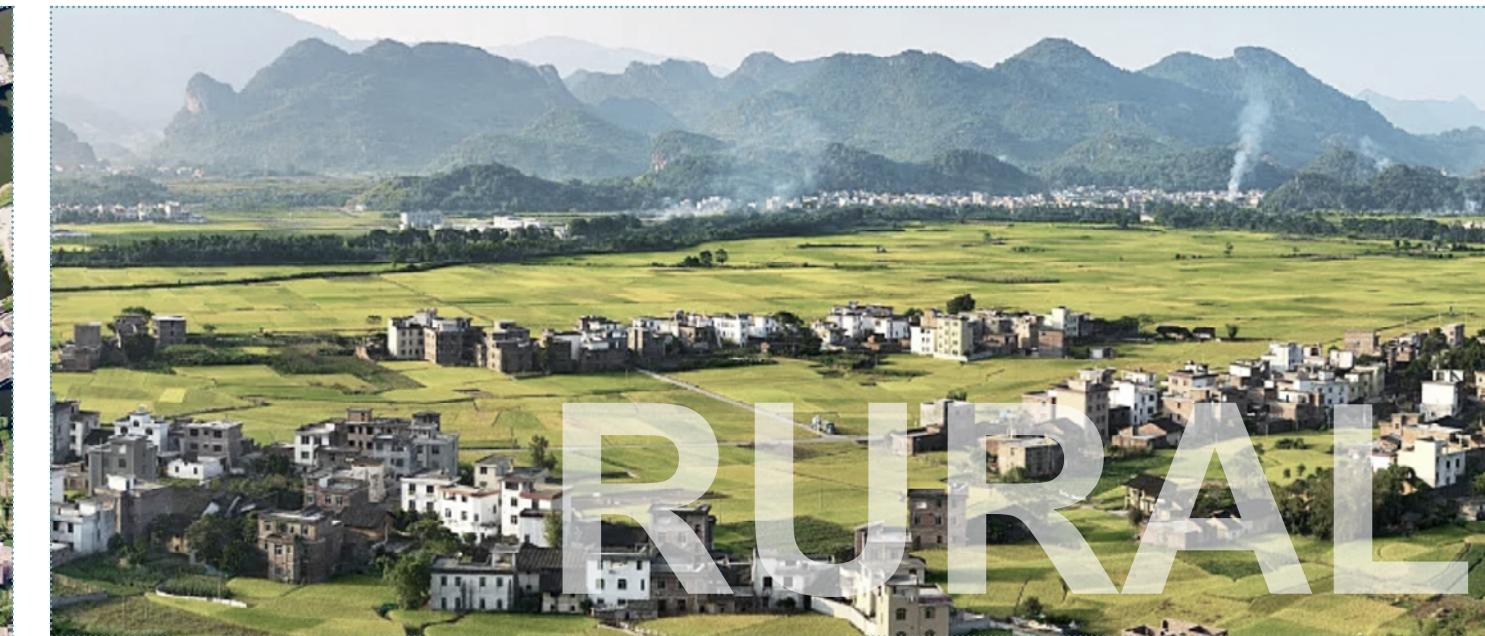
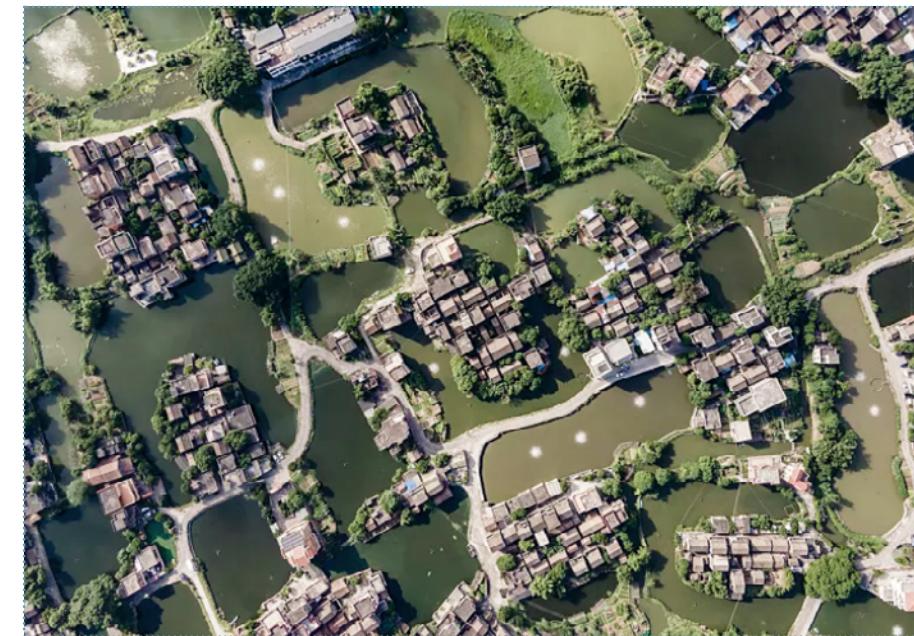




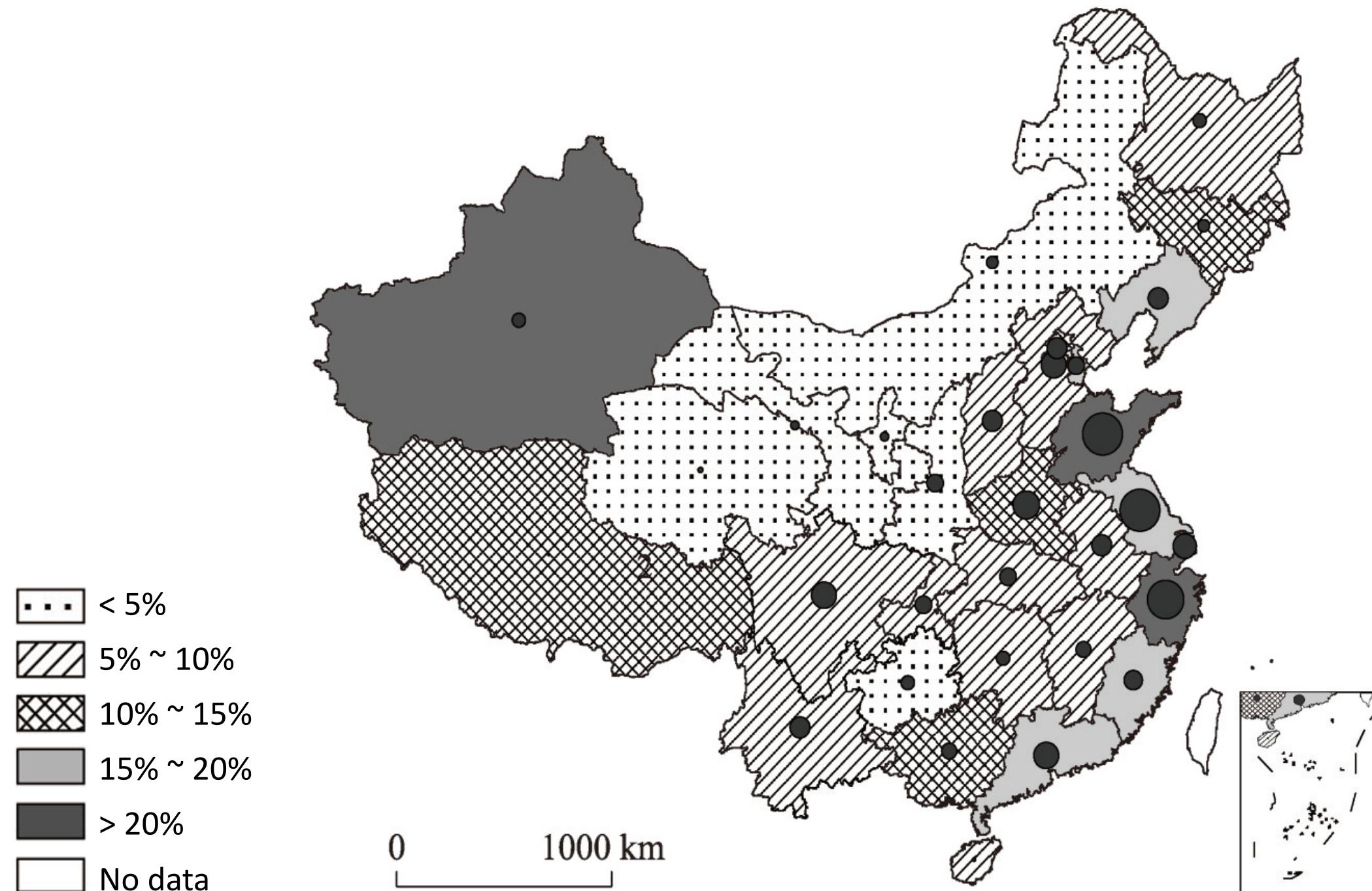
# THE URBAN-RURAL DICHOTOMY IN CHINA

中国的城乡二元化



## DECREASING ARABLE LAND

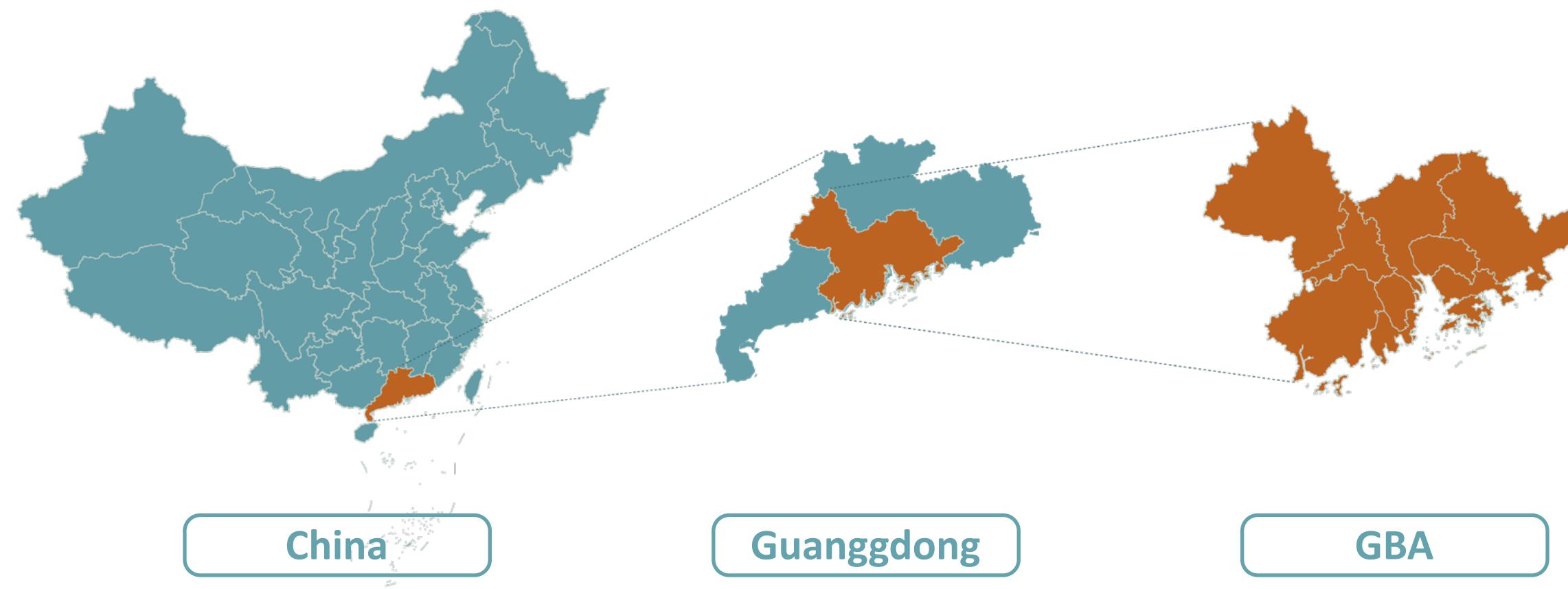
消失的耕地



*Proportion of arable land occupied by construction land*

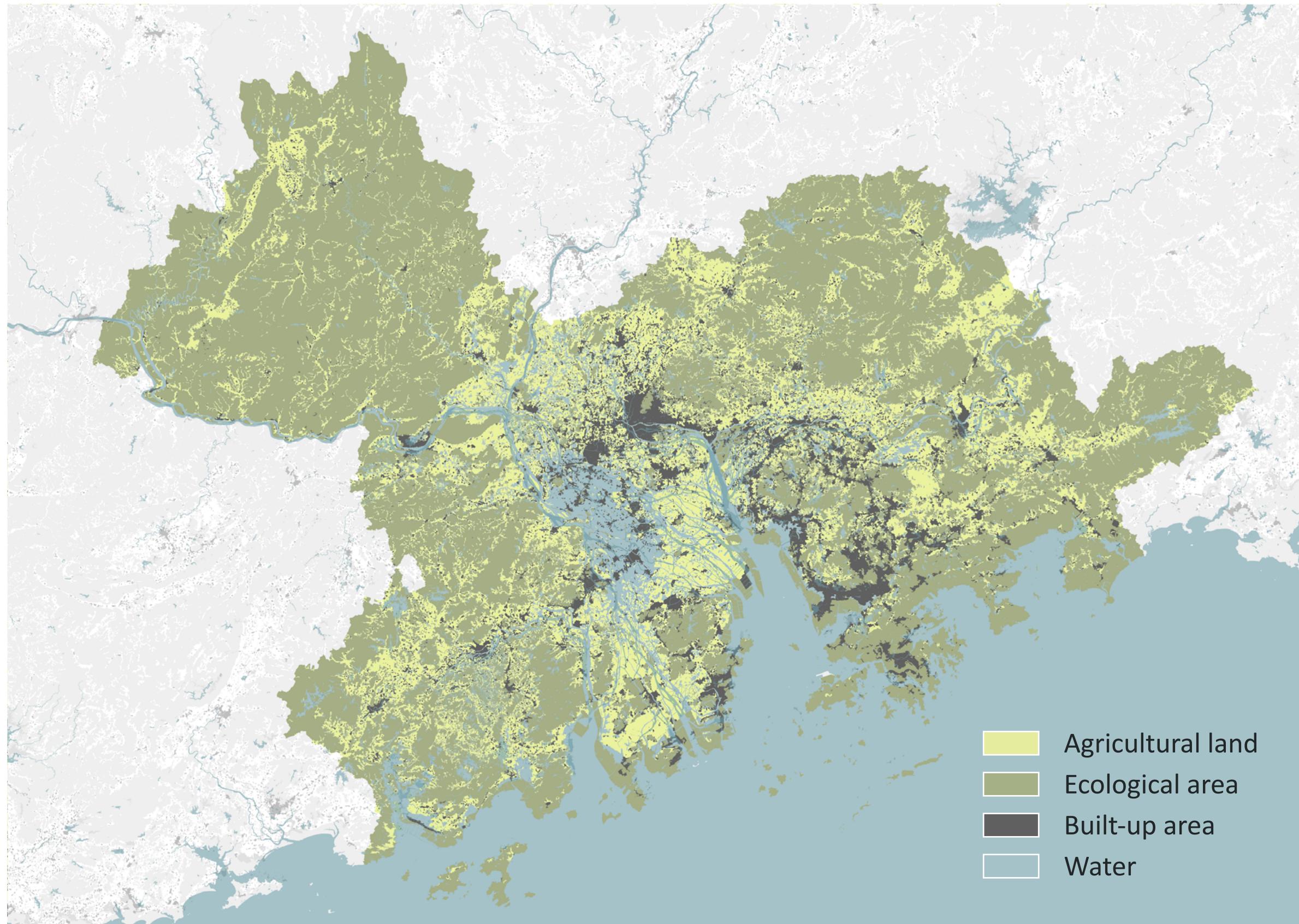
# GREATER BAY AREA: THE LEADING DEVELOPING REGION

粤港澳大湾区：全国领先的发展地区



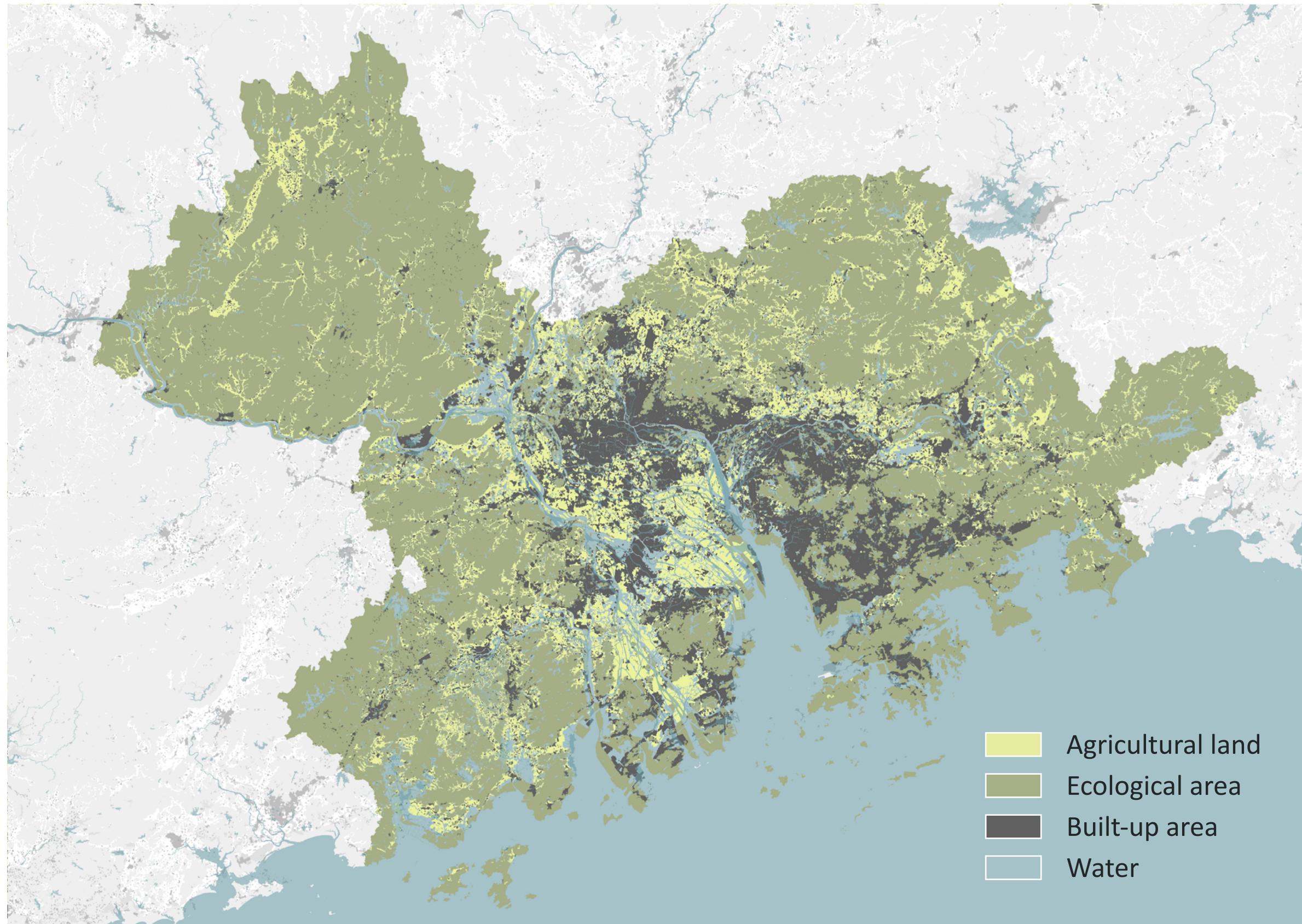
## GREATER BAY AREA: MASSIVE RURAL CONTEXT

粤港澳大湾区：广袤的乡村地区



# GREATER BAY AREA: MASSIVE RURAL CONTEXT

粤港澳大湾区：广袤的乡村地区



# RURAL INDUSTRIALISATION

## 乡村工业化



# THE THREE RURAL PROBLEMS

三农问题

*People*



*Land use*



*Industry*





**WHERE IS THE FUTURE  
OF RURAL AREAS?**

# DIGITALISATION INFLUENCING RURAL AREAS

数字化时代正影响乡村区域

## ● *E-commerce business*

Online trading activities that rely on digital platforms, which are creating more efficient and transparent global markets. They provide businesses with enormous built-in customer bases and effective ways to reach them.



*Farmers selling fruits by Taobao platform*



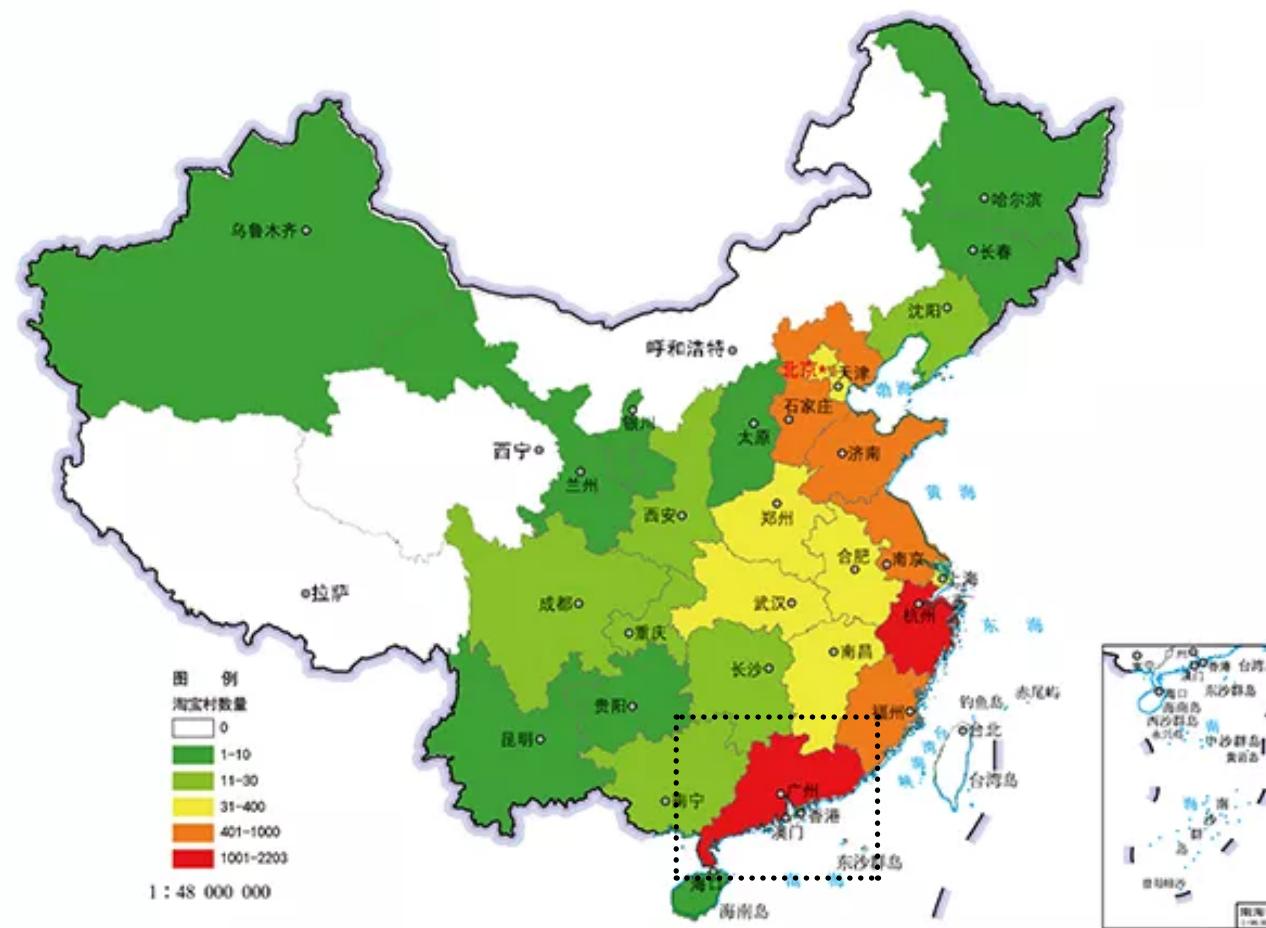
*Picture of a successful Taobao Village*

# THE THRIVING TAOBAO VILLAGES IN CHINA

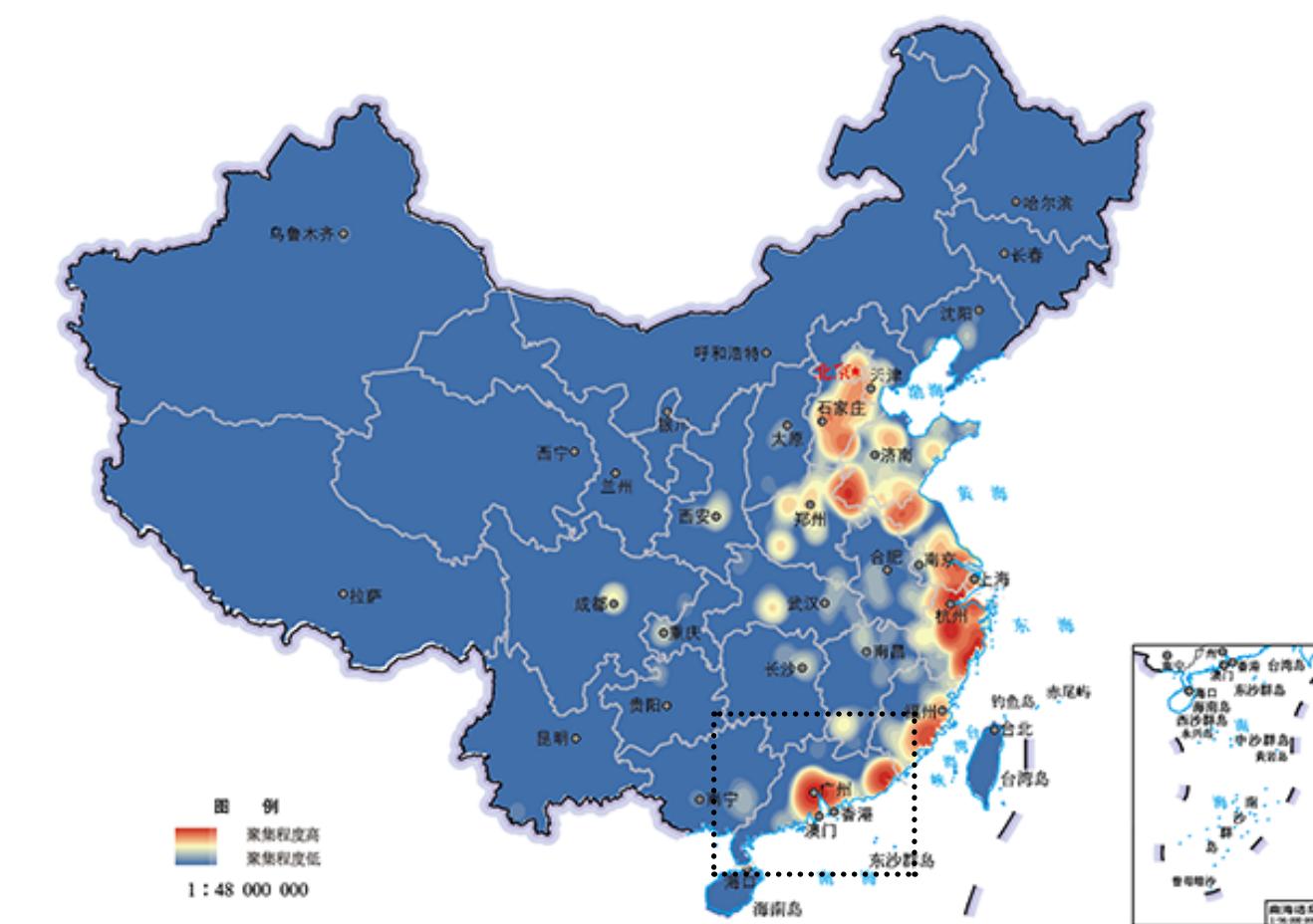
## 中国蓬勃发展的淘宝村

## ● *Taobao Village*

Based on the Internet information technology conditions, the villages developed e-commerce spontaneously based on Taobao and other online platforms as a medium for production and trading economic activities.



