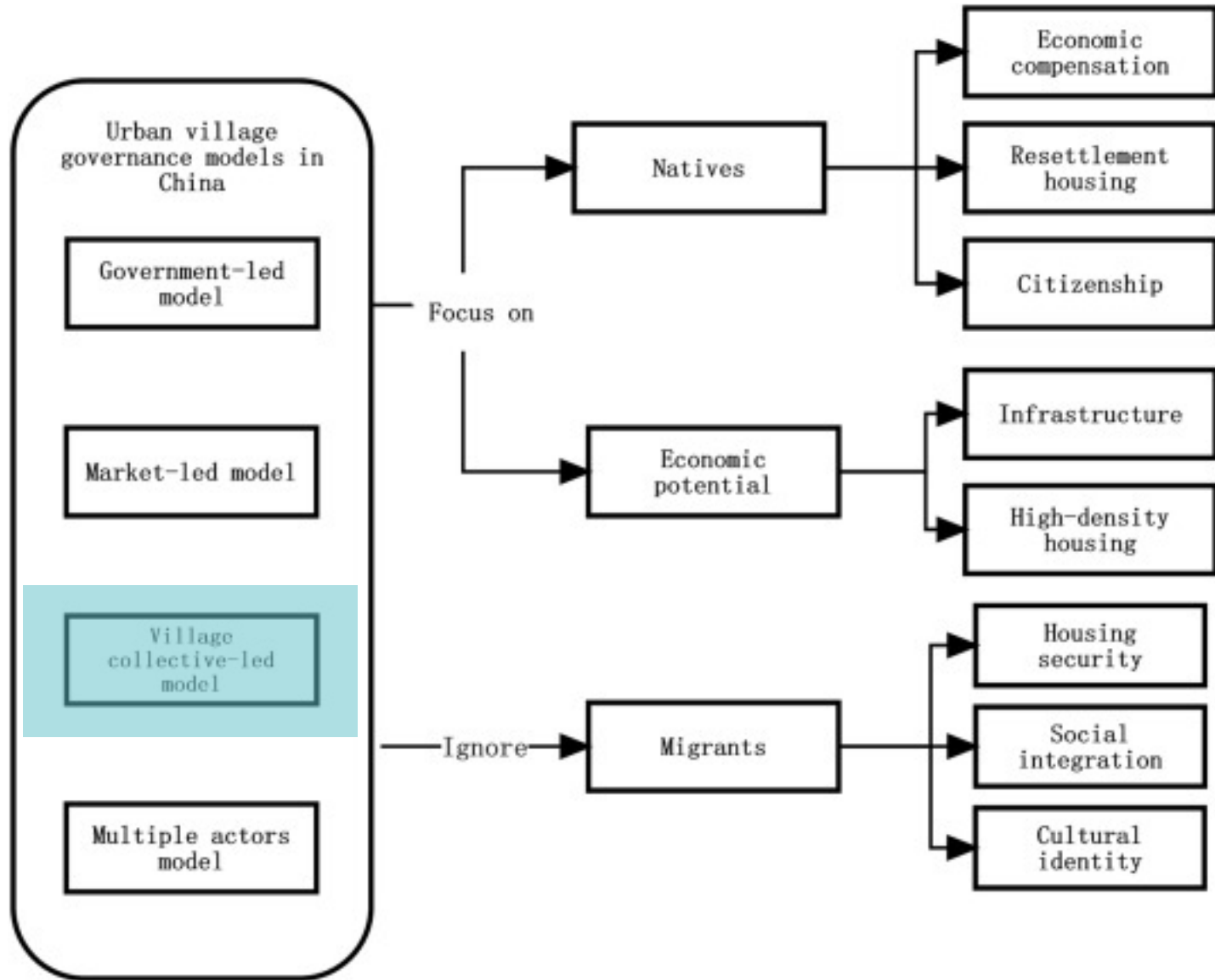


-  Coverage of urban development
-  Coverage of urban service

Top-down

Bottom-up





Village Collective

- Represented by a village committee elected by villagers
- Members of the committee must be villagers who are native in this village

Stakeholder Analysis

 Property Boundary

The property boundary marks the collective land owned by the urban vilallge

 Houses occupied by tenants

These houses are rent and lived by tenants

Stakeholders:

- tenants

 Houses occupied by owners

These houses are lived by their owners

Stakeholders:

- property owners

 Leased Property

The property leased out by the village collective to private sectors.

Stakeholders:

- village collective

- local companies

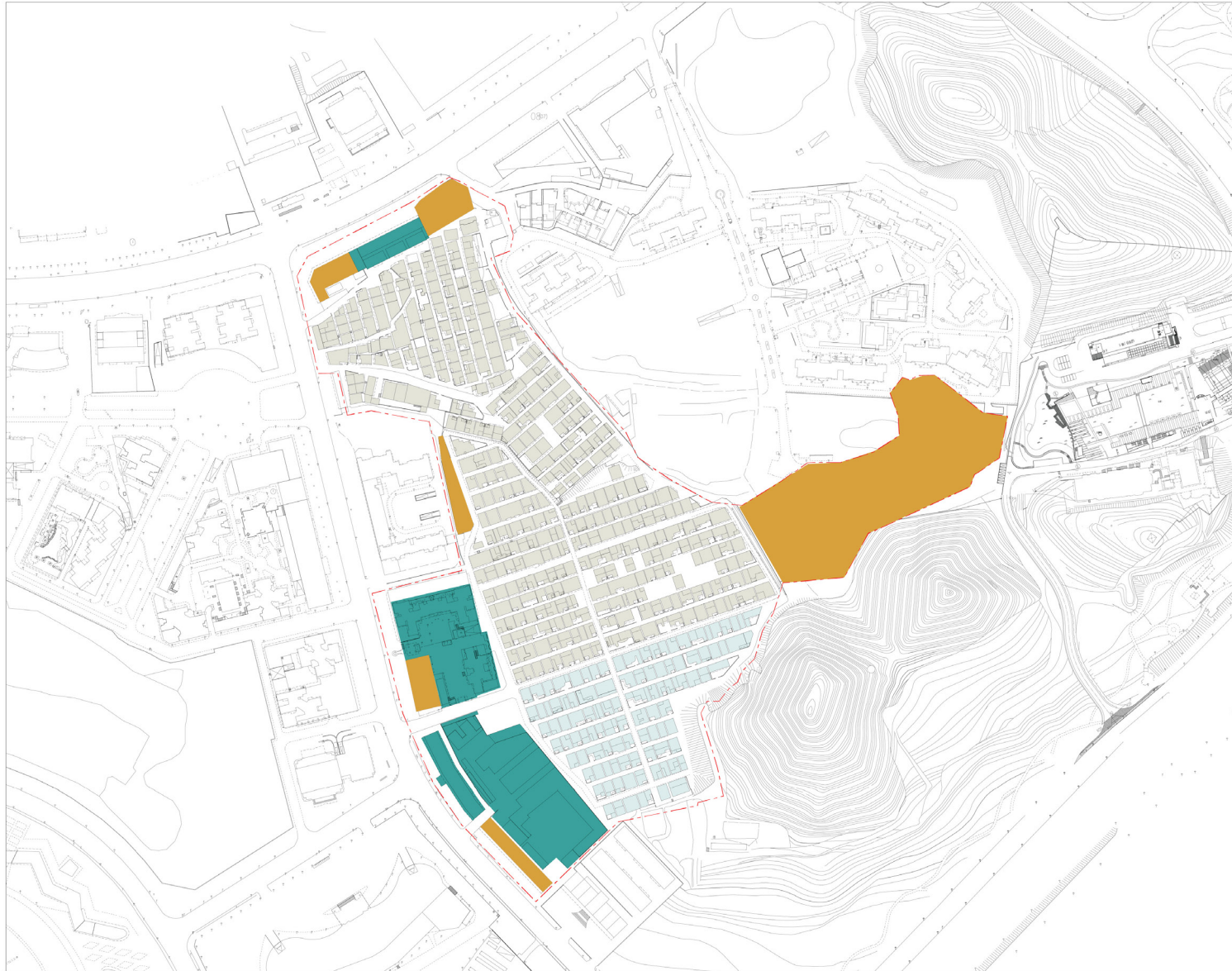
 Unqualified Apartments

The village collective sold the property to small developers, who then built flats and sold them to homebuyers at below-market prices because it is forbidden to build commercial housing on collective land.

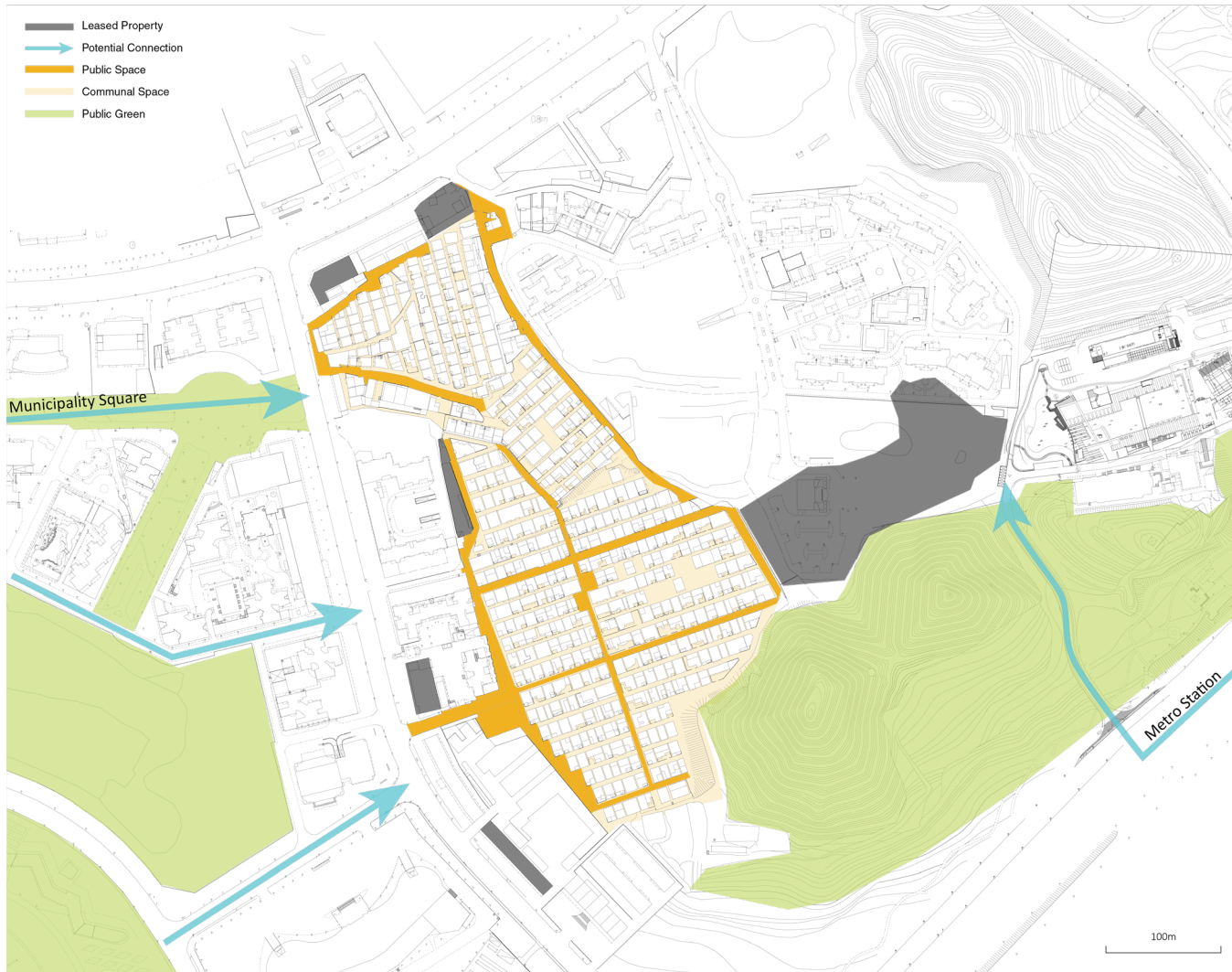
Stakeholders:

- small developers

- homebuyers of unqualified housing



Opportunity

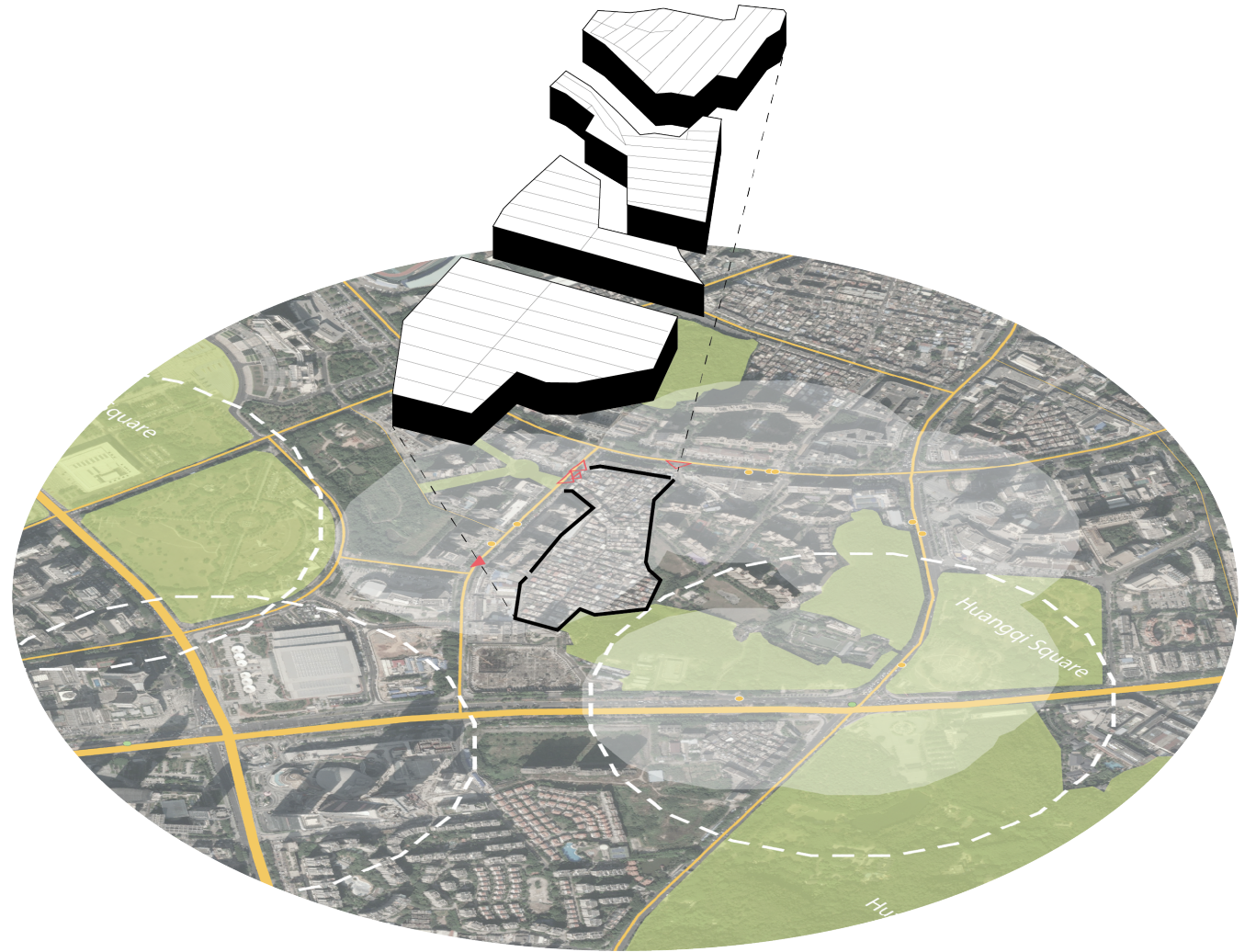


- Rooftop Spaces
- Leased-out property as potential land use
- Need for connection