## *Taobao Villages distribution map*

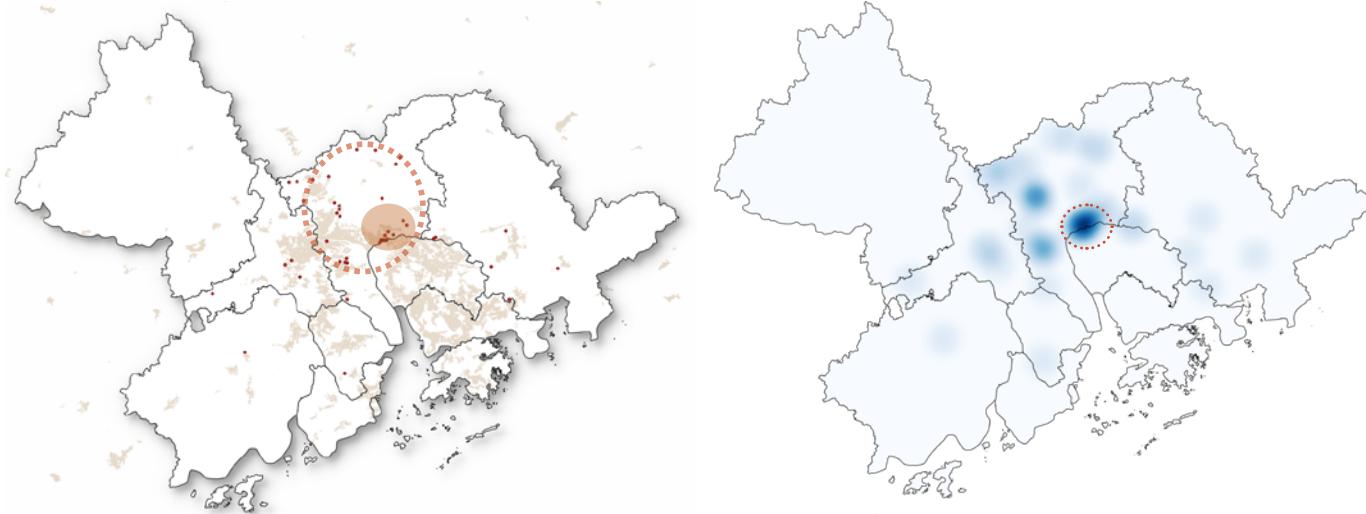


## Heatmap analysis of Taobao Villages

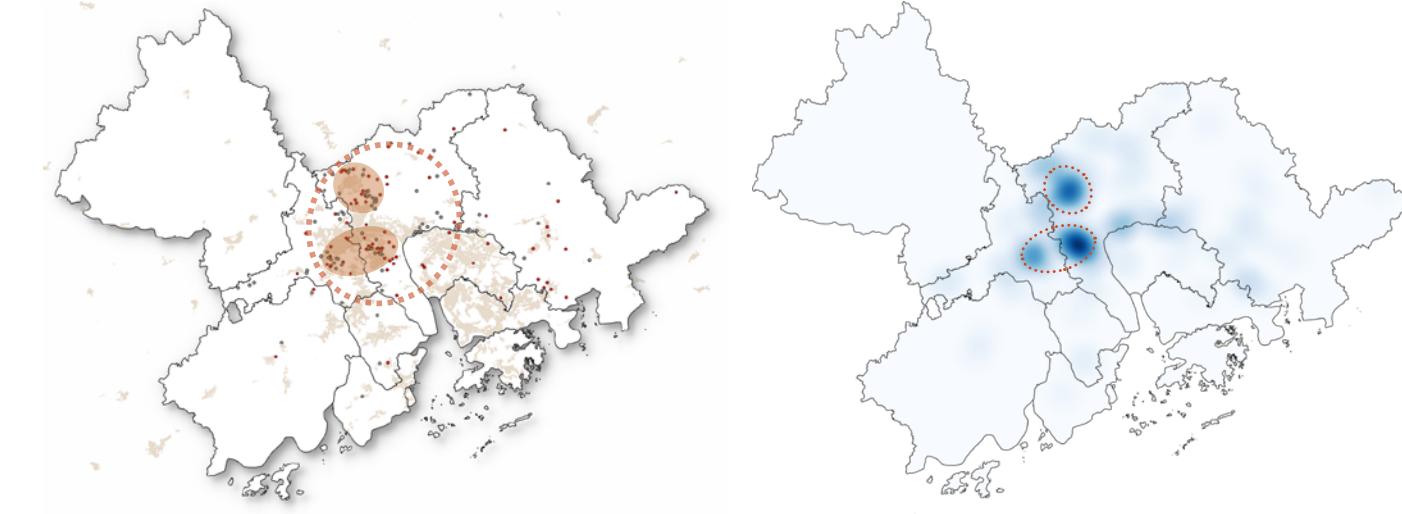
# GBA AS THE LEADING DEVELOPING REGION

粤港澳大湾区成为全国领先的淘宝村发展区域

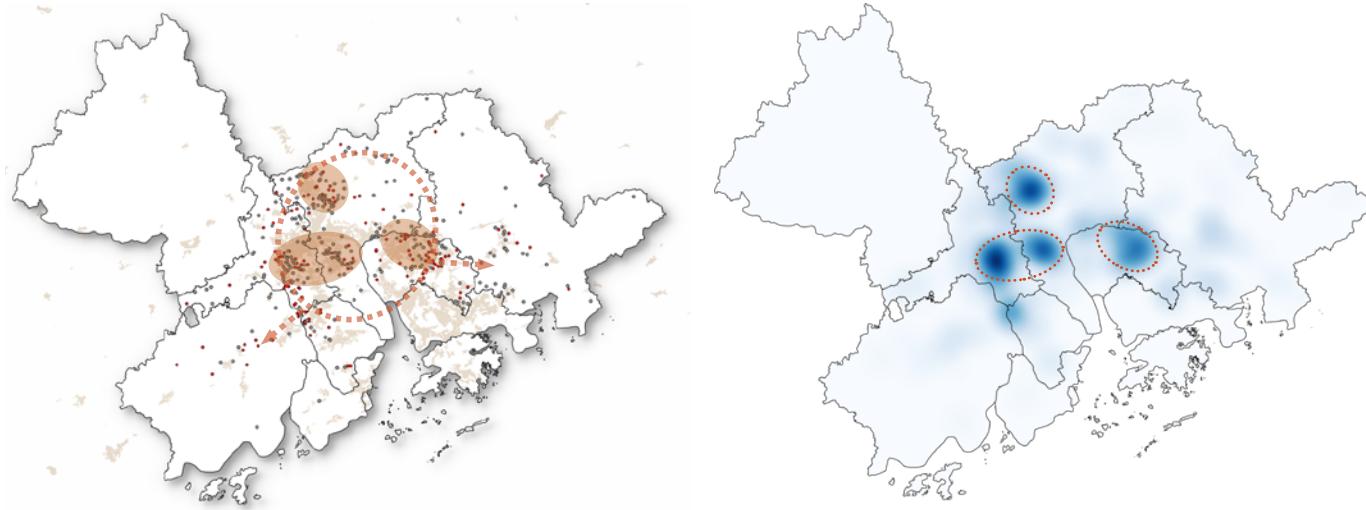
*Phase I: Emergence (before 2014)*



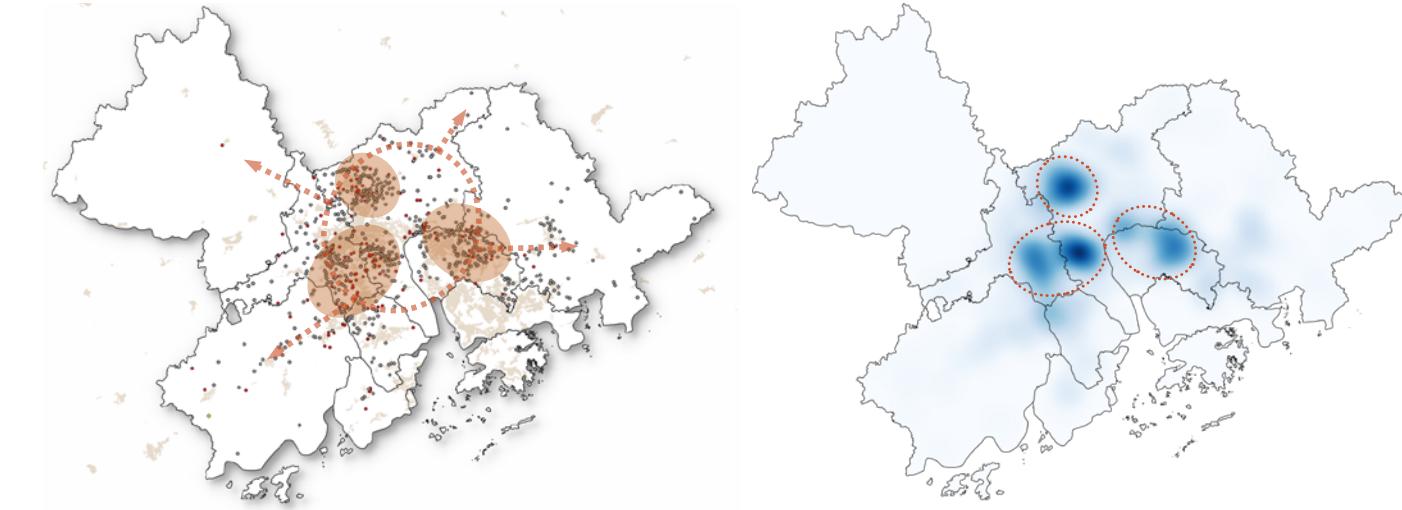
*Phase II: Radiation (2014-2016)*



*Phase III: Diffusion (2016-2018)*

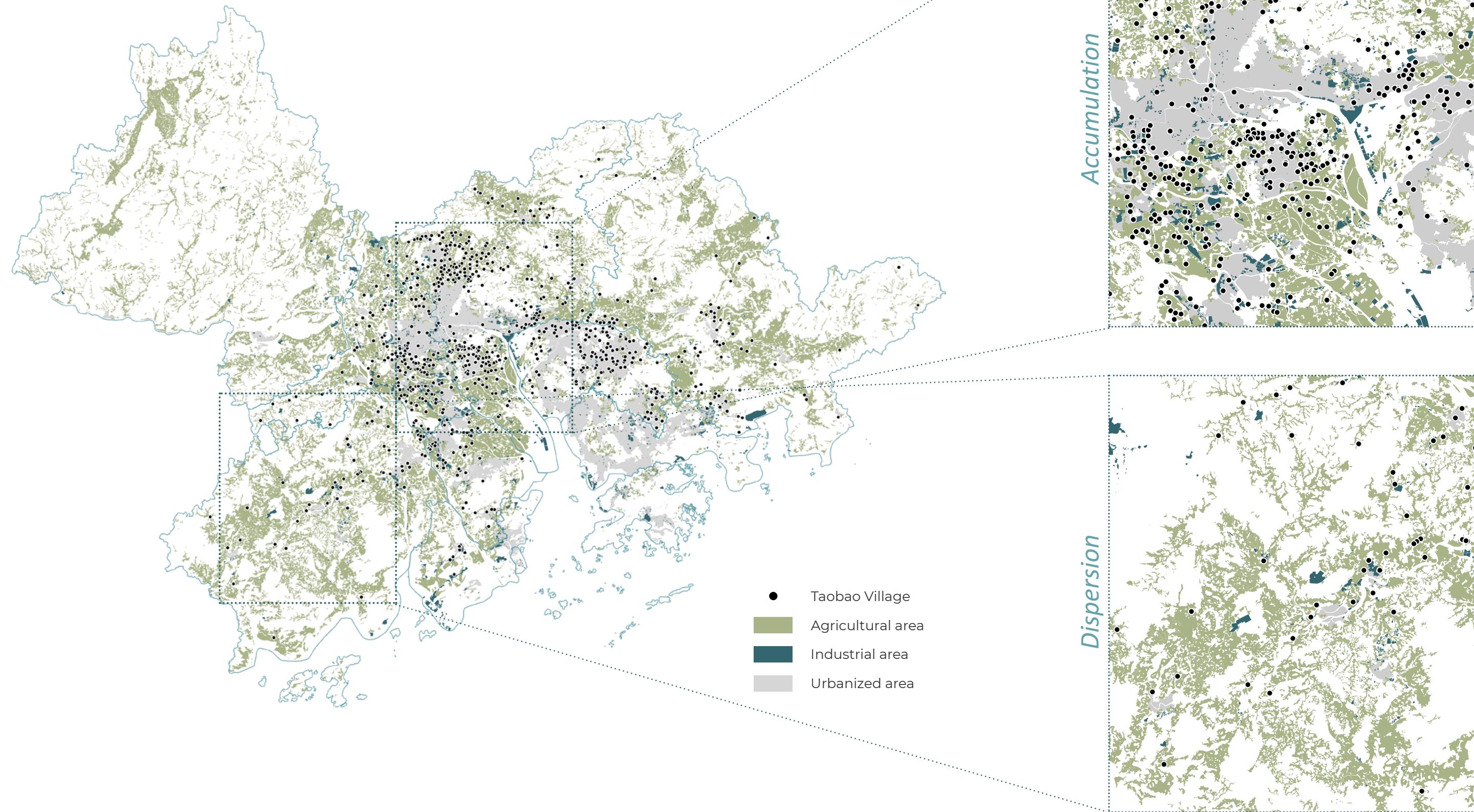


*Phase IV: Clustering (2018-2021)*



## DIFFERENTIATED SPATIAL DISTRIBUTION

差异悬殊的空间分布



## SPATIAL CONFLICTS BETWEEN INDUSTRY AND VILLAGE

工业与乡村的空间矛盾

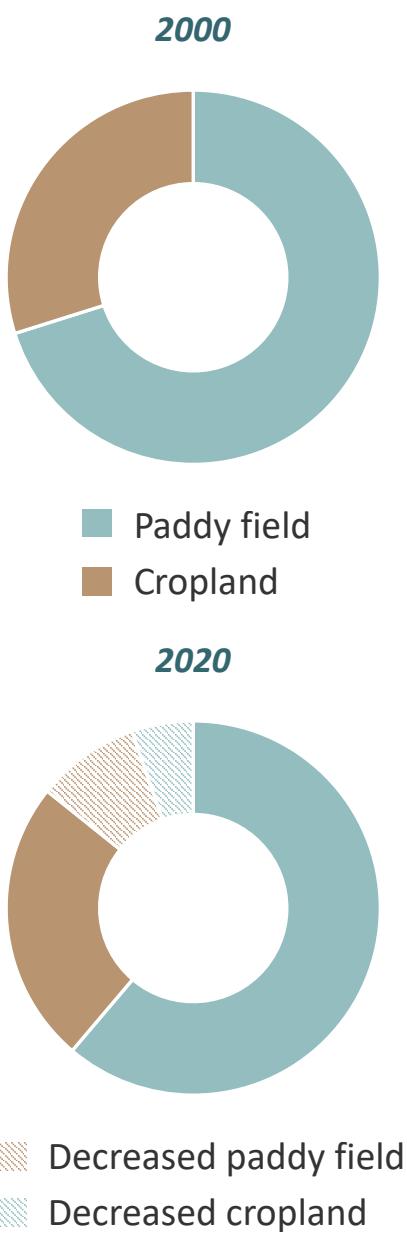


## DESTRUCTION OF AGRICULTURE

农业的退化



*Degraded agricultural land  
in GBA from 2000 to 2020*



# LABOUR-INTENSIVE MANUFACTURING

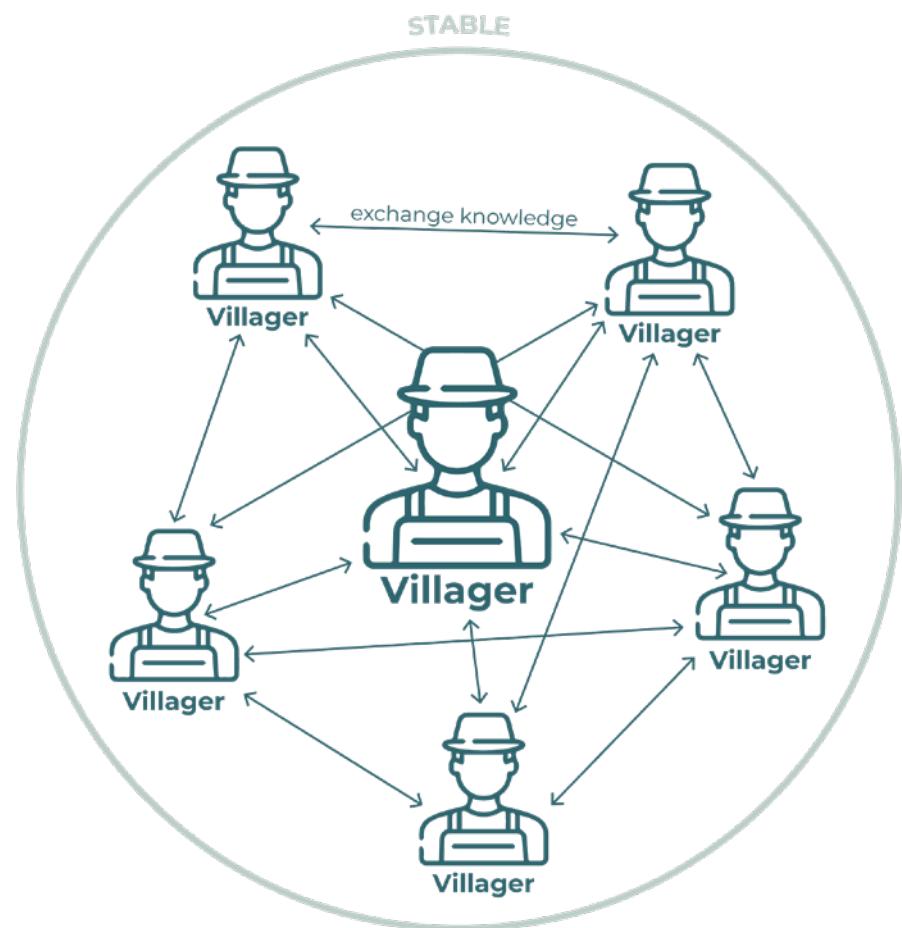
## 劳动密集型产业



## IMPACTS ON RURAL SOCIETY

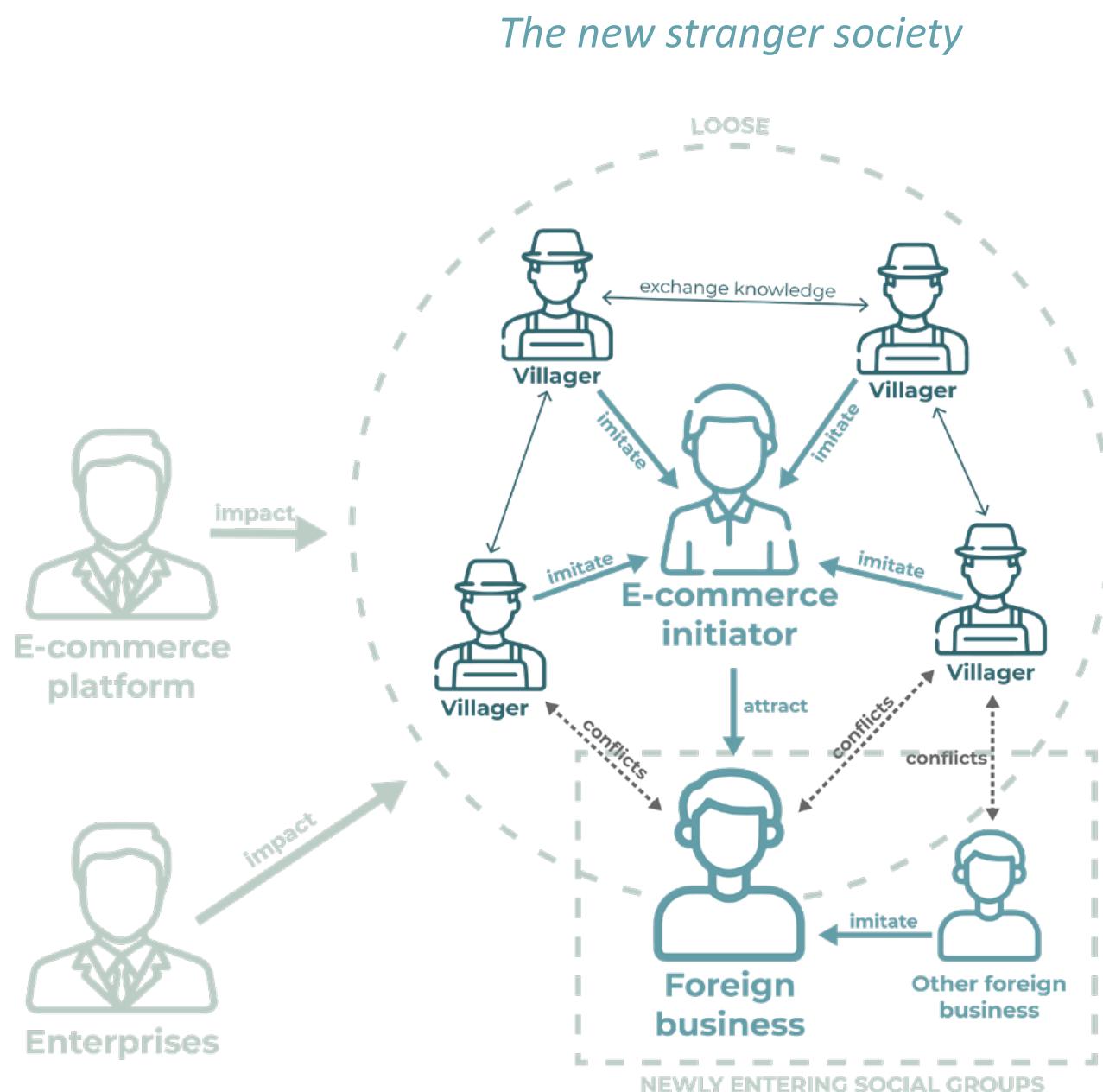
### 对乡村社会的冲击

*The original acquaintance society*



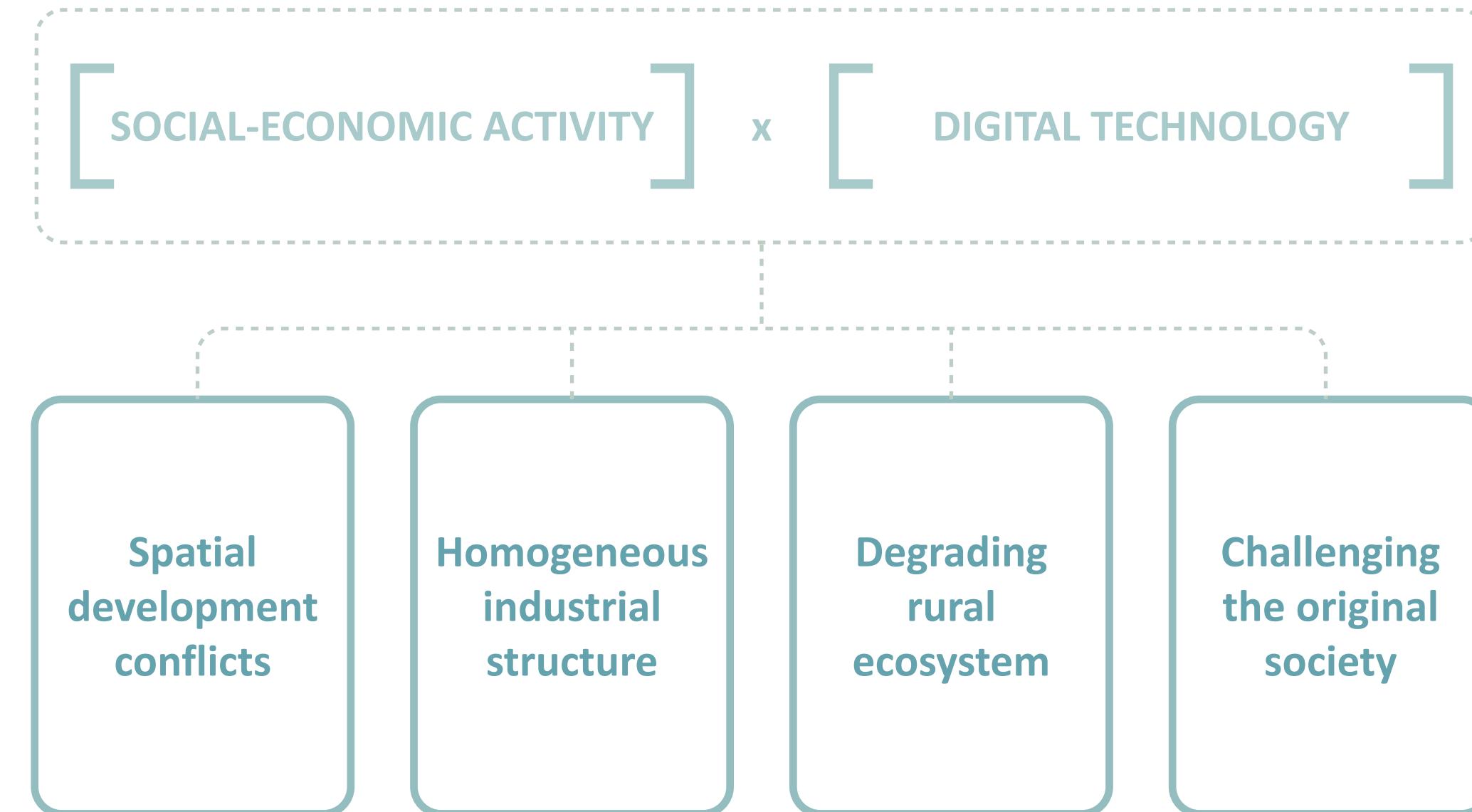
# IMPACTS ON RURAL SOCIETY

对乡村社会的冲击



## PROBLEM POSITIONING

### 问题综述



# How to construct 'Smart Village' based on the optimized Taobao Village model to upgrade the agricultural industry and improve rural liveability for future rural revitalization in GBA?

## **UNDERSTAND**

# *How to understand the spatial impact of the digital economy on rural areas and optimise the Taobao Village mechanism for rural development?*

## EXPLORATION

*What spatial approaches need to be implemented to improve the quality of life and protect ecosystems in rural areas?*

## APPLICATION

*How can the network system positively impact the development of localised industrial structures and sustainable agriculture?*

## REFLECTION

# *How to mitigate social segregation and help reconstruct social relations in the face of new populations entering rural areas?*

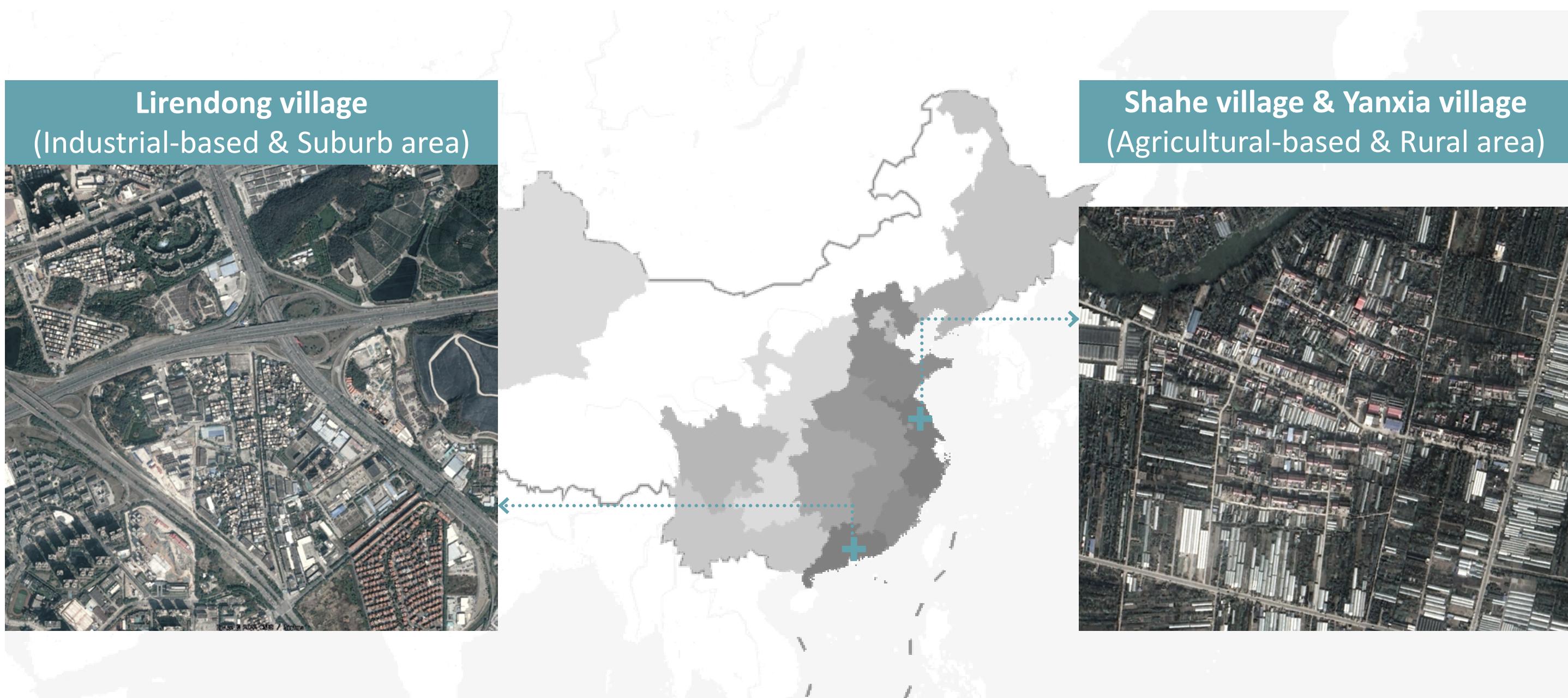
## WHAT IS TAOBAO VILLAGE?

什么是淘宝村?



## TAOBAO VILLAGES: INDUSTRIAL-BASED & AGRICULTURAL-BASED

工业型淘宝村 & 农业型淘宝村



## LIRENDONG VILLAGE: INDUSTRIAL-BASED TAOBAO VILLAGE

里仁洞村：工业型淘宝村



# LIRENDONG VILLAGE: INDUSTRIAL-BASED TAOBAO VILLAGE

里仁洞村：工业型淘宝村



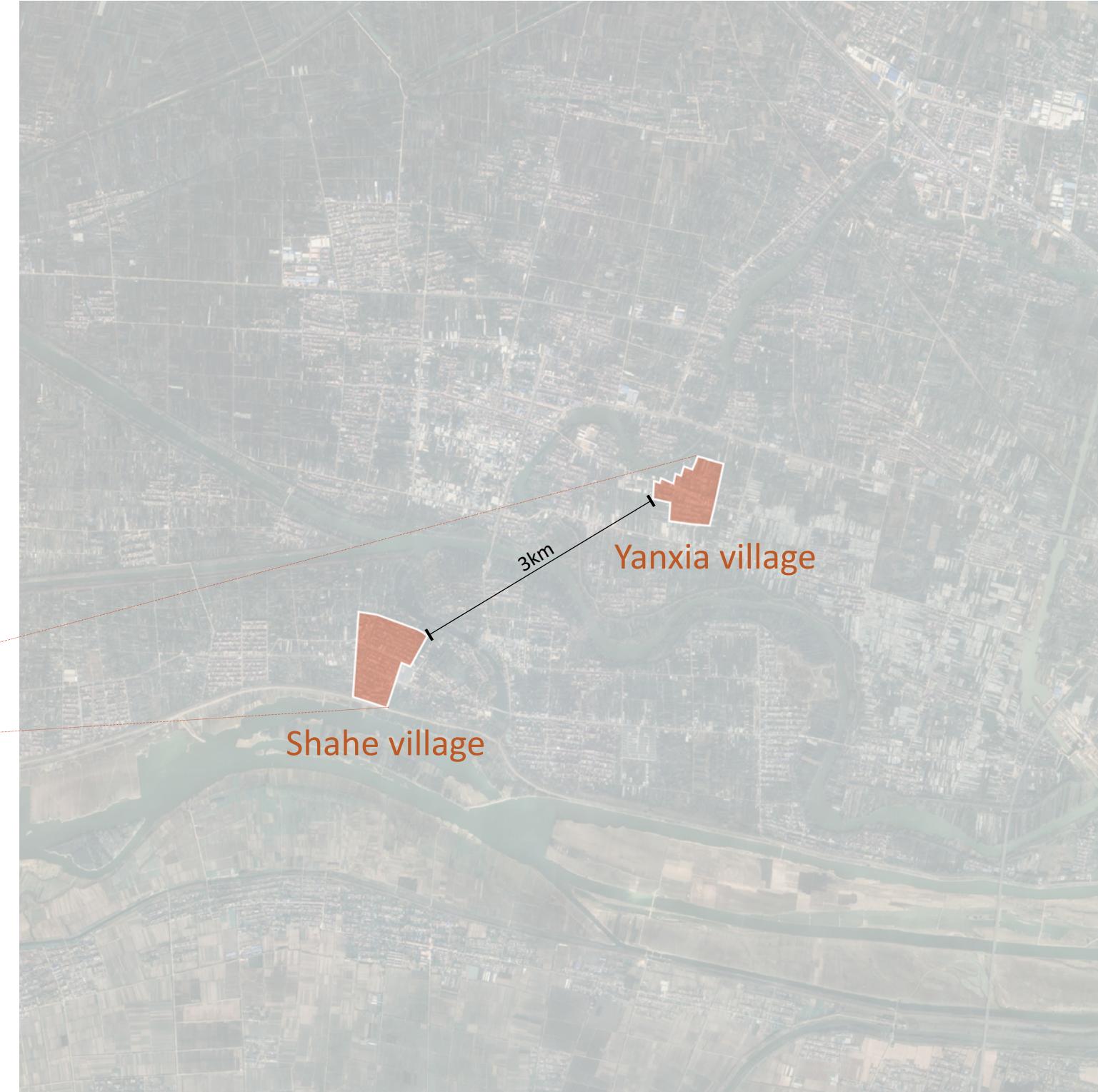
## ATMOSPHERE OF INDUSTRIAL-BASED TAOBAO VILLAGE

工业型淘宝村的景象



## SHAHE & YANXIA VILLAGE: AGRICULTURAL-BASED TAOBAO VILLAGE

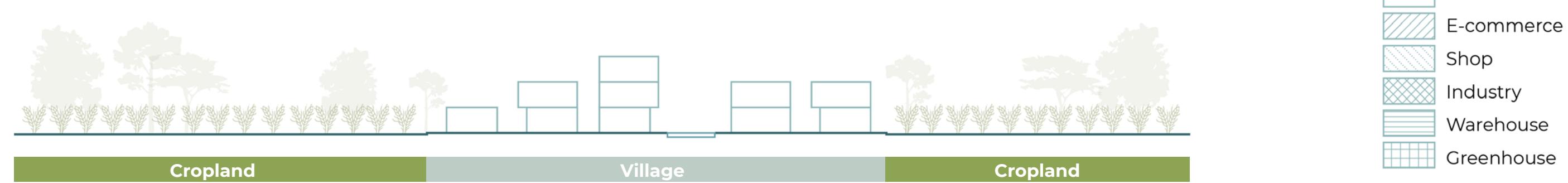
沙河村 & 堰下村: 农业型淘宝村



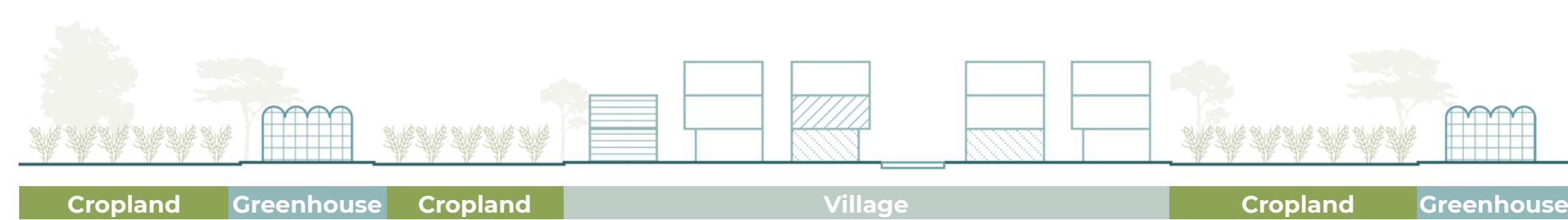
## SHAHE & YANXIA VILLAGE: AGRICULTURAL-BASED TAOBAO VILLAGE

## 沙河村 & 堰下村：农业型淘宝村

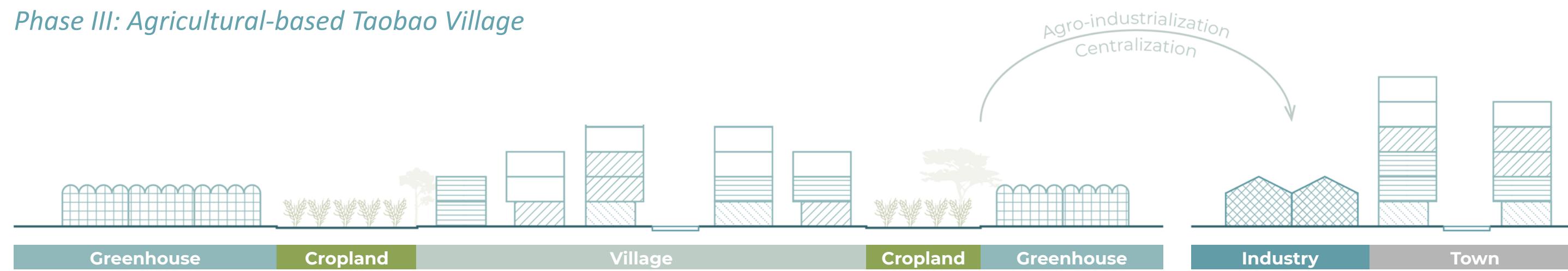
## *Phase I: Traditional rural village*



## *Phase II: Developing rural village*



### Phase III: Agricultural-based Taobao Village



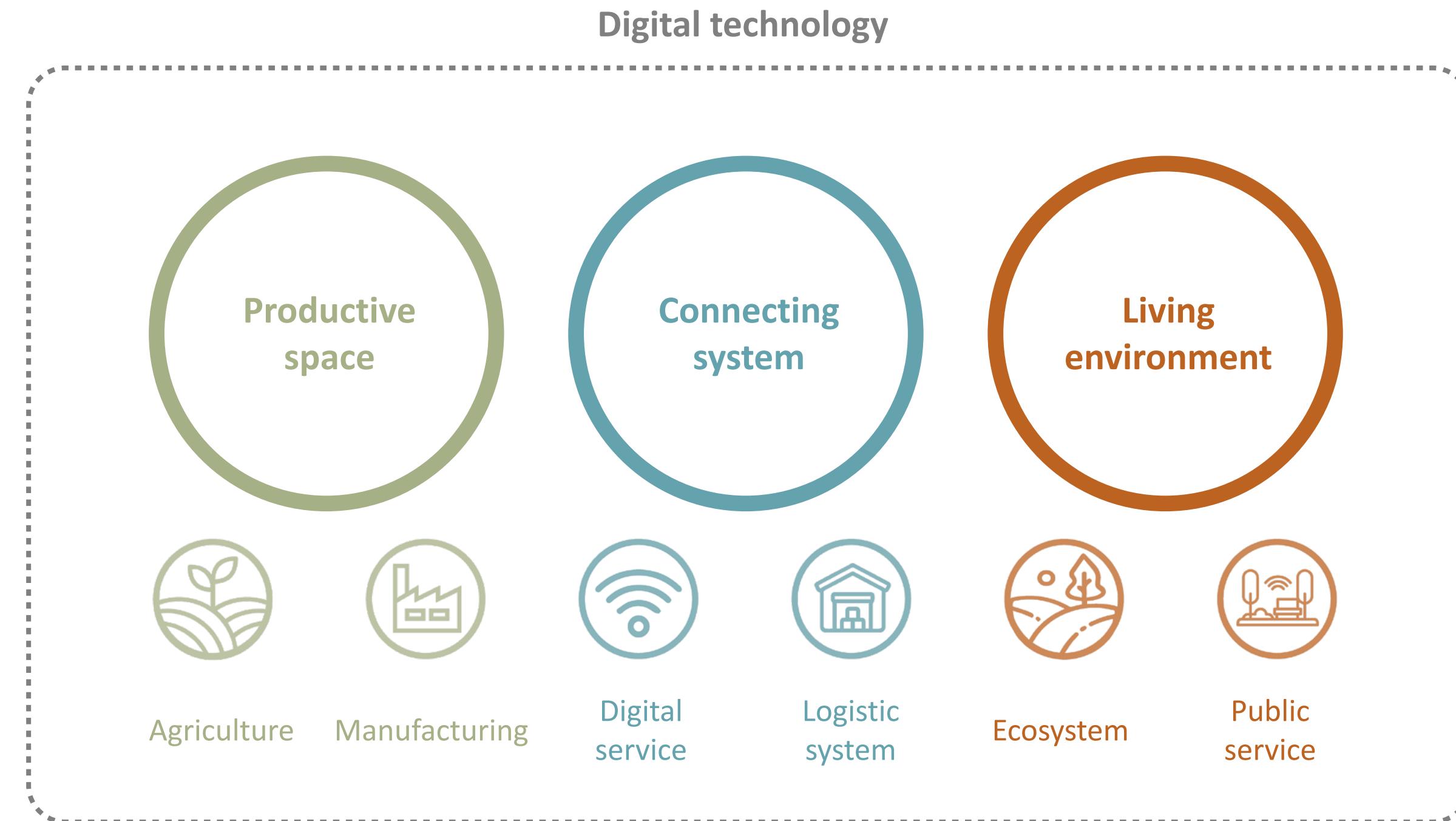
## ATMOSPHERE OF AGRICULTURAL-BASED TAOBAO VILLAGE

农业型淘宝村的景象



# SPATIAL IMPLICATIONS FOR SMART VILLAGES

对智慧乡村空间发展的启发



# IMPROVEMENTS TO SMART VILLAGES

朝智慧乡村升级

Economic benefits

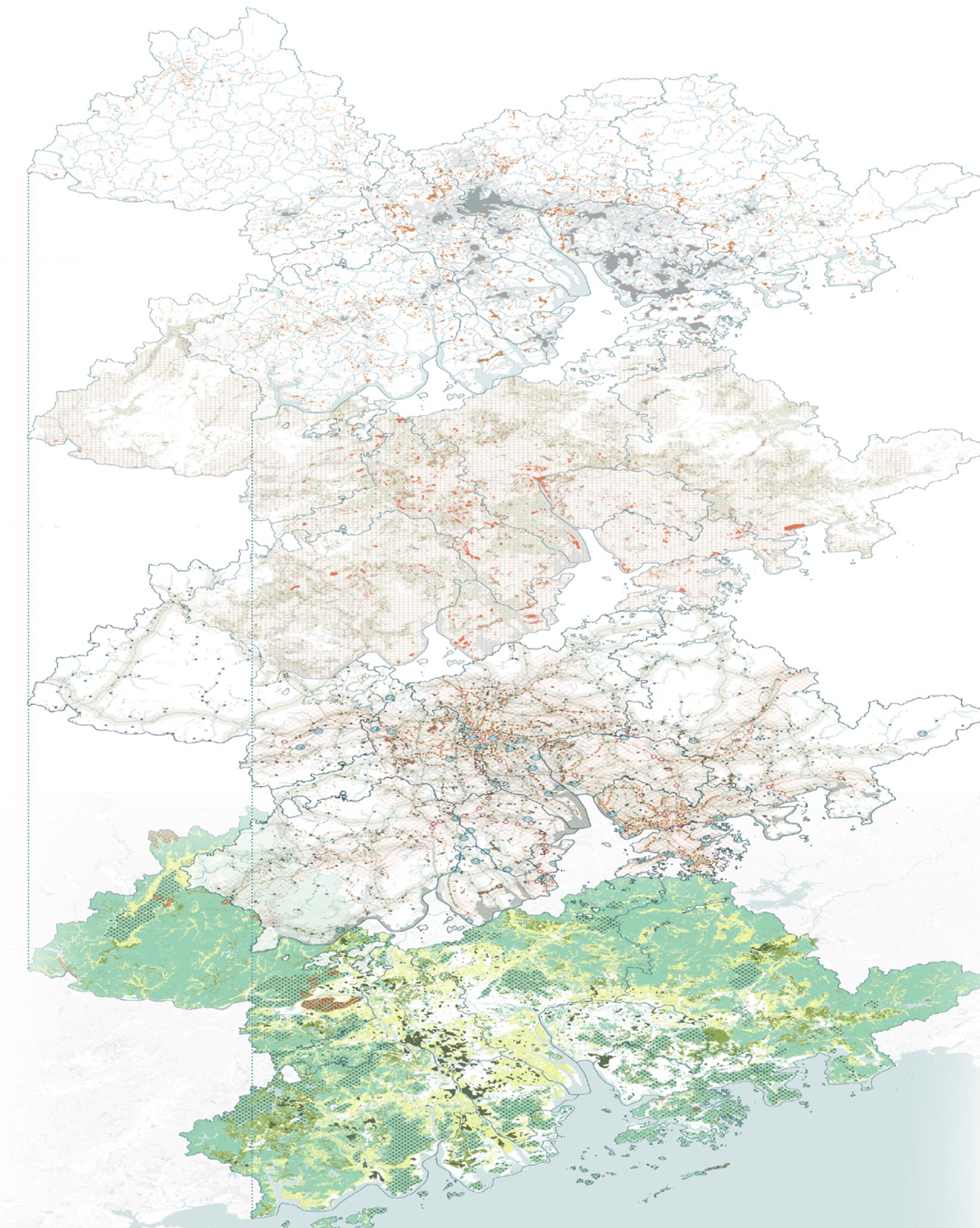
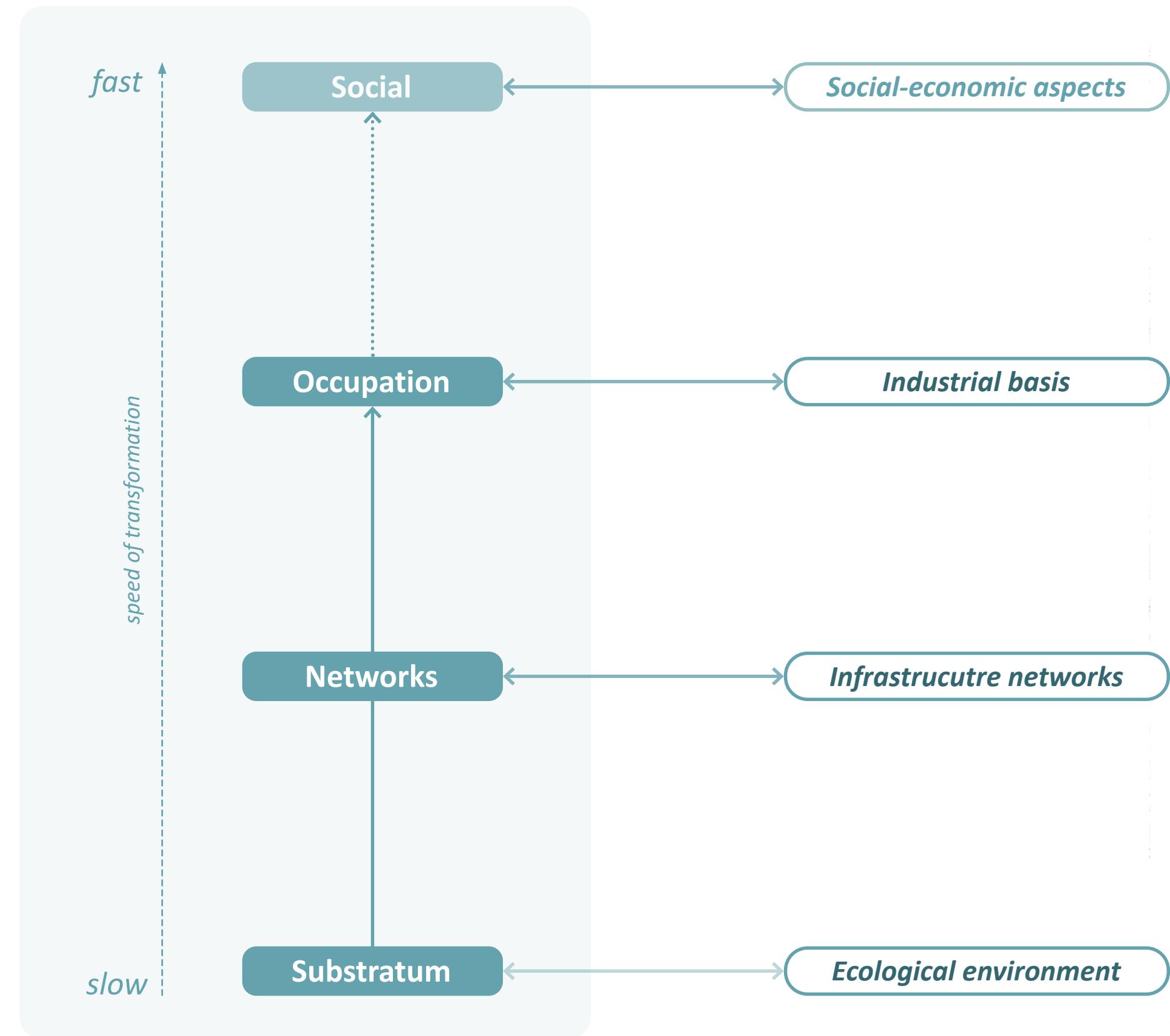
Rural liveability

Agricultural basis



# UNDERSTAND GBA WITH THE LAYER APPROACH

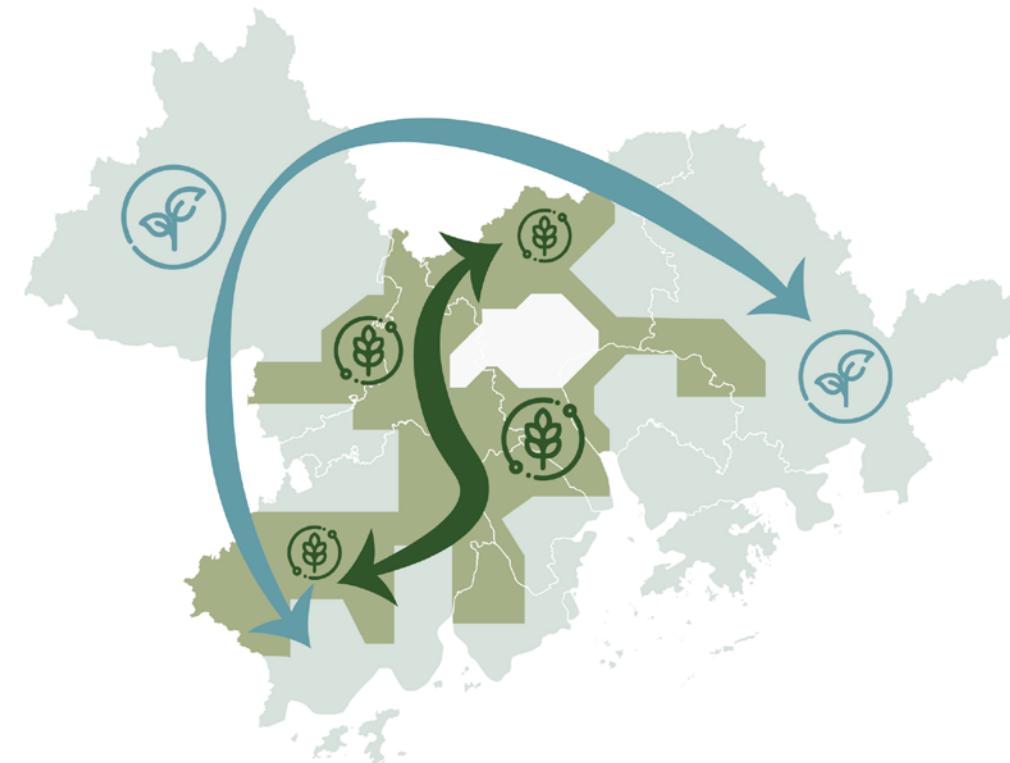
基于分层方法论理解粤港澳大湾区



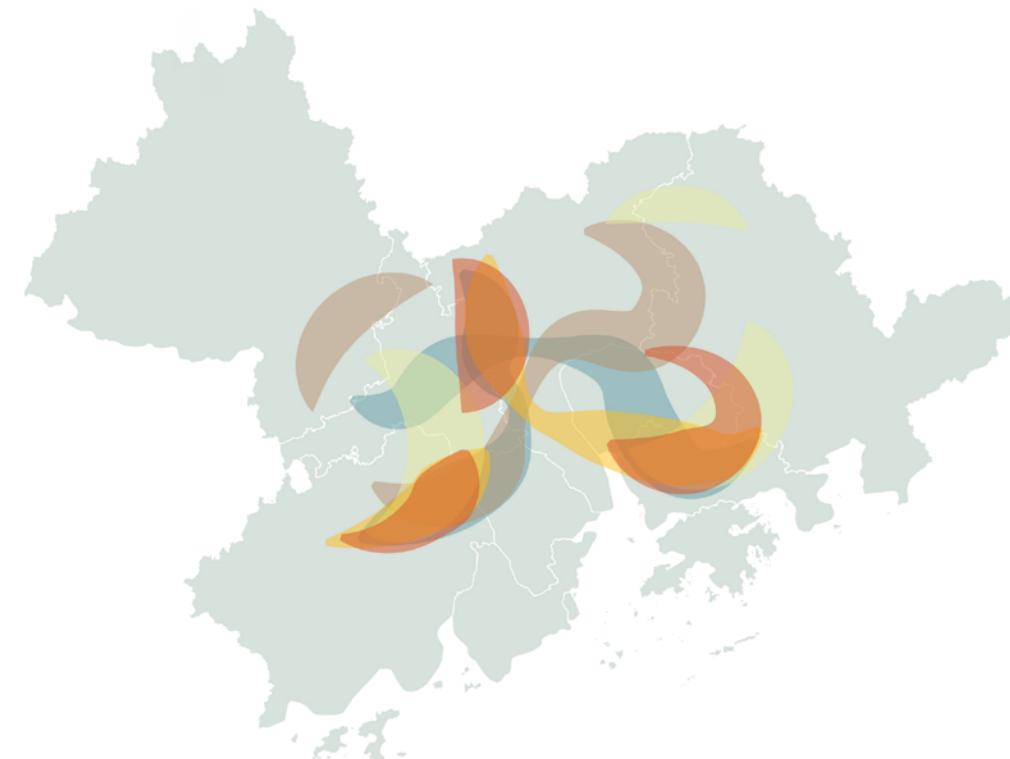
## DEVELOPING POTENTIAL OF GBA

粤港澳大湾区的发展潜力

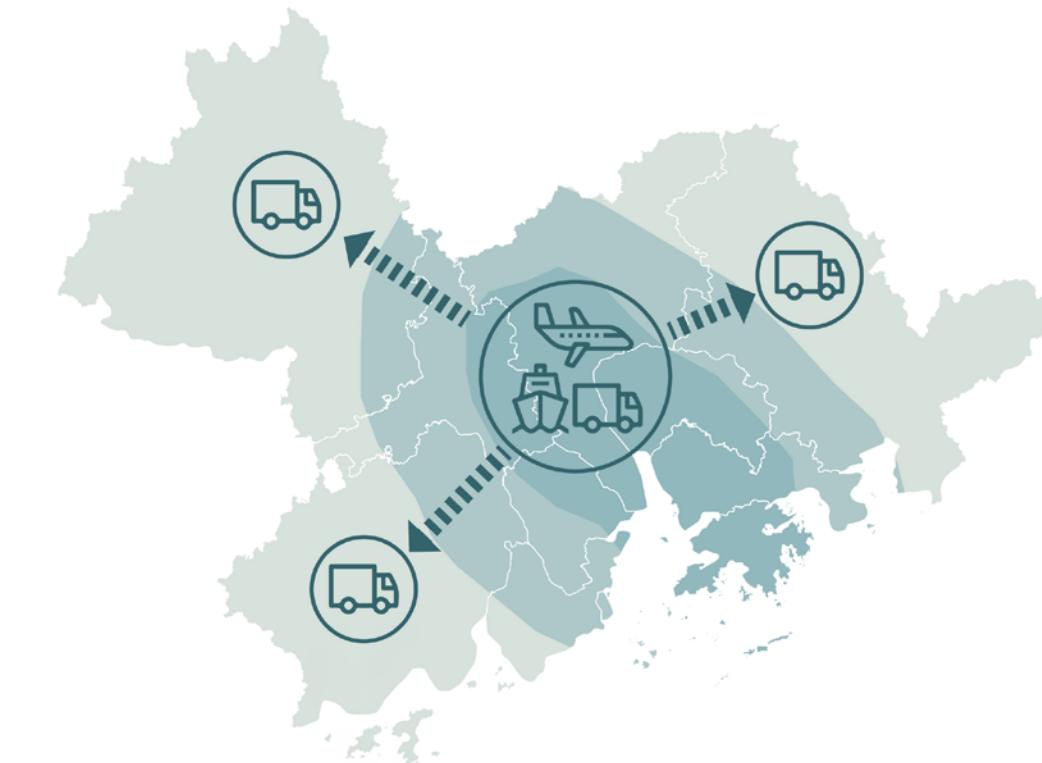
*Agricultural potential*



*Industrial potential*



*Transportation potential*



*Developing potential*

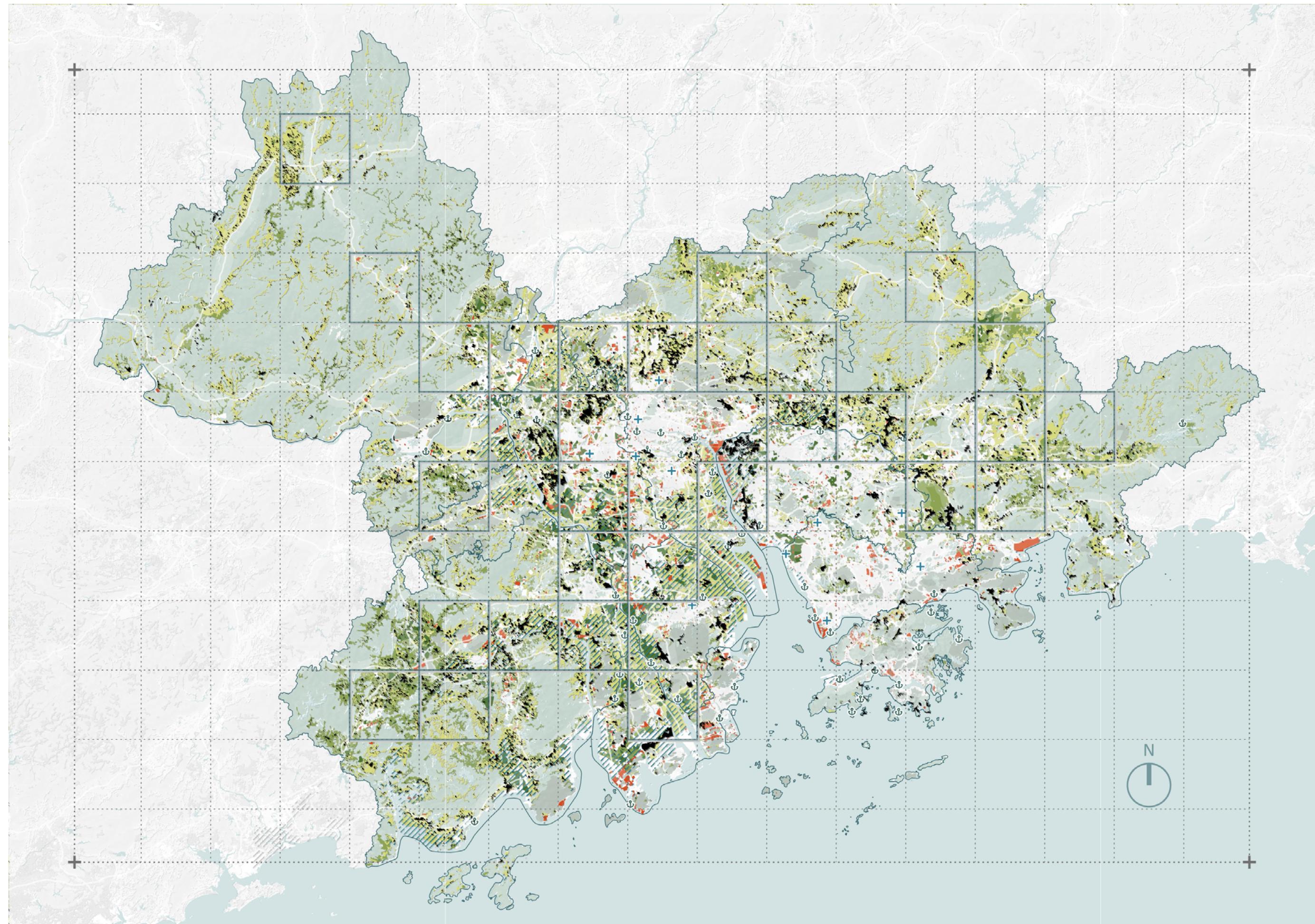


# POTENTIAL REGION

## 潜力区域

- Enhancing existing resources
- Implementing scarce resources

- Logistic park
- Port
- Highway
- Flooding risk
- Rural area
- Industrial area
- Dyke pond
- Paddy field
- Cropland
- Mountain
- Water
- Potential developing area



# UNDERSTAND RURAL AREAS

认知乡村地区



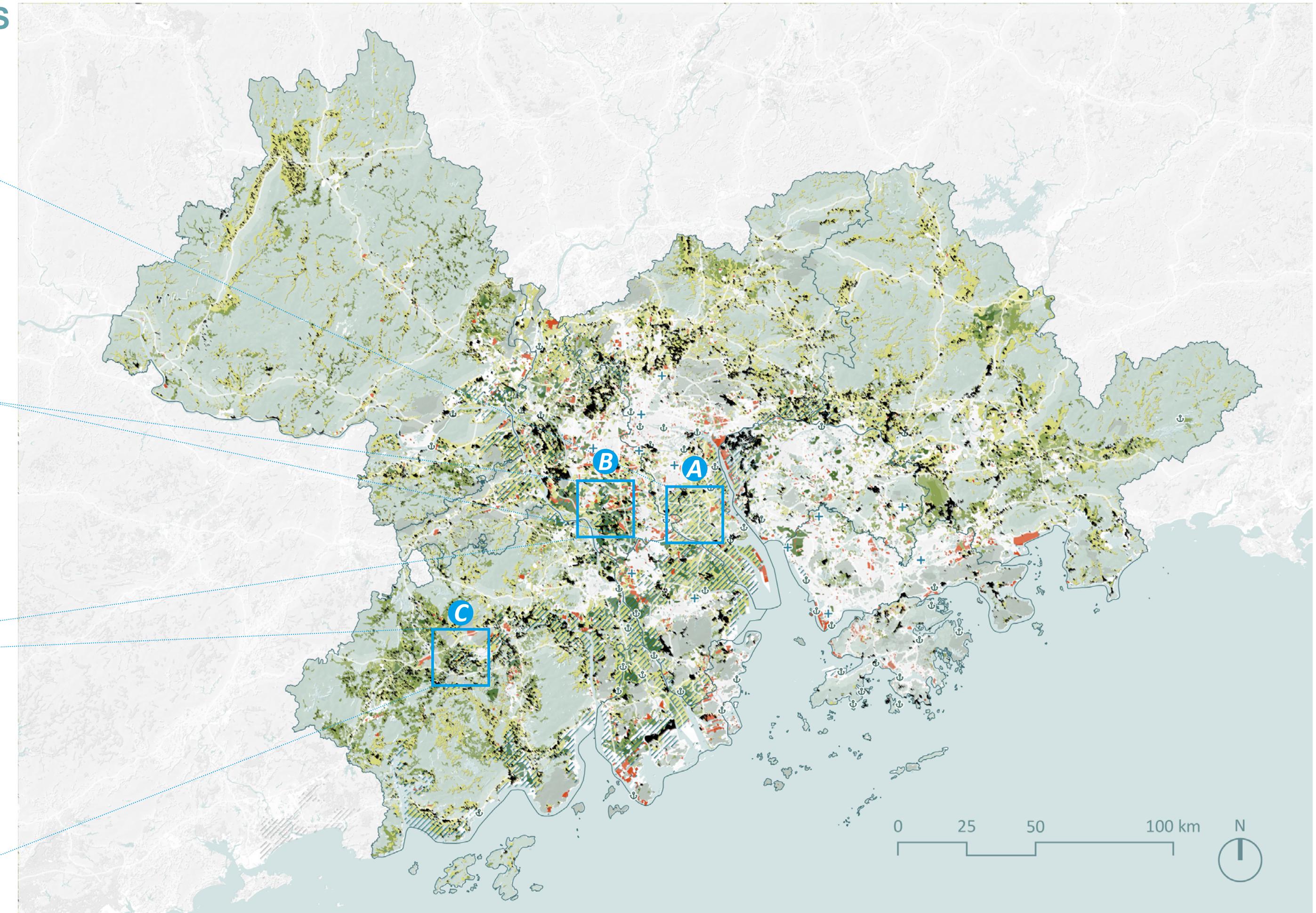
A



B

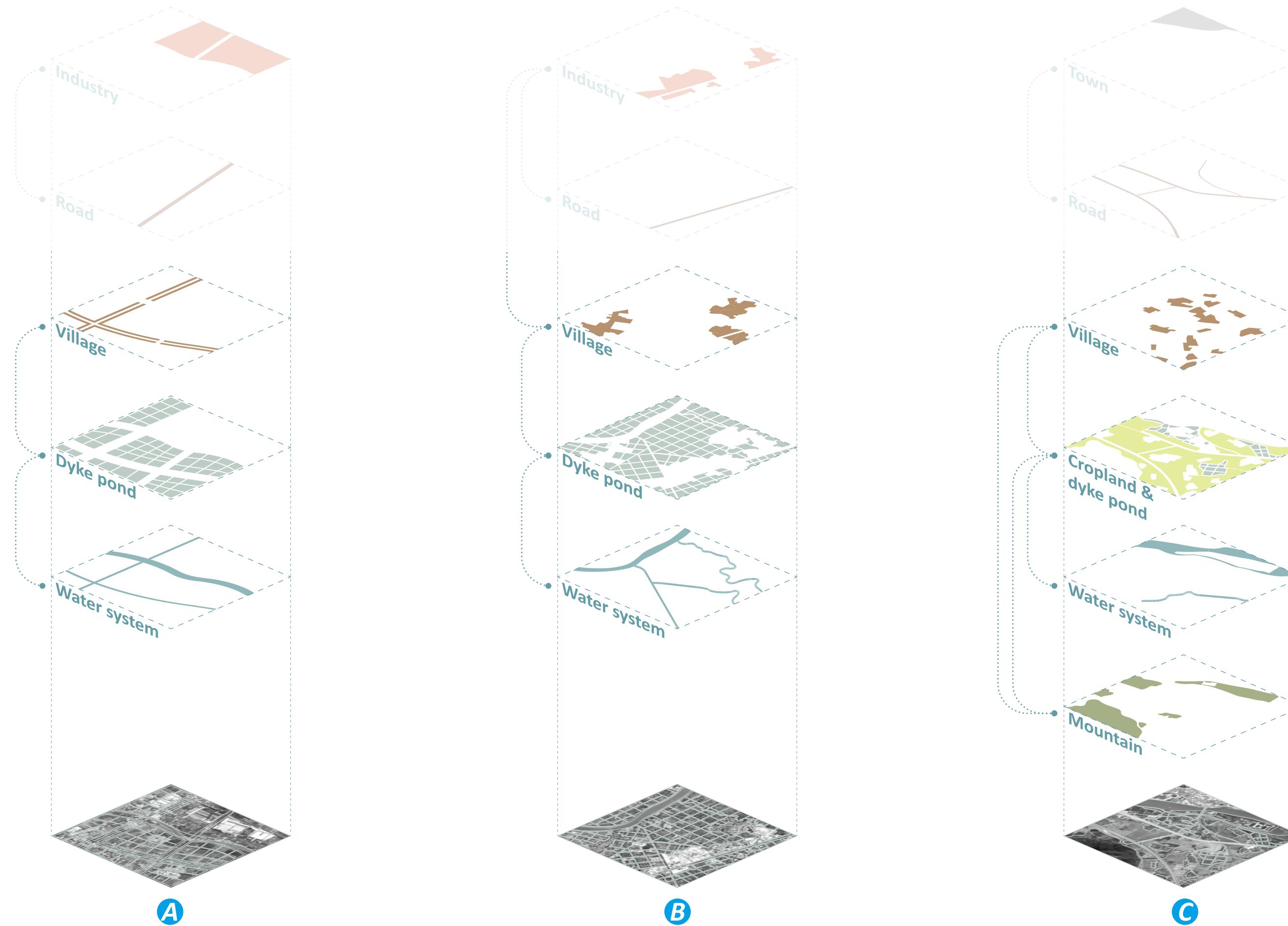


C



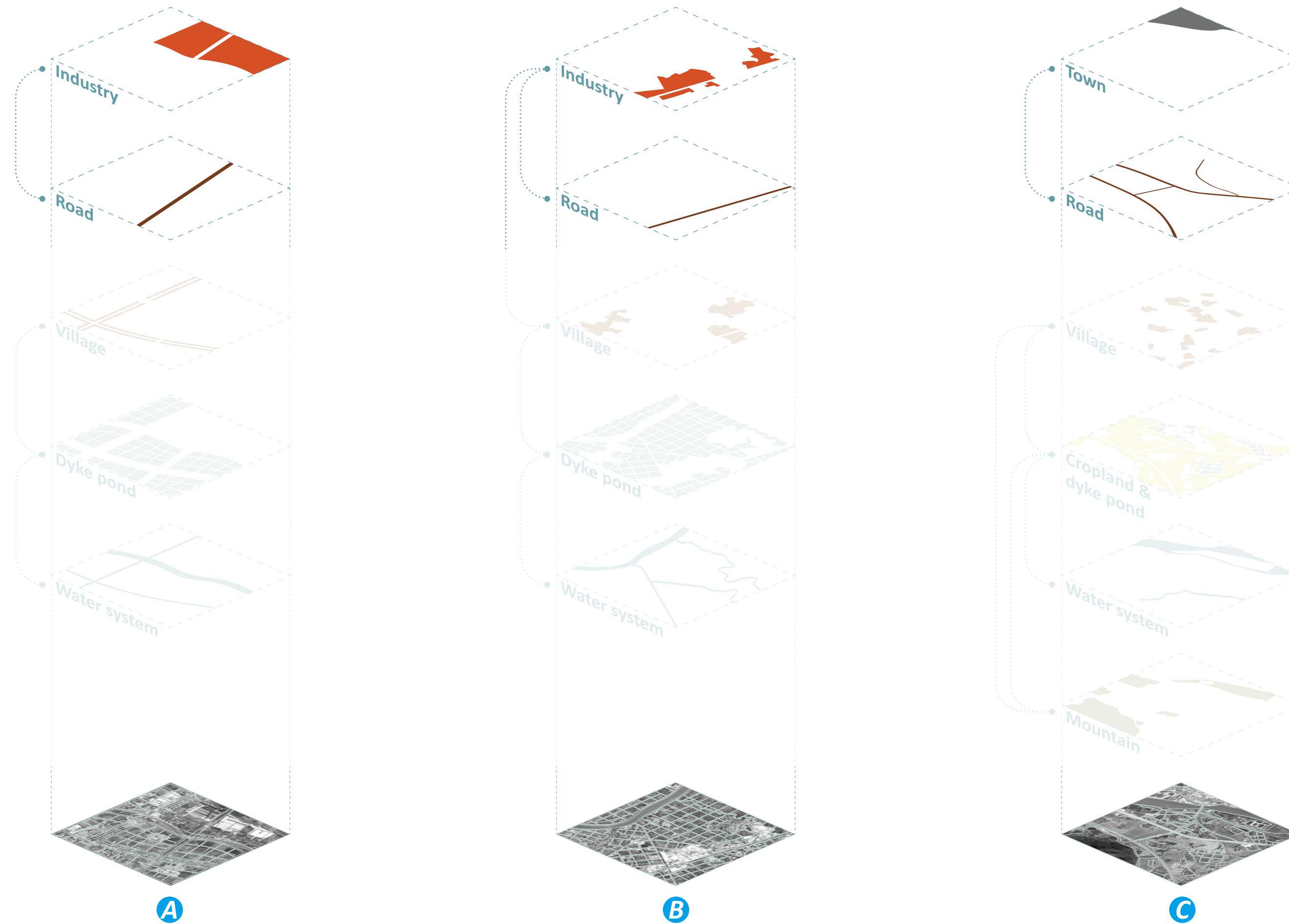
# SPATIAL RELATIONSHIPS

空间关系



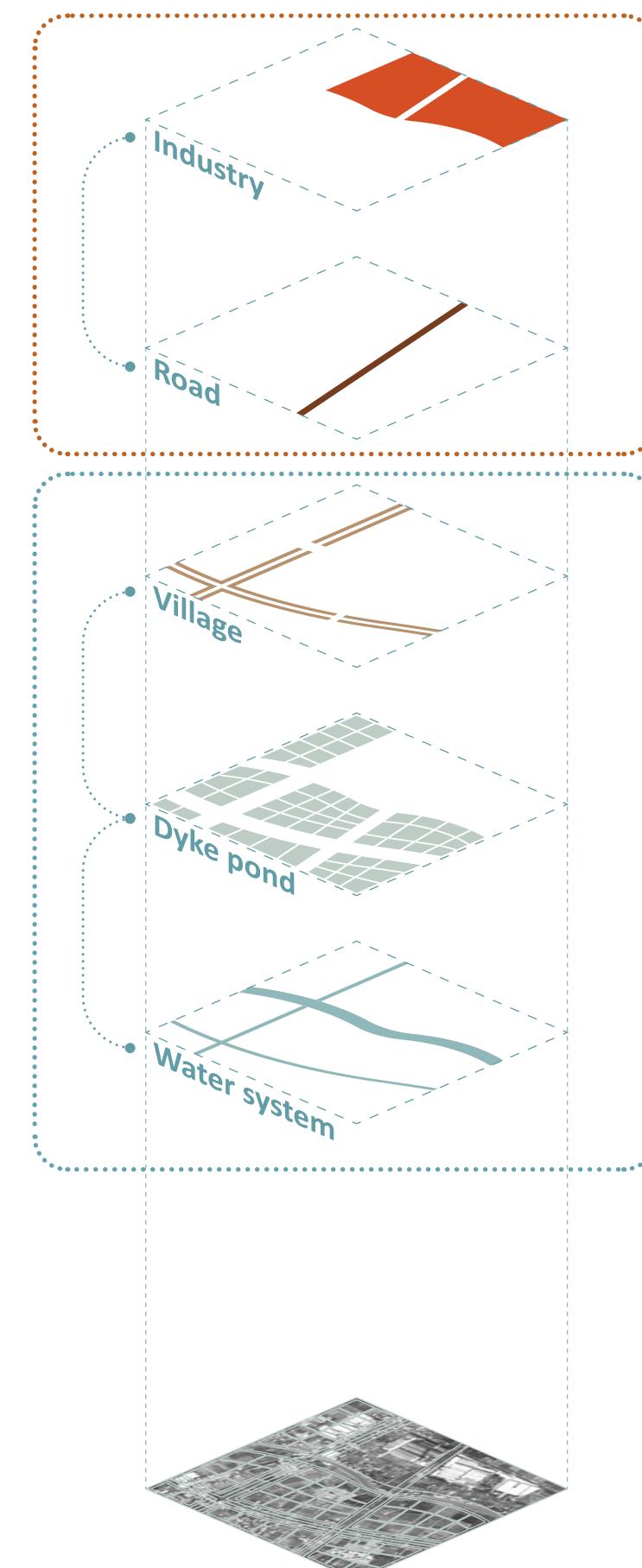
# SPATIAL RELATIONSHIPS

空间关系

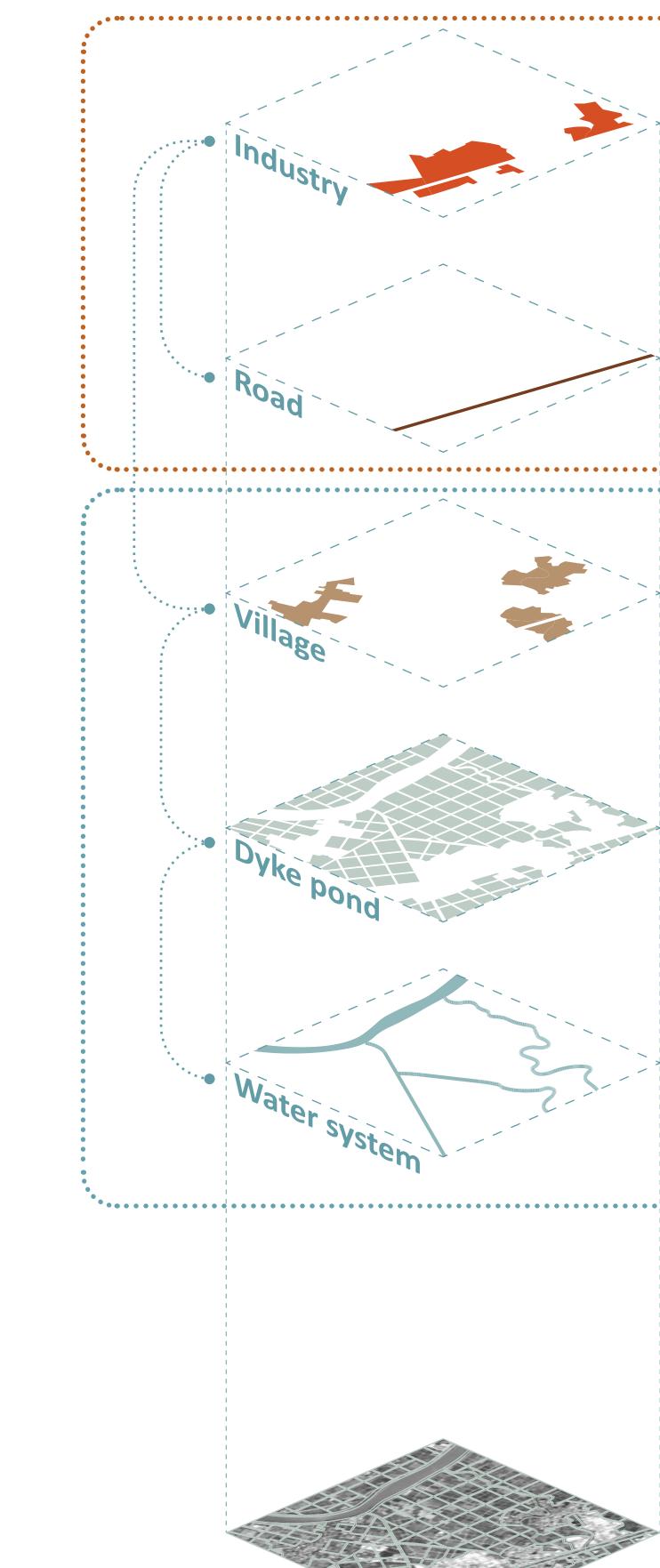


# SPATIAL RELATIONSHIPS

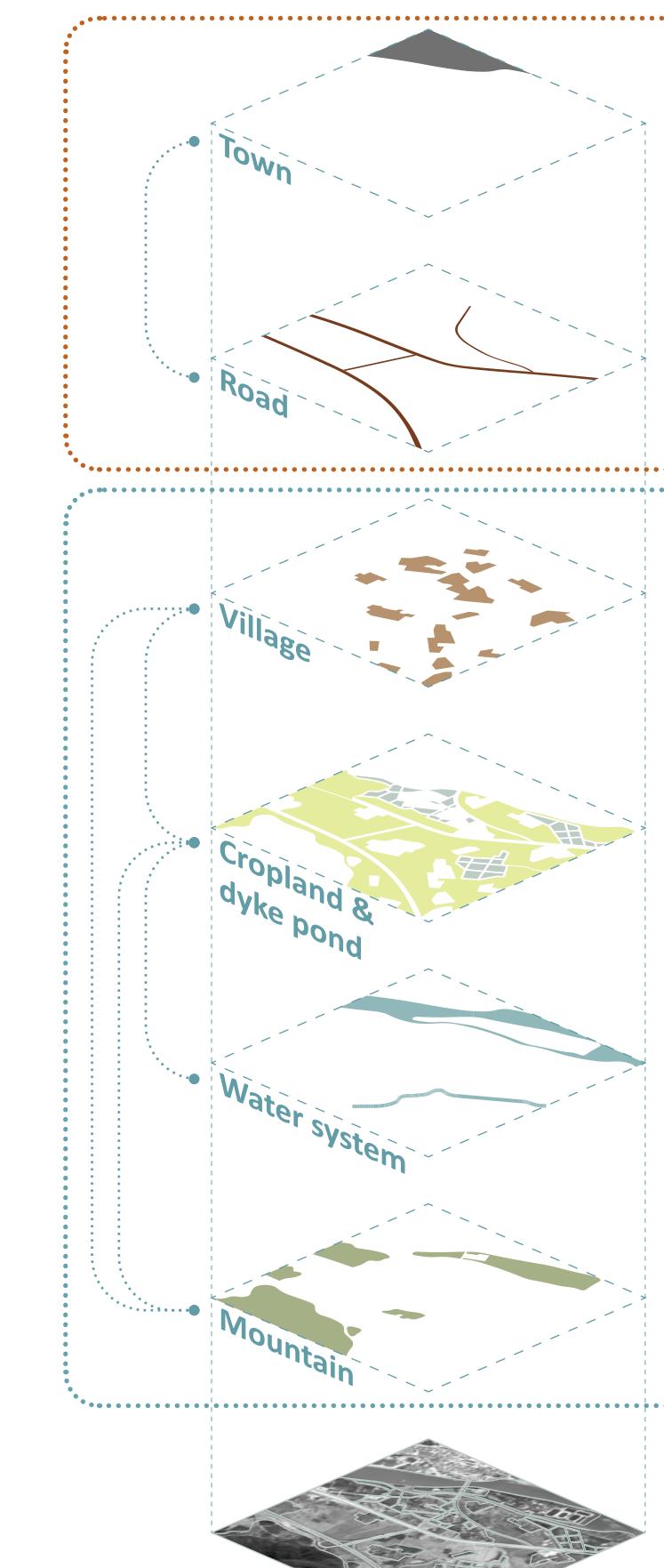
空间关系



A



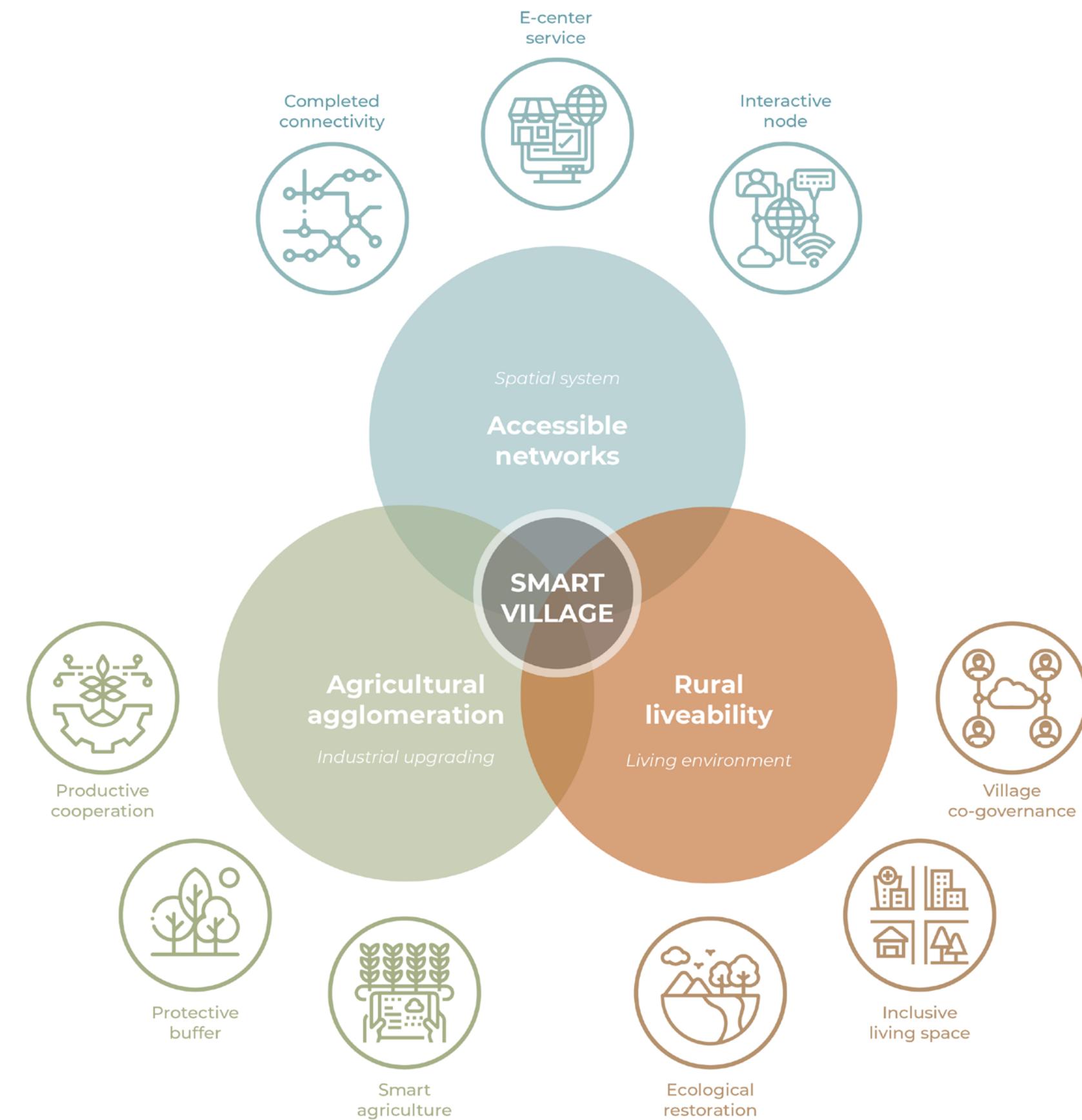
B



C

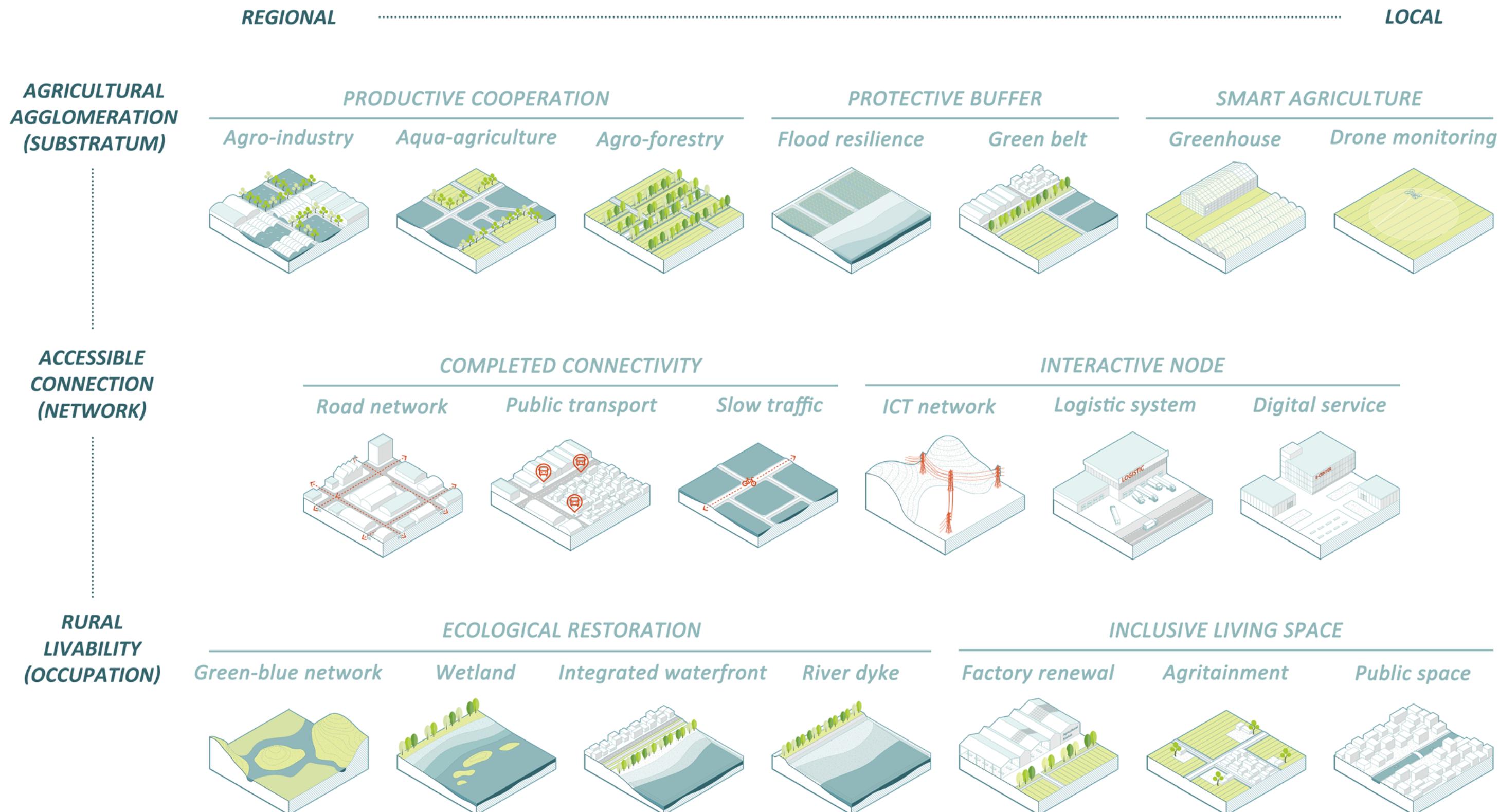
# DESIGN PRINCIPLE

## 设计原则



# TOOLKITS OF DESIGN PRINCIPLES

## 设计原则工具箱



# SMART VILLAGE DEVELOPMENT FRAMEWORK

智慧乡村发展框架

## Accessible network

- Logistic park
- Port
- Highway

## Agricultural agglomeration

- Agro-industrial area
- Aquacultural area
- Eco-agricultural area

## Rural livability

- Agro-industrial developing village
- Agricultural upgrading village

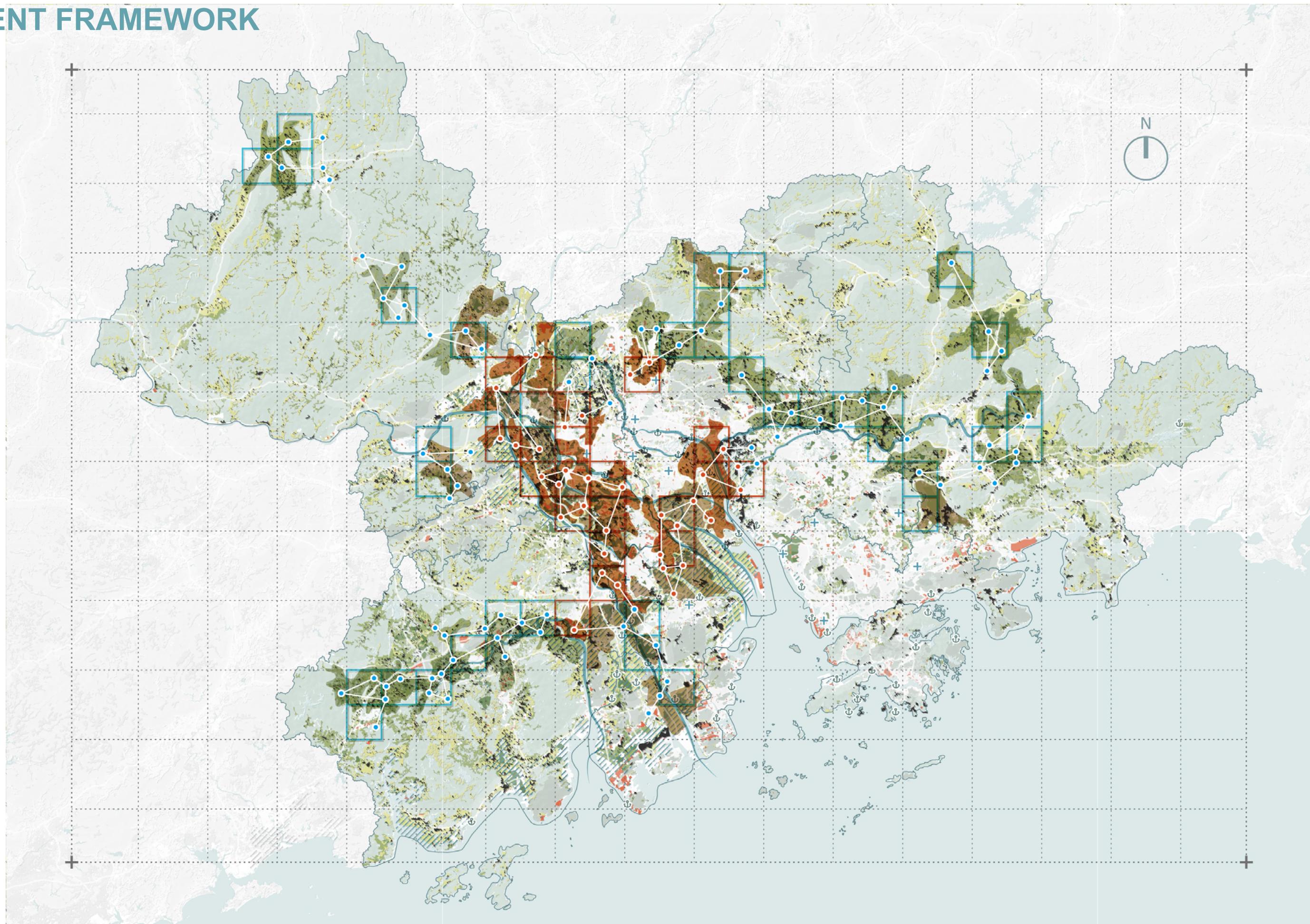
□ Agro-industrial developing area

□ Eco-agricultural developing area

— Green-blue network

■ Mountain

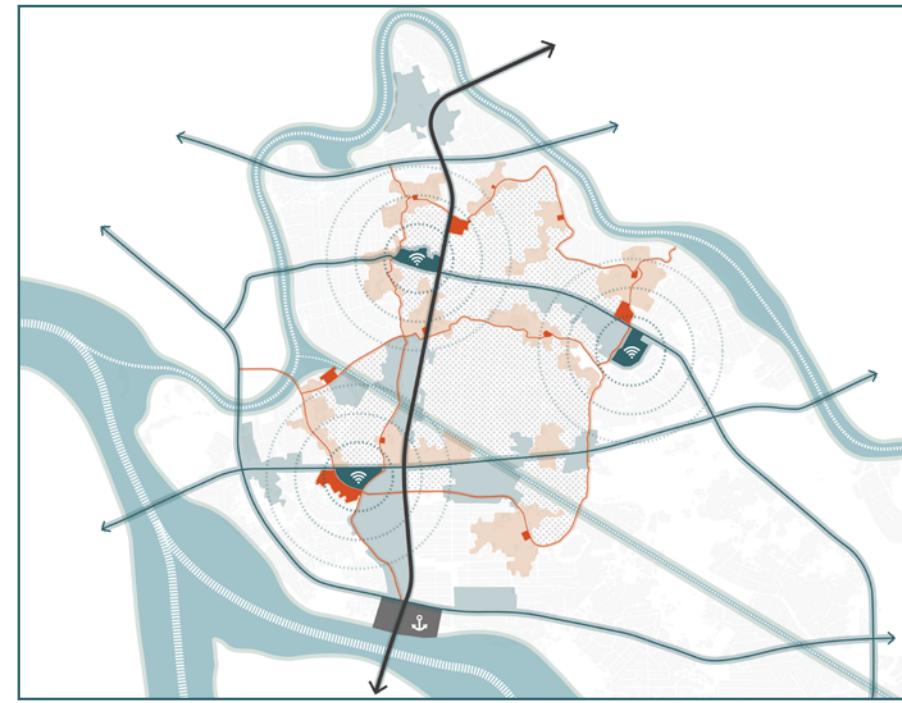
■ Water



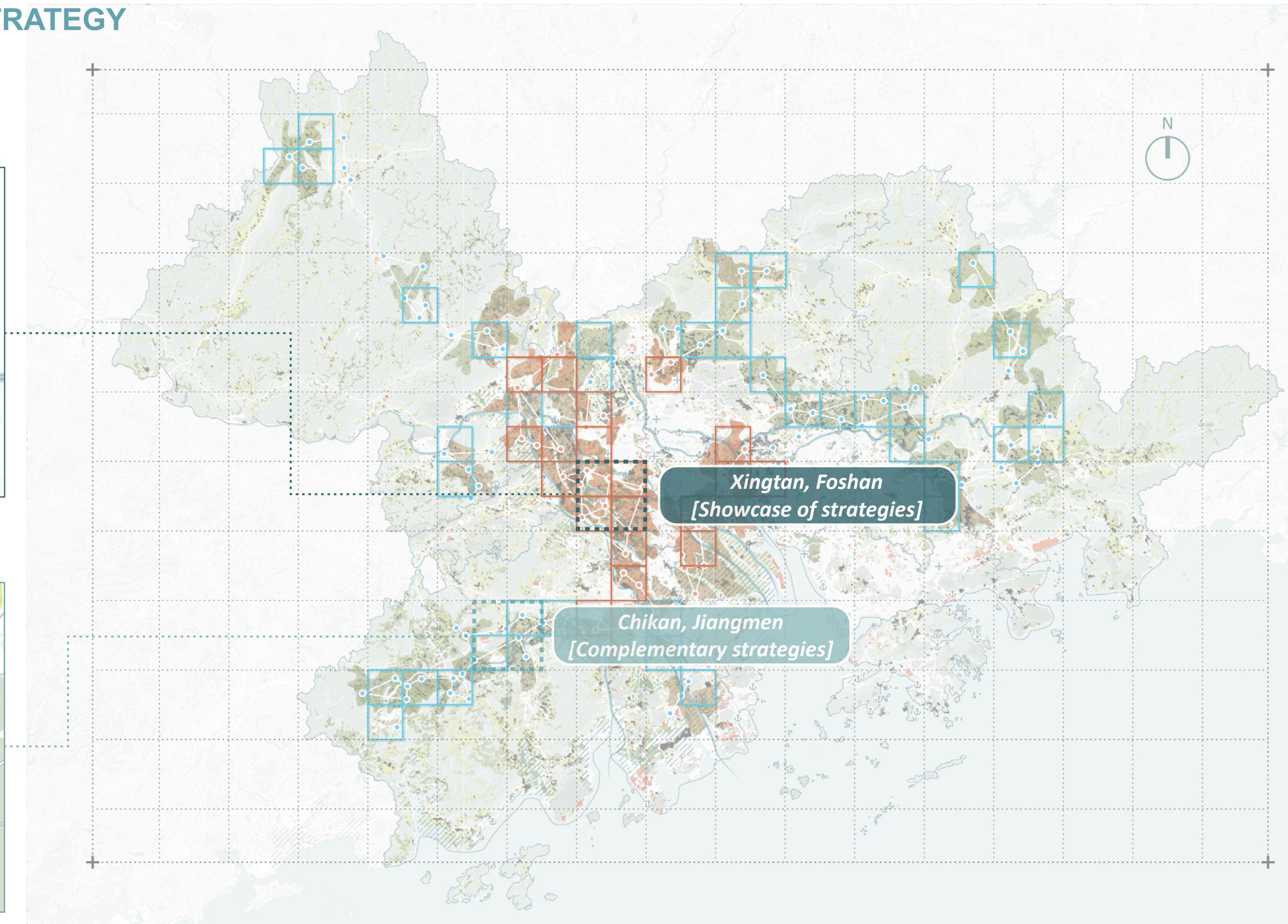
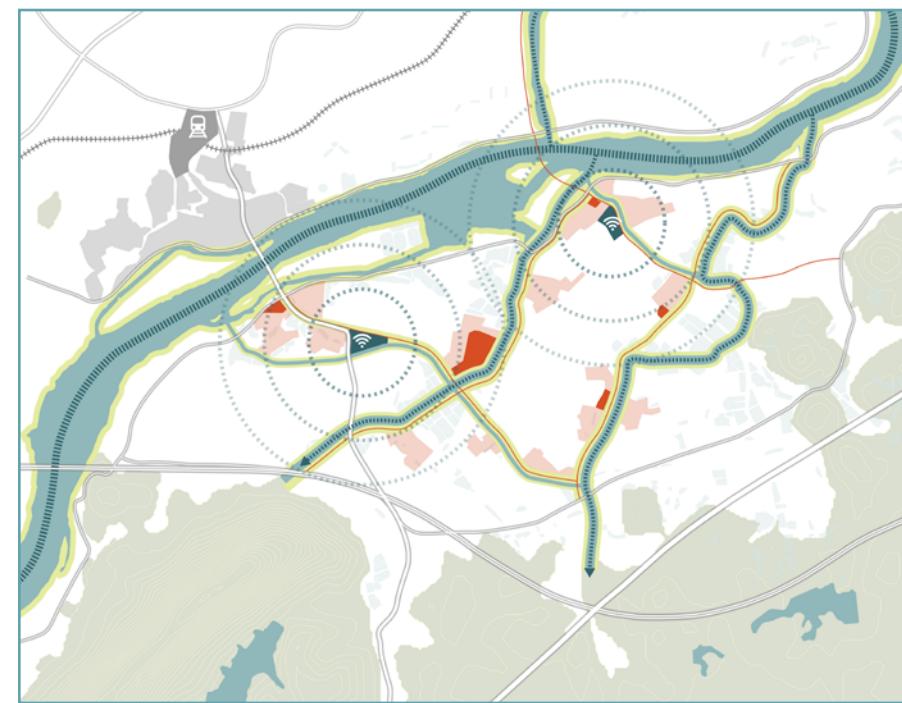
# SHOWCASES OF DESIGN STRATEGY