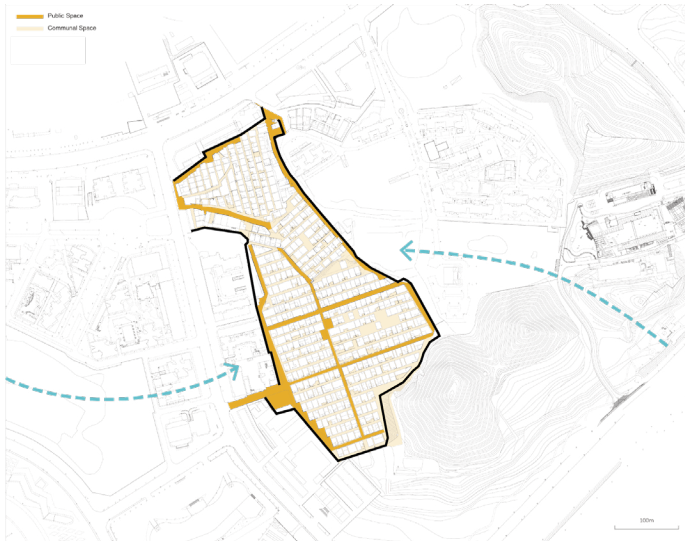
5 Redevelopment Strategy

Design Problem

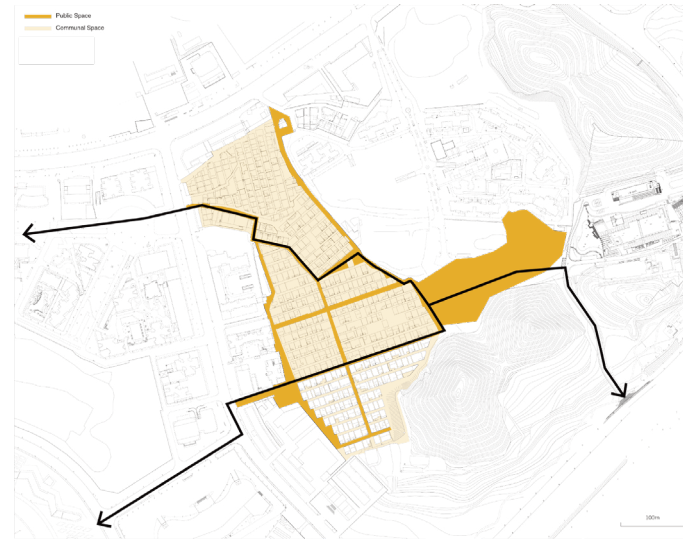
Fragmentation & Segregation



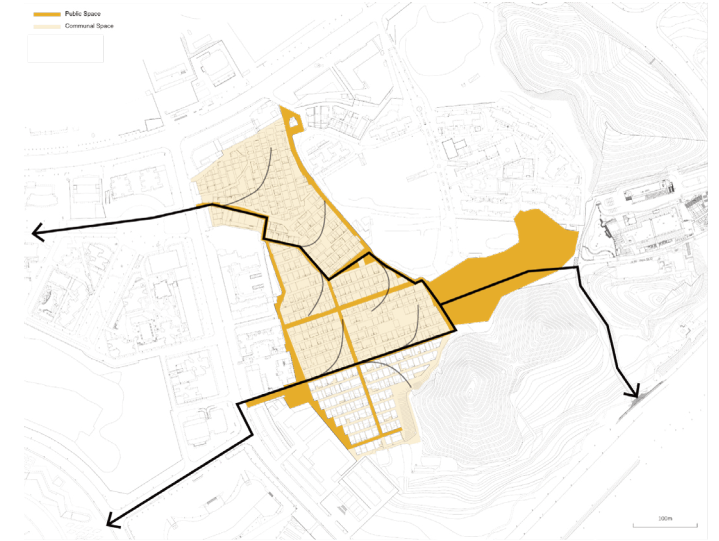
Stitching as Concept



1 - The demand for connectivity is blocked

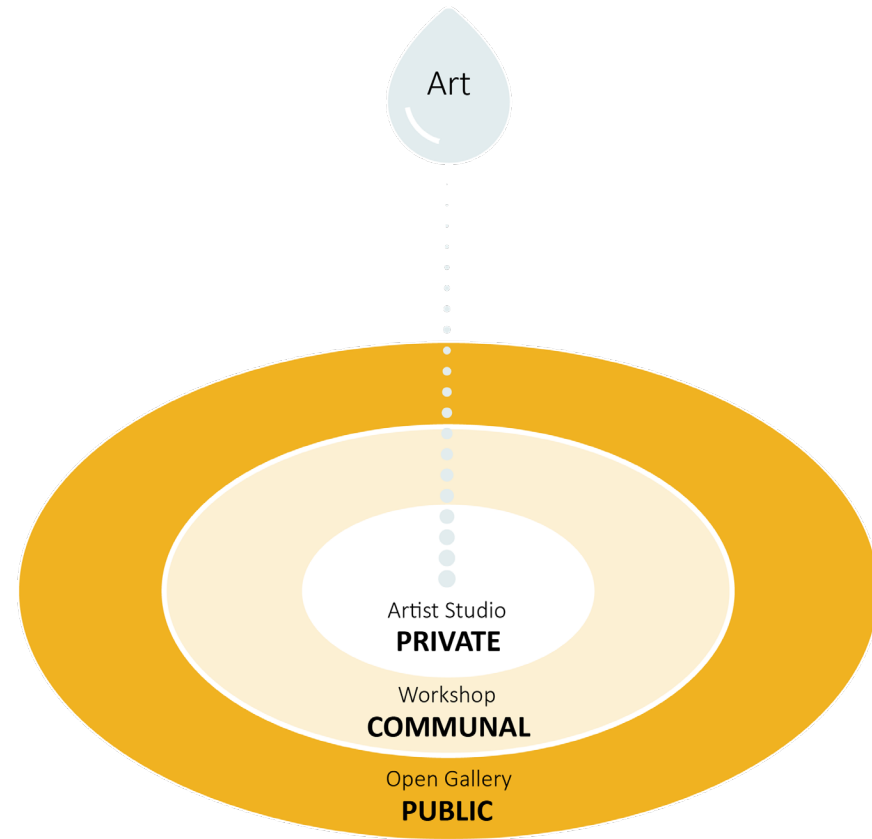


2 - The public routes stitch it together with the city

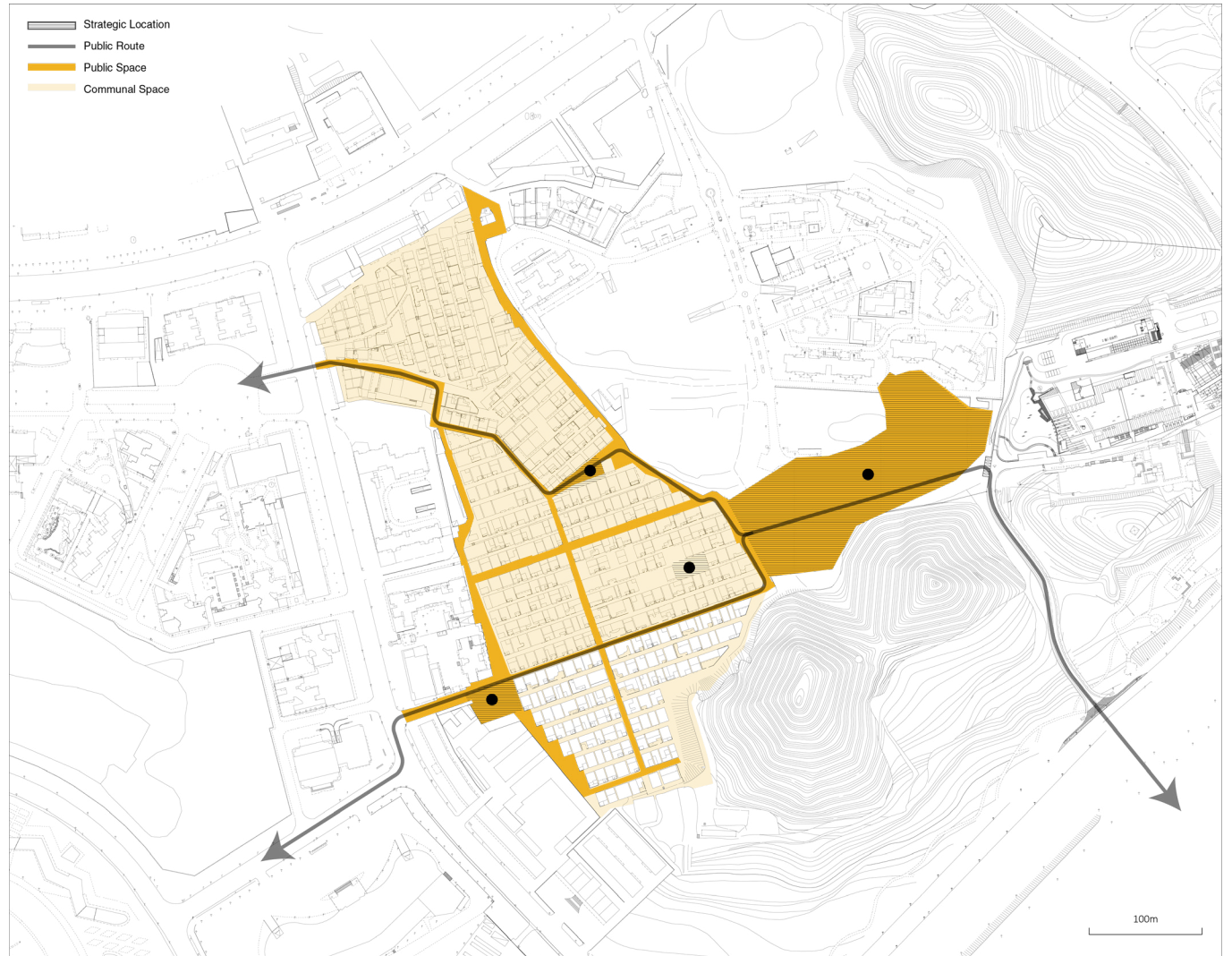


3 - Communal spaces grow gradually and connect the village as a whole

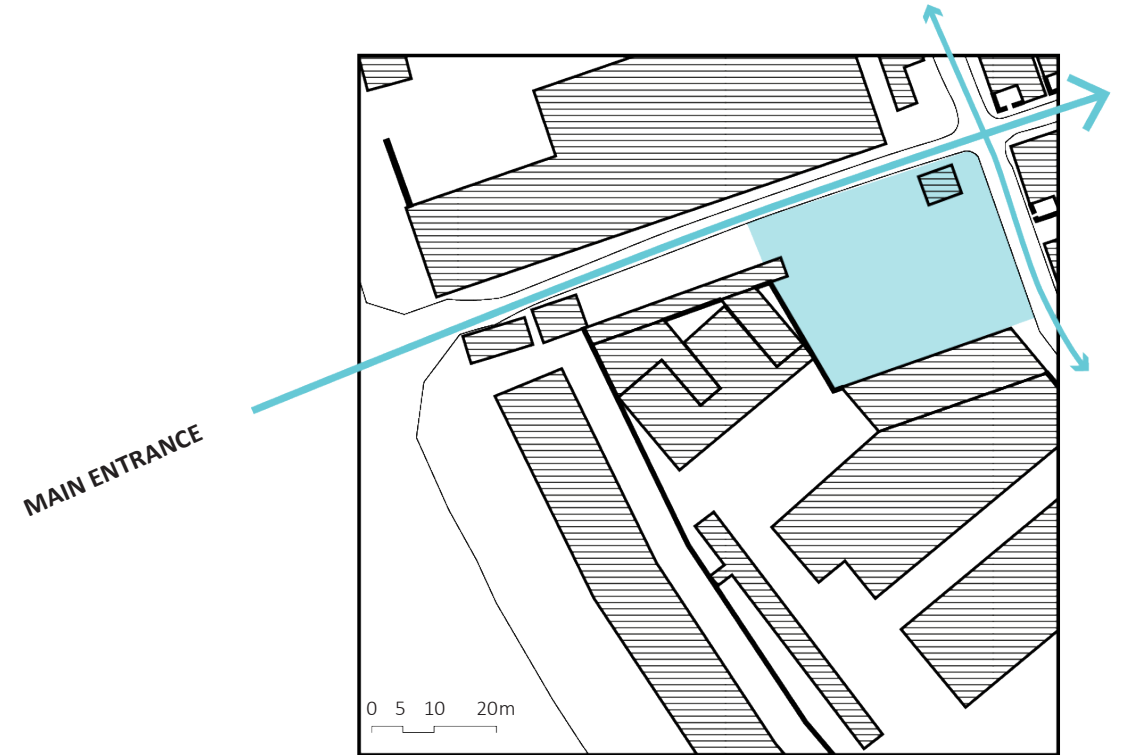
Art as Trigger

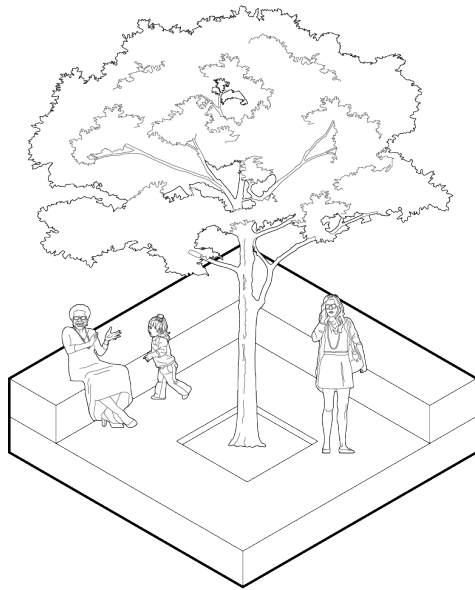


Public Routes & 4 Strategic Locations

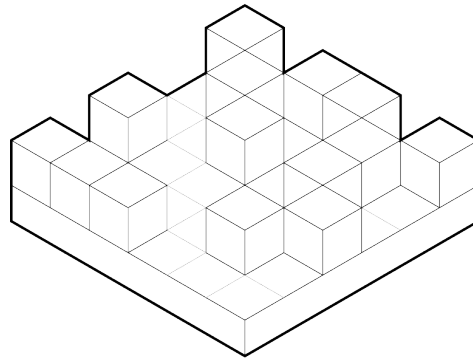


Strategic Location 1 - Living Square

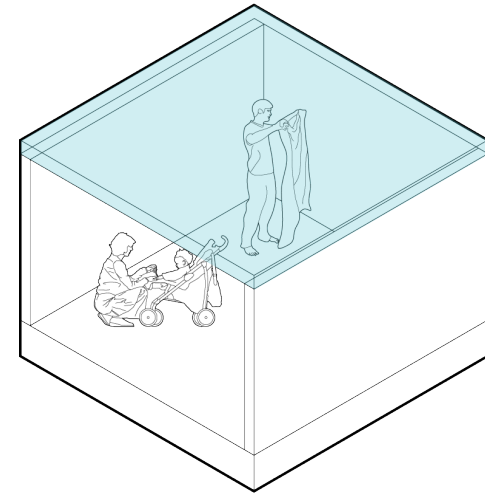




Welcoming Atmosphere

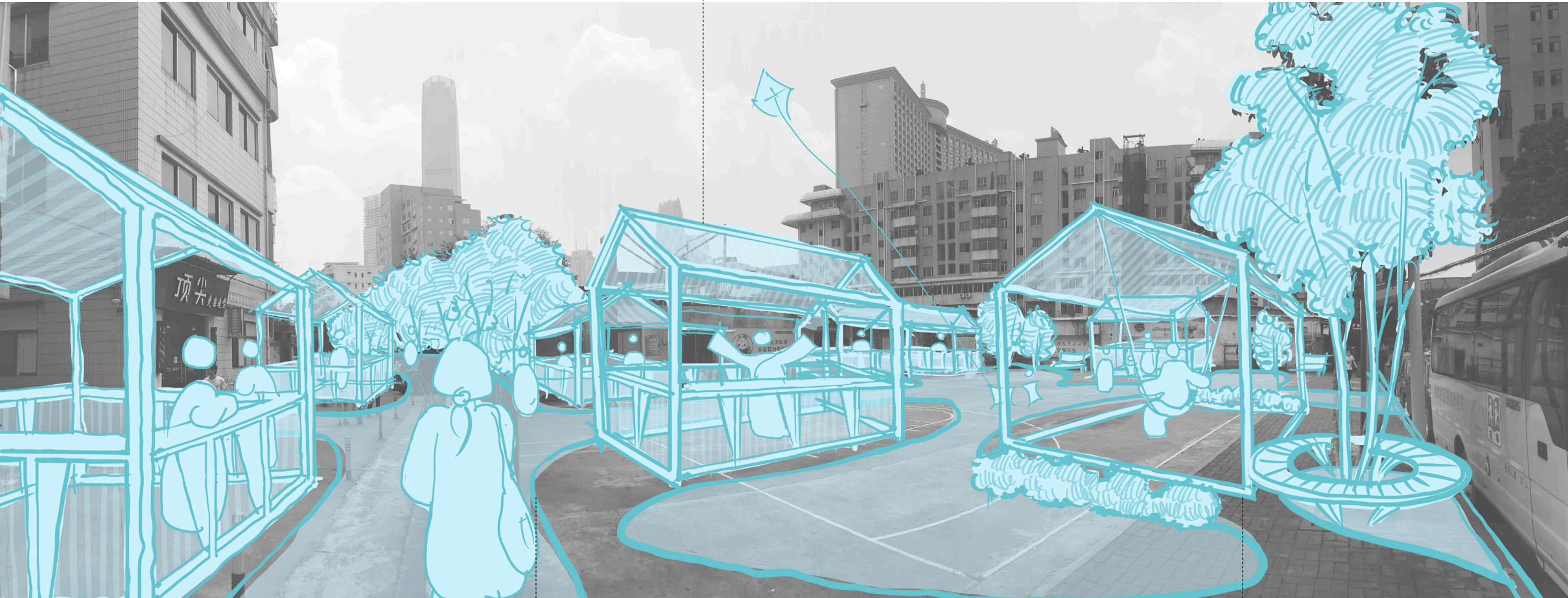


Flexible Functionality



Sheltering Structures