## 设计区域

*- Addressing historical remaining problems*



*- Promoting future developing potential*



# XINGTAN, FOSHAN AGRO-INDUSTRIAL DEVELOPMENT

- Highway
- Rural area
- Industrial area
- Urbanized area
- River

0 5 10 15 20km

## VILLAGES DEVELOPED ON WATER SYSTEM

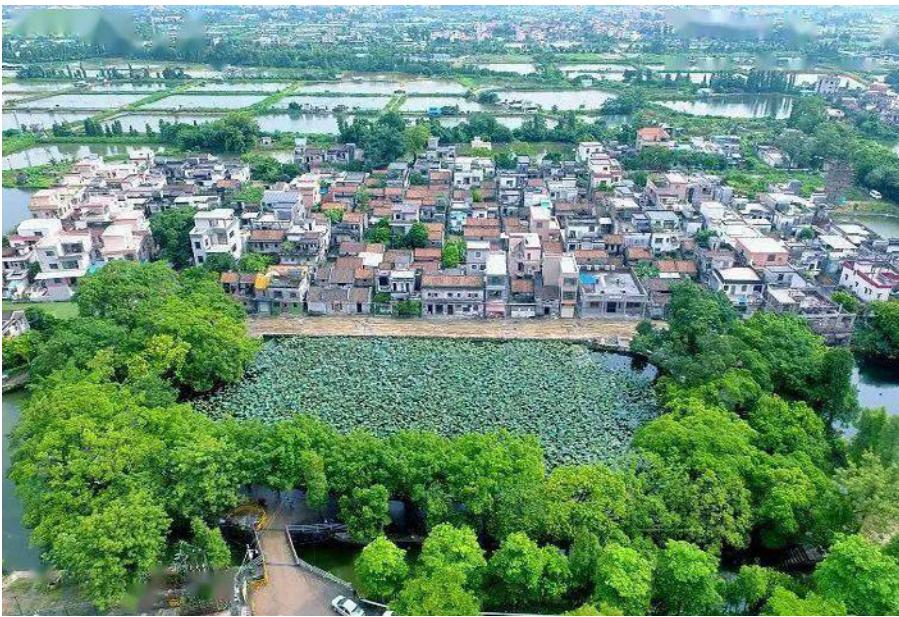
基于水系发展的村庄



*Dyke pond*



*Village*



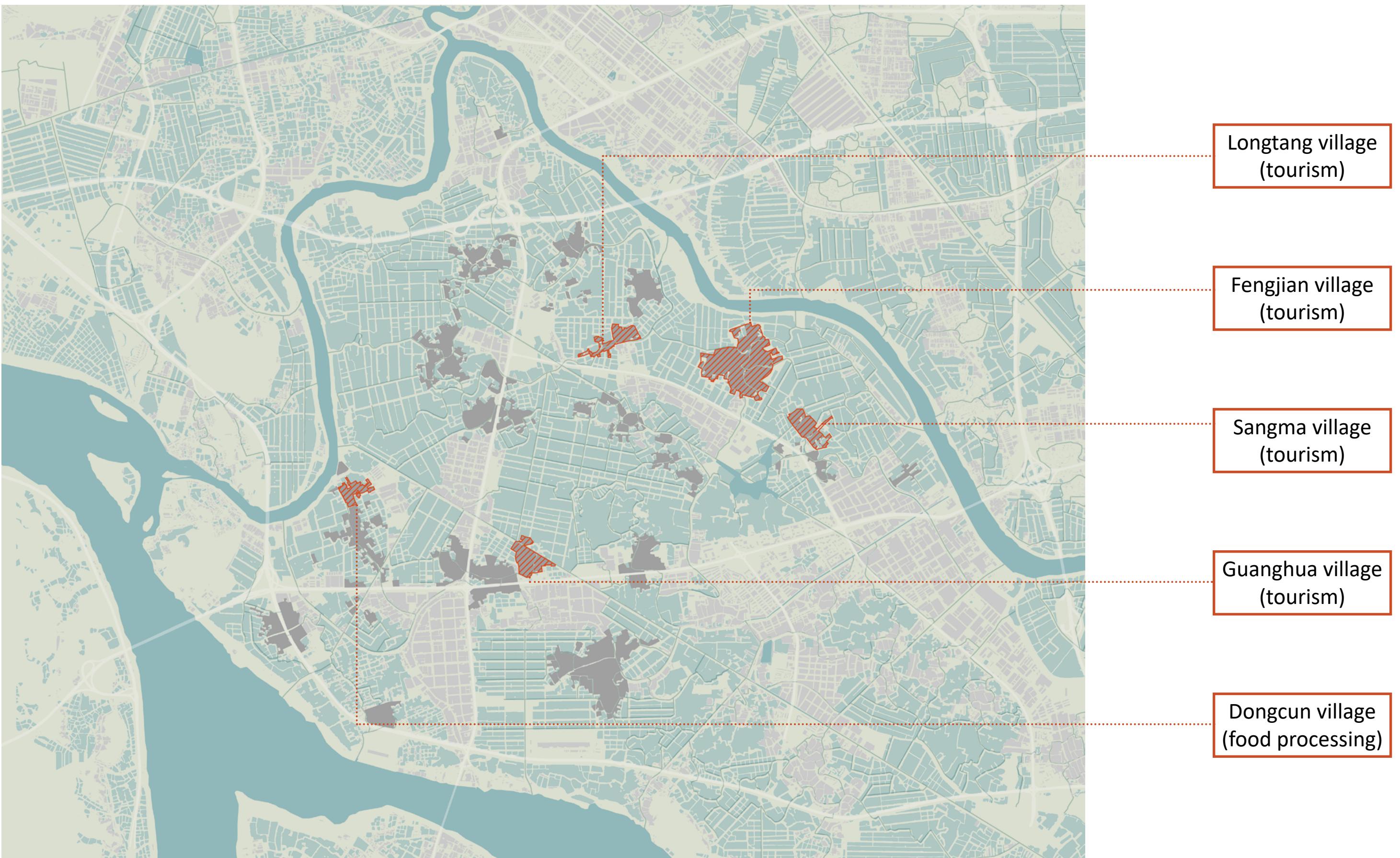
*Taobao village*



# VILLAGES DEVELOPED ON WATER SYSTEM

基于水系发展的村庄

- Village
- Taobao village
- Dyke system
- Pond
- River
- Agricultural area



# INDUSTRIALISED RURAL AREAS

工业化的乡村地区



*Road construction*



*Industrial area*



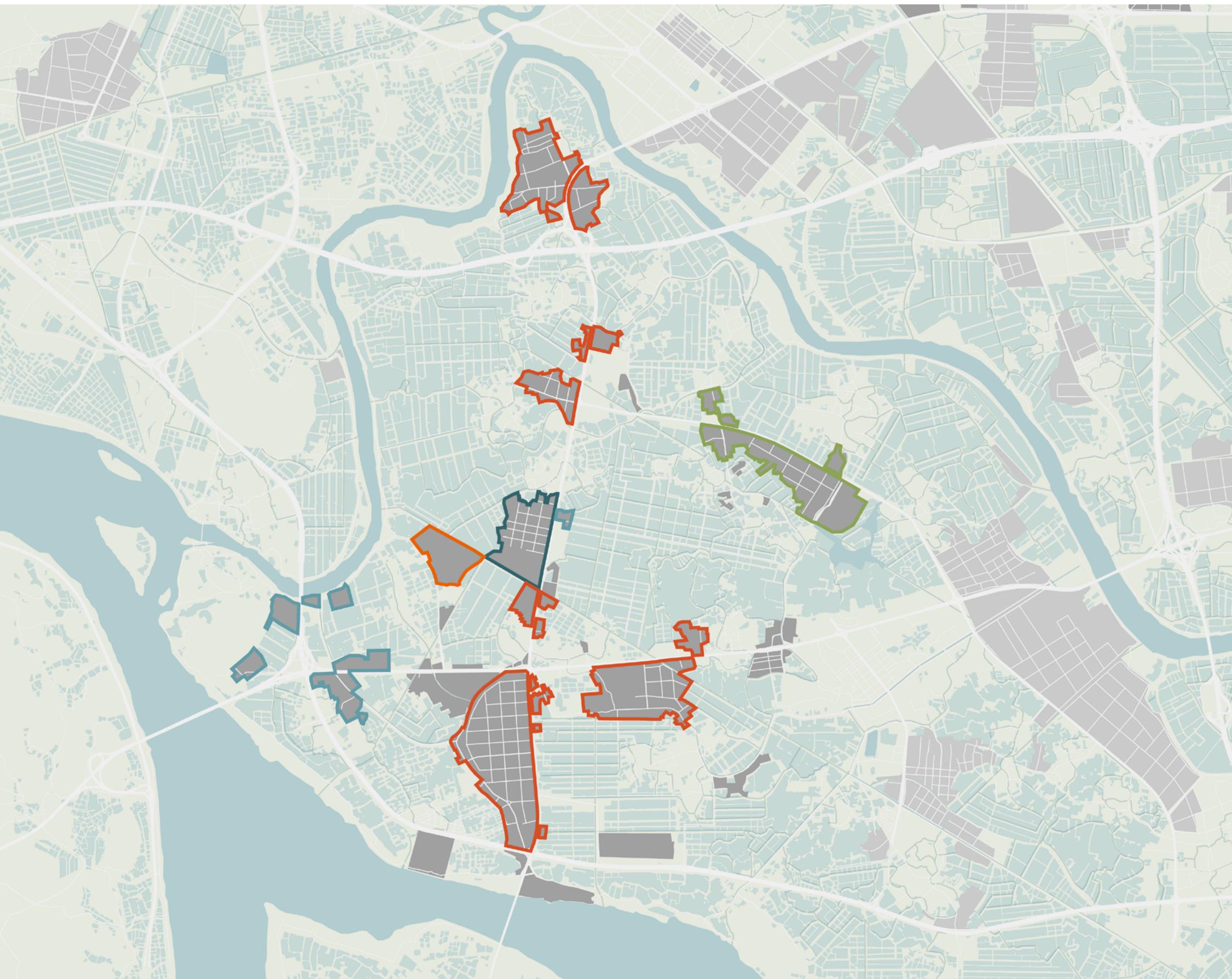
*Rural factory*



# INDUSTRIALISED RURAL AREAS

工业化的乡村地区

- Industrial area
- Metal industry
- Plastic industry
- Aquatic product industry
- Building material industry
- Food processing industry
- Road network



REPLACE



*Metal industry*



*Plastic industry*

UPGRADE



*Aquatic products*



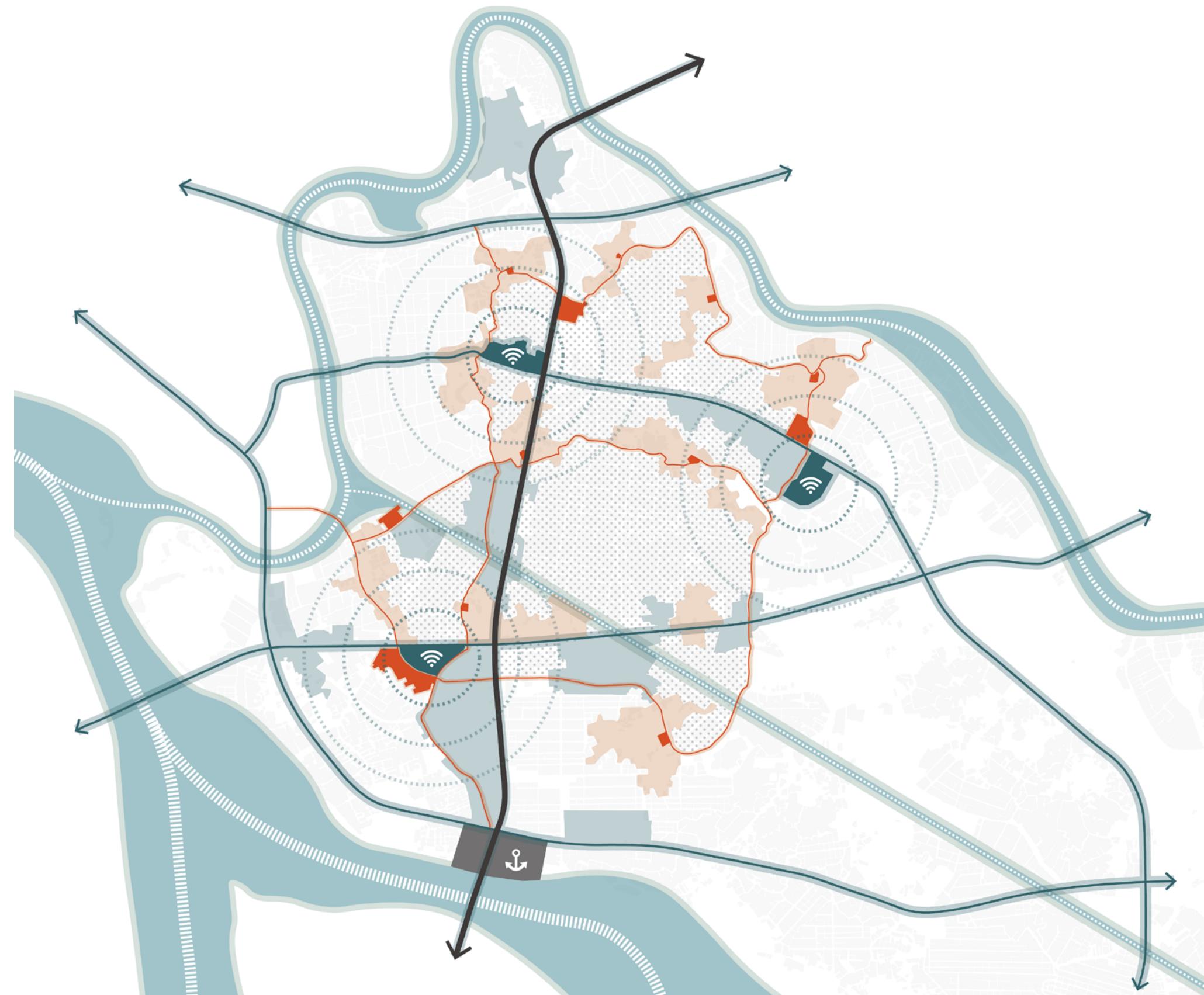
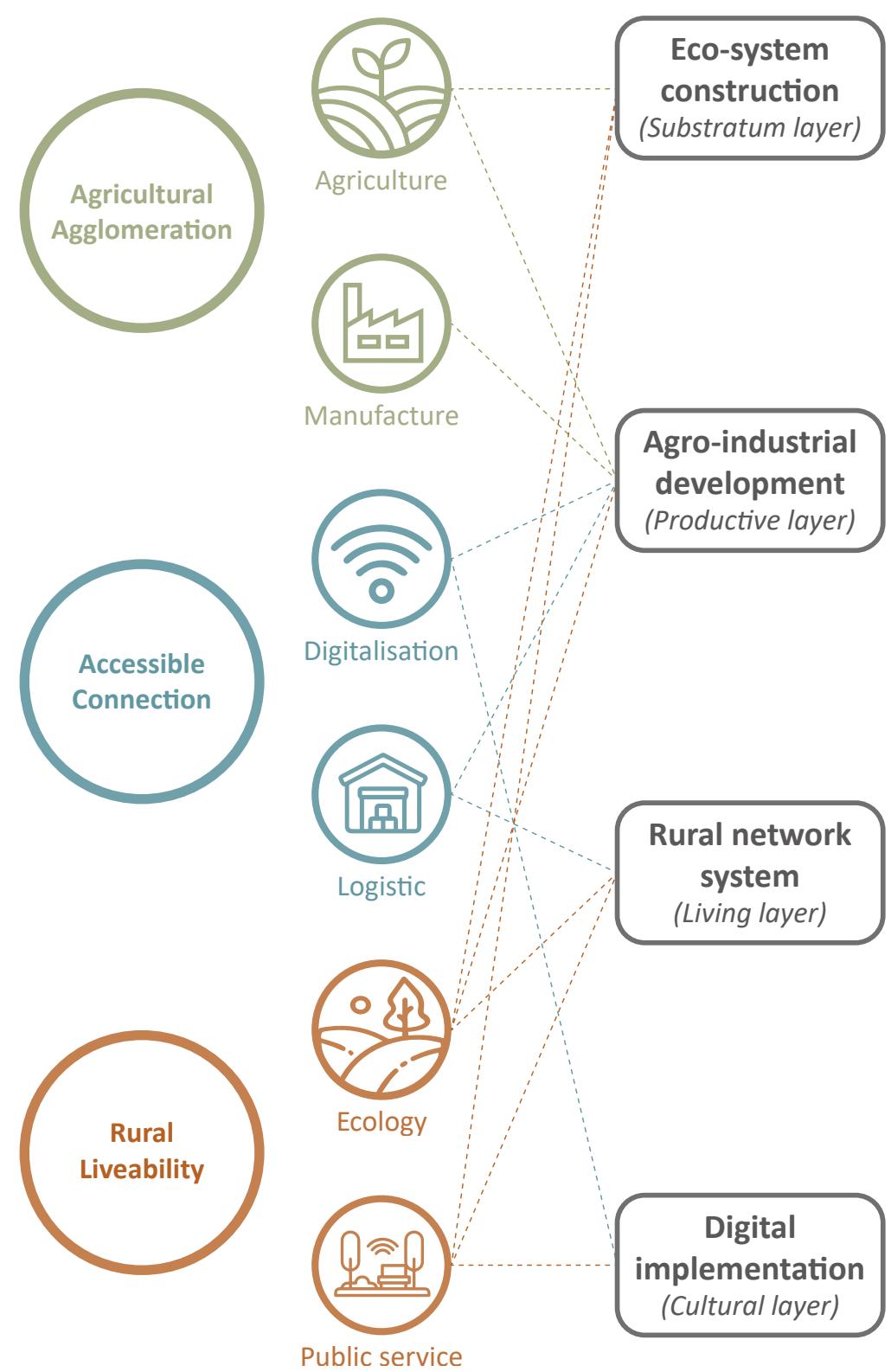
*Building material*



*Food processing*

# INTEGRAL DESIGN AGENDA TOWARDS SMART VILLAGES DEVELOPMENT

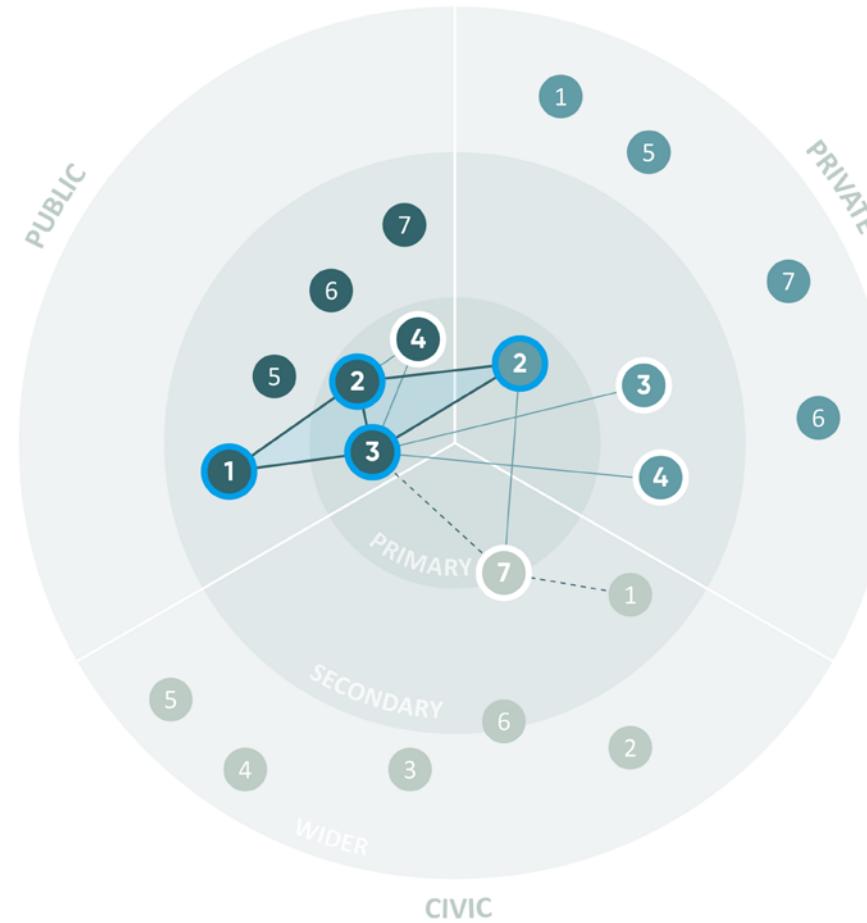
智慧乡村指引下的设计策略



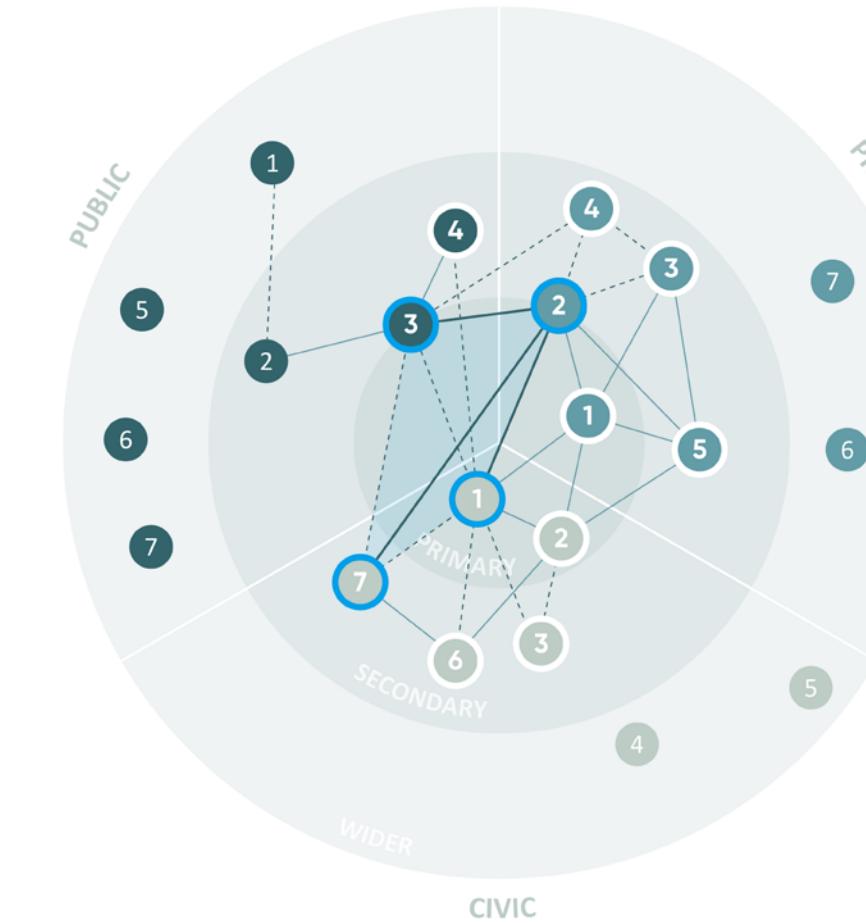
# STAKEHOLDER ANALYSIS

## 利益相关者分析

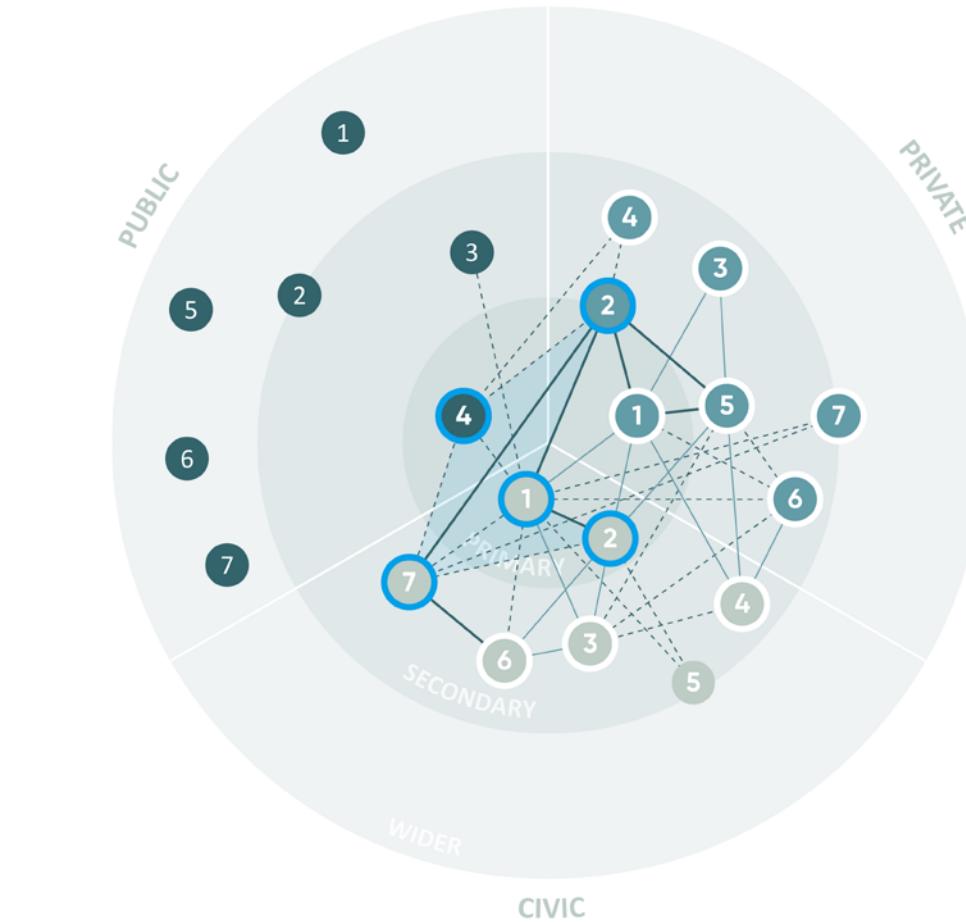
*Regional scale*



*District scale*



*Local scale*



### RELATIONSHIPS

- Current connection ———
- Strengthen cooperation ————
- Build up new connection -----

### PUBLIC SECTOR

- 1 Central government
- 2 Provincial government
- 3 Municipal government
- 4 Planning institute
- 5 Ministry of industry and technology
- 6 Ministry of agriculture and rural areas
- 7 Ministry of human resources

### PRIVATE SECTOR

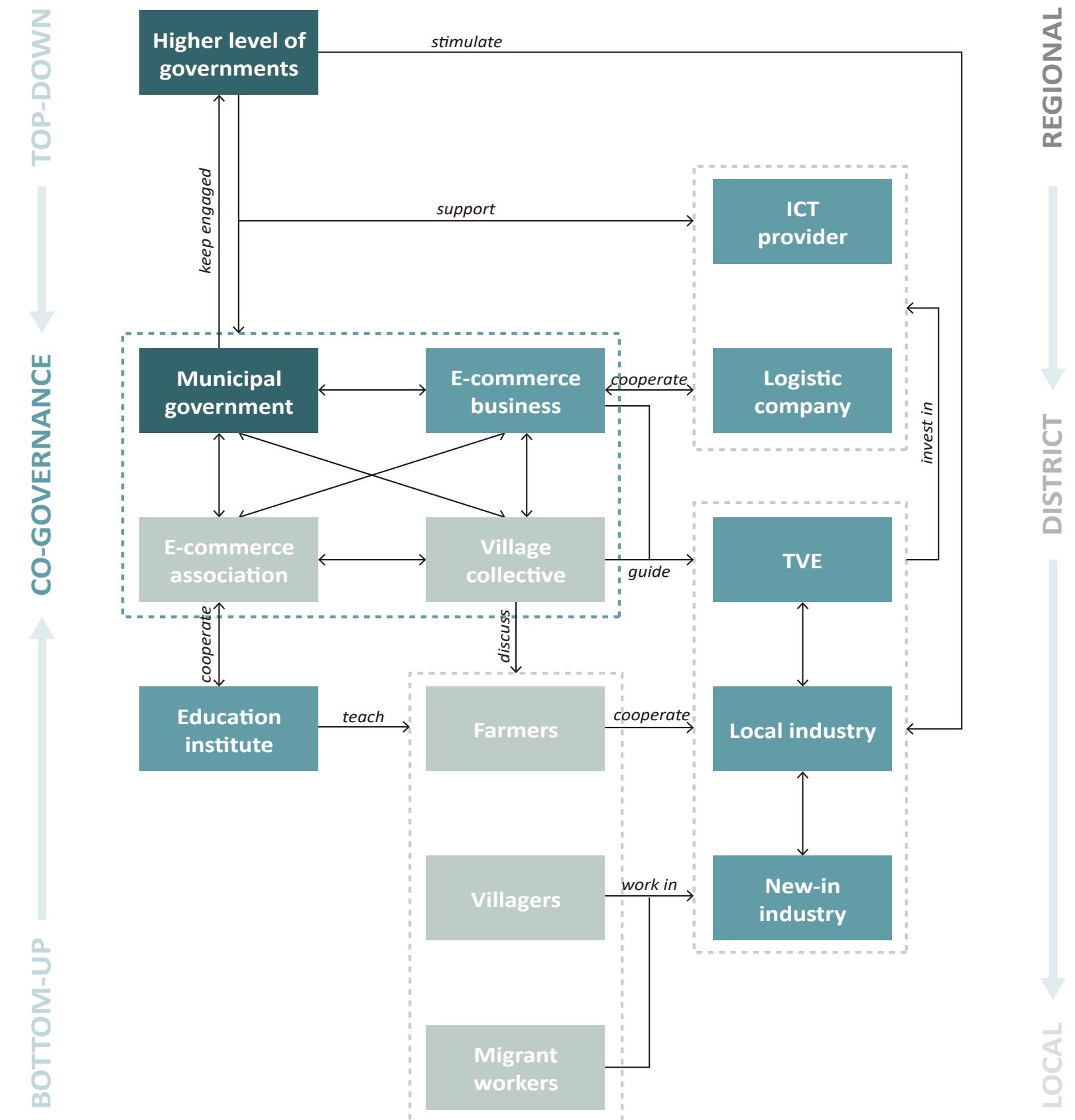
- 1 TVE (township village enterprise)
- 2 E-commerce company
- 3 Logistic company
- 4 ICT provider
- 5 Local industry
- 6 New-in industry
- 7 Education institute

### CIVIC SOCIETY

- 1 Village collective
- 2 Villagers
- 3 Farmers
- 4 Migrant workers
- 5 Tourists
- 6 E-commerce promoter
- 7 E-commerce association

# CO-GOVERNANCE STRATEGY

共同治理战略



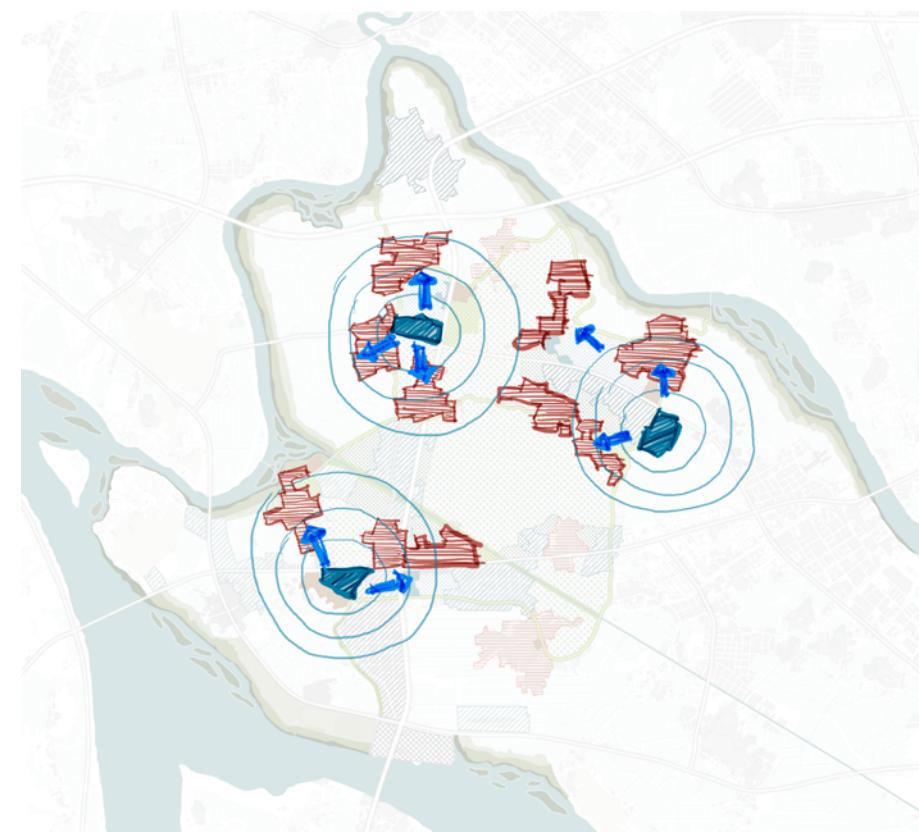
# PHASING DEVELOPMENT

阶段性发展

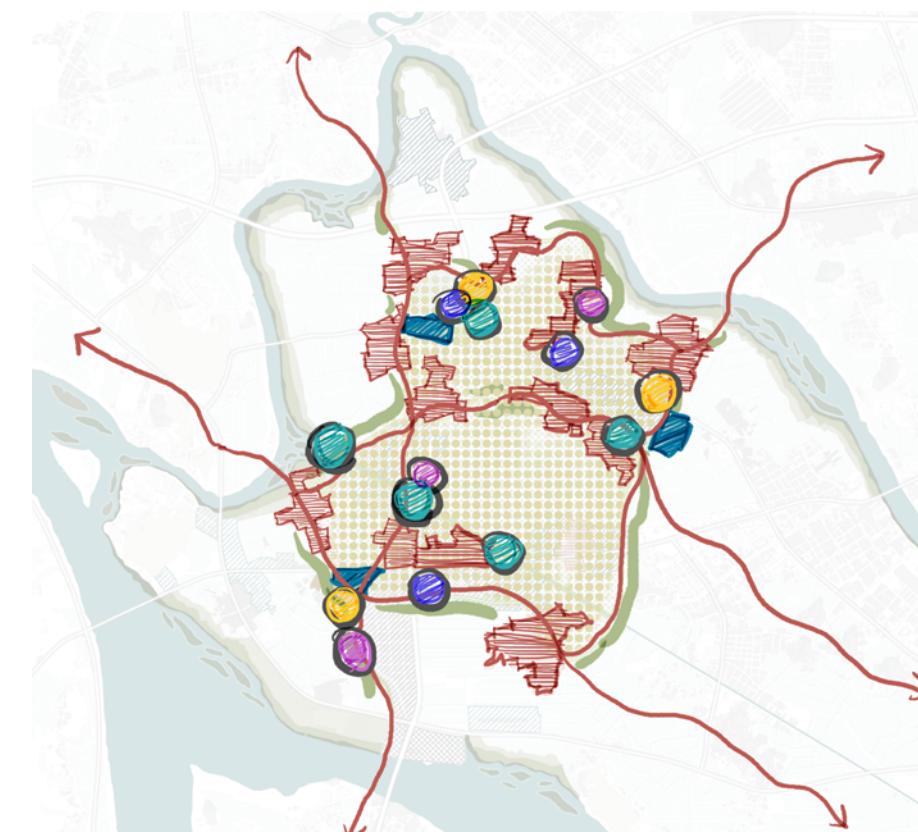
*PHASE I: STIMULATING*



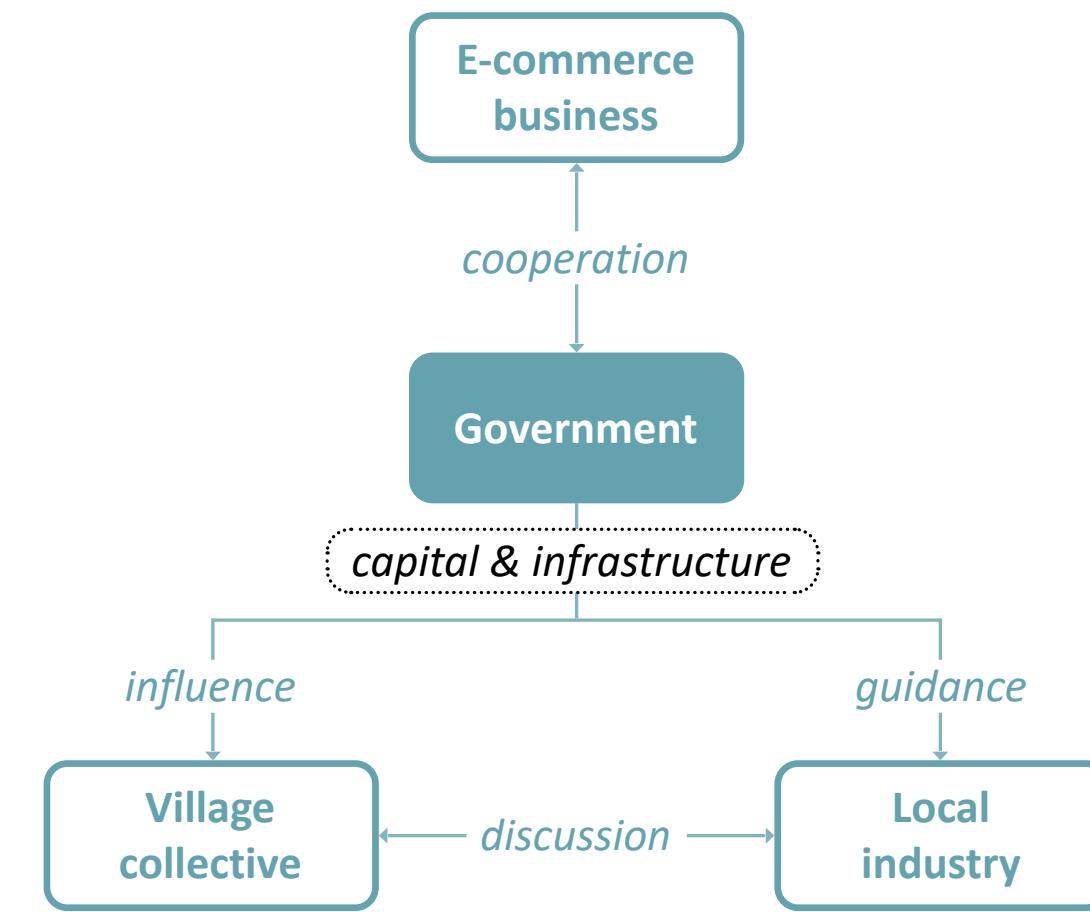
*PHASE II: INFLUENCING*



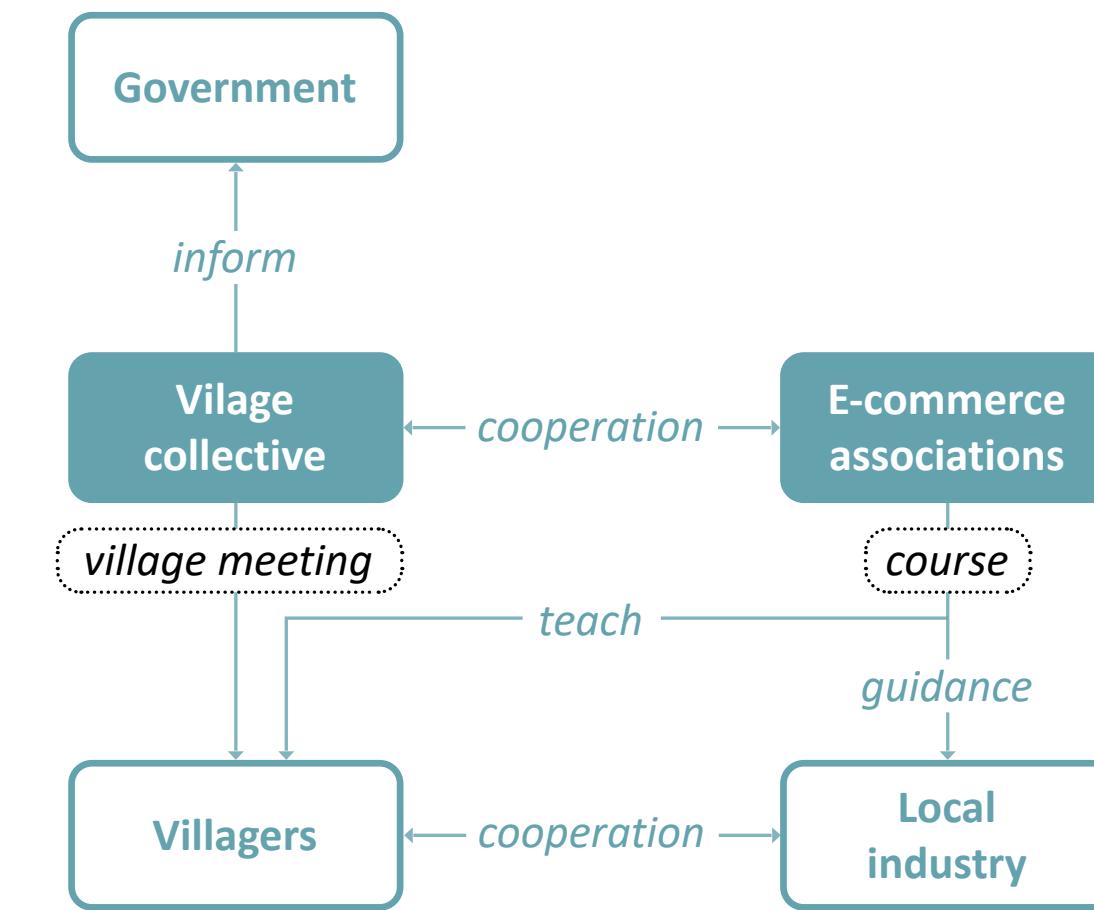
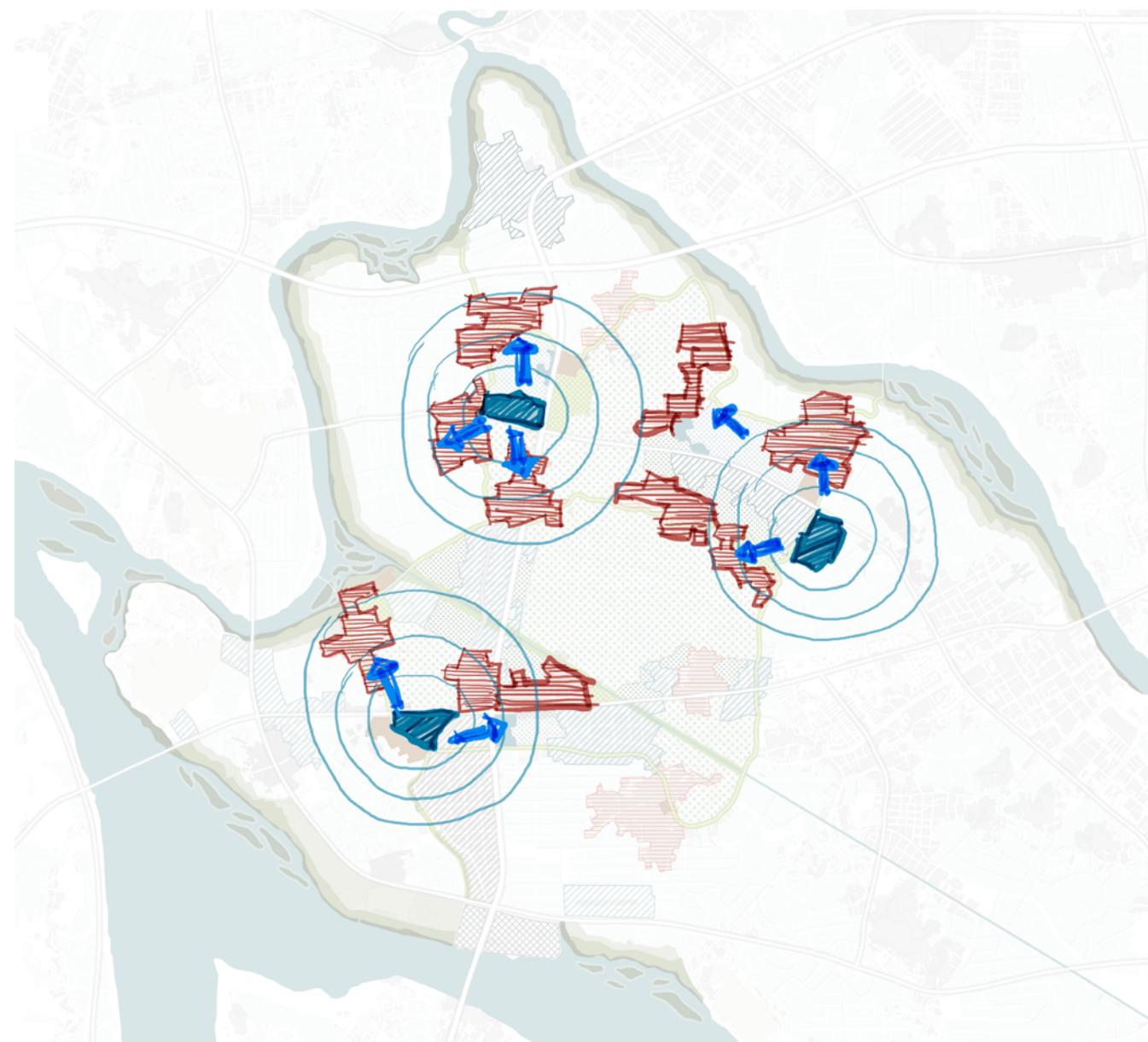
*PHASE III: DEVELOPING*



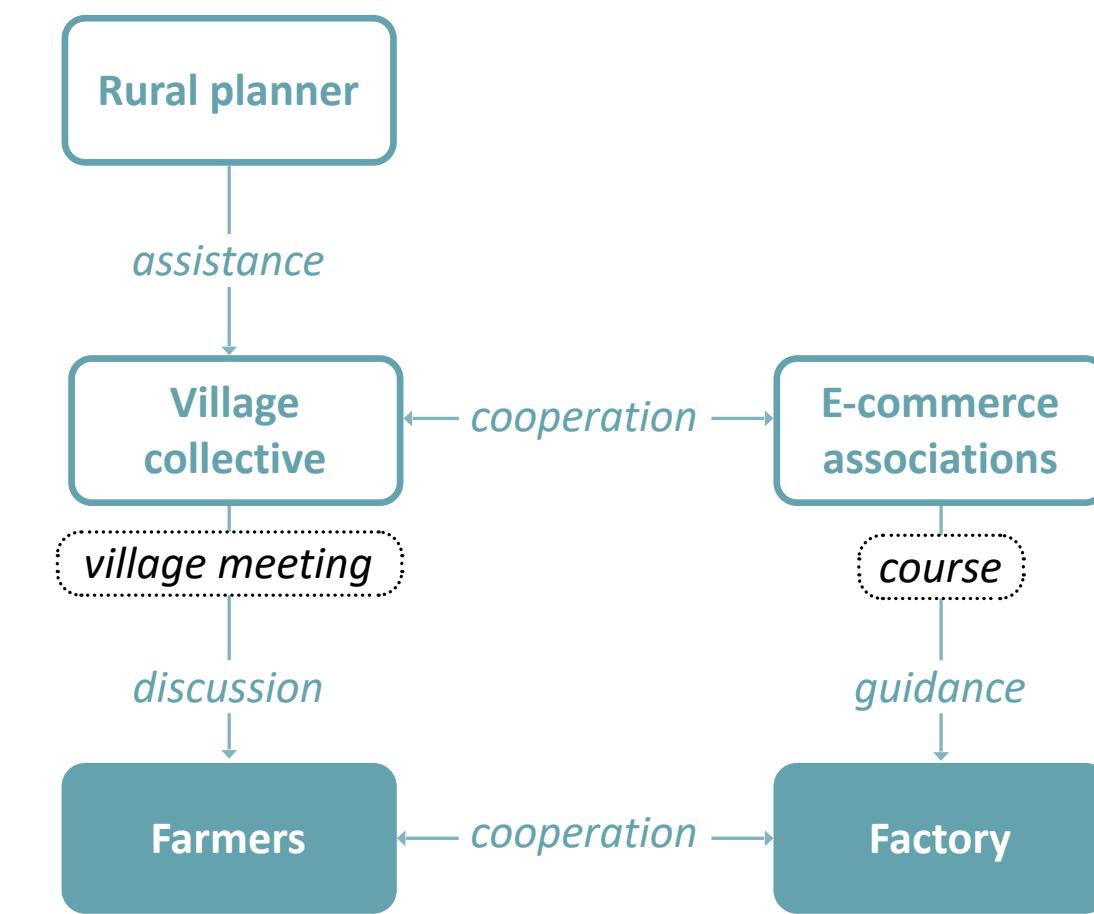
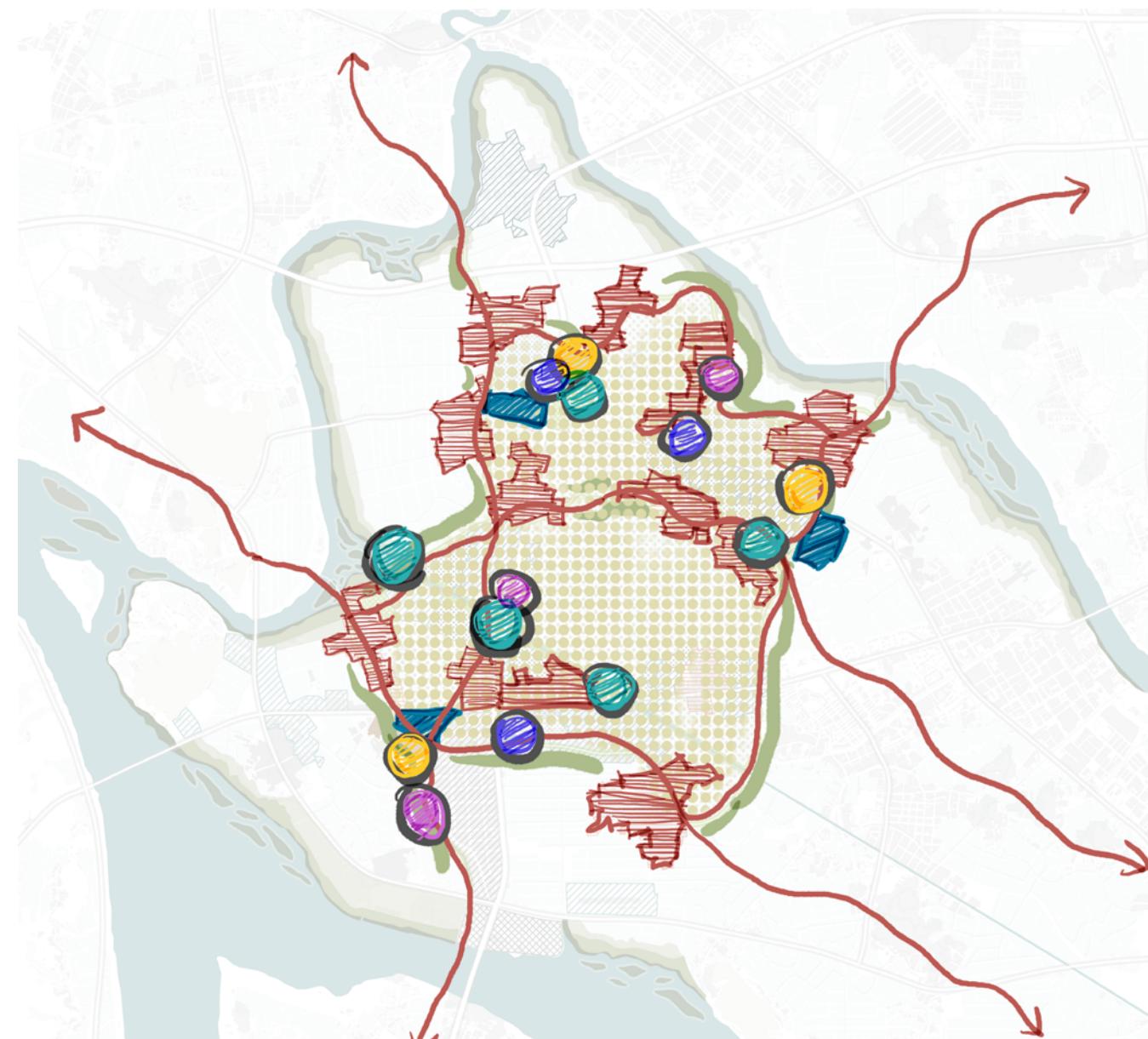
## PHASE I: STIMULATING



## PHASE II: INFLUENCING

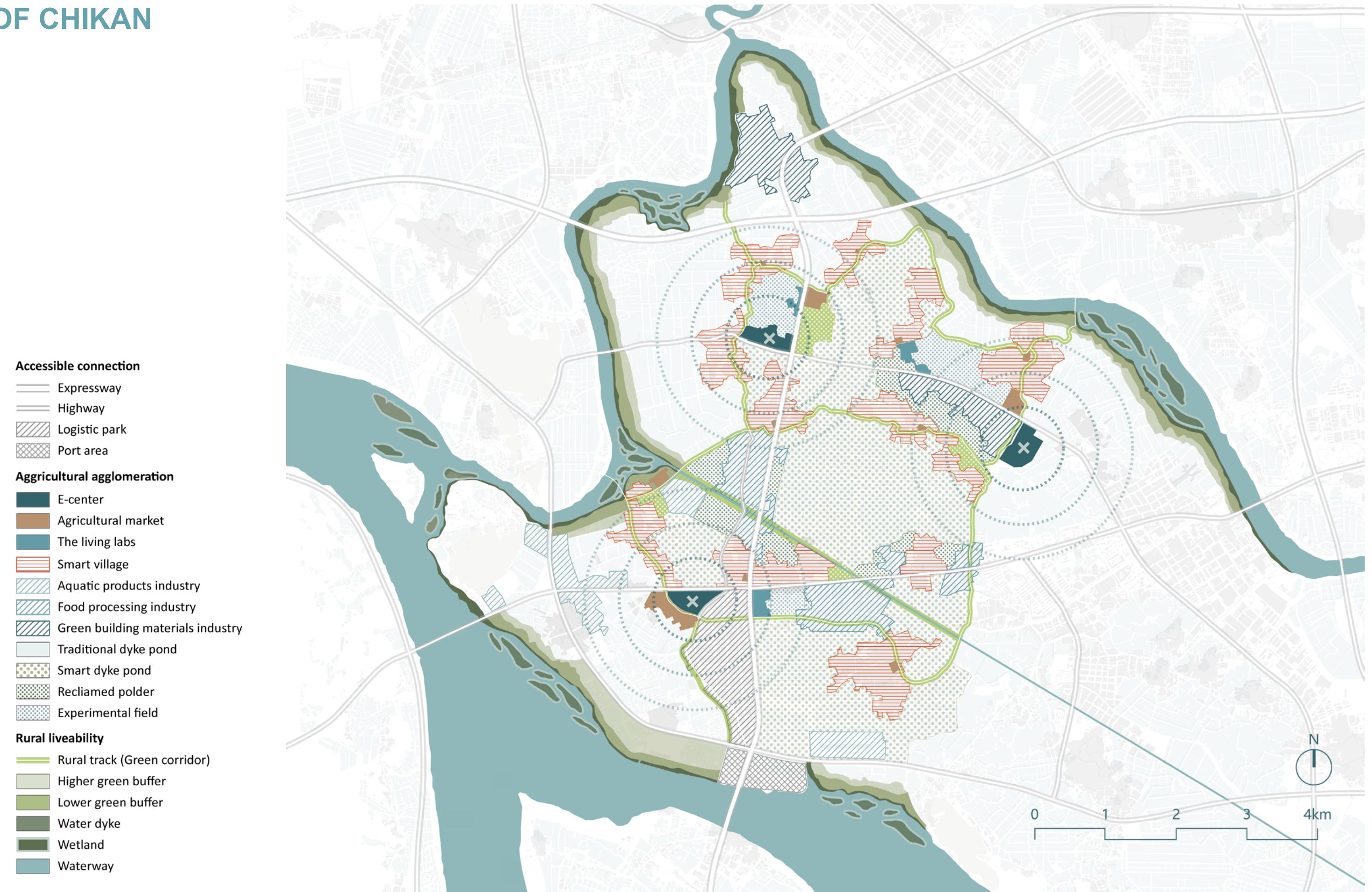


## PHASE III: DEVELOPING



# FUTURE OF CHIKAN

## 赤坎的未来



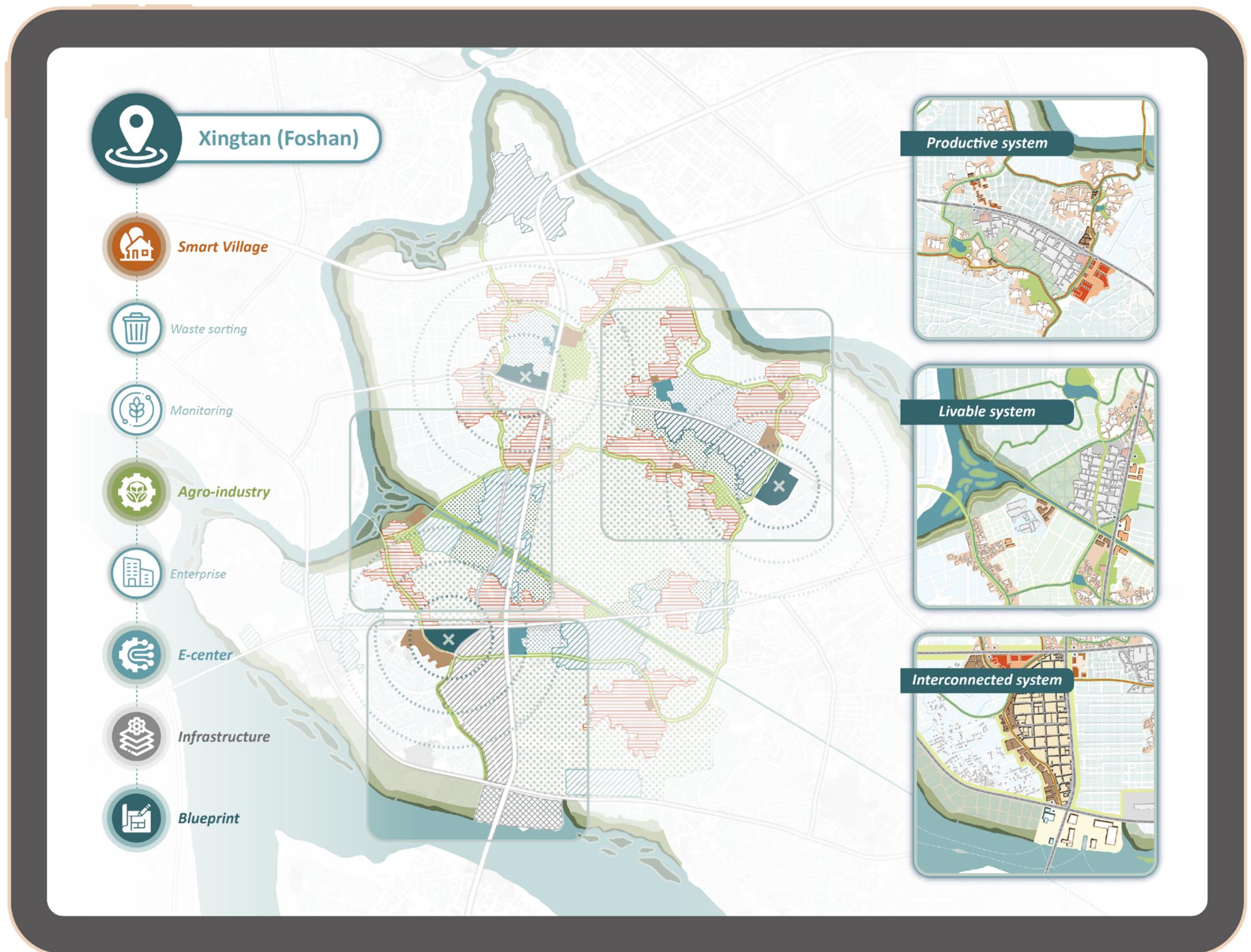
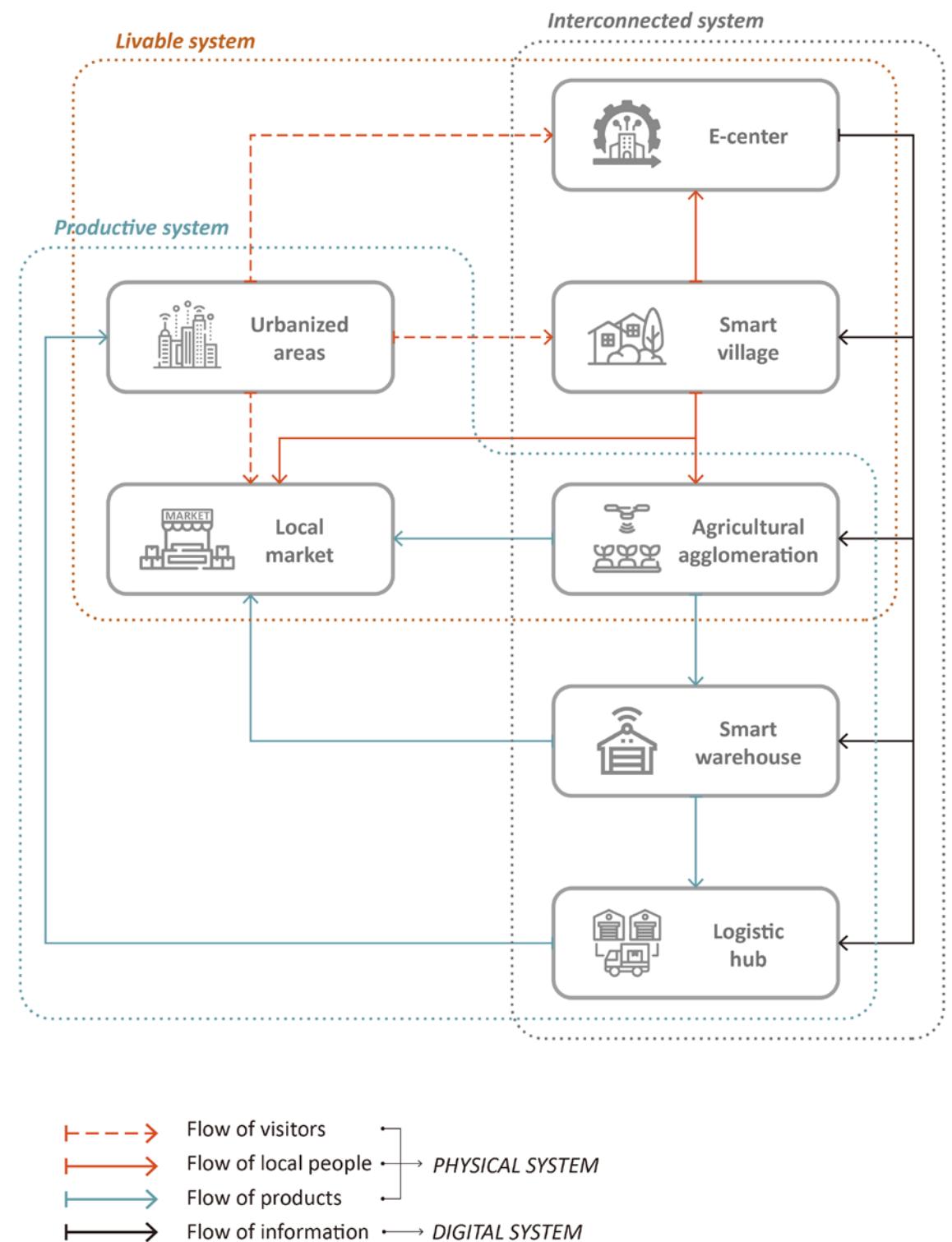
# DIGITALISATION SUPPORTS SMART VILLAGE DEVELOPMENT

数字化支持智慧乡村发展



# INTEGRATED SMART VILLAGE SYSTEMS

智慧乡村发展系统

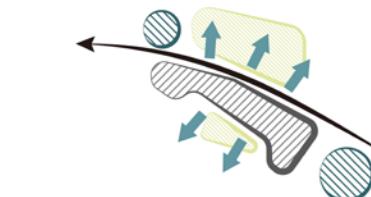


## AGENDA I: PRODUCTIVE SYSTEM

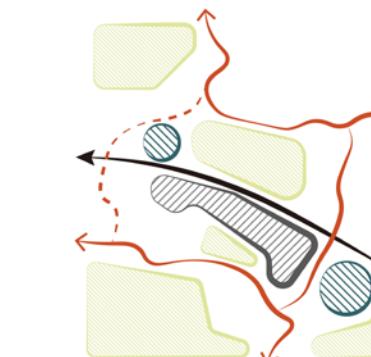
生产系统



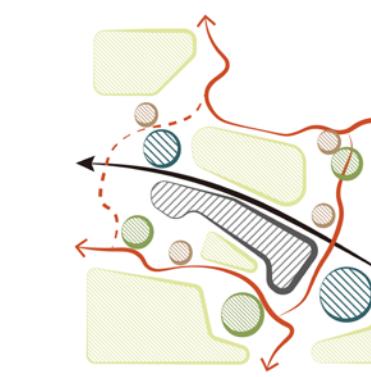
Implementation of e-center  
and the living lab



Upgrading of local industry  
to work with farmland

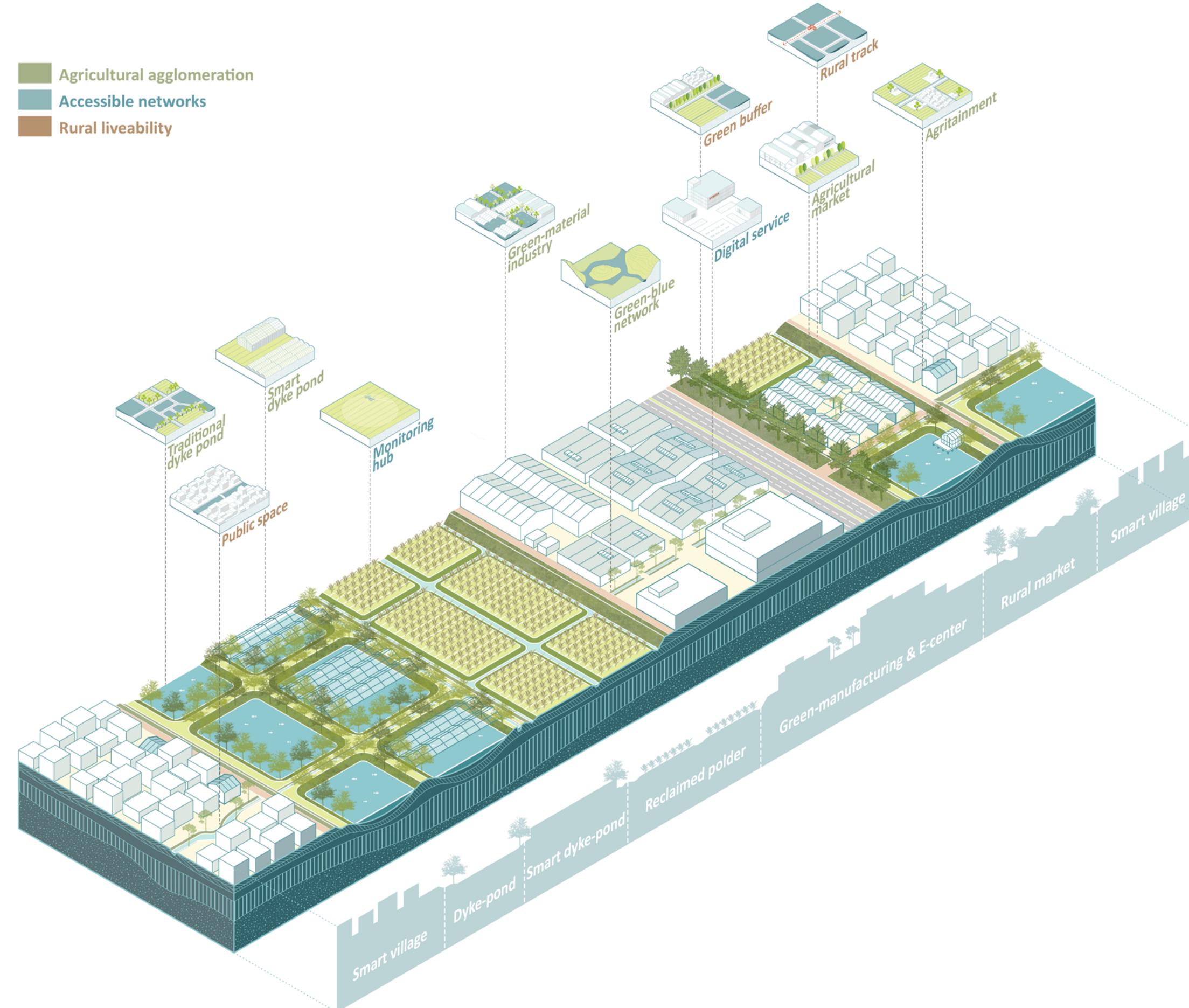


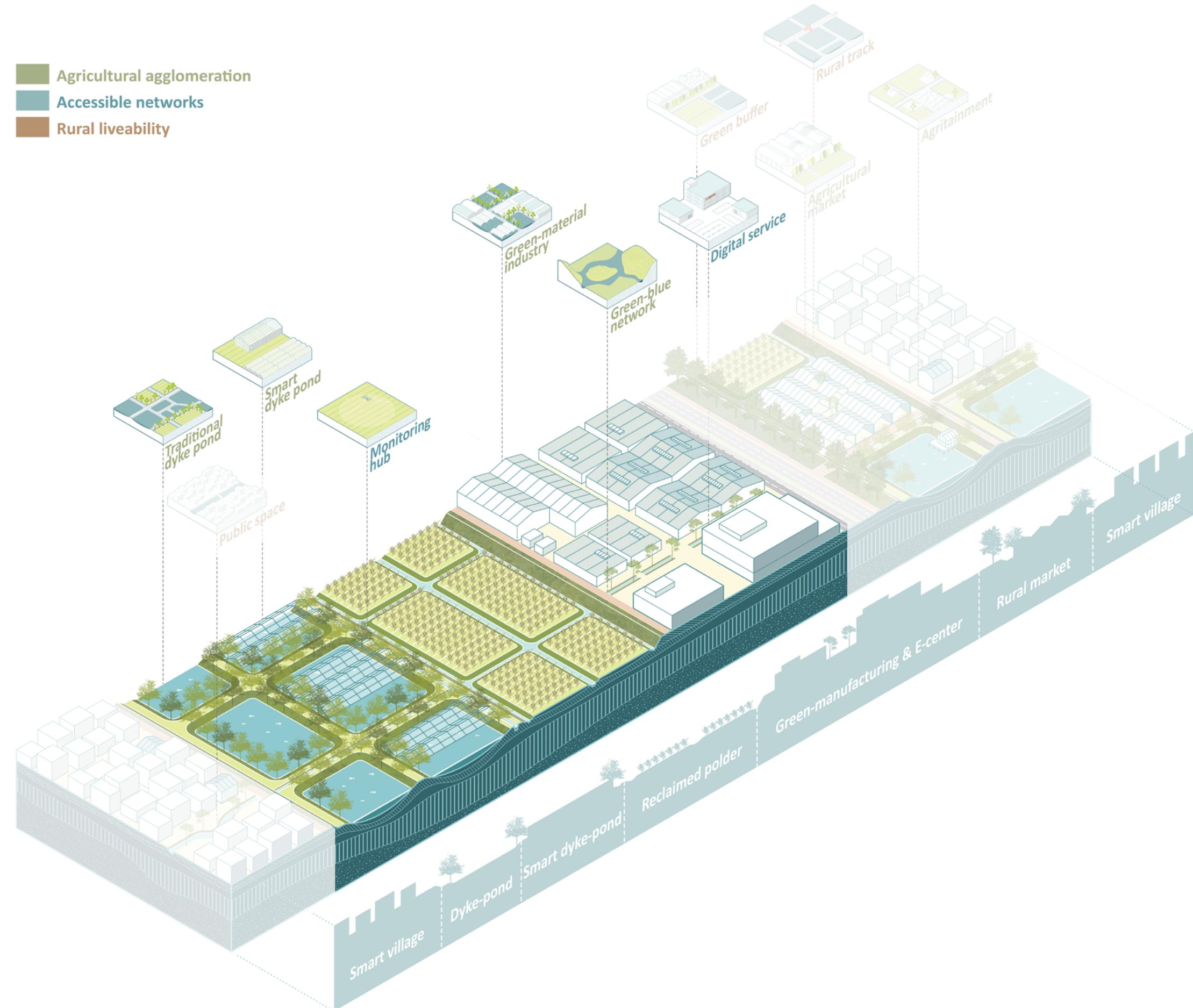
Construction of rural track  
to enhance cooperation

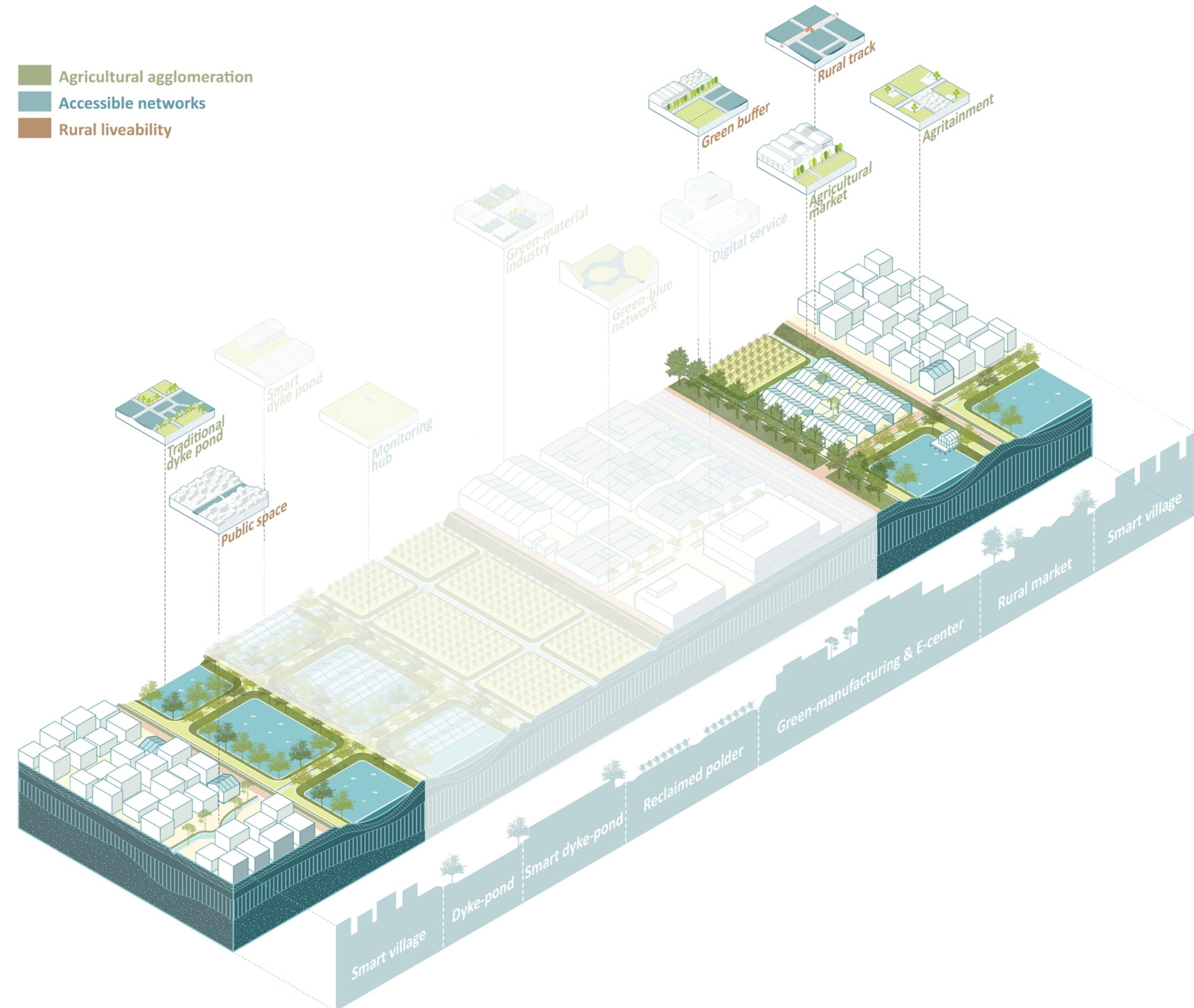


Emergence of rural activity  
related to agro-industry

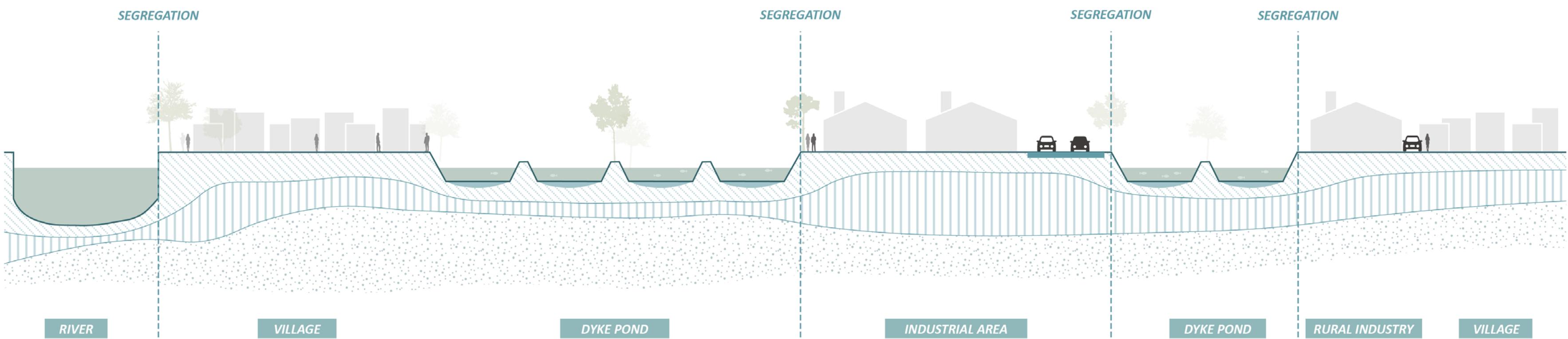
●	Bus station
—	Road
—	Rural track
—	Waterway
—	Dyke system
■	Lake
■	Agricultural park
■	Traditional pond
■	Smart dyke pond
■	Experimental pond
■	Reclaimed polder
■	E-center
■	Market
■	The living lab
■	Courier station
■	Green manufacturing
■	Smart village