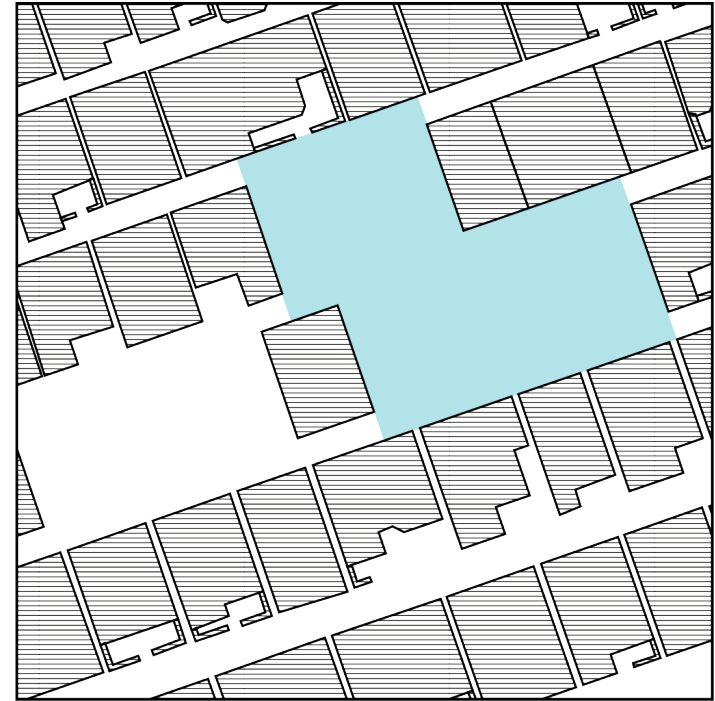
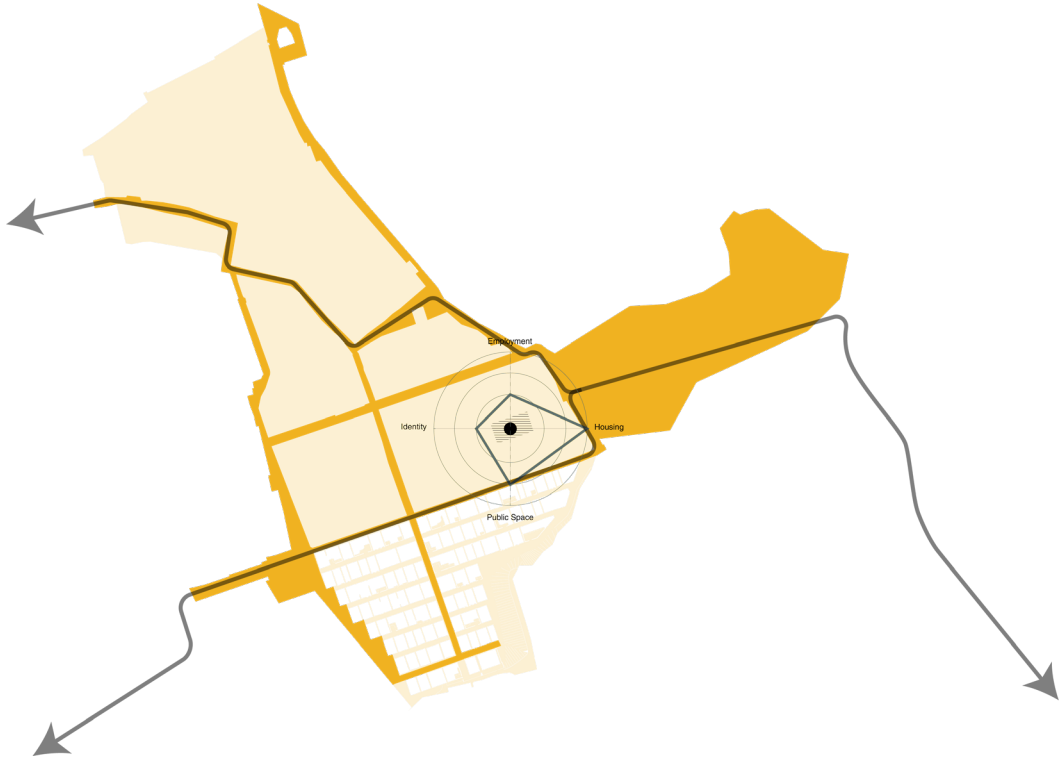
The structure can serve as shelters for various activities from local extreme weather



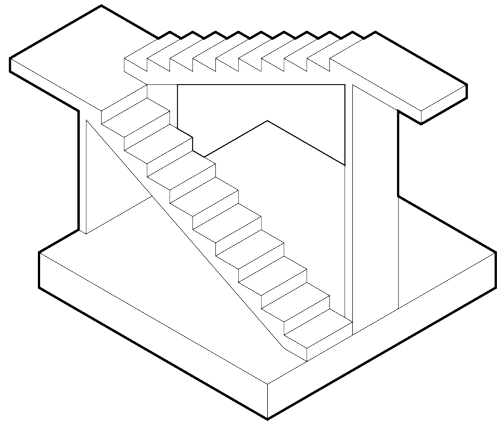
The path are linked with the public route to create a welcoming atmosphere

The structure can be moved and used flexibly to accomodate different programs

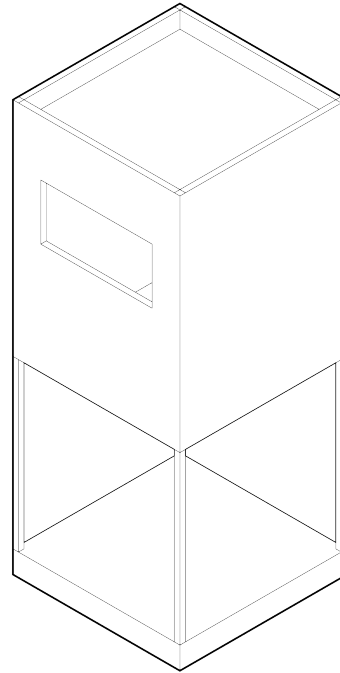
Strategic Location 2 - Rooftop Nexus



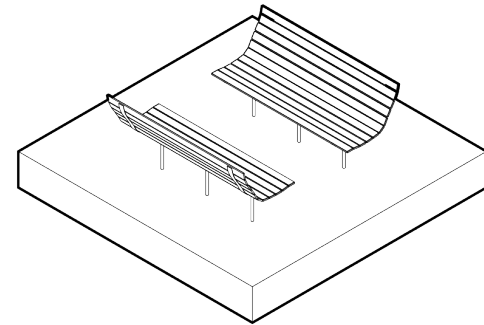
0 5 10 20m



Vertical Mobility



Artistic Studio

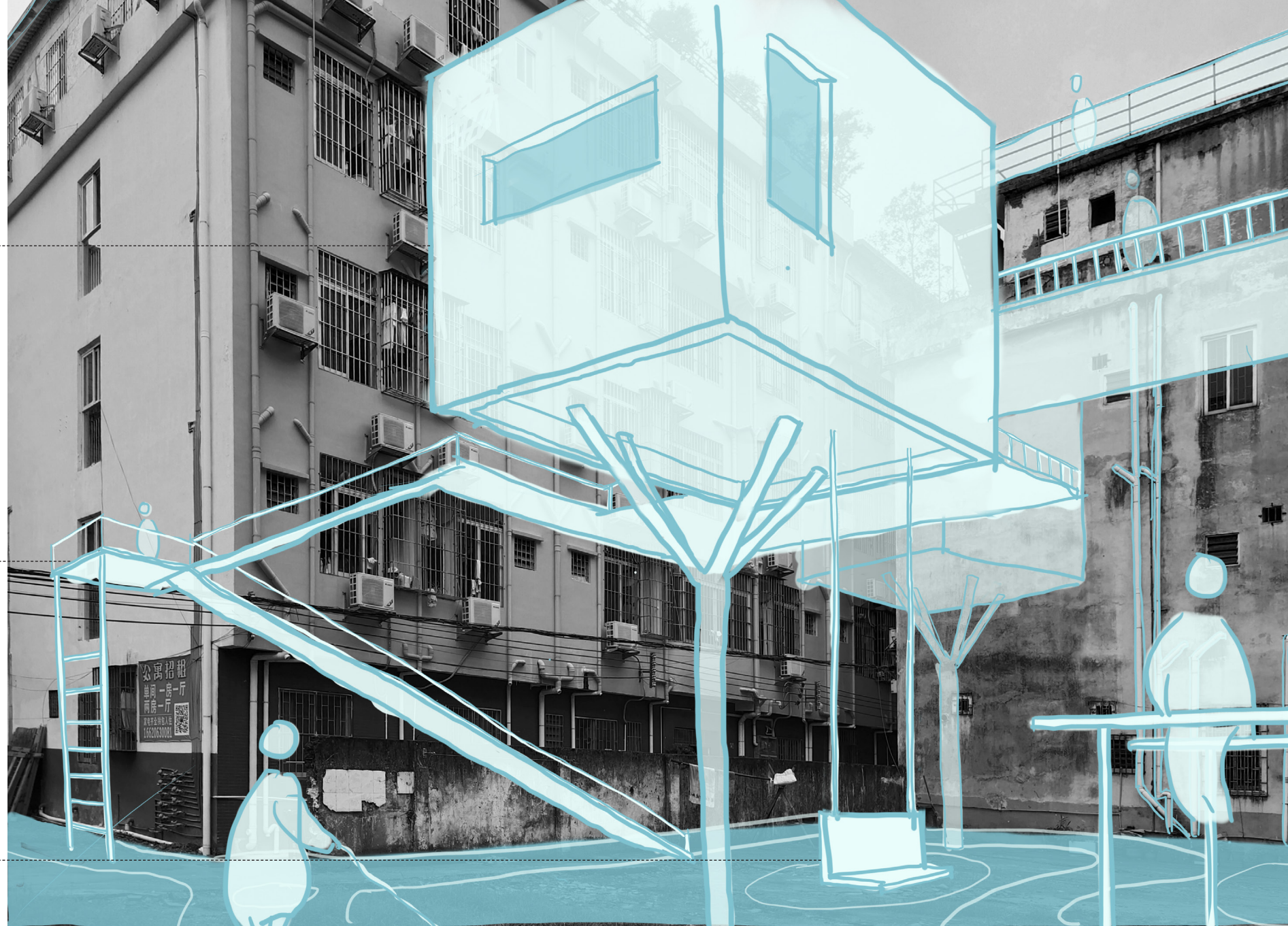


Urban Furniture

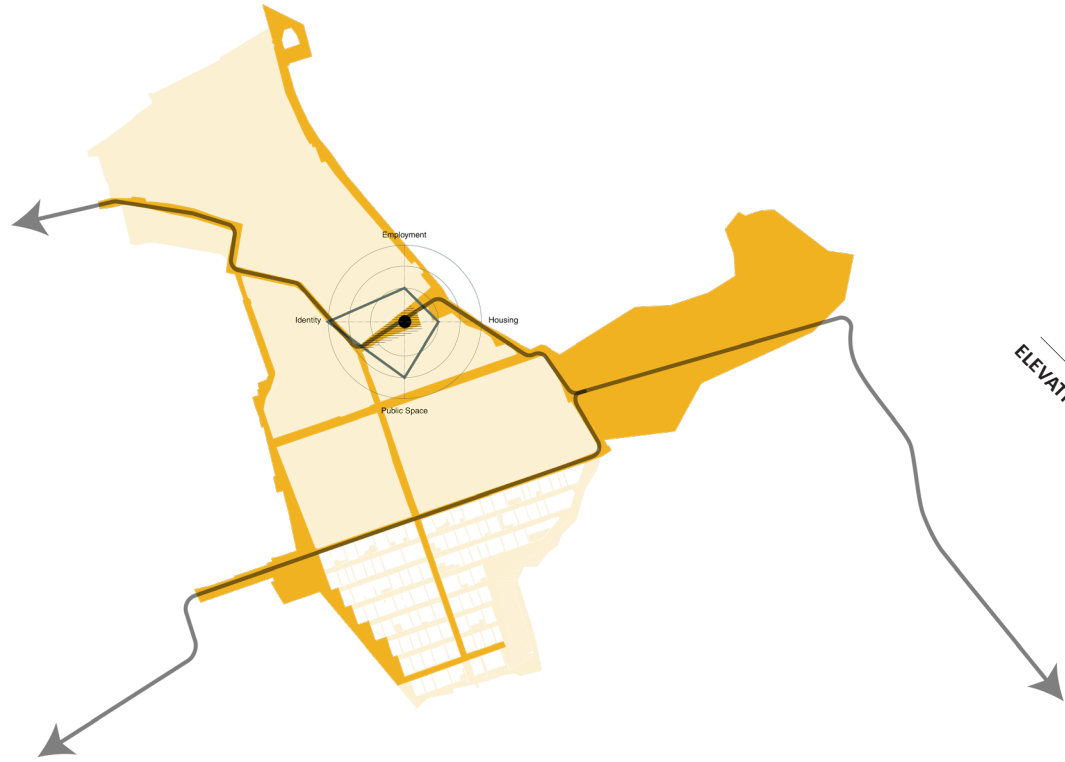
The Artist Studio will be inserted in to accomodate artists

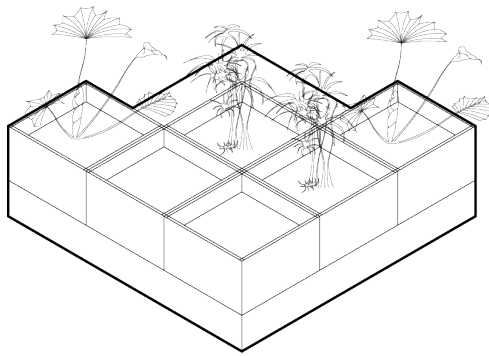
Vertical transport will be created to give accesses to artist studios and link the rooftop with the ground