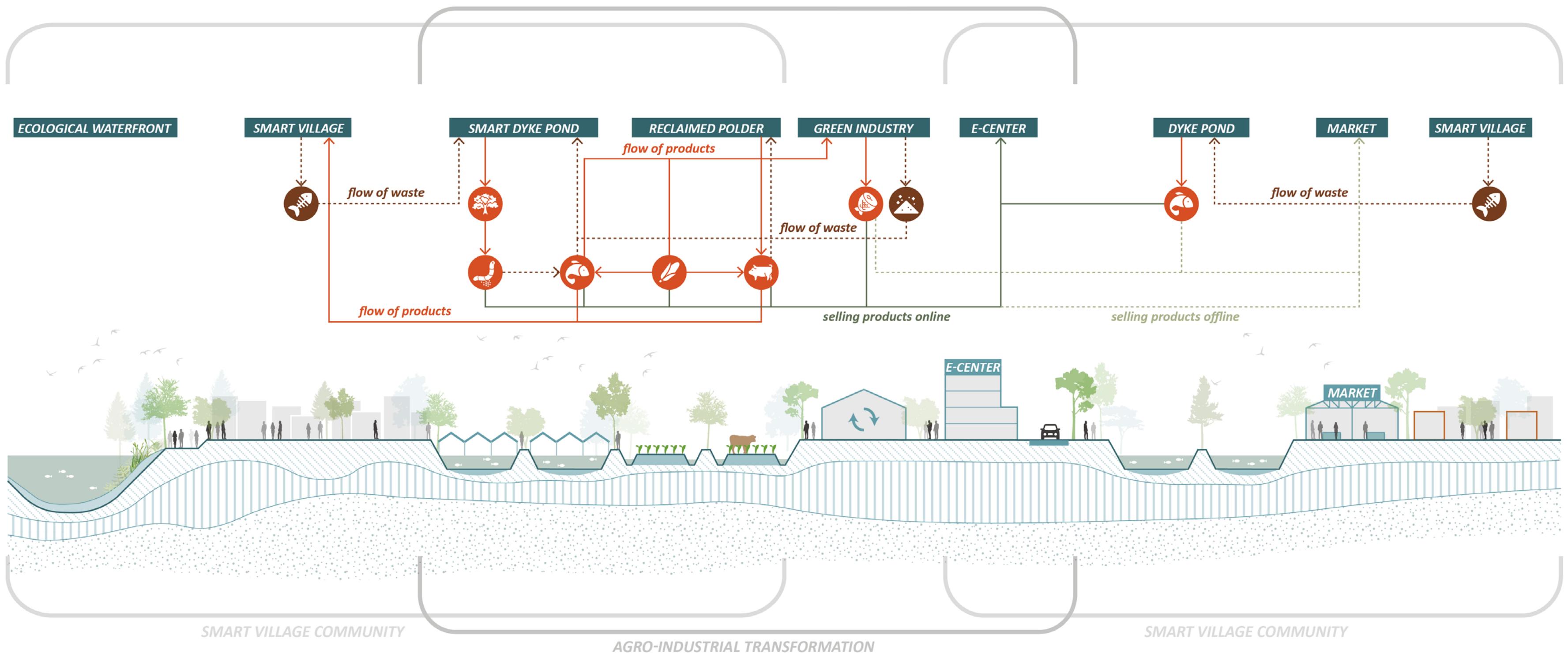




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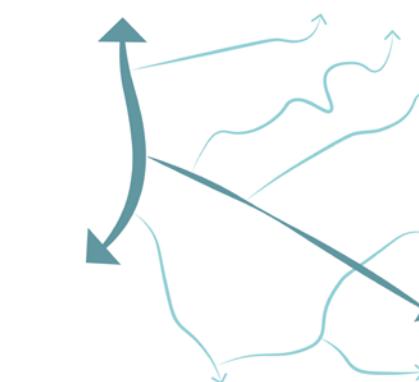
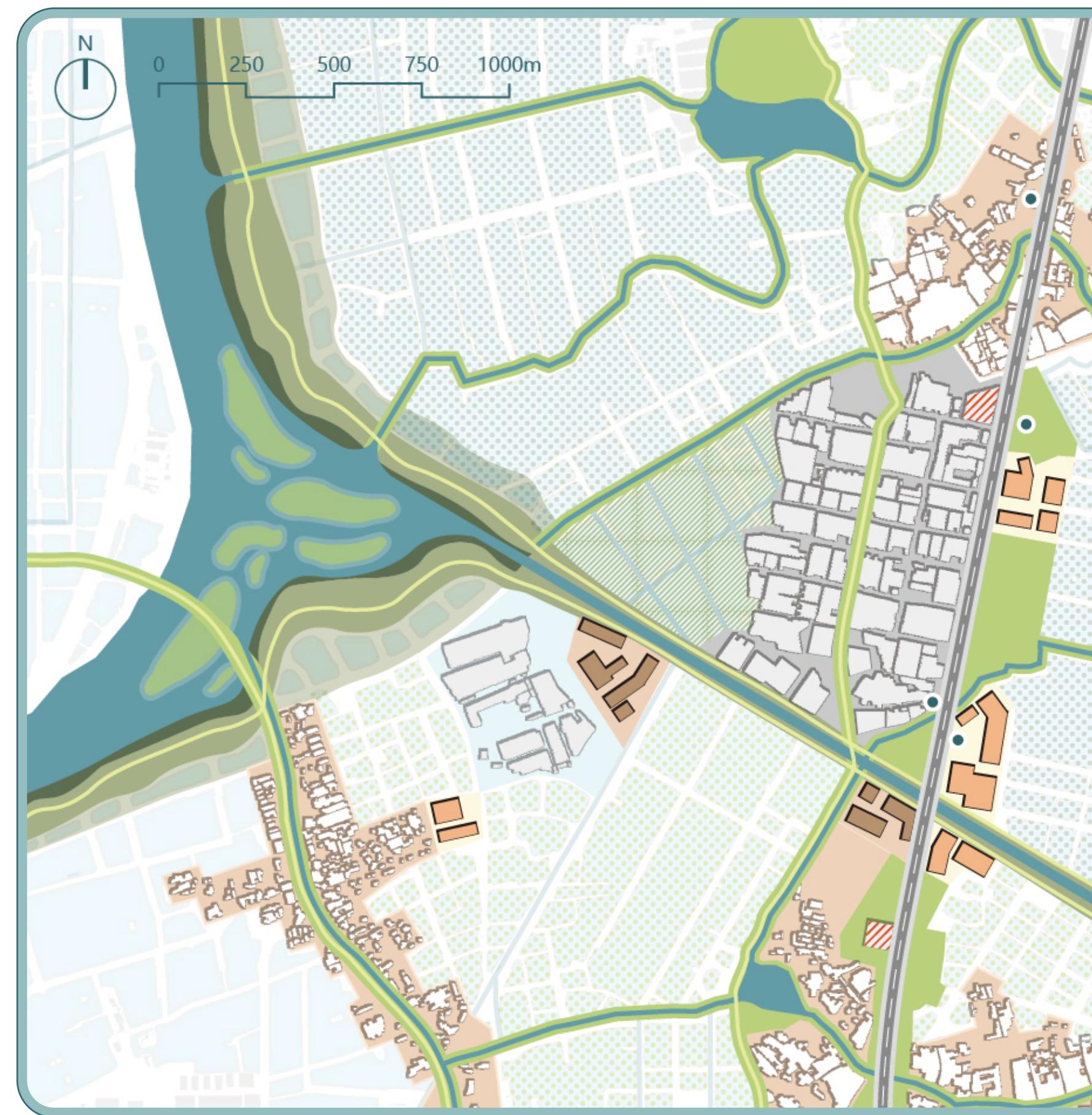
AFTER



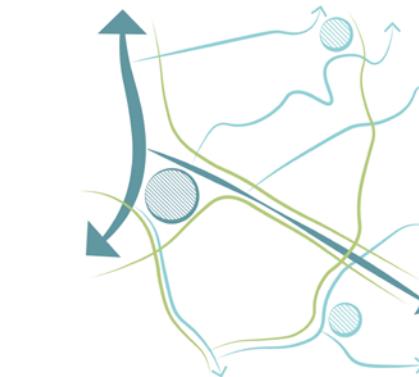


## AGENDA II: LIVABLE SYSTEM

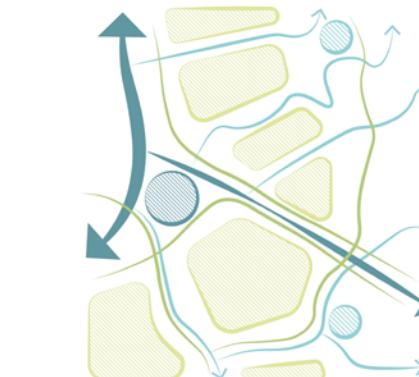
生活系统



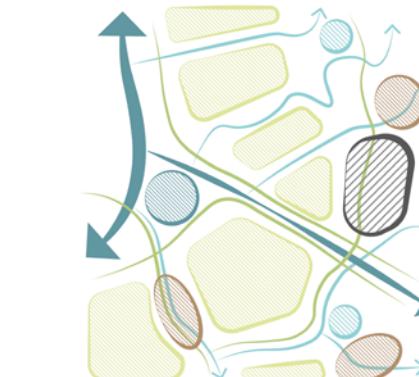
Connection between the river and dyke system



Development of greenways and landscape views



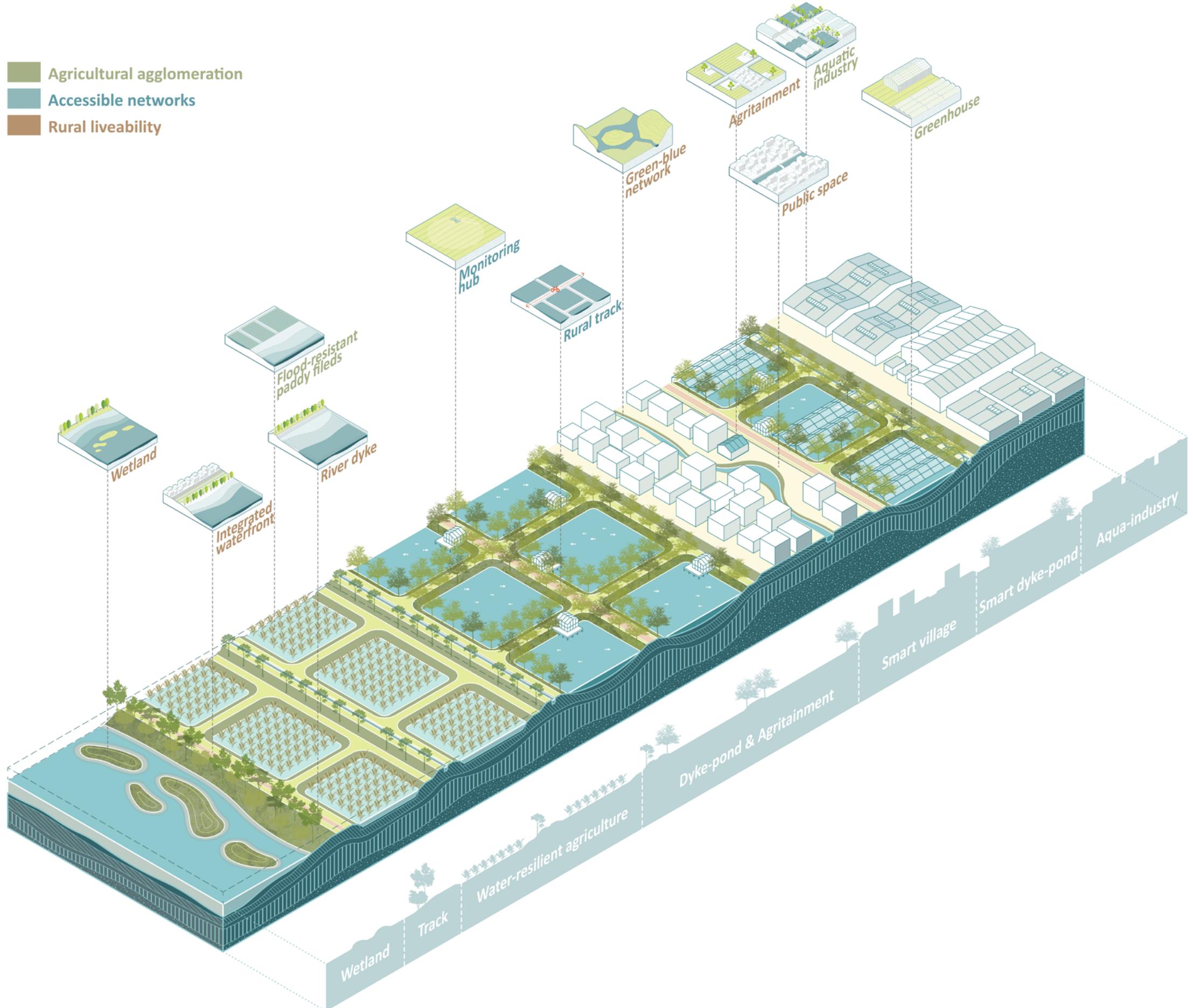
Classification and management of farmland

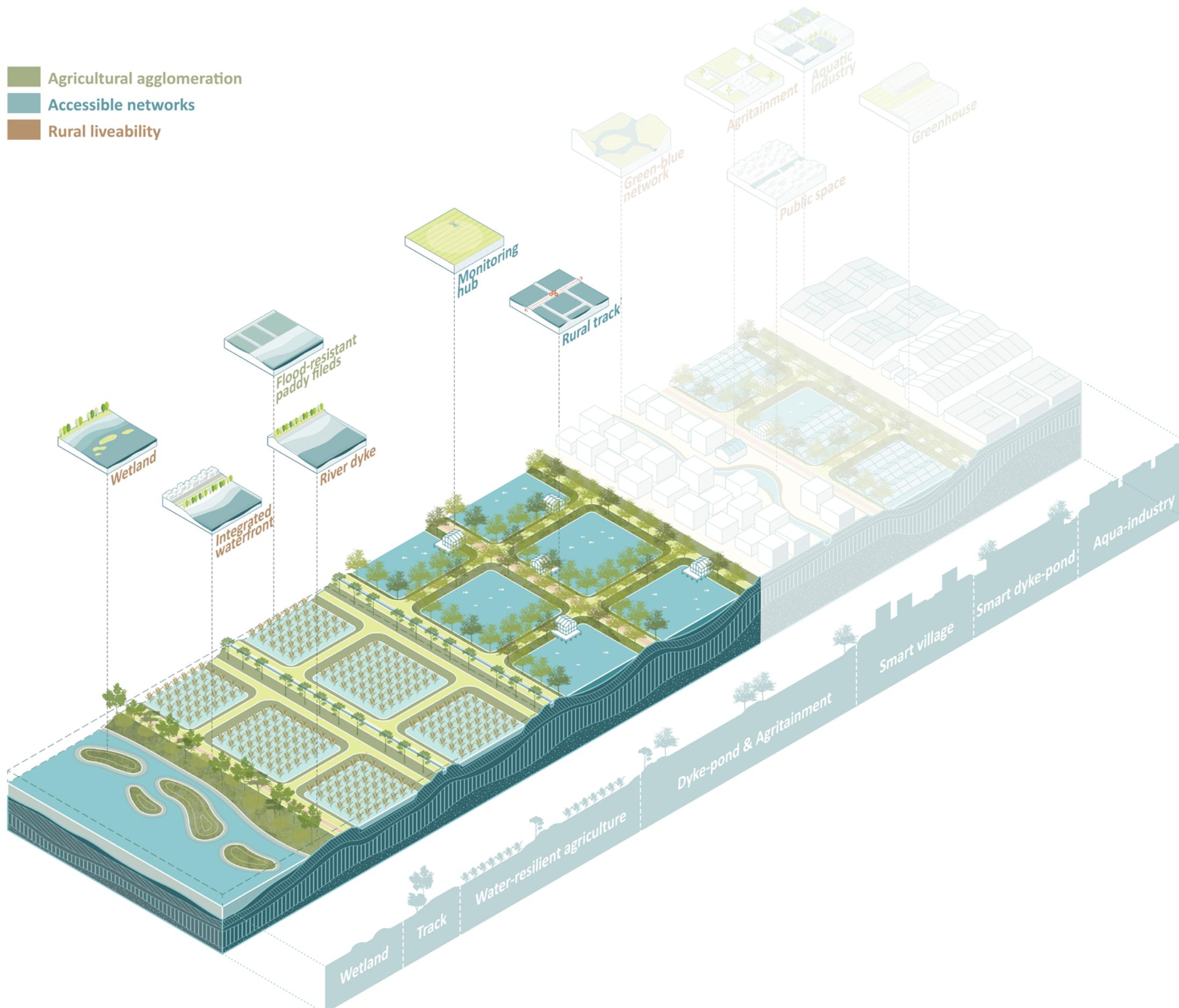


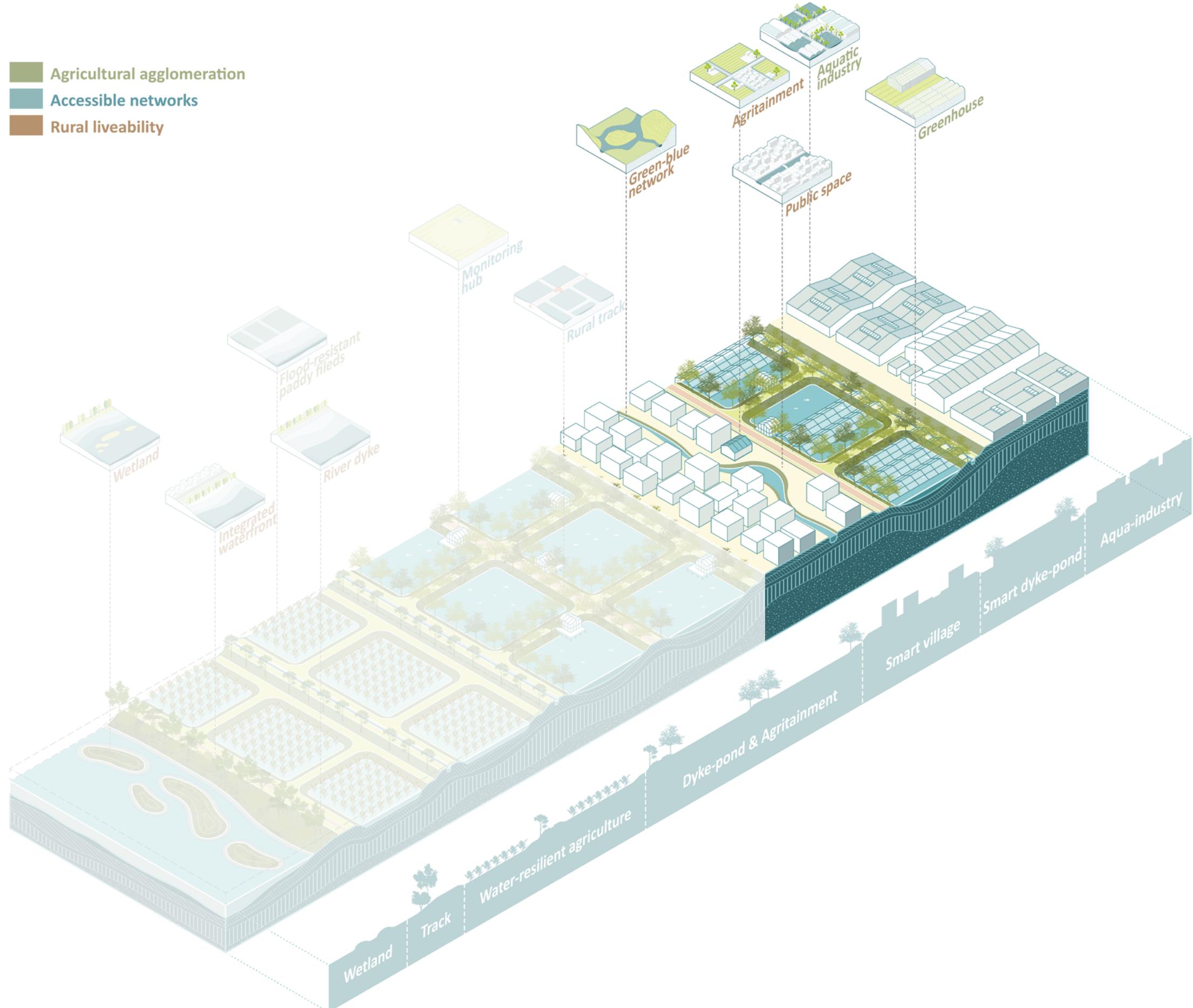
Improvement of the quality of rural spaces

● Bus station
— Road
— Rural track
— River
— Dyke system
■ Agricultural park
■ Wetland
■ Flood-resistant area
■ Traditional pond
■ Smart dyke pond
■ Agritainment pond
■ Reclaimed polder
■ Market
■ Agritainment house
■ Aquatic industry
■ Food industry
■ Smart village

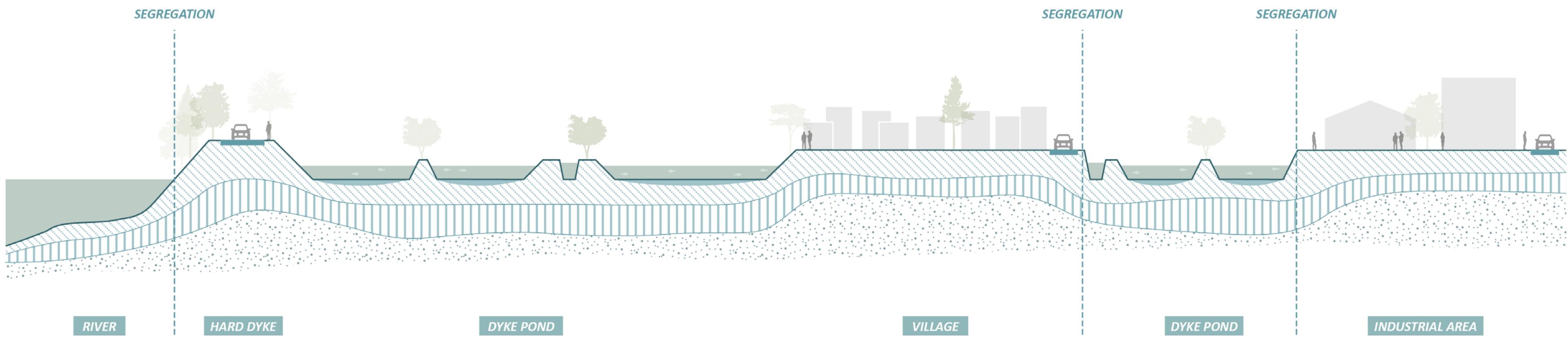
Agricultural agglomeration  
Accessible networks  
Rural liveability

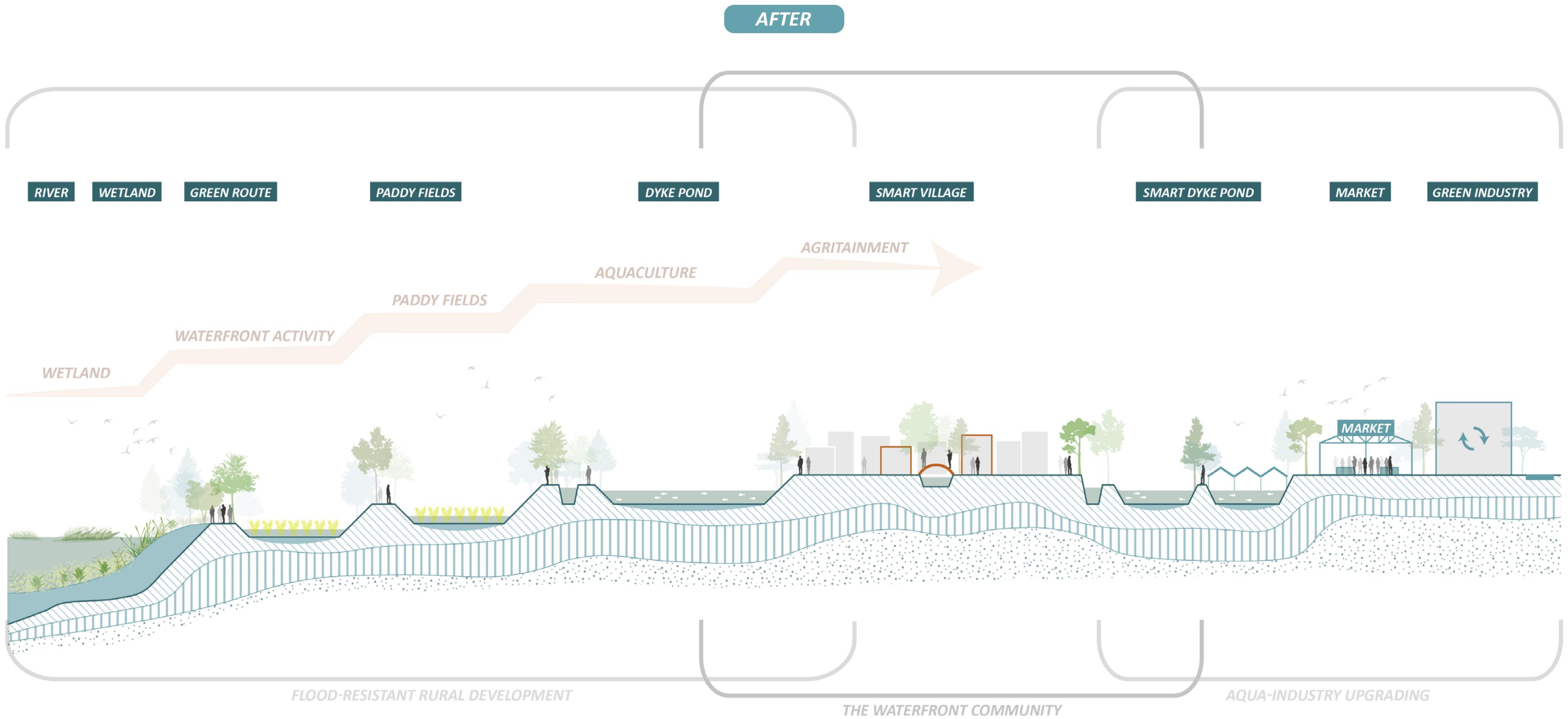






**BEFORE**

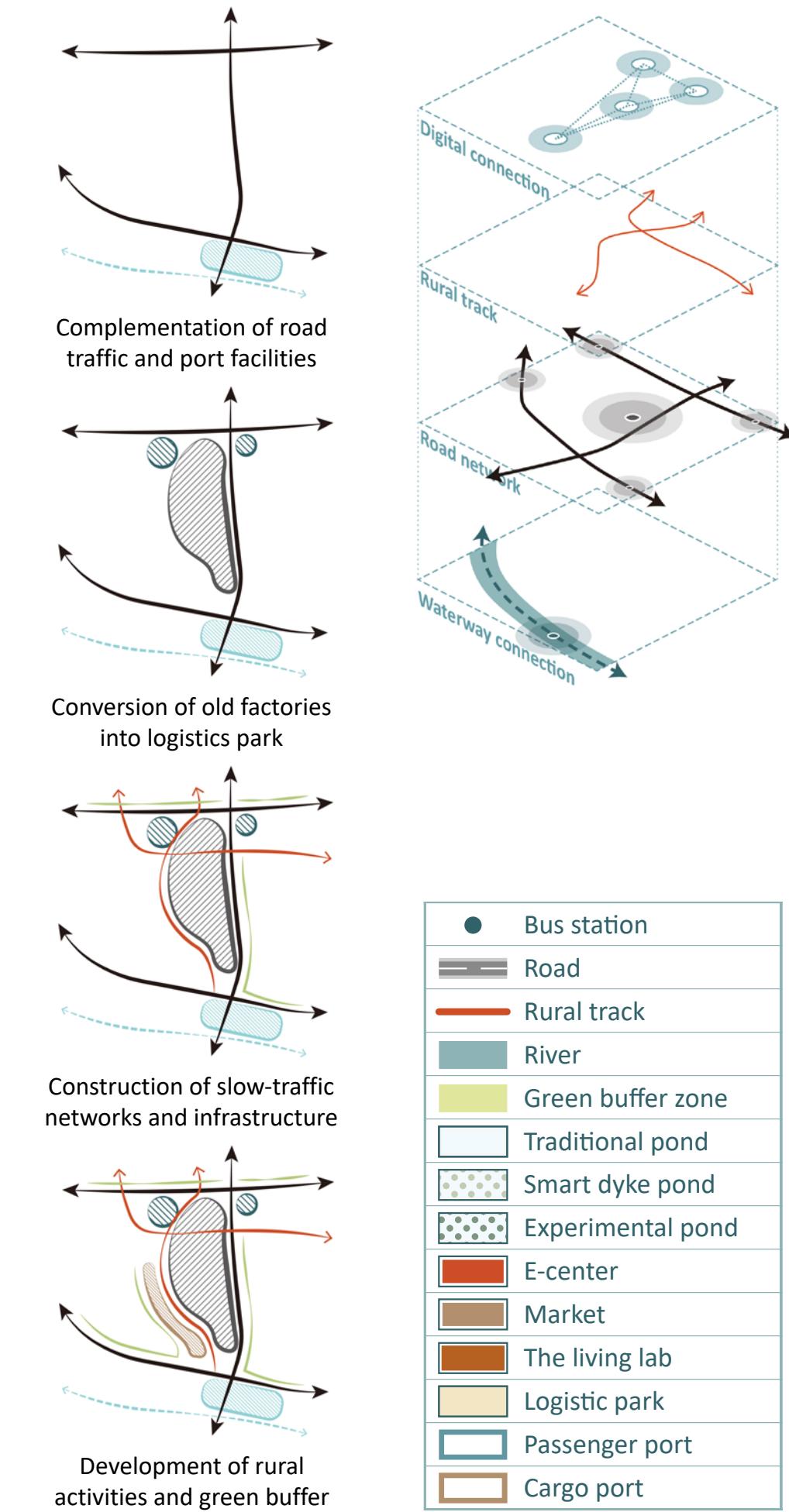
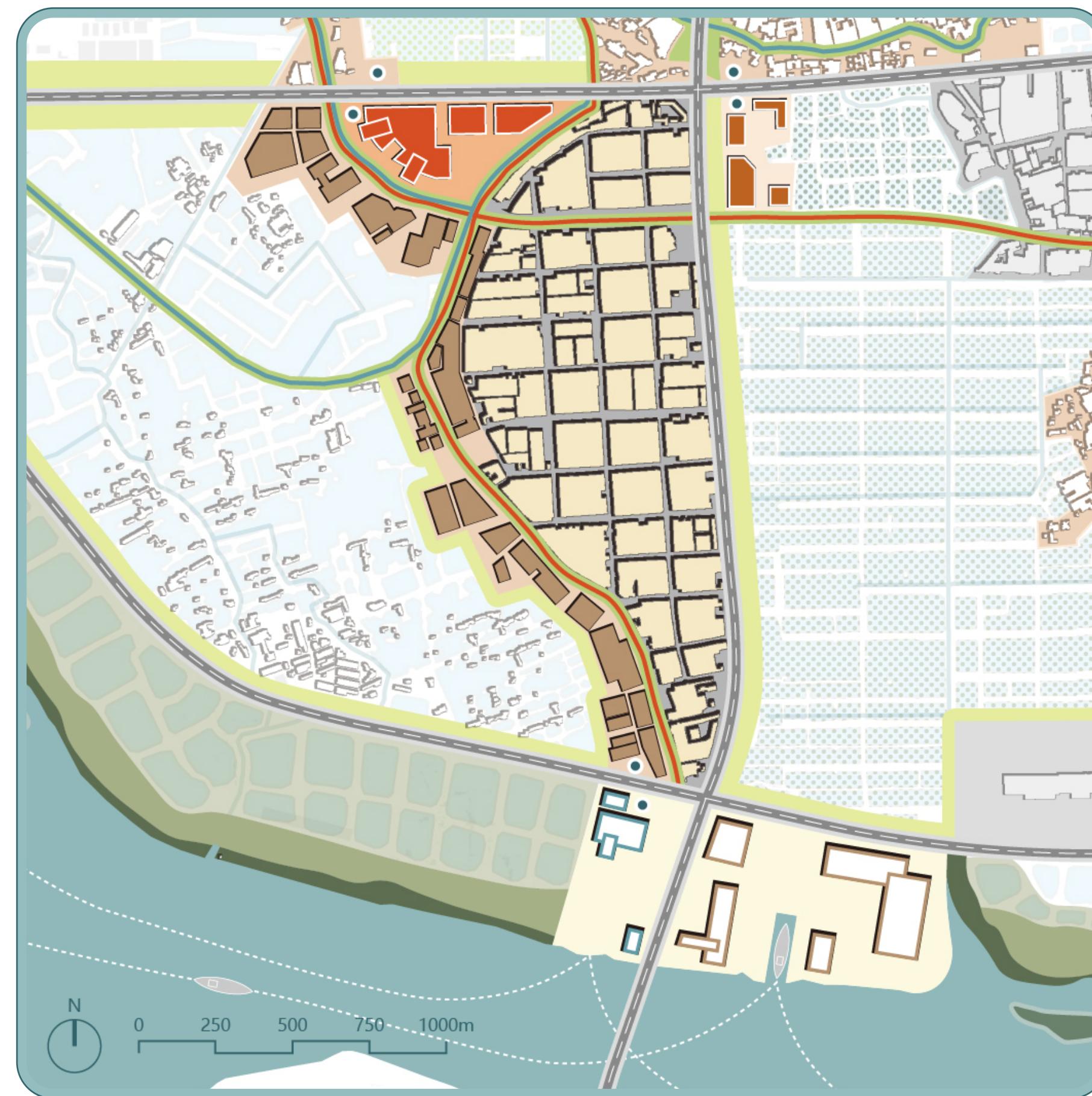


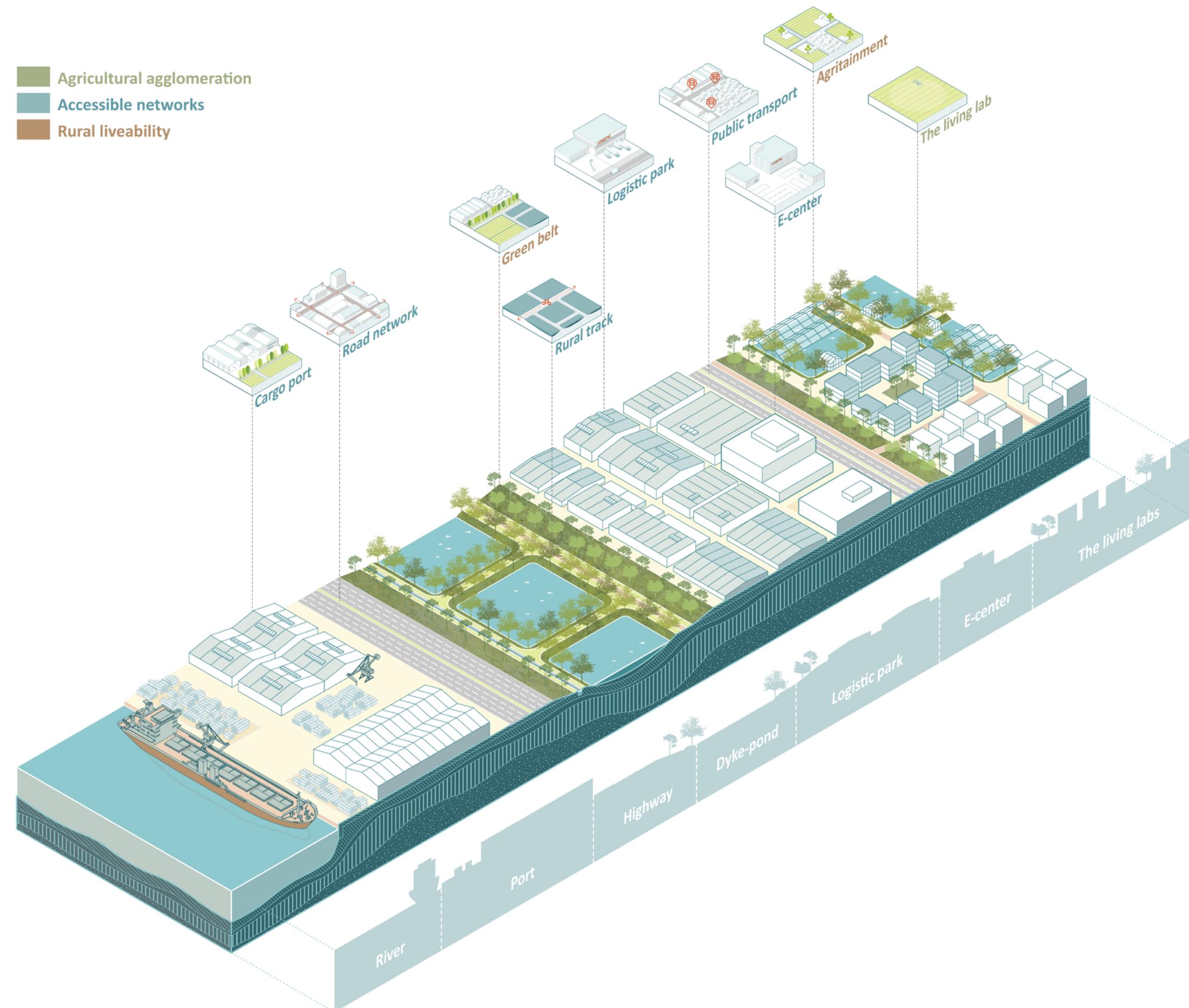




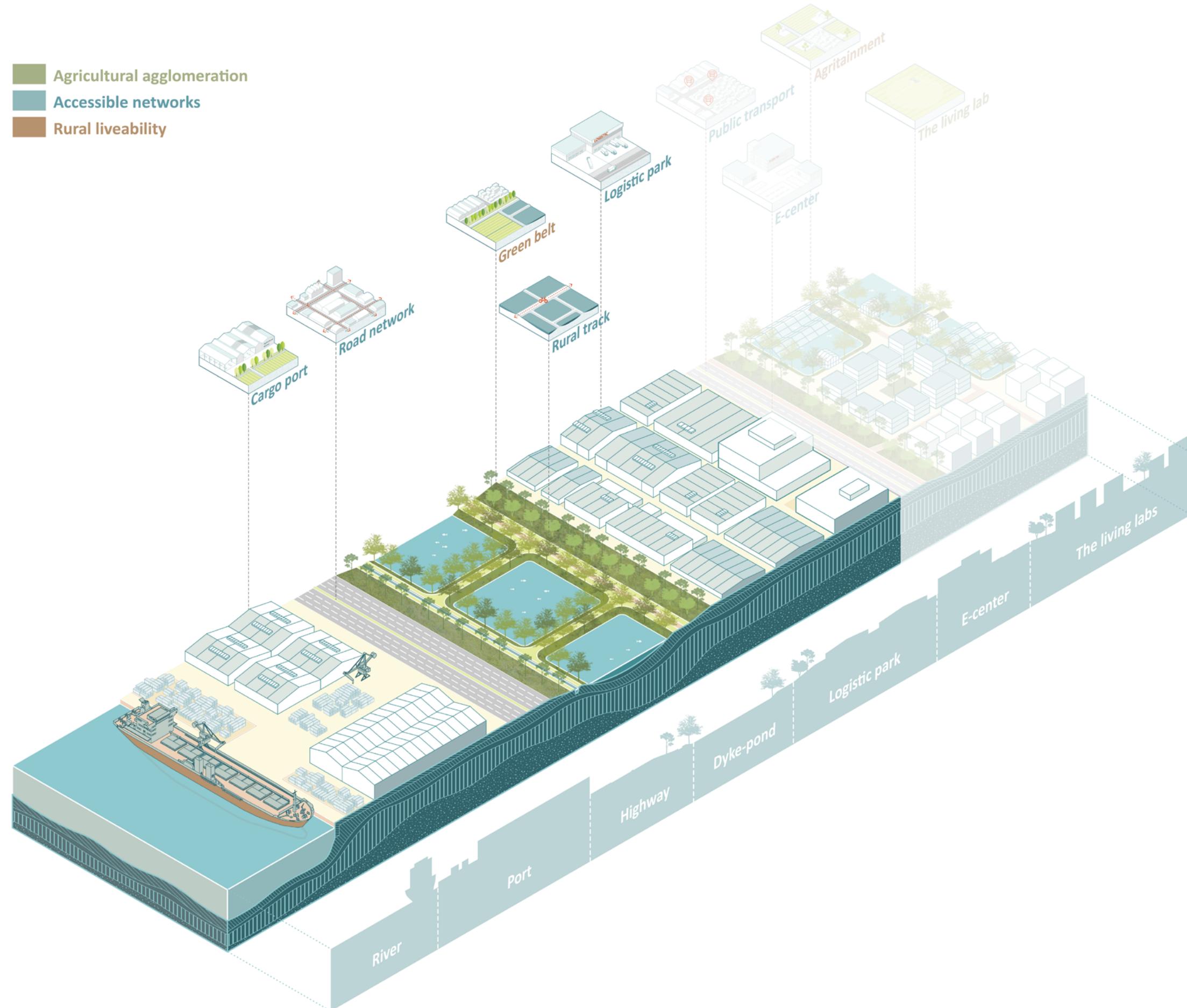
## AGENDA III: INTERCONNECTED SYSTEM

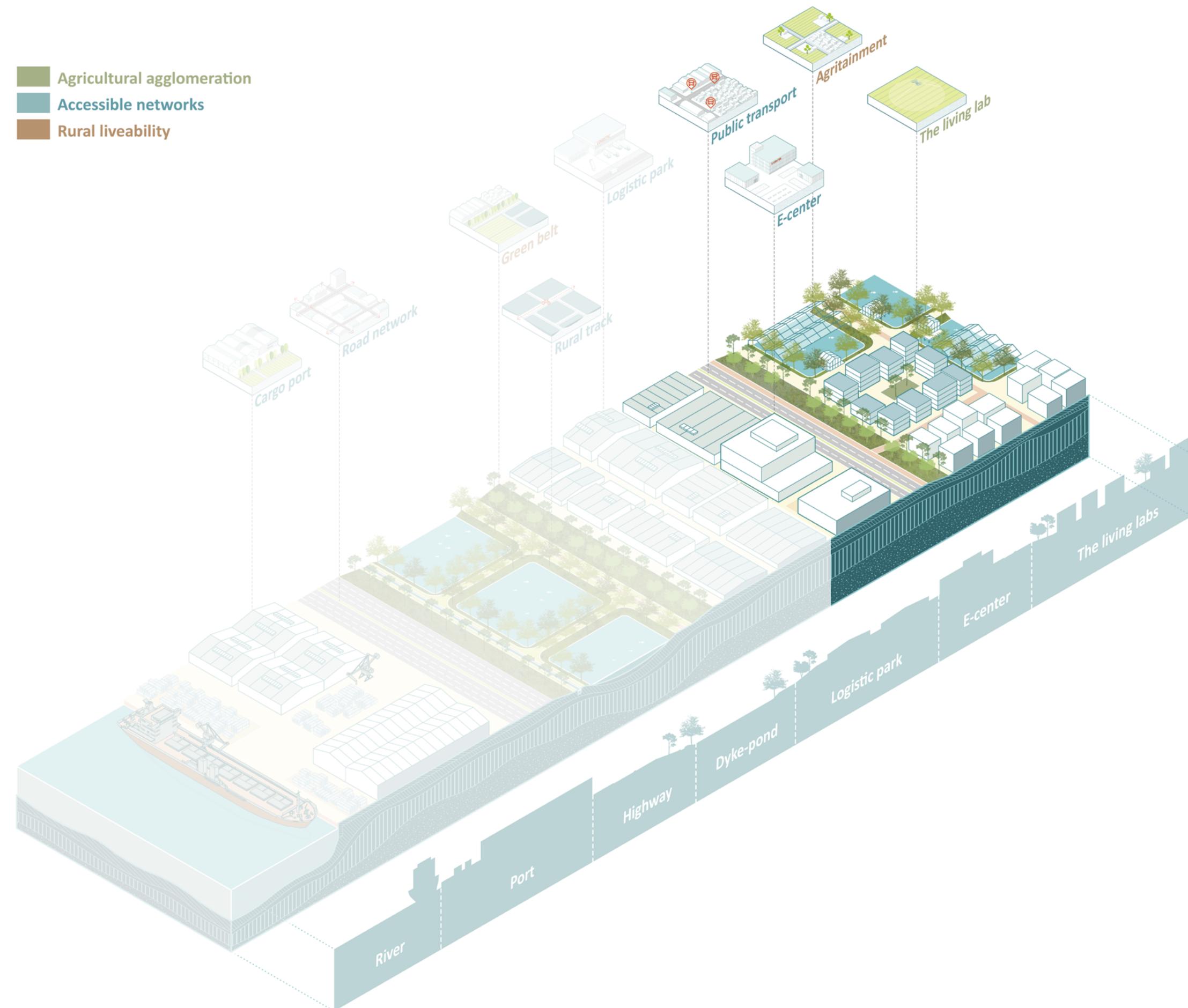
互联系统

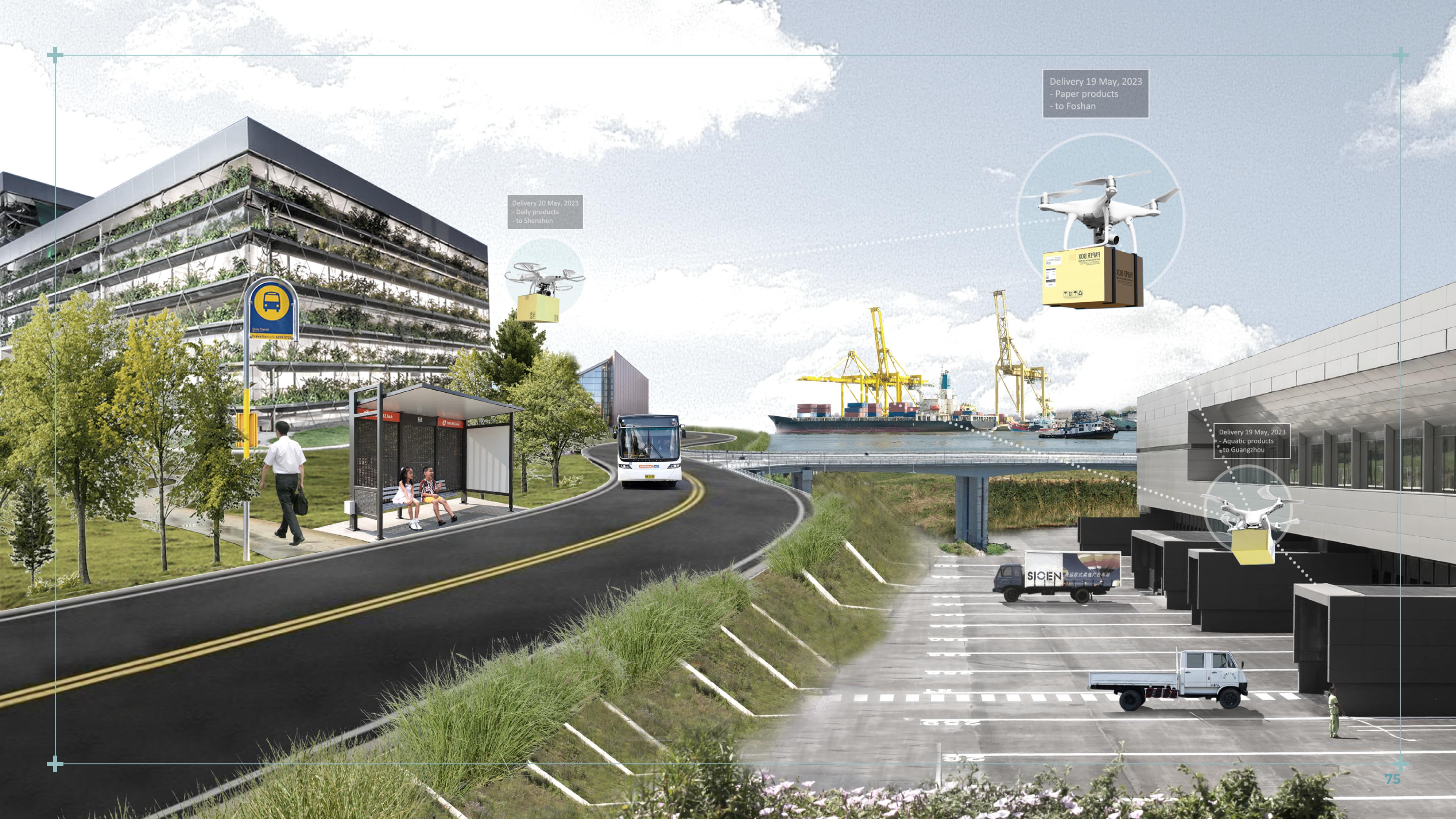


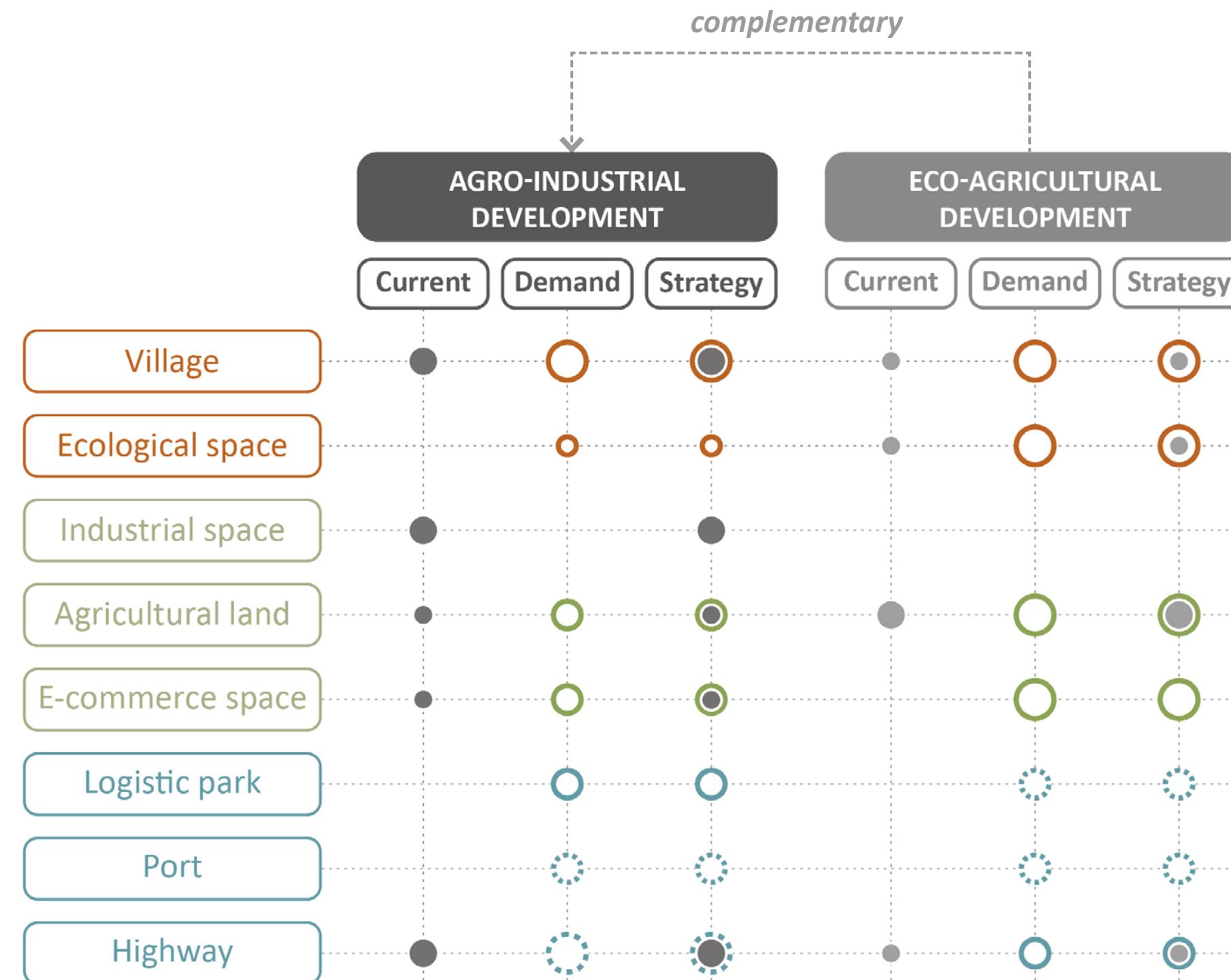


Agricultural agglomeration  
 Accessible networks  
 Rural liveability

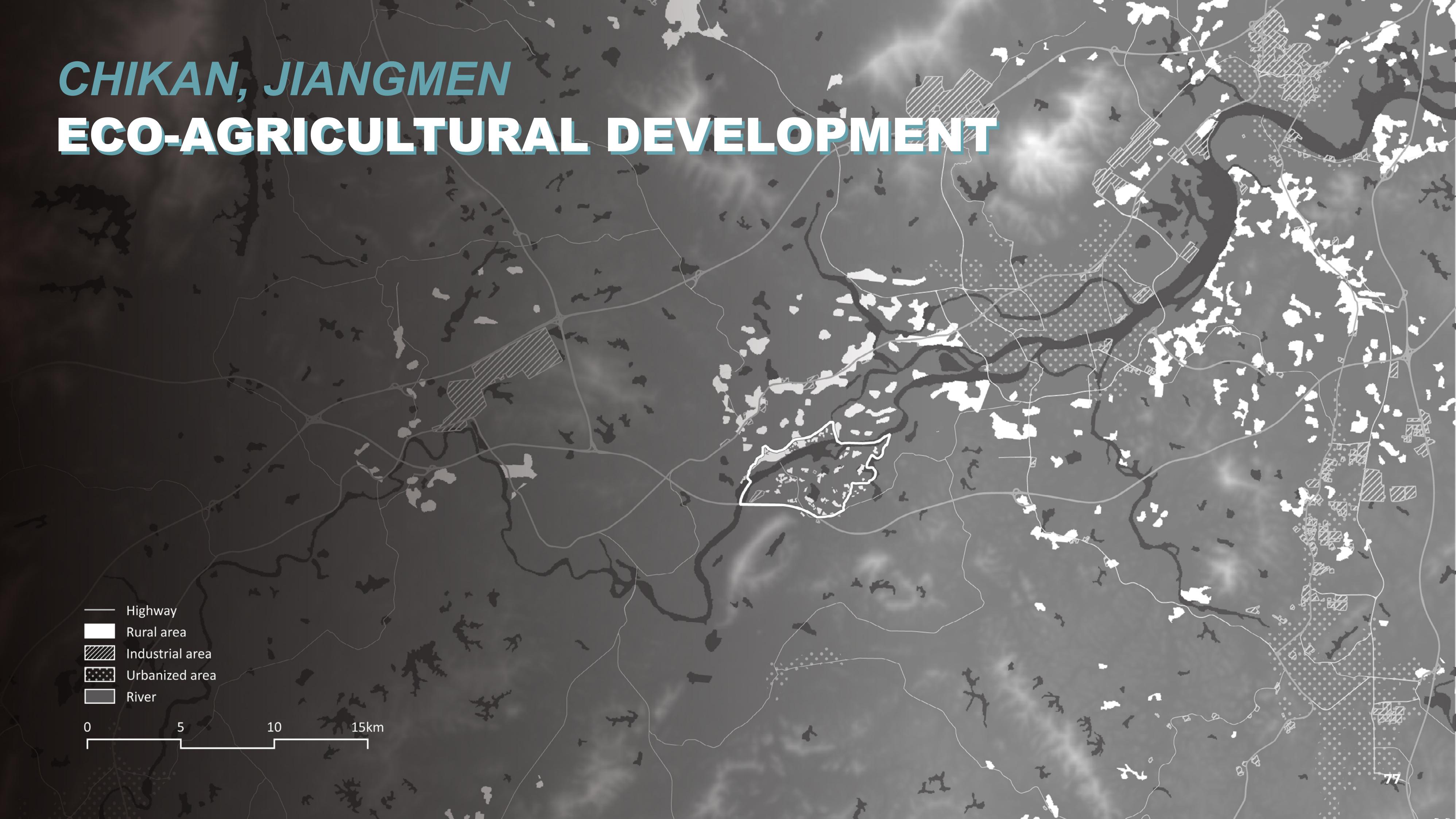






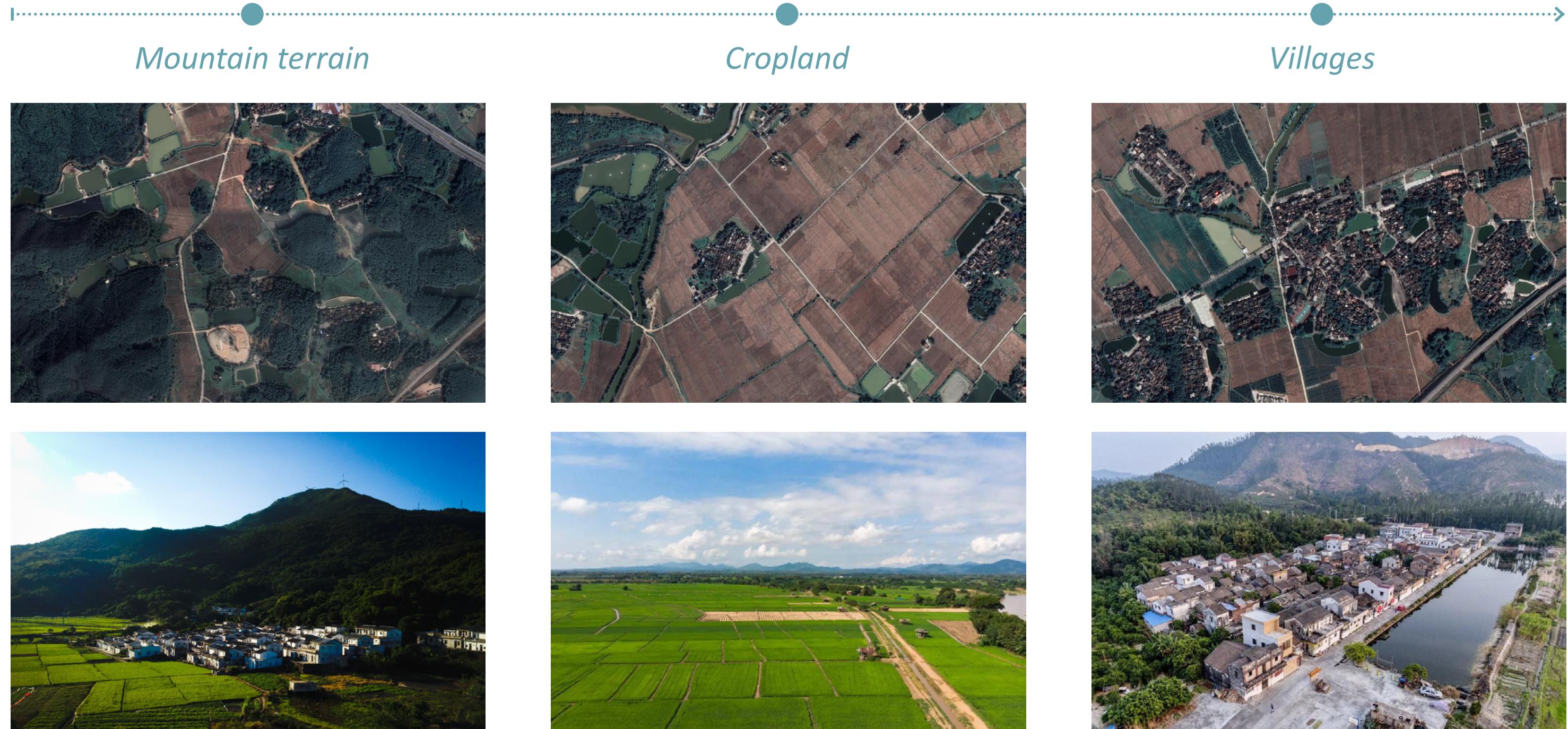


# CHIKAN, JIANGMEN ECO-AGRICULTURAL DEVELOPMENT



# RURAL AREAS WITH GREAT ECOLOGICAL POTENTIAL

具有生态潜力的乡村地区



# RURAL AREAS WITH GREAT ECOLOGICAL POTENTIAL

具有生态潜力的乡村地区

- Road network
- Building
- Village
- Town
- Cropland
- Dyke pond
- Mountain
- River

*Hard barge*

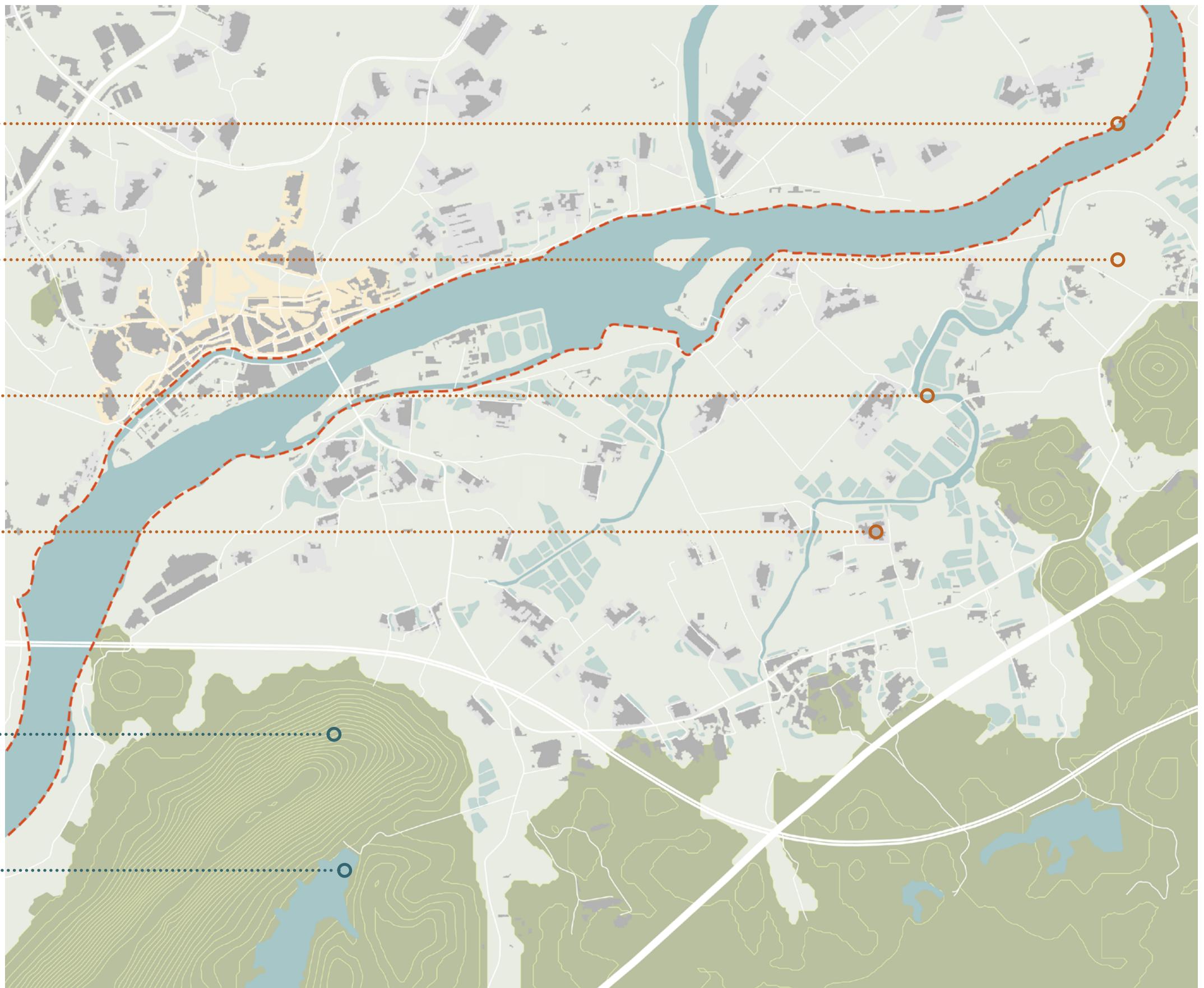
*Monoculture*

*Limited scale*

*Isolated village*

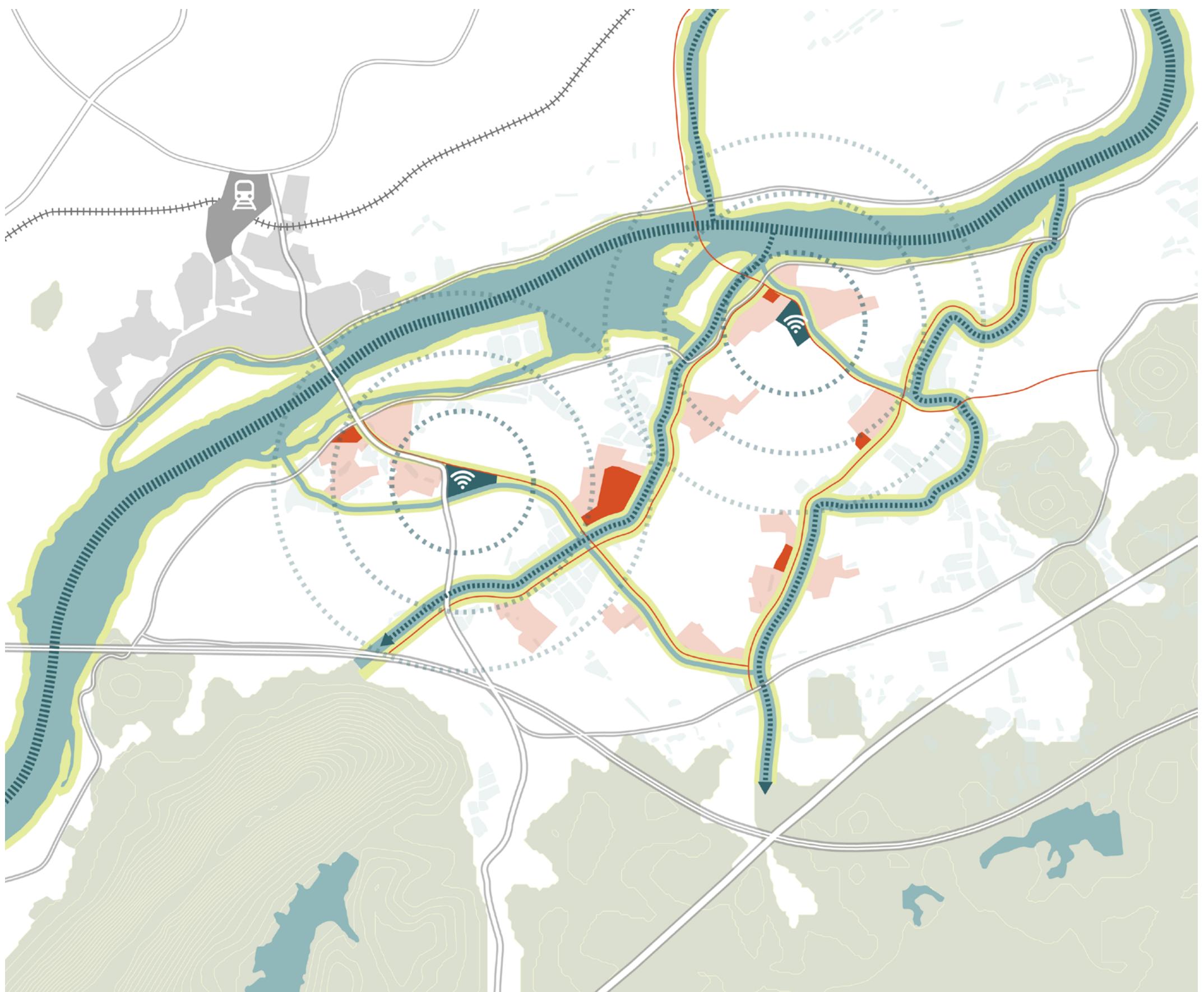
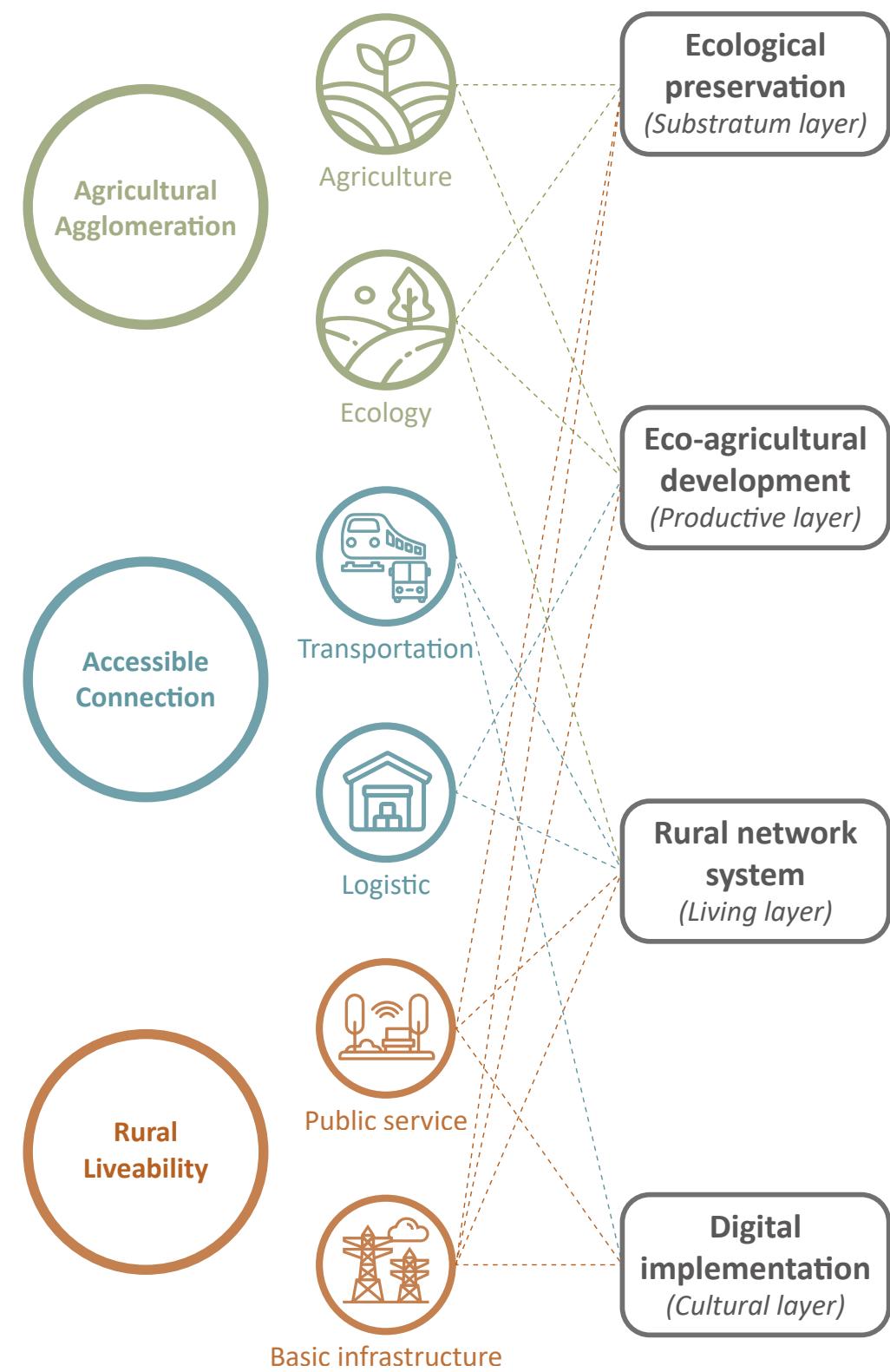
*Green resources*

*Blue resources*



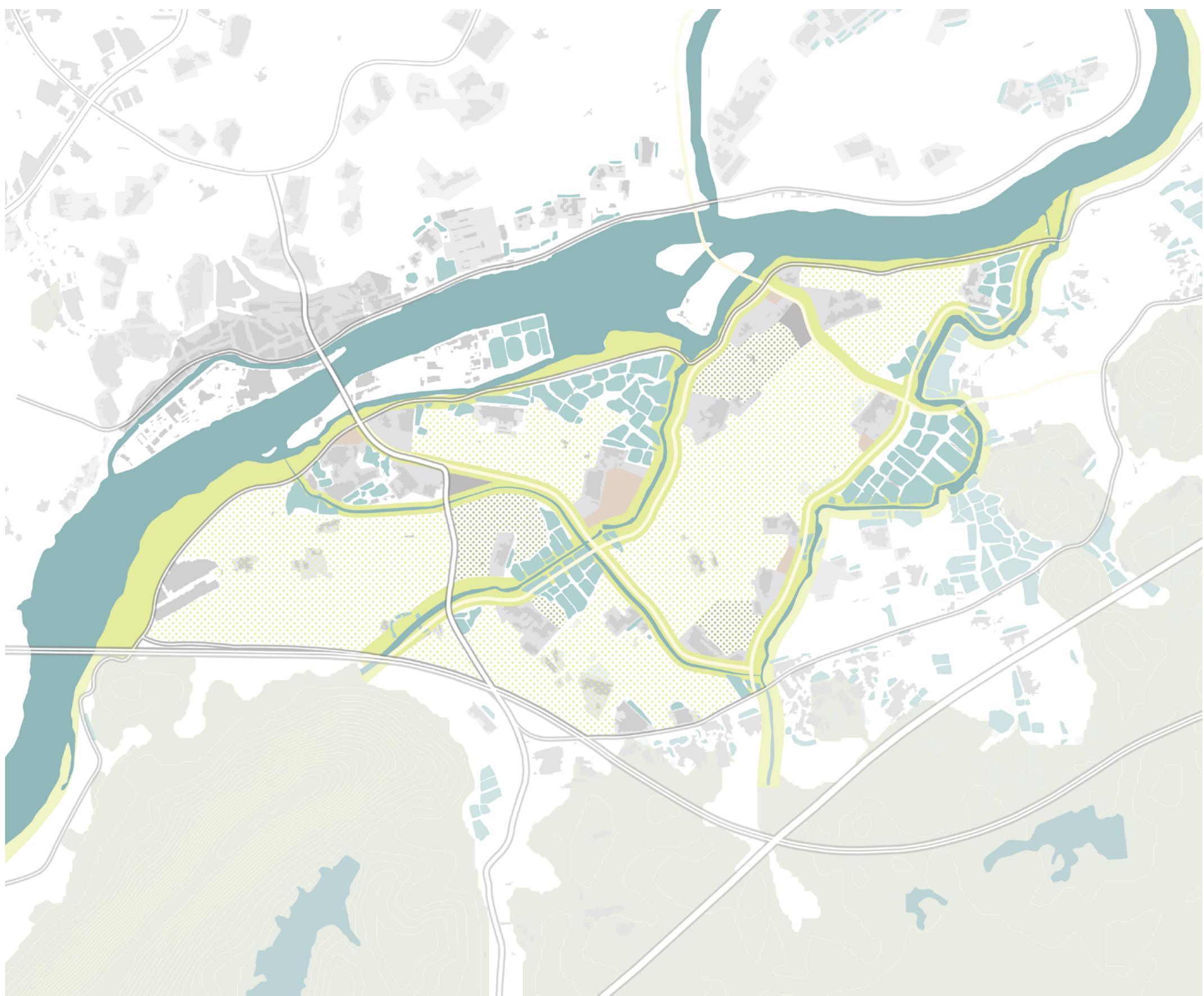
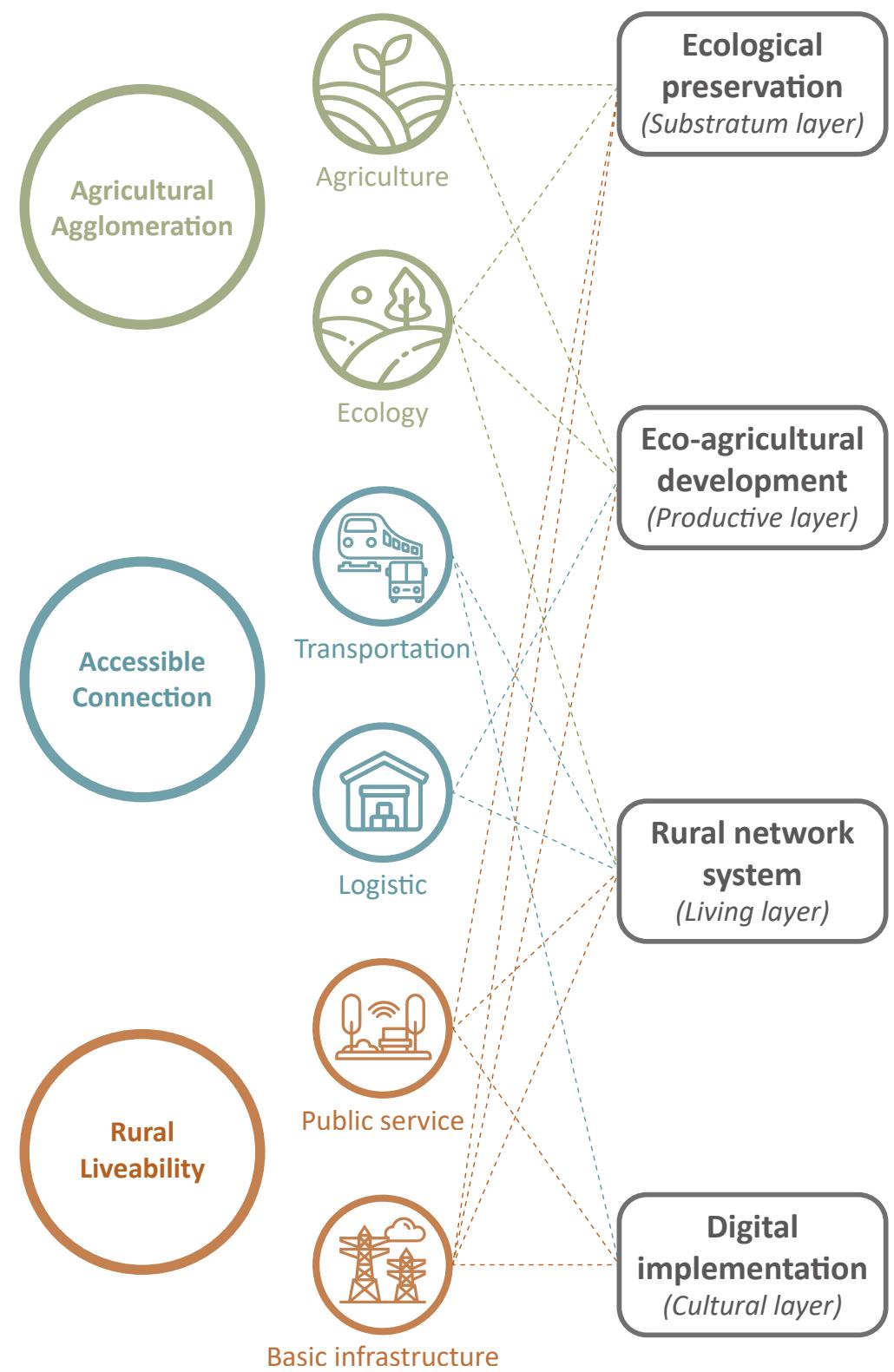
# DESIGN STRATEGY OF ECOLOGICAL AGRICULTURE