Urban furnitures are designed within the system

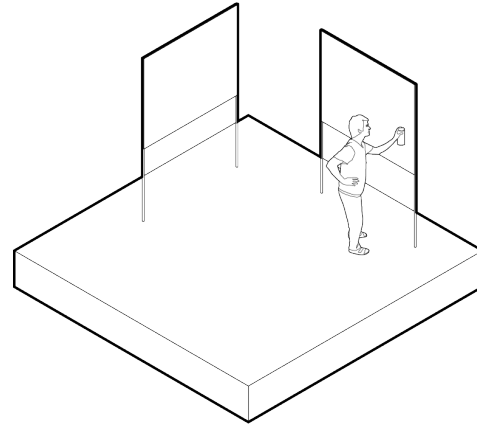


Strategic Location 3 - Co-Creation Garden

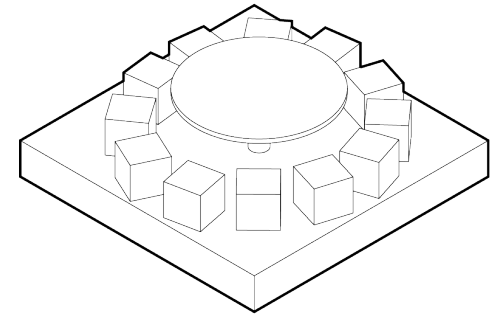




Co-gardening



Information Disclosure



Public Participation

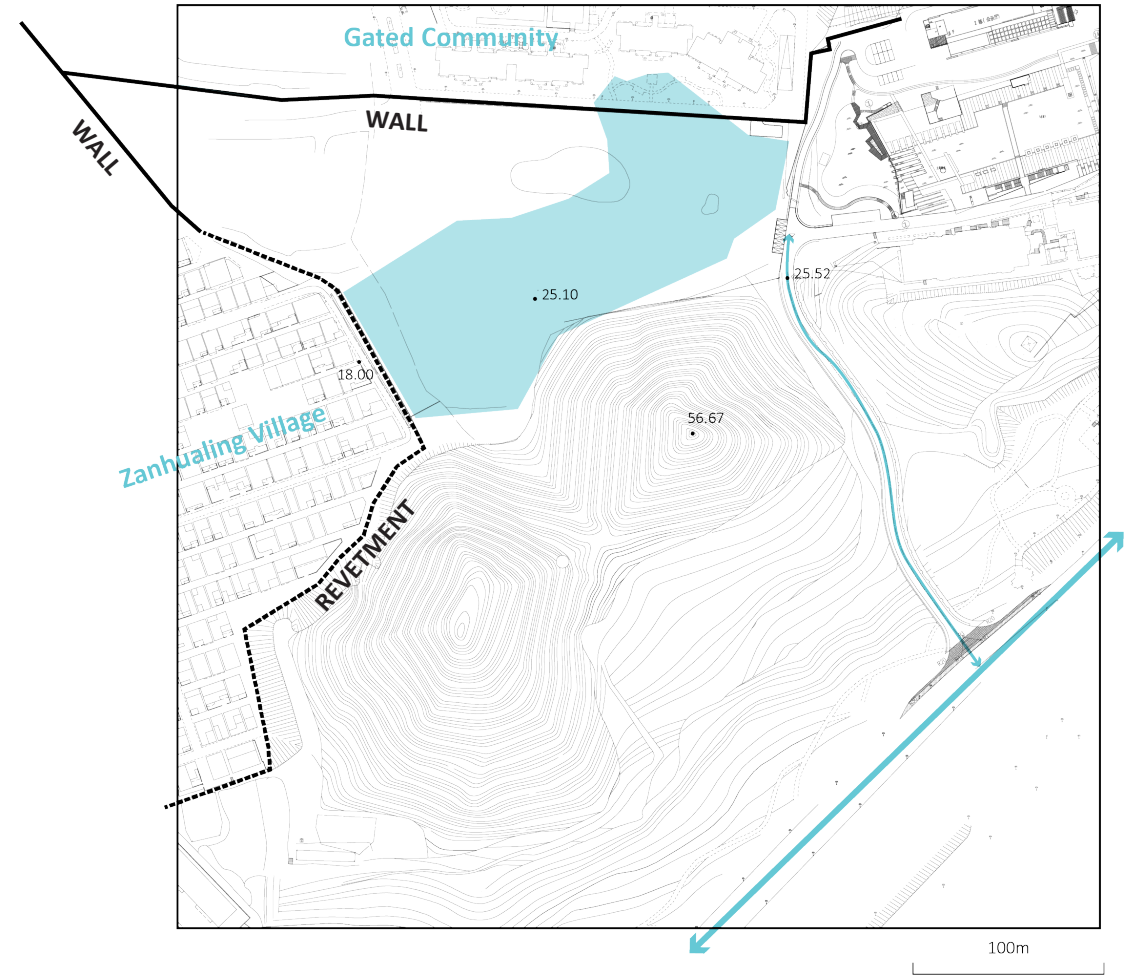
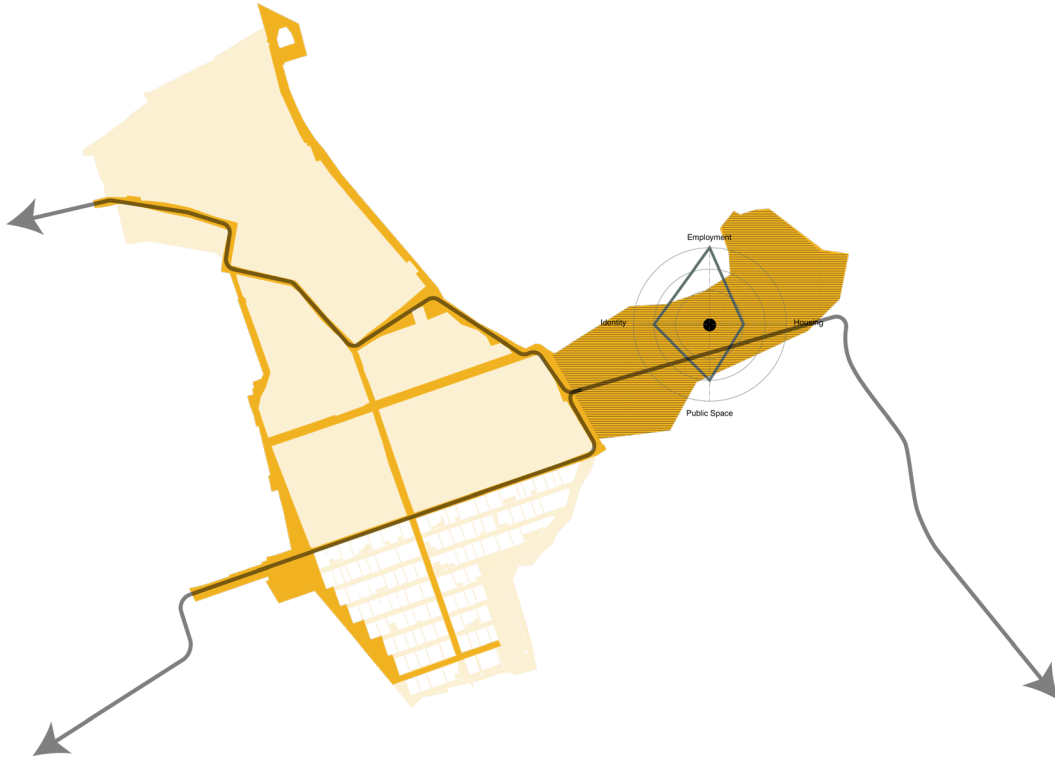
Amphitheater has been created to utilize the height difference on this site

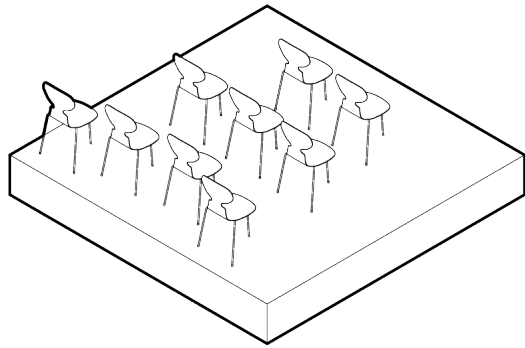
Public route runs through the garden

Garden grid for co-gardening

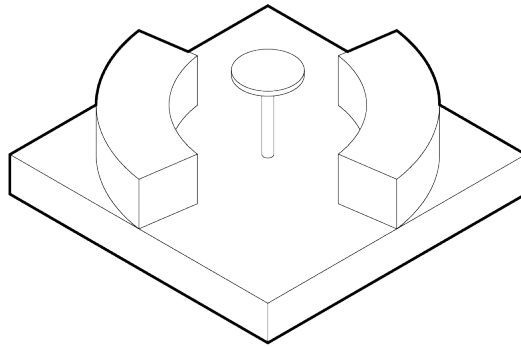


Strategic Location 4 - Inclusive Learning Hub

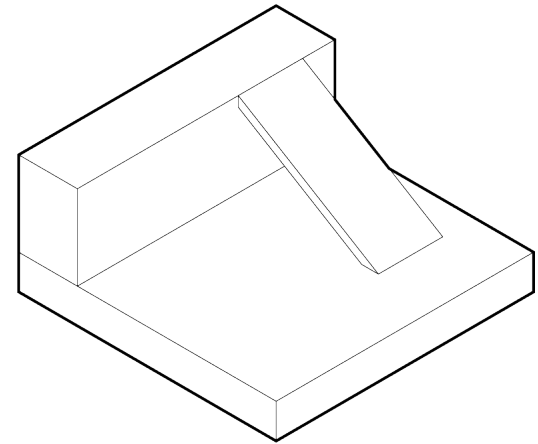




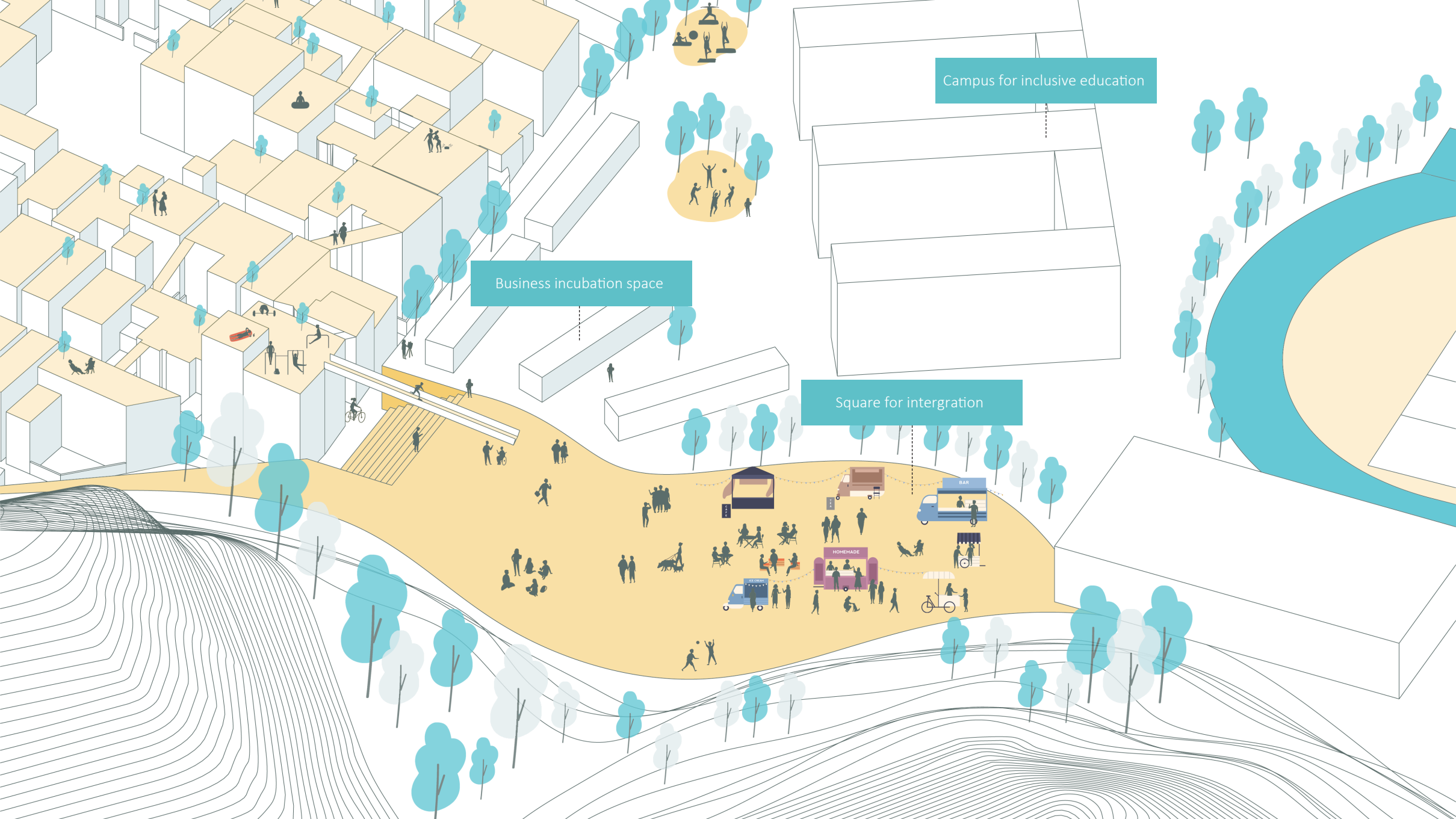
Education for All



Nurturing Innovation



Building Bridges

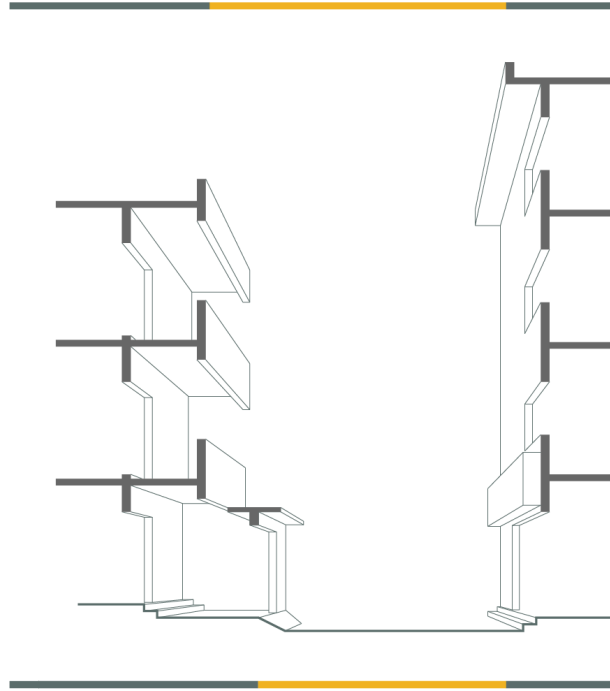


Campus for inclusive education

Business incubation space

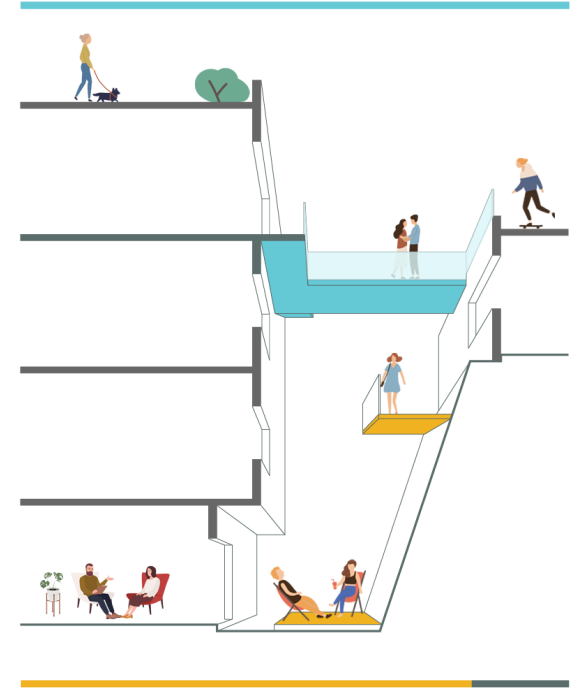
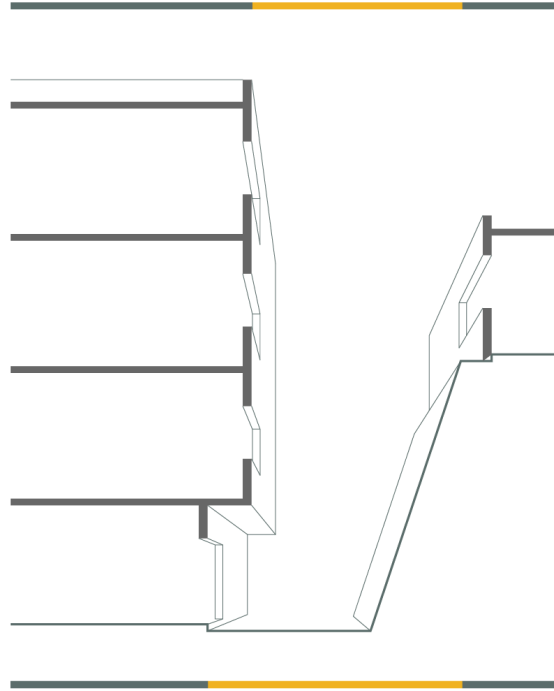
Square for intergration

Line - Public Route



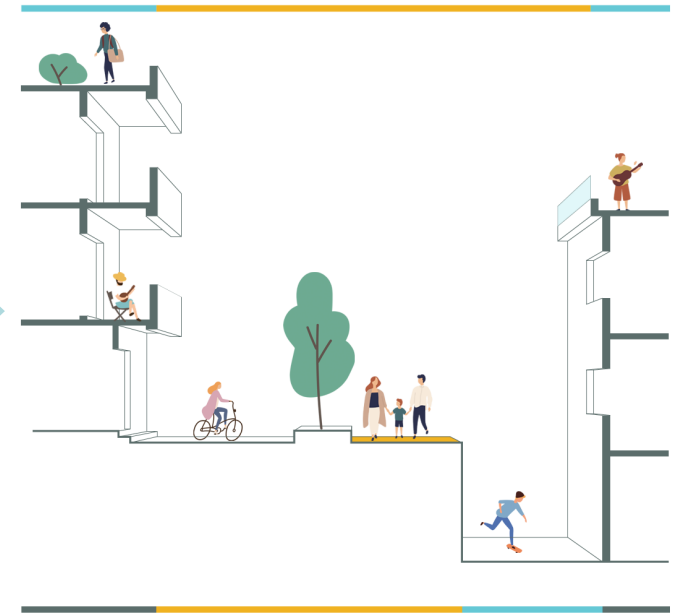
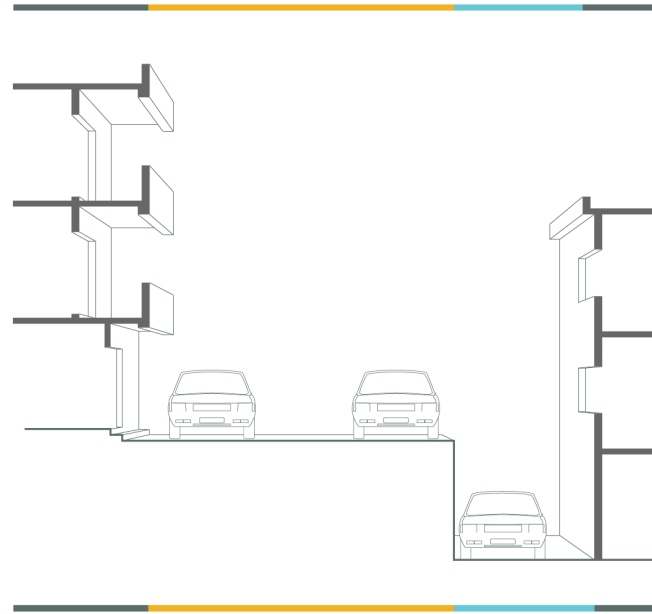
Section A

- Private
- Communal
- Public



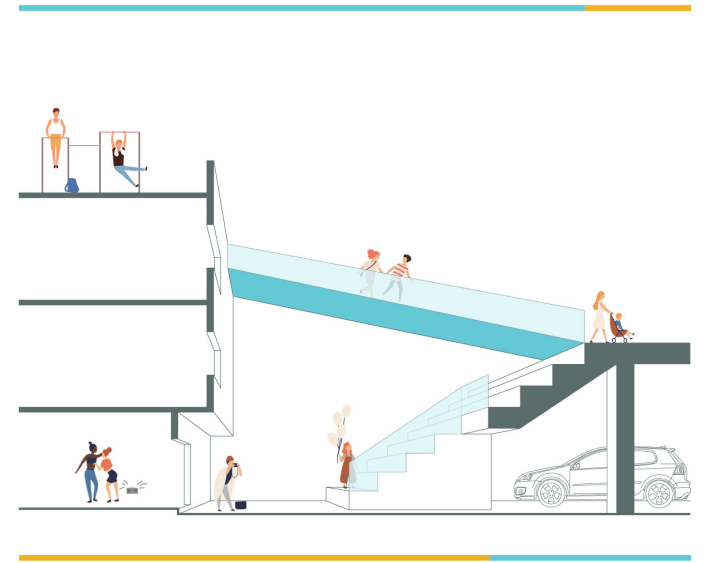
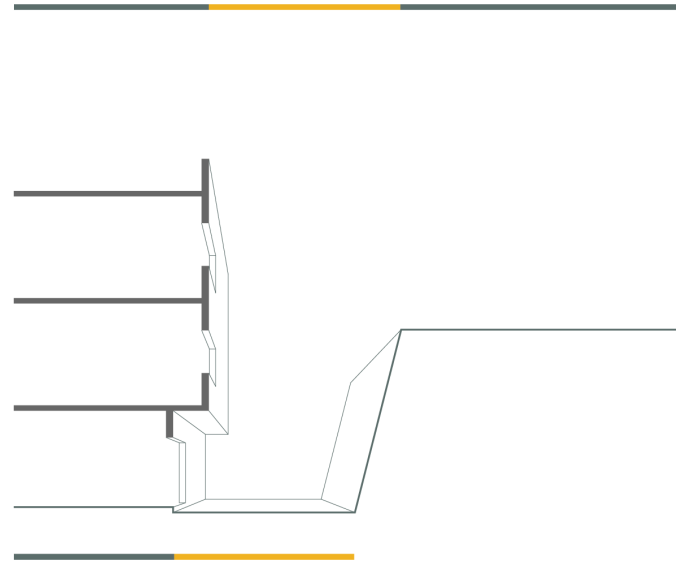
Section B

- Private
- Communal
- Public



Section C

- Private
- Communal
- Public



Section D

- Private
- Communal
- Public

Case Study: Nantou Old Town



Nantou Old Town



Zanhualing Village



Cultural Event as Trigger



Bi-City Biennale of Urbanism/Architecture (UABB)



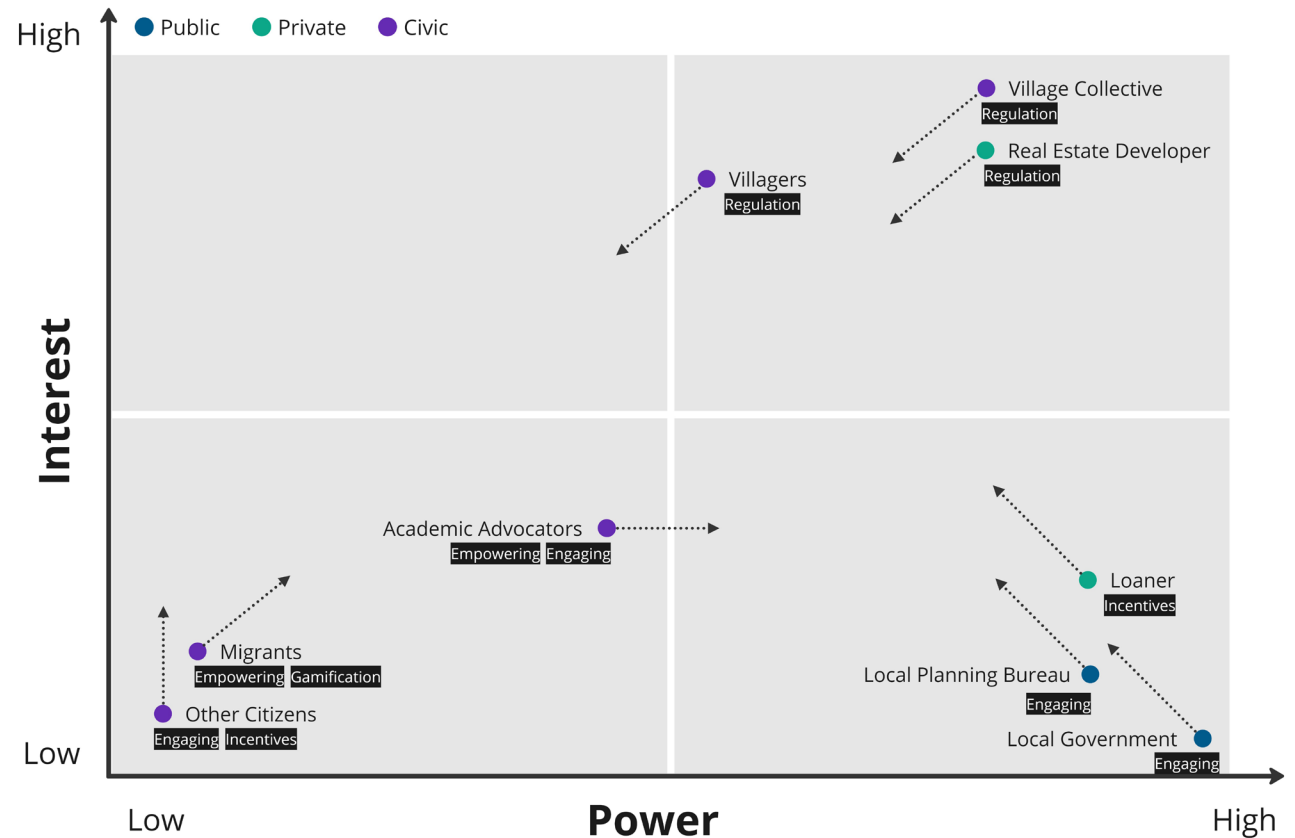
Stakeholder Participation

Regulation and **Empowering** will be achieved by new policies.

Incentives will be achieved by establishment of a Real Estate Trust, attracting both citizens and investors to contribute and earn interest through their investments.

Gamification will be employed as a captivating and interactive approach to engage them in the decision-making process.

Engaging key stakeholders such as the local planning bureau, local government, and academic advocates will be facilitated by incorporating them into a Transitional Management Organization (TMO).



Empowerment

Identity

Zanhualing shall function as a pilot community, wherein a **residents management system**, incorporating a housing management system, shall be established. It is hereby mandated that all residents within Zanhualing shall enjoy equal rights, regardless of their Hukou (Household Registration System) registration or property ownership status.

Housing

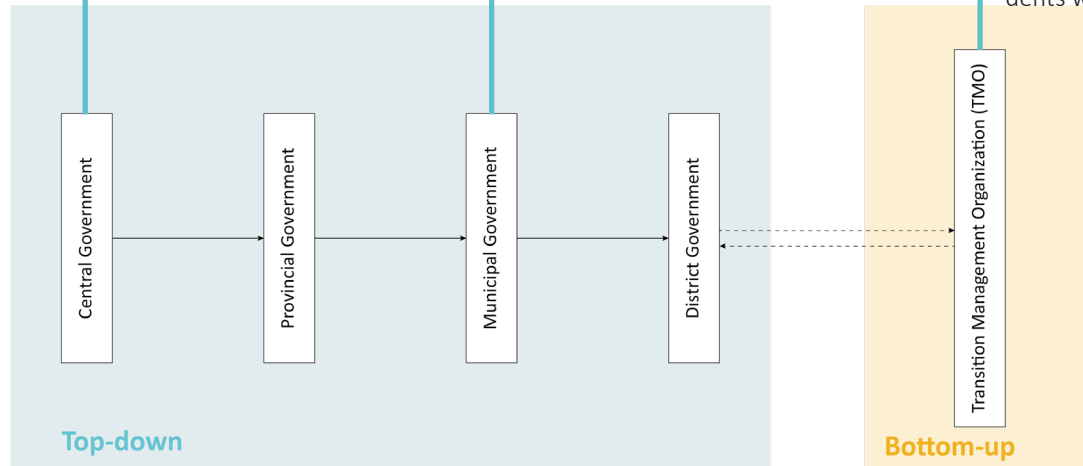
The land of Zanhualing is designated exclusively for residential purposes, and any form of development should not result in a decrease in the **quantity of social housing** within its boundaries.

Public Space

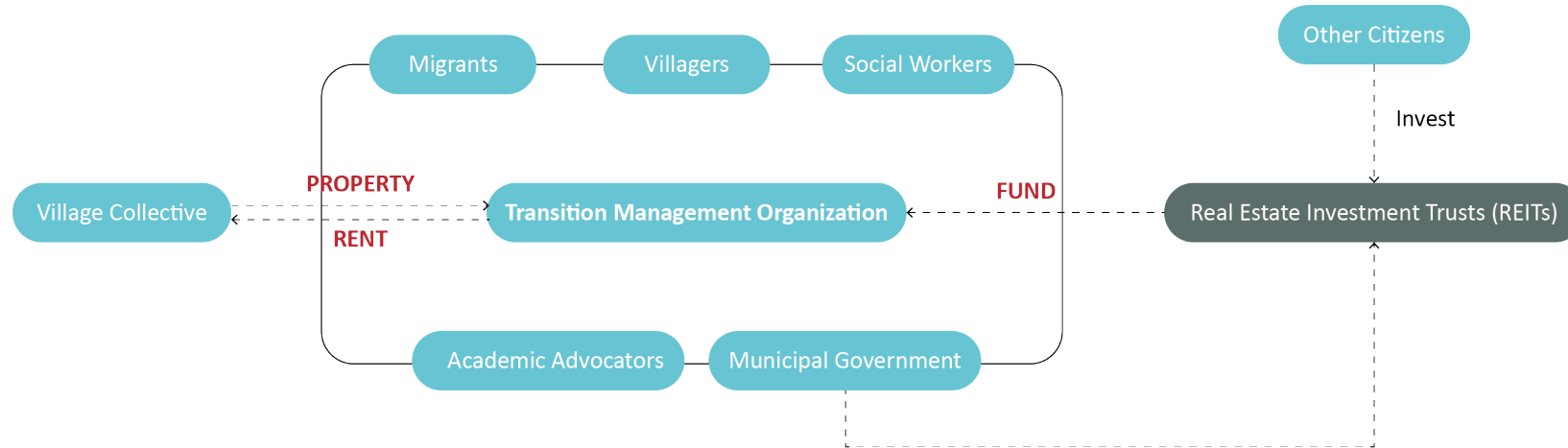
Residents of Zanhualing are required to make monthly payments of a management fee for the purpose of facilitating the operation and maintenance of the village. However, it is hereby stipulated that residents have the option to participate as **volunteers**, thereby receiving remission of the fee. By choosing to become volunteers, residents will actively engage in the execution and organization of public and communal activities within the community, contributing their time and effort towards the overall functioning and development of the village.

Employment

The Artists' Studio will be open to **recruit young artists** who wish to settle in and utilize the studio space at no cost. In exchange, participating artists are expected to **conduct weekly workshops** for the benefit of Zanhualing residents. Residents of Zanhualing are eligible to attend these training workshops free of charge, while non-residents will be required to pay a registration fee.



Incentive



Gamification

CHARACTER

Young graduate
Strength:
Workshop
Needs: H & P

Migrant worker
Strength:
Community
Potlucks
Needs: H & E

Villager
Strength: housing
Needs: P & E

RESILIENCE TOOL

Housing/ H

Balcony

Road
Crossings

Rooftop
Gardens

Public Space/ P

Open Air
Cinema

Community
Potlucks

Community
Playground

Employment/ E

Workshop

Commercial
Street

Market

TOOL

Urban
Furnitures

Bike Lane

Public Art

Flea Market

Tree

Public Toilet

Kindergarten

Sports Facility

Mother's
room

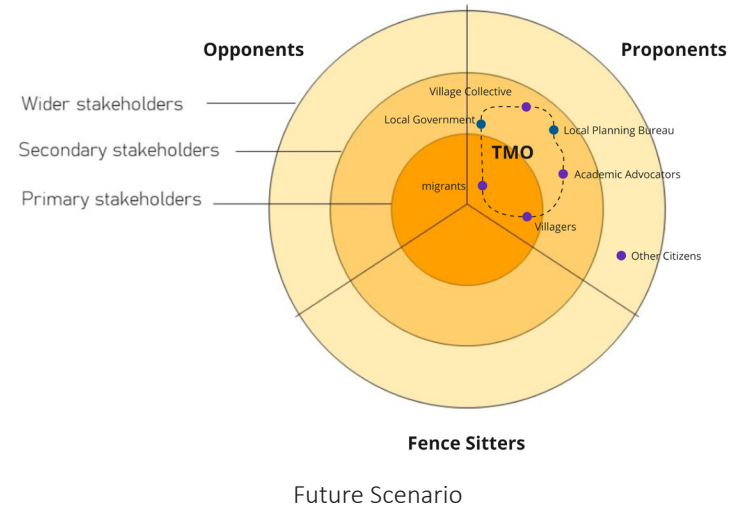
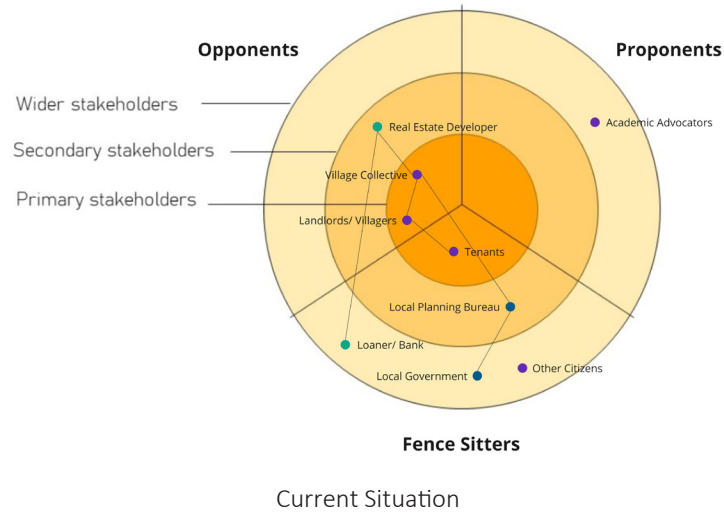
Park

Slope

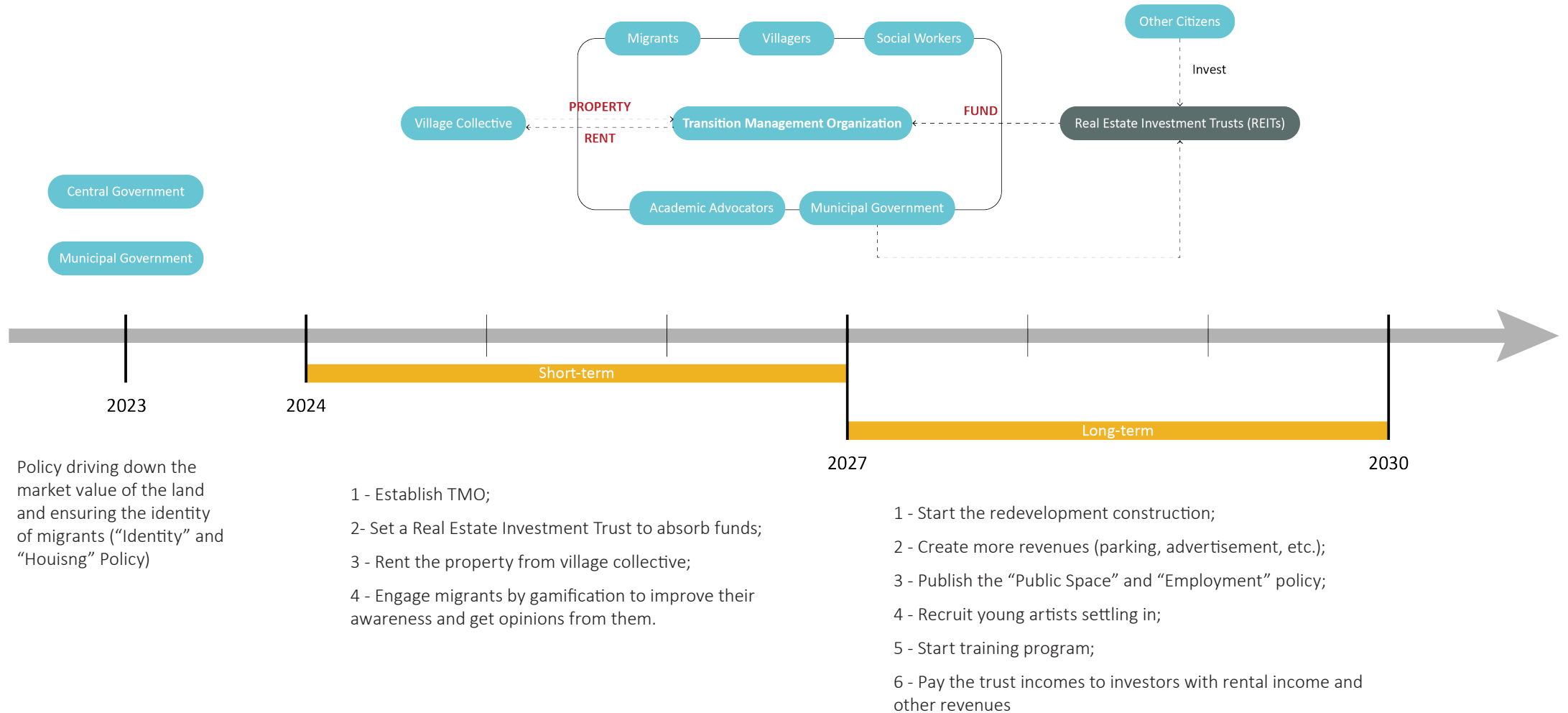
Public
Transport

Engagement

Transition Management Organization



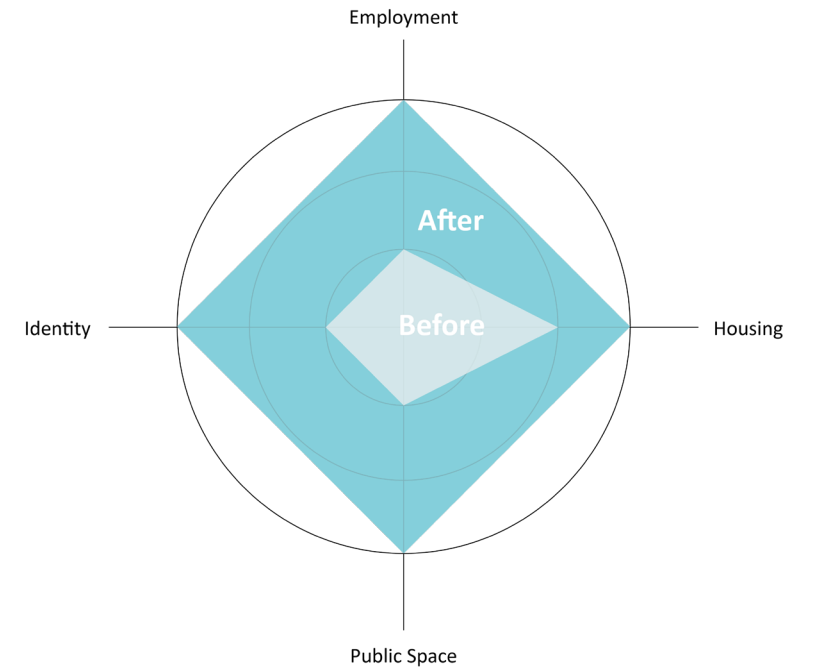
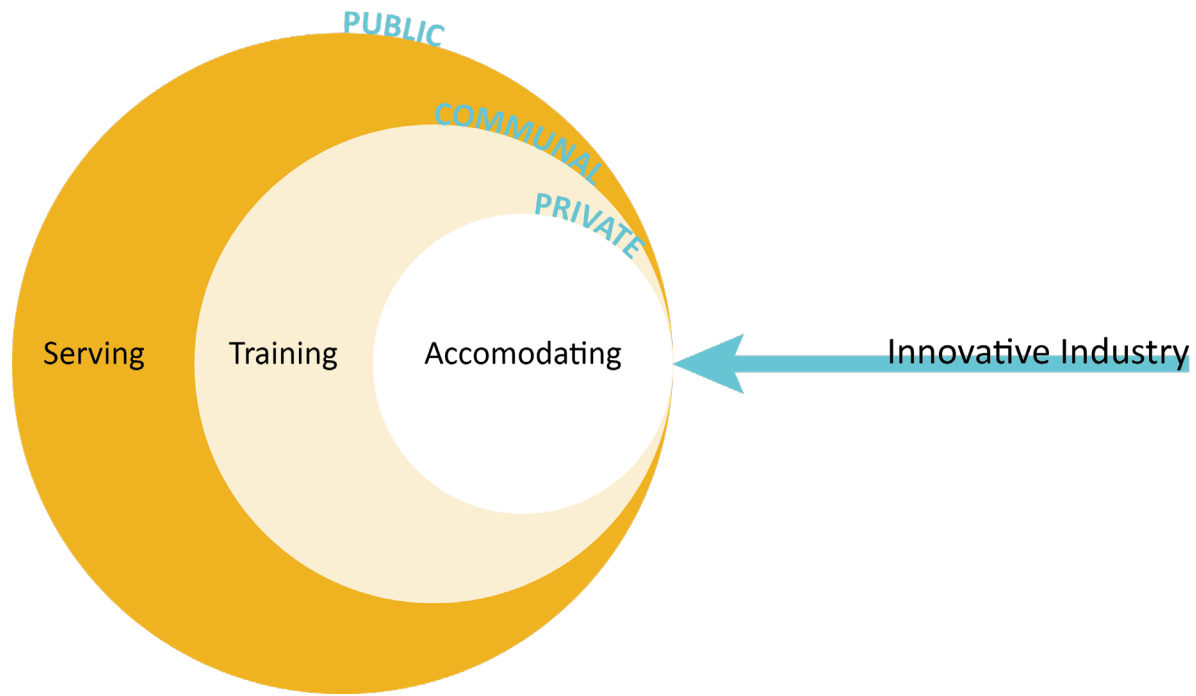
Transition Timeline



Social Resilience Change

		BEFORE	AFTER
Identity	Legal Identity	○ ○ ○ ○ ○	● ● ● ● ○
	Sense of Belonging in the Community	○ ○ ○ ○ ○	● ● ● ● ●
Housing	Affordability	● ● ● ● ●	● ● ● ● ○
	Ammenity	● ● ○ ○ ○	● ● ● ● ●
Employment	Capability for fulfilling jobs	● ● ○ ○ ○	● ● ● ● ○
	Ease of Commuting	● ● ● ○ ○	● ● ● ● ●
Public Spce	High-quality Public Space	● ○ ○ ○ ○	● ● ● ● ●
	Multi-level Privacy	● ○ ○ ○ ○	● ● ● ● ●

Conclusion



Planning Principles

Affordable Housing

Urban villages in urban areas are characterized by low-cost rental housing. Based on the analysis, affordable housing is an urgent need in Dongguan, so the strategy for urban villages in urban areas would be to create an affordable housing plan that addresses the needs of low-income residents.

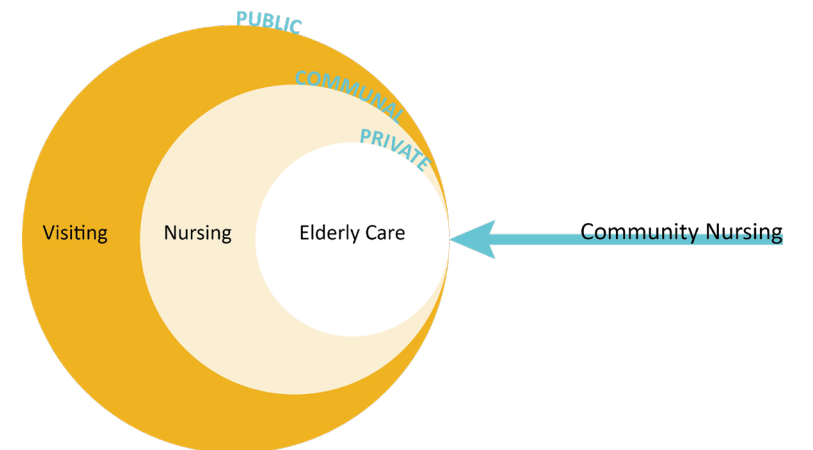
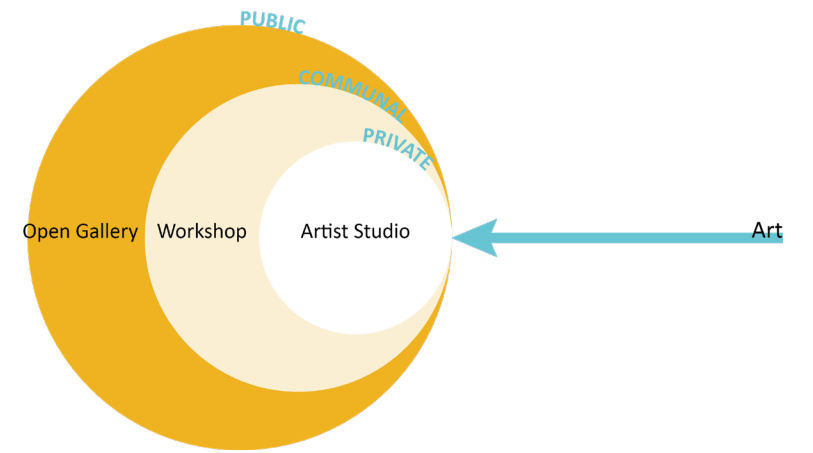
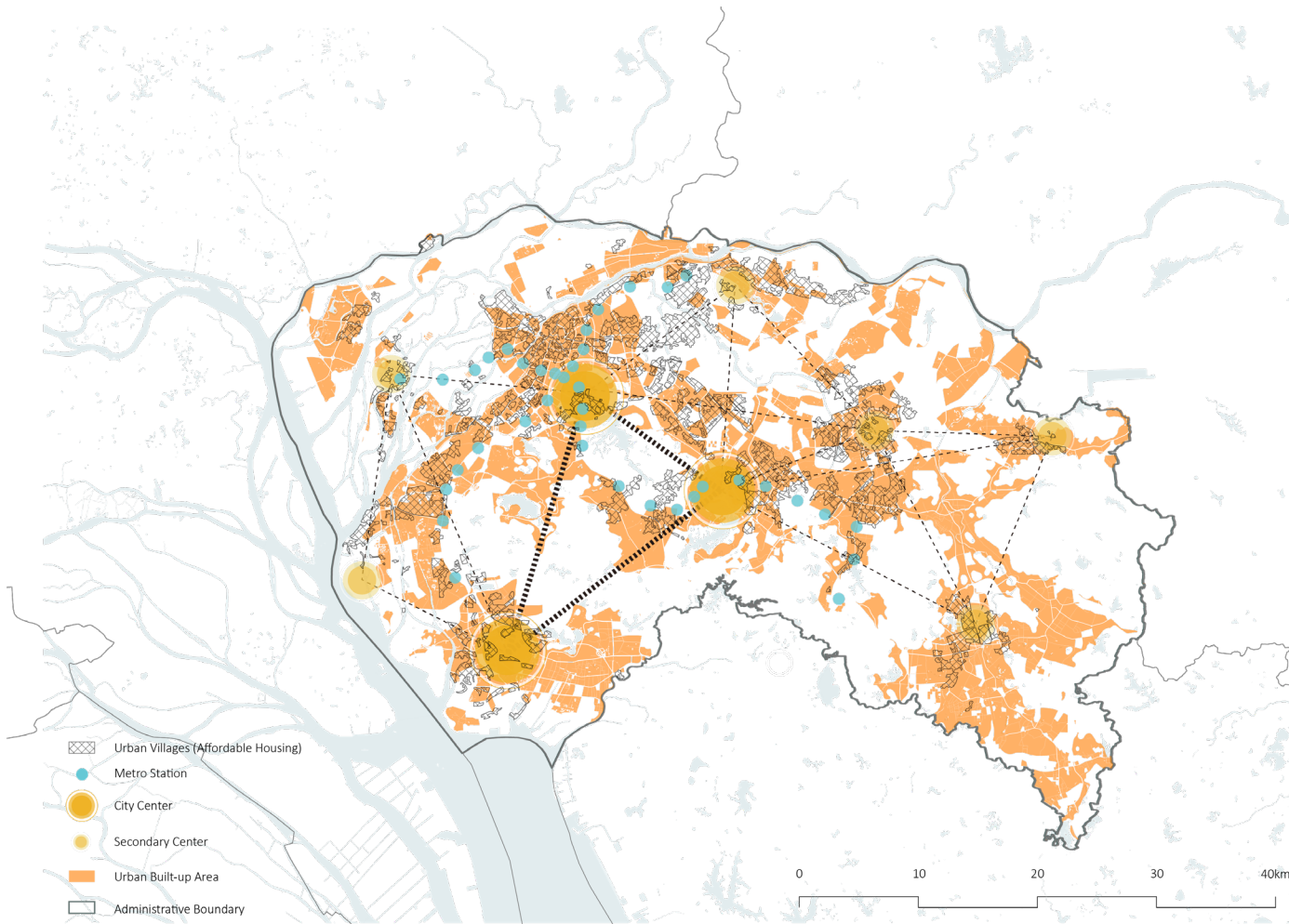
Industrial Synergy

Manufacturing is a pillar in Dongguan's economy. For urban villages situated near these industrial areas, a strategic approach is transforming them into incubation hubs. This can be achieved by providing incentives to entrepreneurs to establish small businesses in these urban villages, establishing shared workspaces to foster collaboration among small businesses, and actively supporting the development of local cooperatives. By adopting such measures, Dongguan can harness the potential of these urban villages and promote innovation and entrepreneurship.

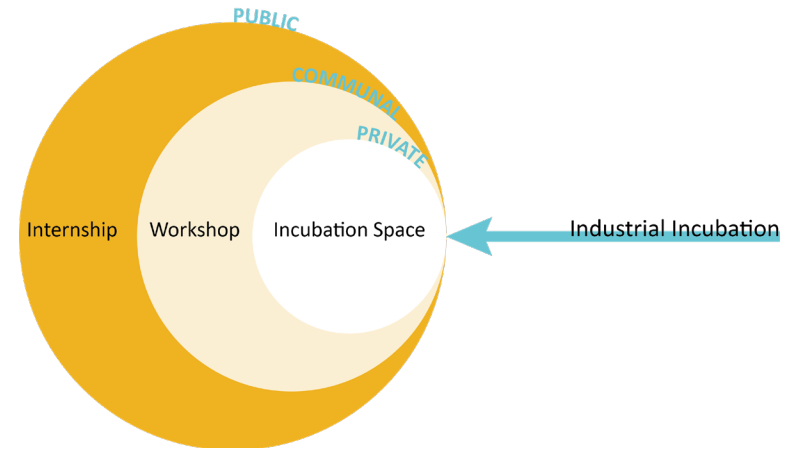
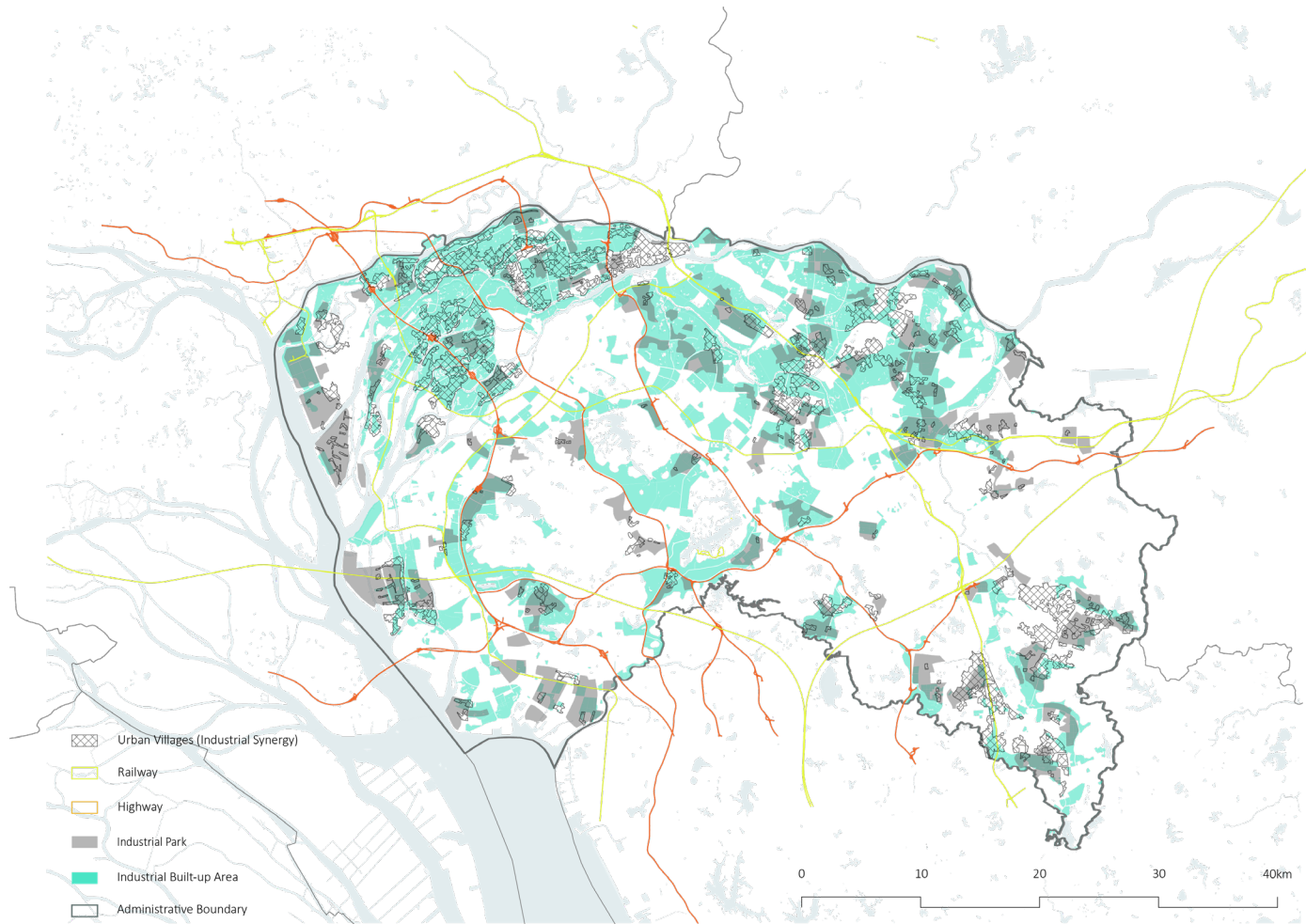
Ecological Preservation

The construction intensity in Dongguan is high, so that it's important to preserve the endangering ecological area. To promote the ecological preservation function of urban villages, the strategy would be to identify the ecological assets in the urban villages and protect them from construction. This could include creating green spaces and parks, establishing urban farming programs, and promoting sustainable practices among residents.

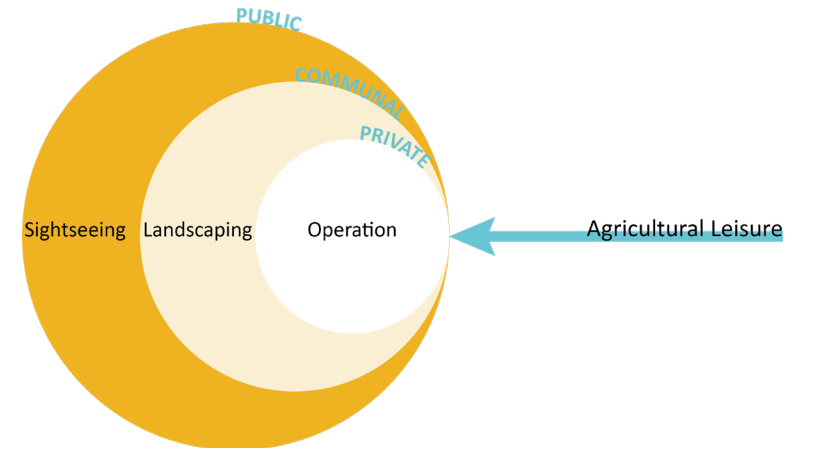
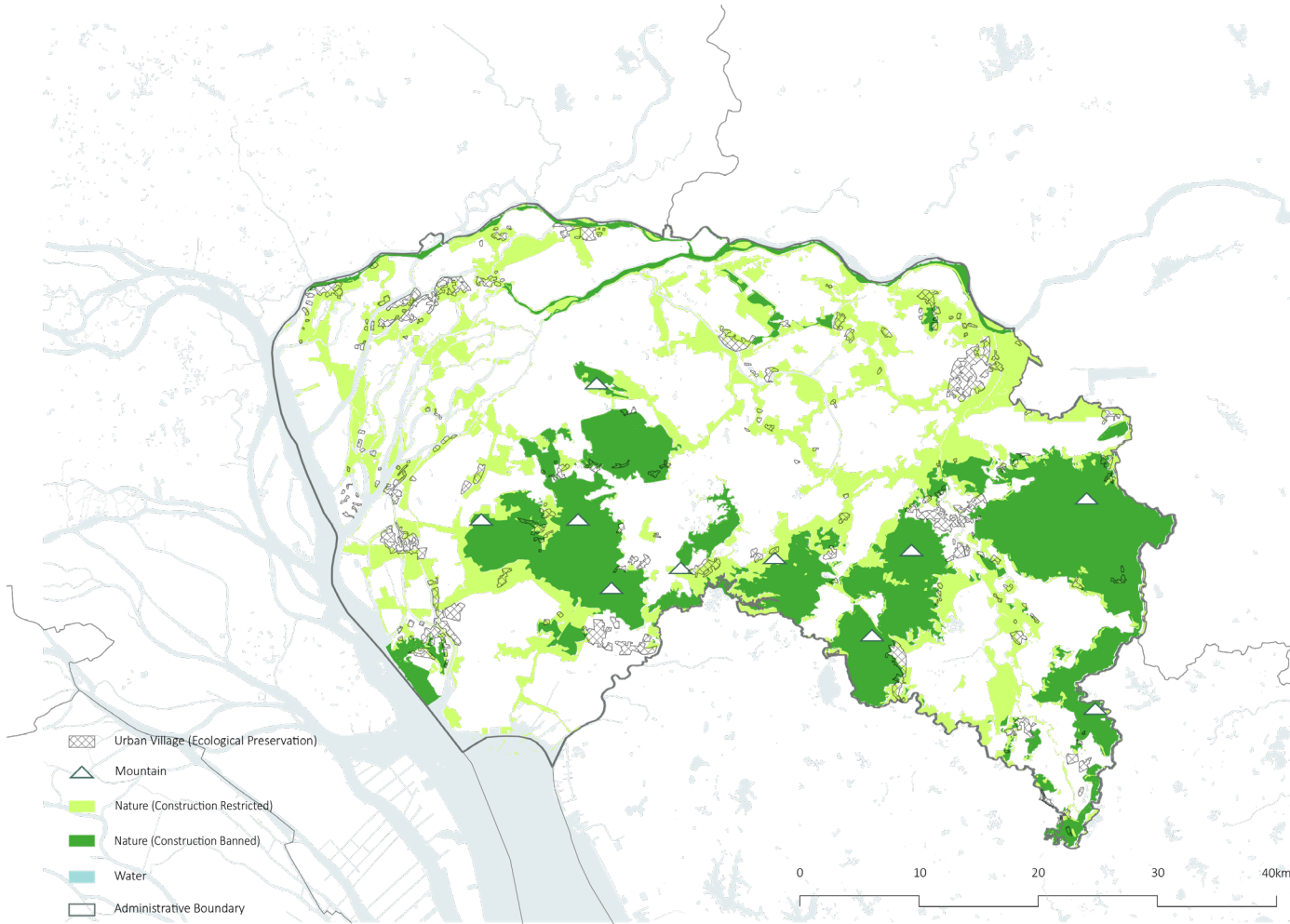
Affordable Housing Network



Industrial Synergy Network



Ecological Preservation Network



Thank you!

Appendix

Methods

Literature Review

Literature Review

Case Study

Case study

Data Collection

Interviewing

Photography

Policy review

Data Analysis

Stakeholder analysis

Mapping analysis

Policy analysis

Design

Mechanism Design

Urban design

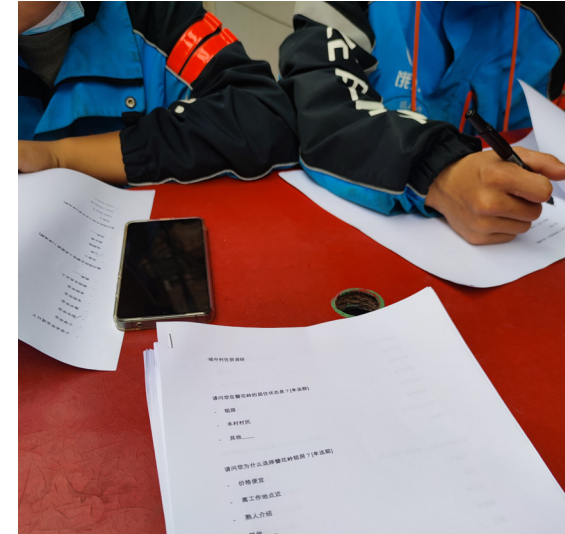
Strategic planning

Reflection

Evaluation

Reflection

Interviewing



With the aid of a local student, a survey was conducted at Zanhualing Village to investigate the basic information pertaining to the social resilience of migrants, detailed information about the questionnaires is in Appendix.

- Location: Zanhualing Village
- Timing: Daytime on a weekday
- Participants: Migrants residing in Zanhualing Village
- Sample Size: 25 respondents

Methods Answering Research Questions

RESEARCH QUESTION		METHODS					PRODUCTS	
	Sub-question	Literature Review	Case Study	Data Collection	Data Analysis	Design	Research Outcome	Final Products
1 - Community Scale	1.1 What is social resilience in the context of urban village?	Social Resilience						Socail Resilience Indicators
	1.2 How can urban design facilitate the social resilience in urban villages?	Living Lab	Shuiwei Village	Interviewing Data Mining	Mapping (topography, traffic system, function, border, user portrait, daily path of different people)	Urban Design	1. Physical Barrier 2. Potential Map 3. Vulnerability Assessment	Urban Design
	1.3 How can governance facilitate the social resilience in urban villages?	Co-governance Social Cohesion	Coin Street Redevelopment	Data Mining Policy Review	Mapping (stakeholders, ownership, housing) Stakeholder Analysis Policy Analysis	Participation & Empowerment	1. Governance Model 2. Stakeholder Analysis	Transition Timeline Gamification Policy Recommendation
2 - City Scale	2.1 What will be the new role of urban village in city?	Dongguan Master-plan		Interviewing Policy Review Data Mining	Mapping (regional analysis, master plan of Dongguan)			Planning Principles
	2.2 How does the planning of urban villages respond to their new roles?			Data Mining	Mapping (urban villages in Dongguan, urban land use map)	Strategic Planning	Application of principles	Strategic Planning

Figure 27 Methods Answering Research Questions

Social Resilience

Social Resilience

Broadly, social resilience refers to the ability of a social entity to recover from, or respond positively to adversity (Maguire & Patrick, 2007). According to Maguire and Patrick (Maguire & Patrick, 2007), social resilience has three properties comprising resistance, recovery, and creativity.

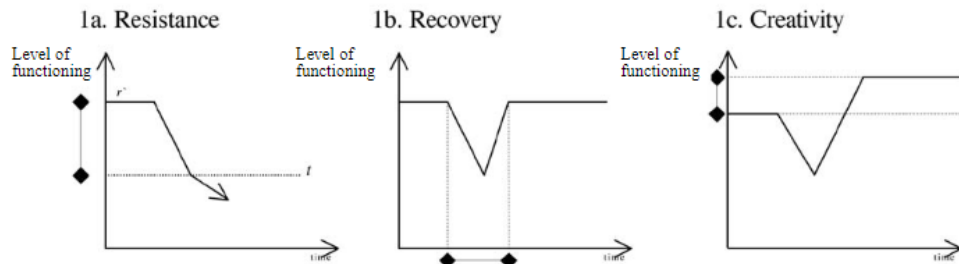


Figure 28 Properties of social resilience (Maguire & Patrick, 2007)

Social Resilience in Urban Village

With the theory of social resilience and vulnerability in consideration, as well as the reality in urban villages, a set of social resilience indicators consisting of housing, employment, identity, and public space is established.



Housing



Employment

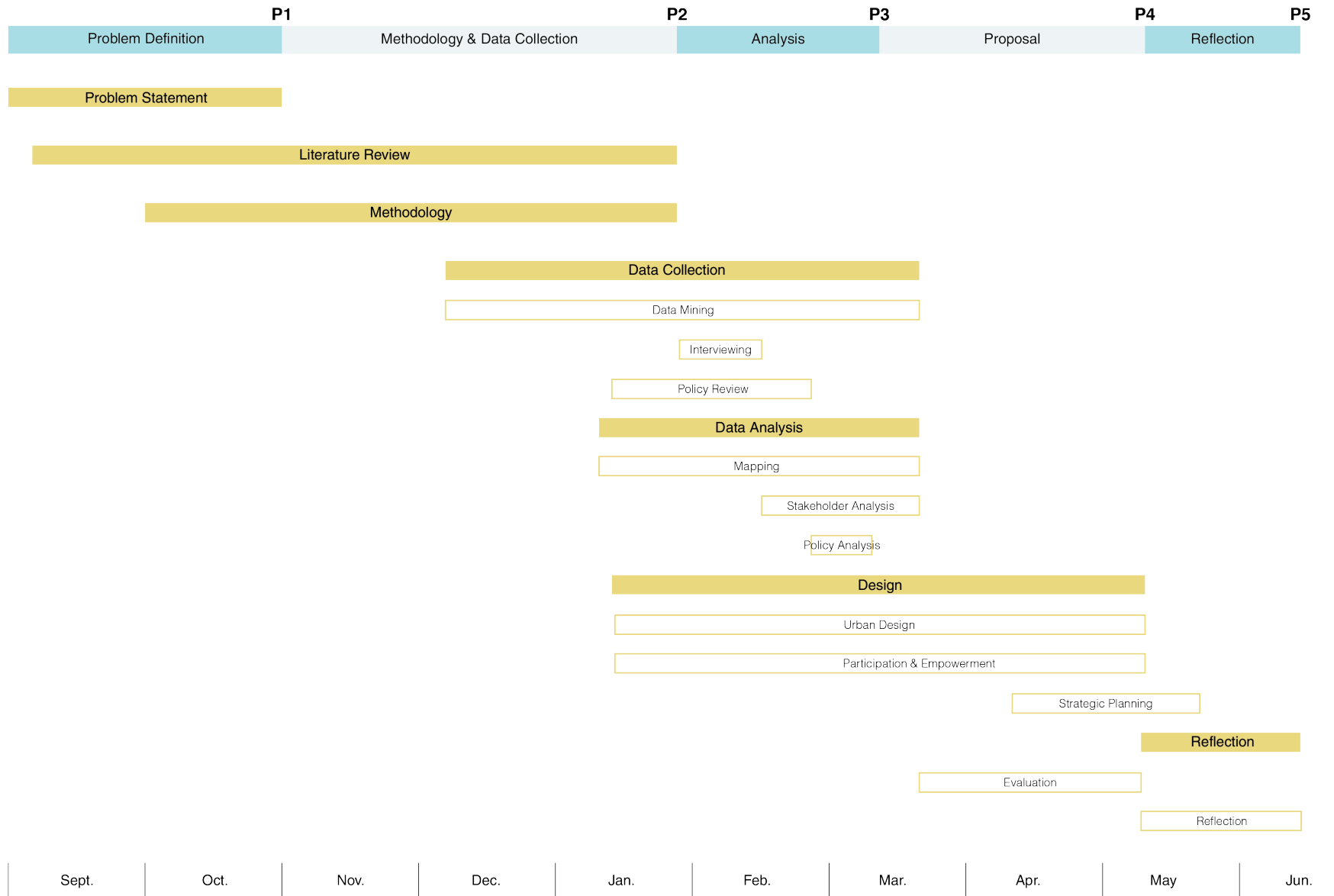


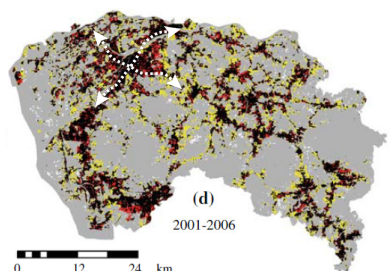
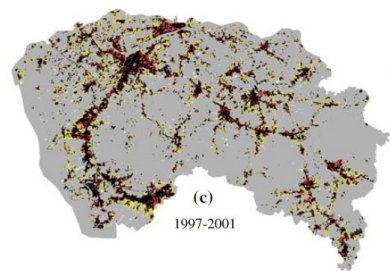
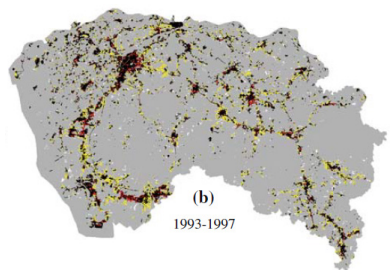
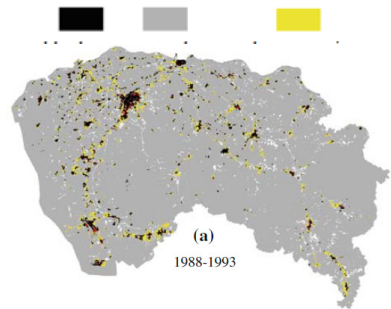
Identity



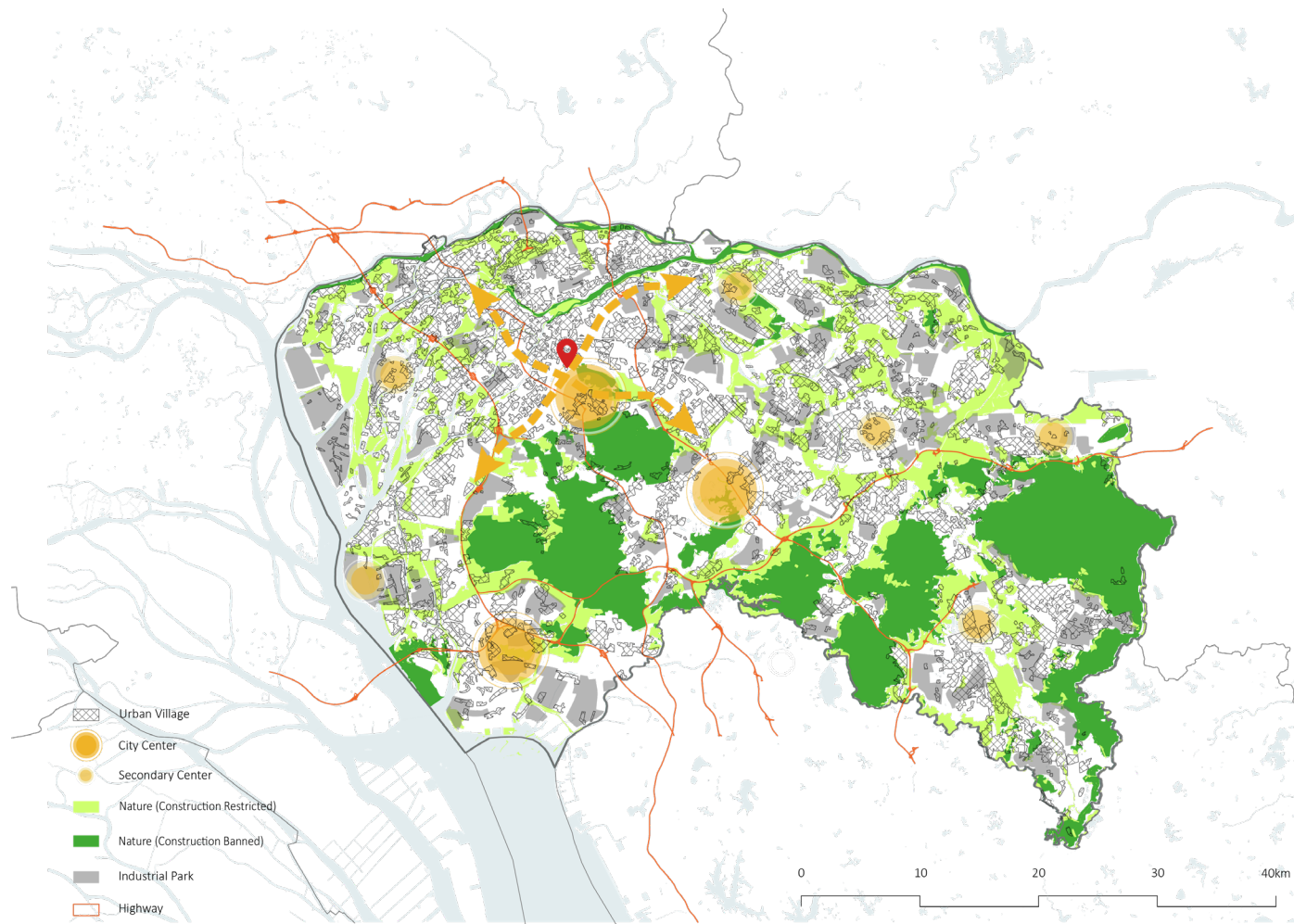
Public Space

Graduation Plan





0 12 24 km

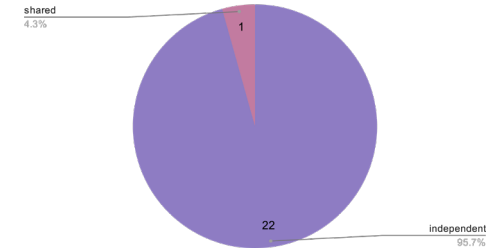




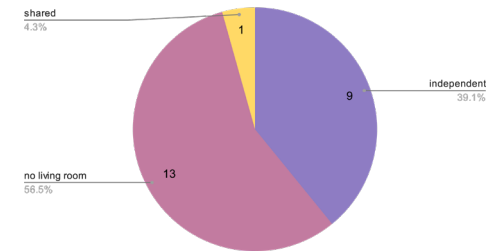


Total site area: 77300 m2
 Number of buildings: 475
 Building footprint area: 46644 m2
 Total floor area: 233220 m2 (estimated)
 Floor Area Ratio (FAR): 2.56
 Building density: 57.7%

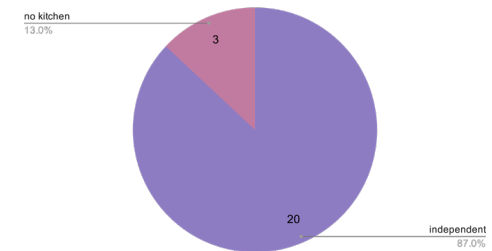
Living Facility - Toilet



Living Facility - Living Room



Living Facility - Kitchen



The housing condition is good

Lesson from Shenzhen

Loss of land use freedom;
Loss of stable rental income;
Increased cost of living

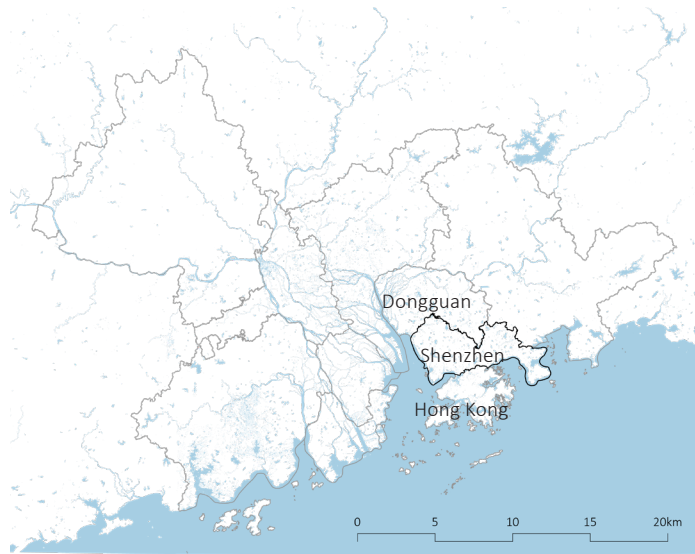
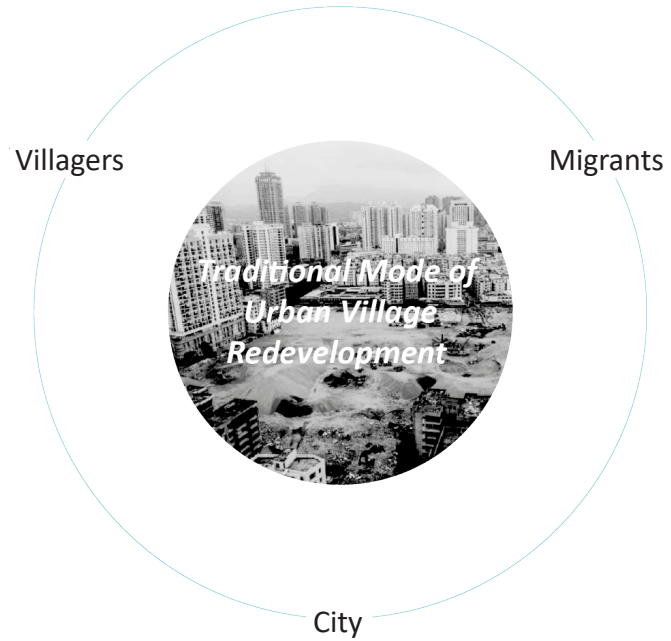


Figure 29 Shenzhen in Greater Bay Area



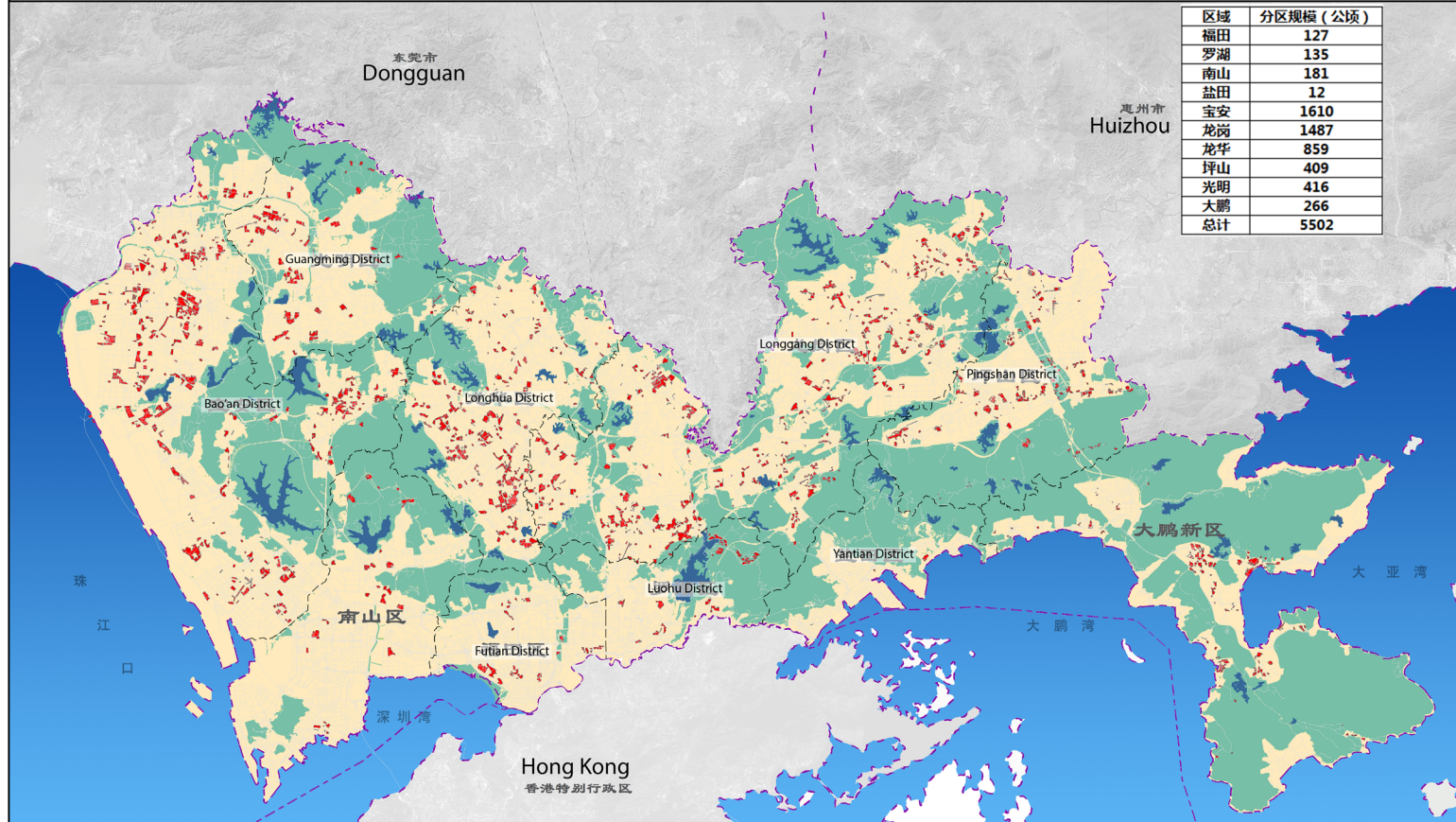
Displacement;
Increased commuting costs;
Unemployment of low skilled workers

Decline in urban land use efficiency;
Loss of labor and enterprises;
Increased the poor-rich gap;
Decline in city competitiveness

深圳市城中村（旧村）综合整治总体规划（2019-2025）

Masterplan for Comprehensive Improvement of Urban Villages in Shenzhen

Map of Comprehensive Improvement Area
城中村综合整治分区范围图



图例
■ Comprehensive Improvement Urban Villages

Figure 30 Masterplan of Comprehensive Improvement of Urban Villages in Shenzhen | Source: <http://www.sz.gov.cn/attachment/0/51/51731/1344686.pdf>