生态农业设计策略



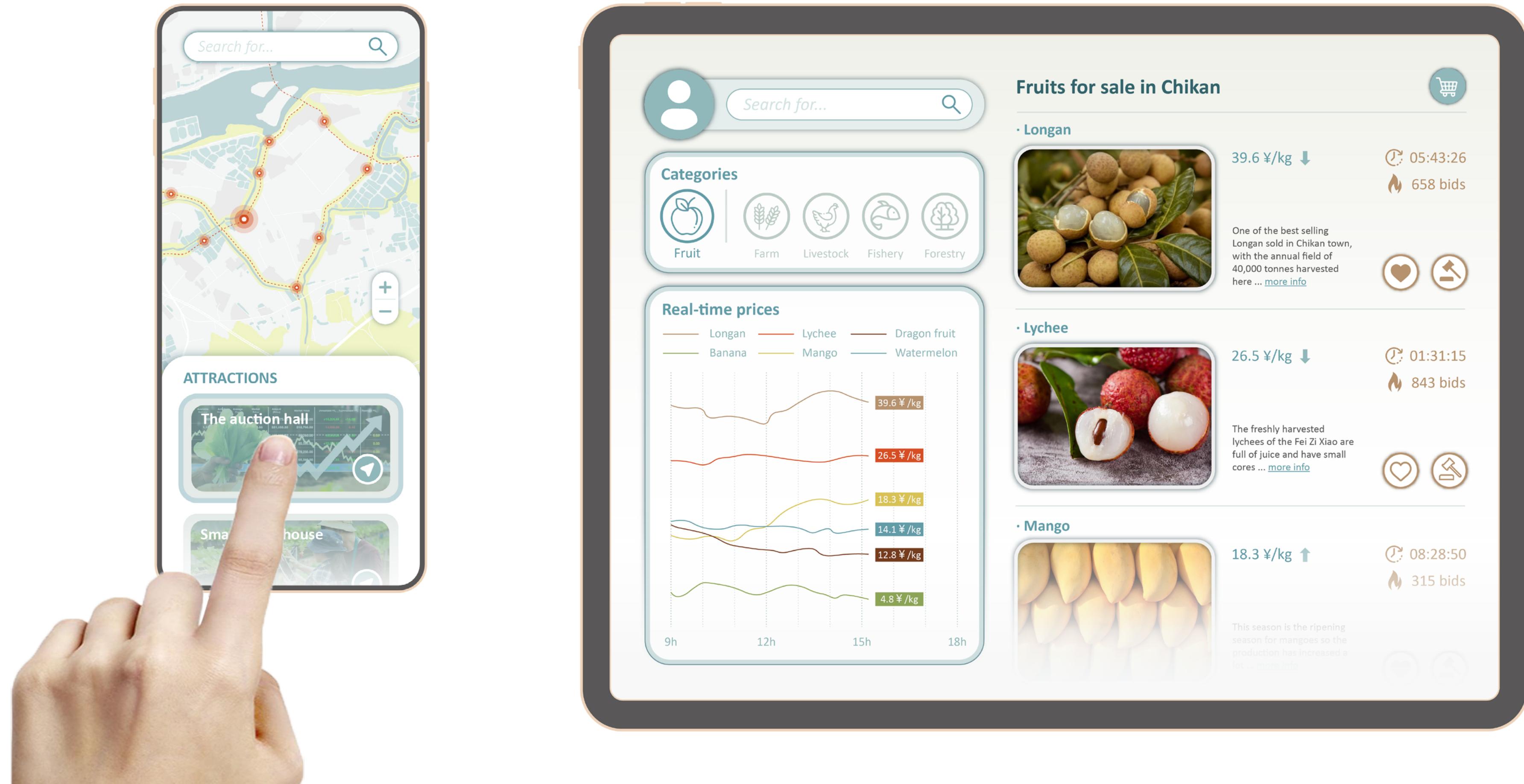
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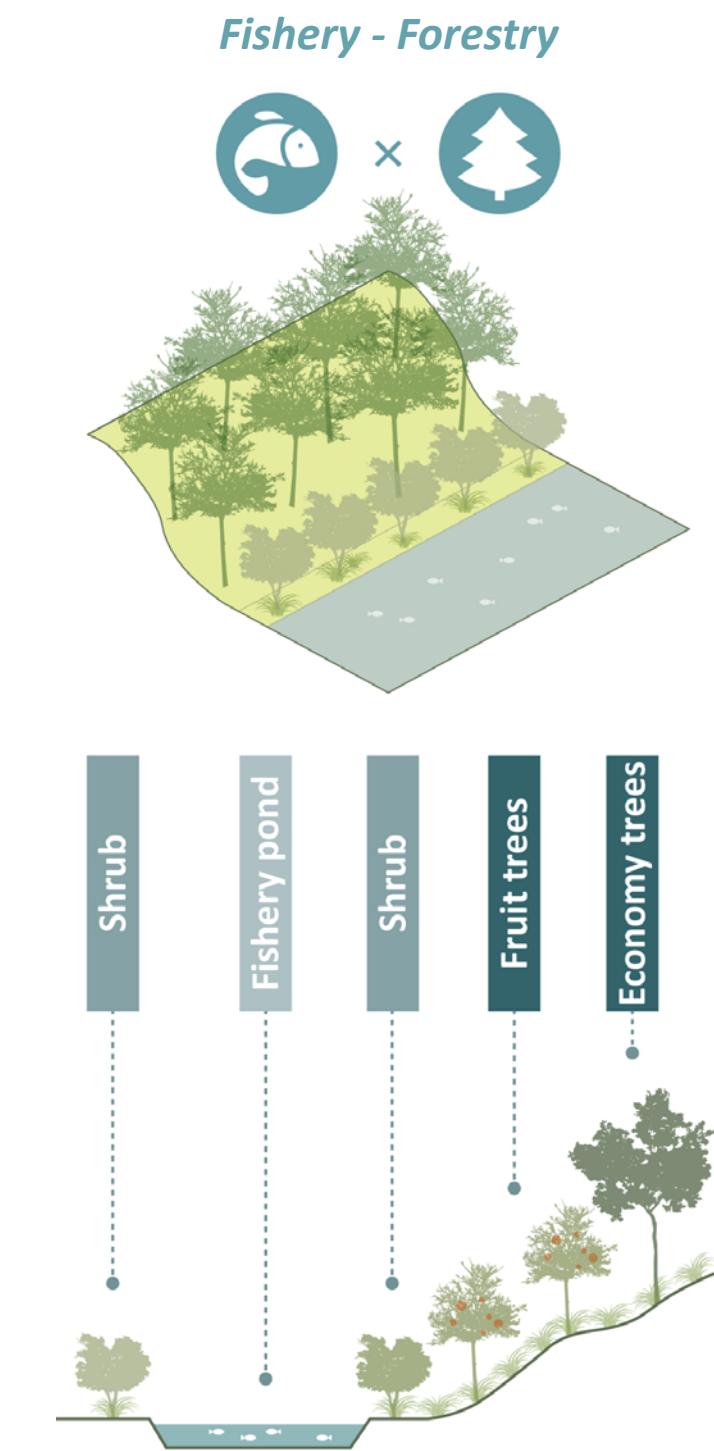
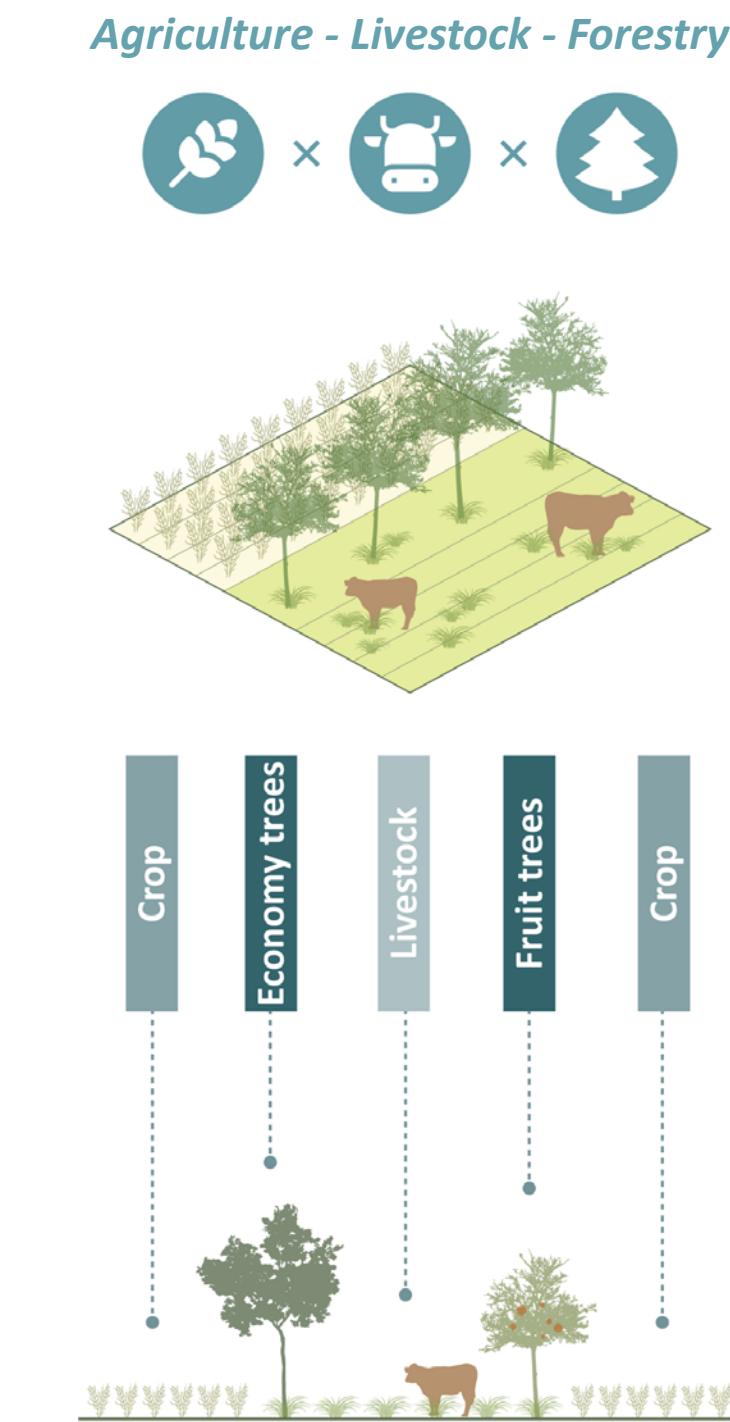
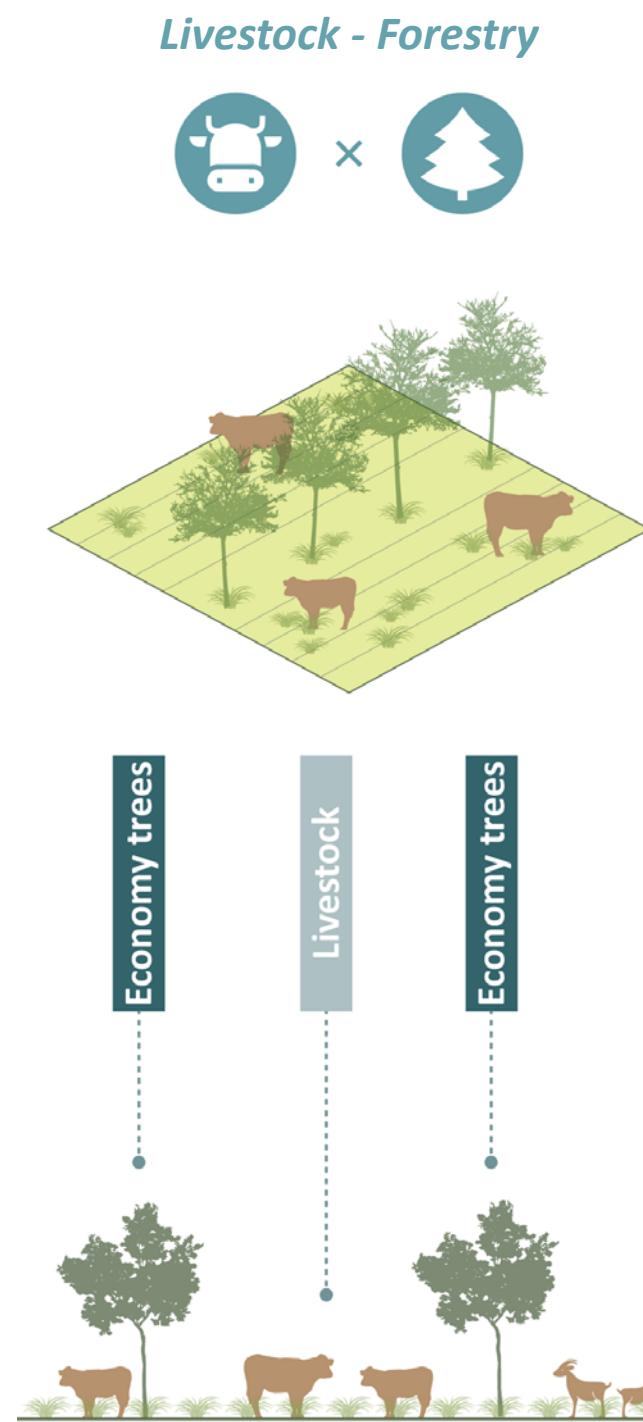
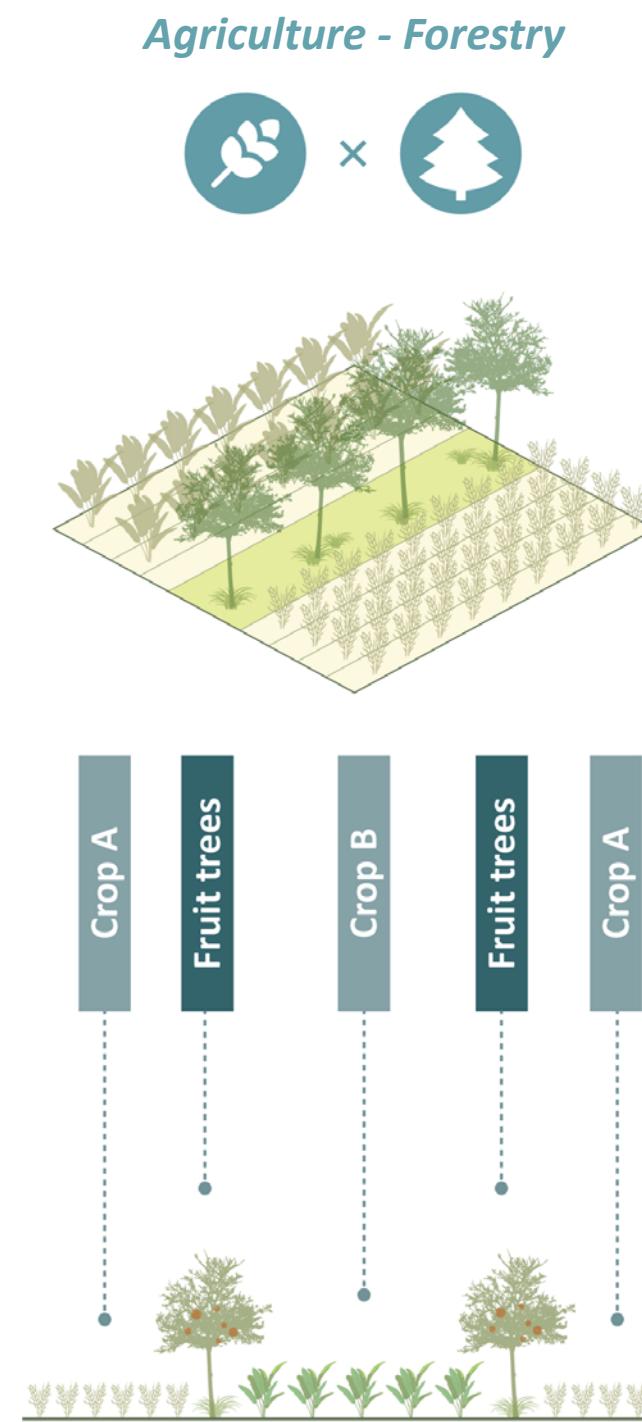
# DIGITAL PLATFORM SUPPORT RURAL DEVELOPMENT

在线平台支持乡村发展

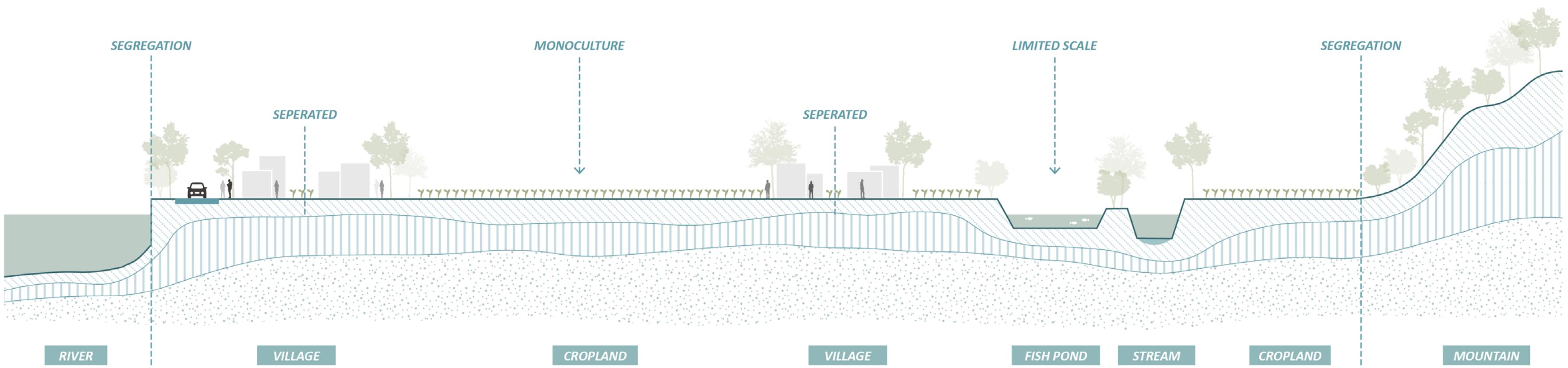


# AGRO-FORESTRY PRACTICES

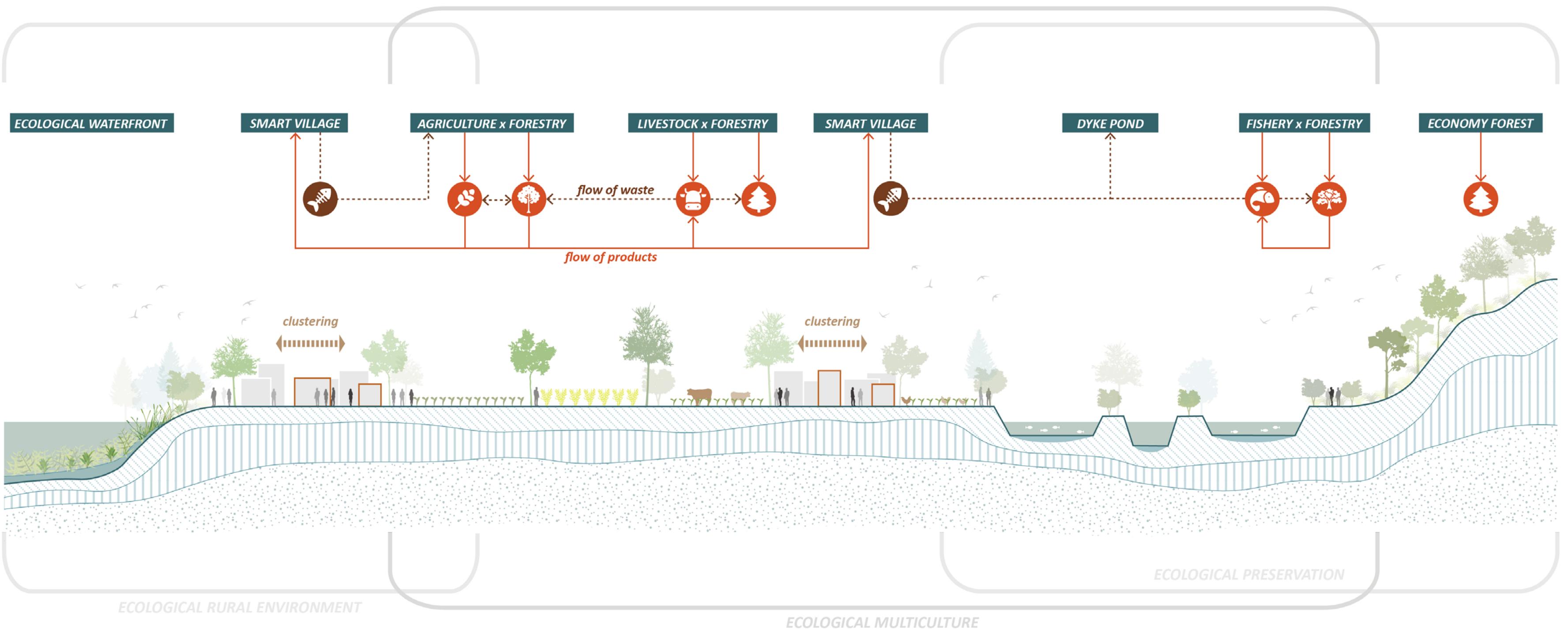
农林业合作实践



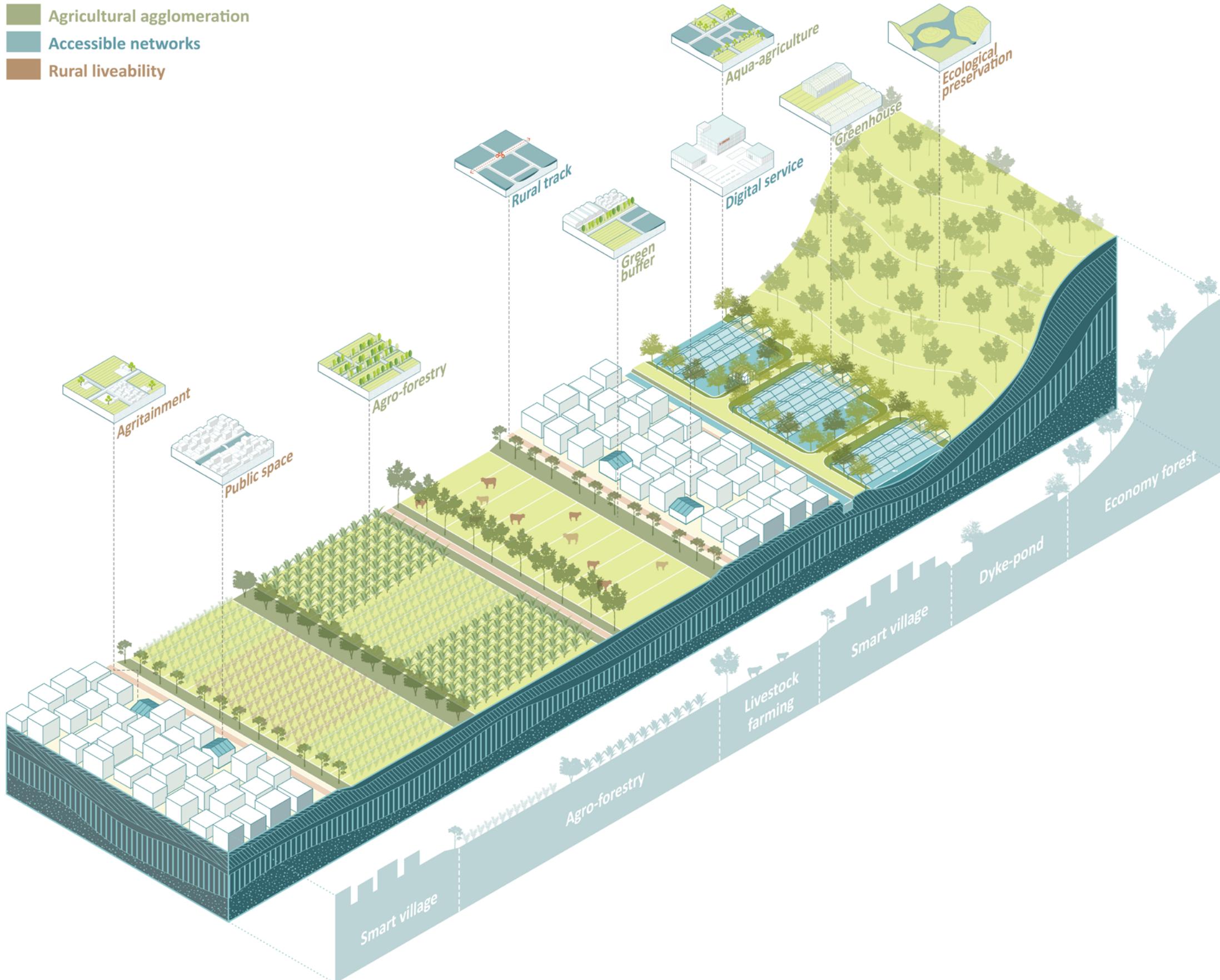
**BEFORE**



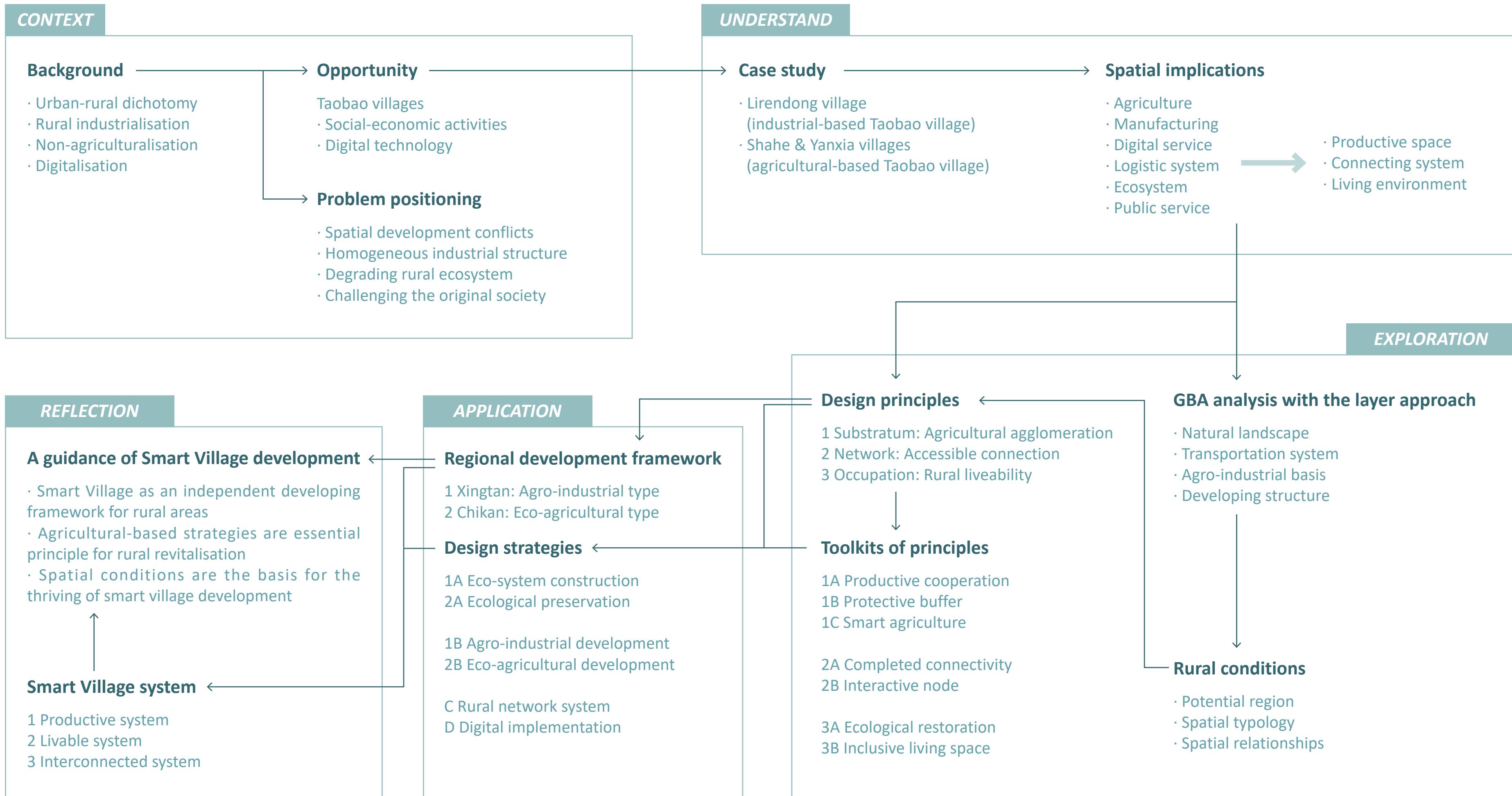
AFTER



Agricultural agglomeration  
Accessible networks  
Rural liveability







# UNDERSTAND

*How to understand the spatial impact of the digital economy on rural areas and optimise the Taobao Village mechanism for rural development?*

## *Industrial-based Taobao Village*



- Industrial pollution
- Destroy the natural landscape
- Complement public services
- Densify the village

## *Agricultural-based Taobao Village*



- Ecological benefit
- E-commerce development
- Logistic system construction
- Low living quality

# UNDERSTAND

How to understand the spatial impact of the digital economy on rural areas and optimise the Taobao Village mechanism for rural development?

## Industrial-based Taobao Village



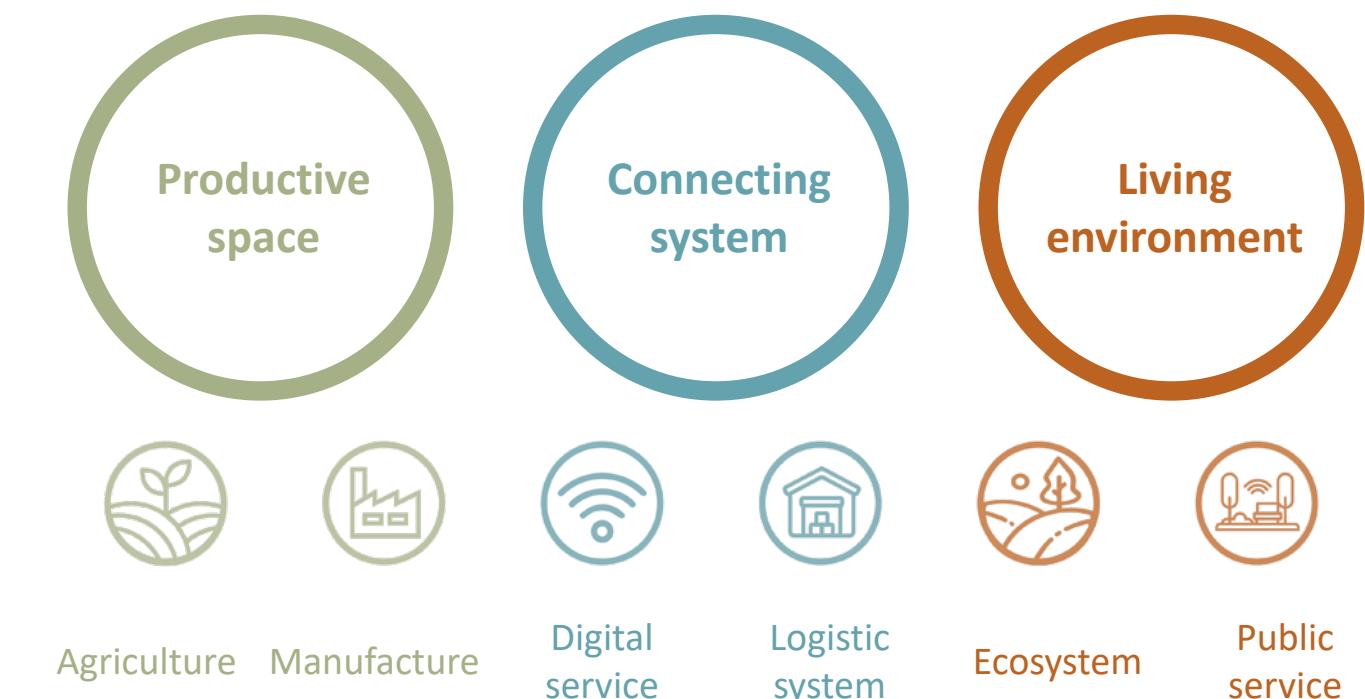
- Industrial pollution
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## Agricultural-based Taobao Village



- Ecological benefit
- E-commerce development
- Logistic system construction
- Low living quality

## Digital technology

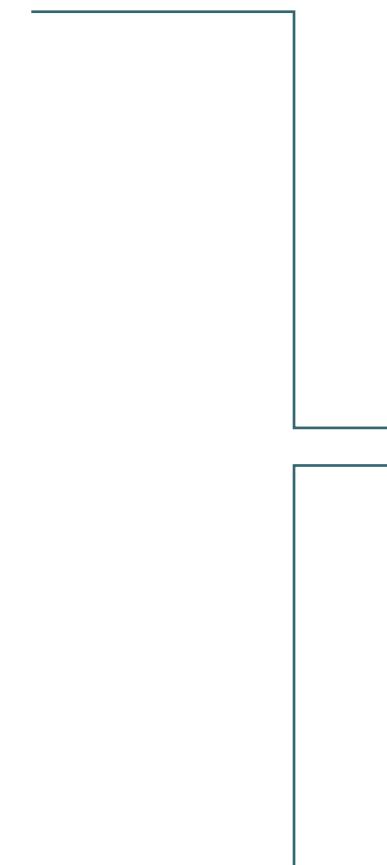


# EXPLORATION

What spatial approaches need to be implemented to improve the quality of life and protect ecosystems in rural areas?

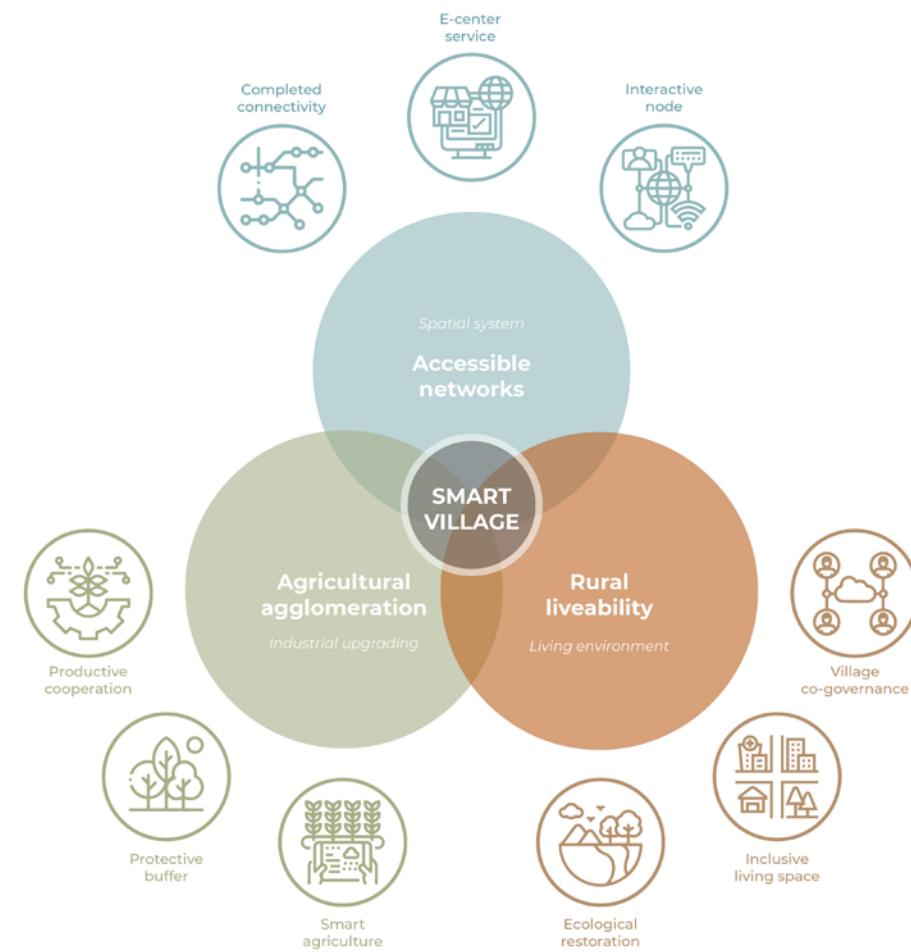


**Regional scale**



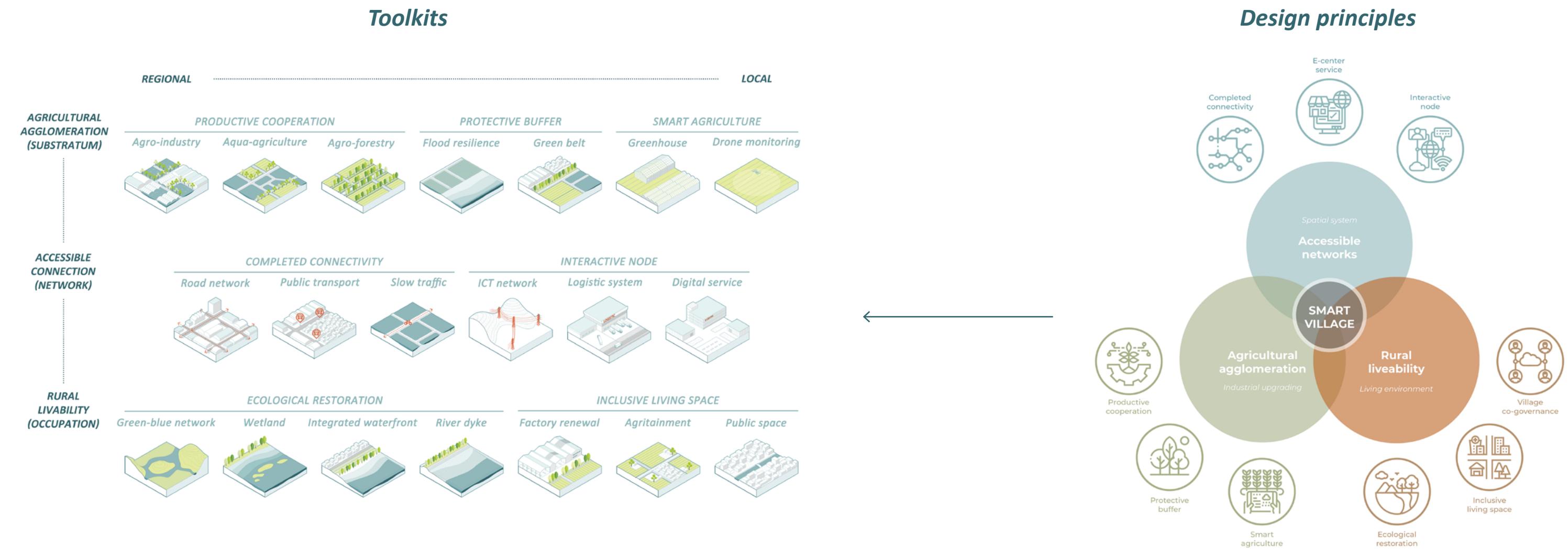
**Local scale**

**Design principles**



# EXPLORATION

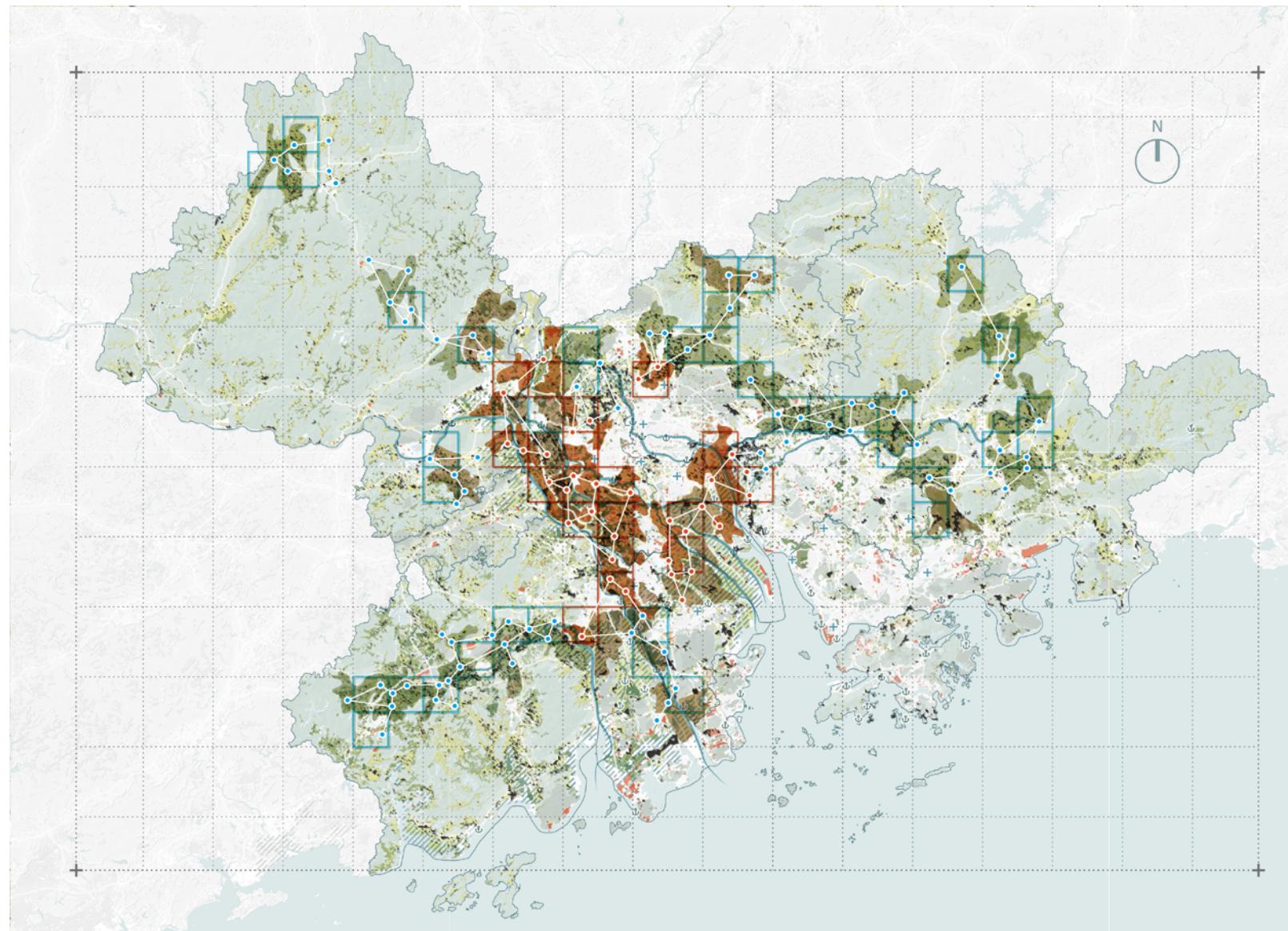
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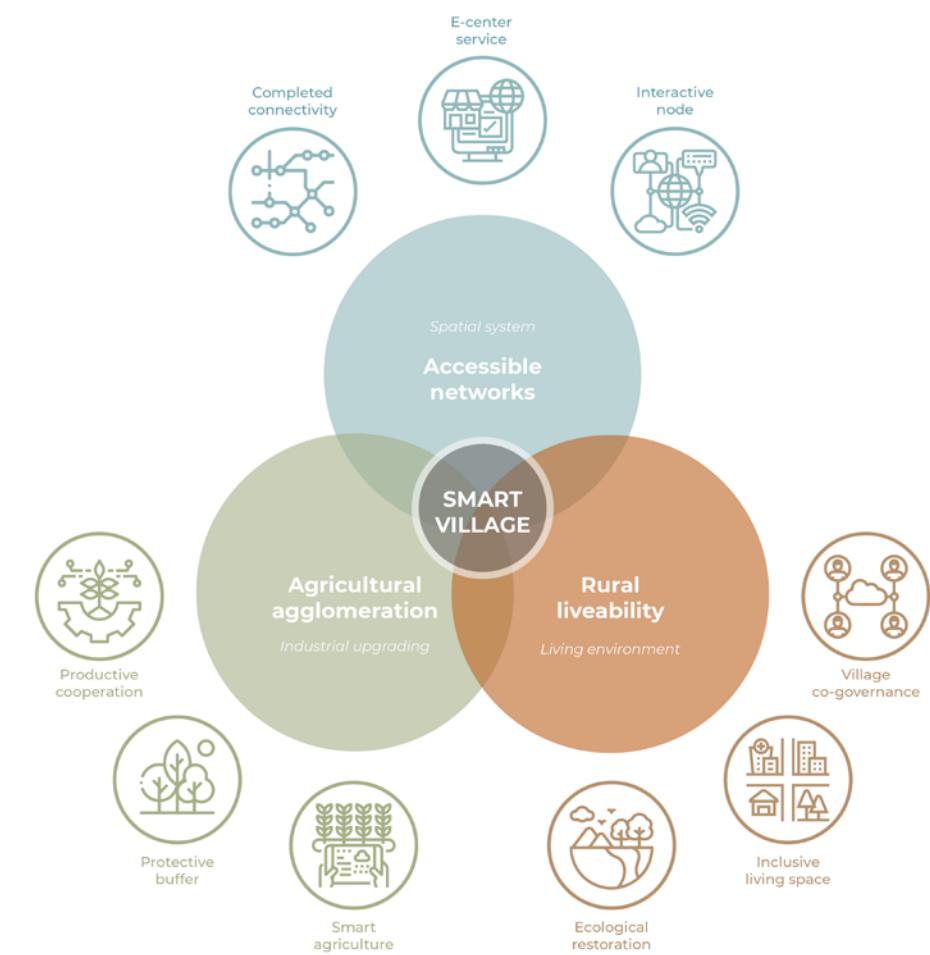
# EXPLORATION

*What spatial approaches need to be implemented to improve the quality of life and protect ecosystems in rural areas?*

## *Potential development framework*

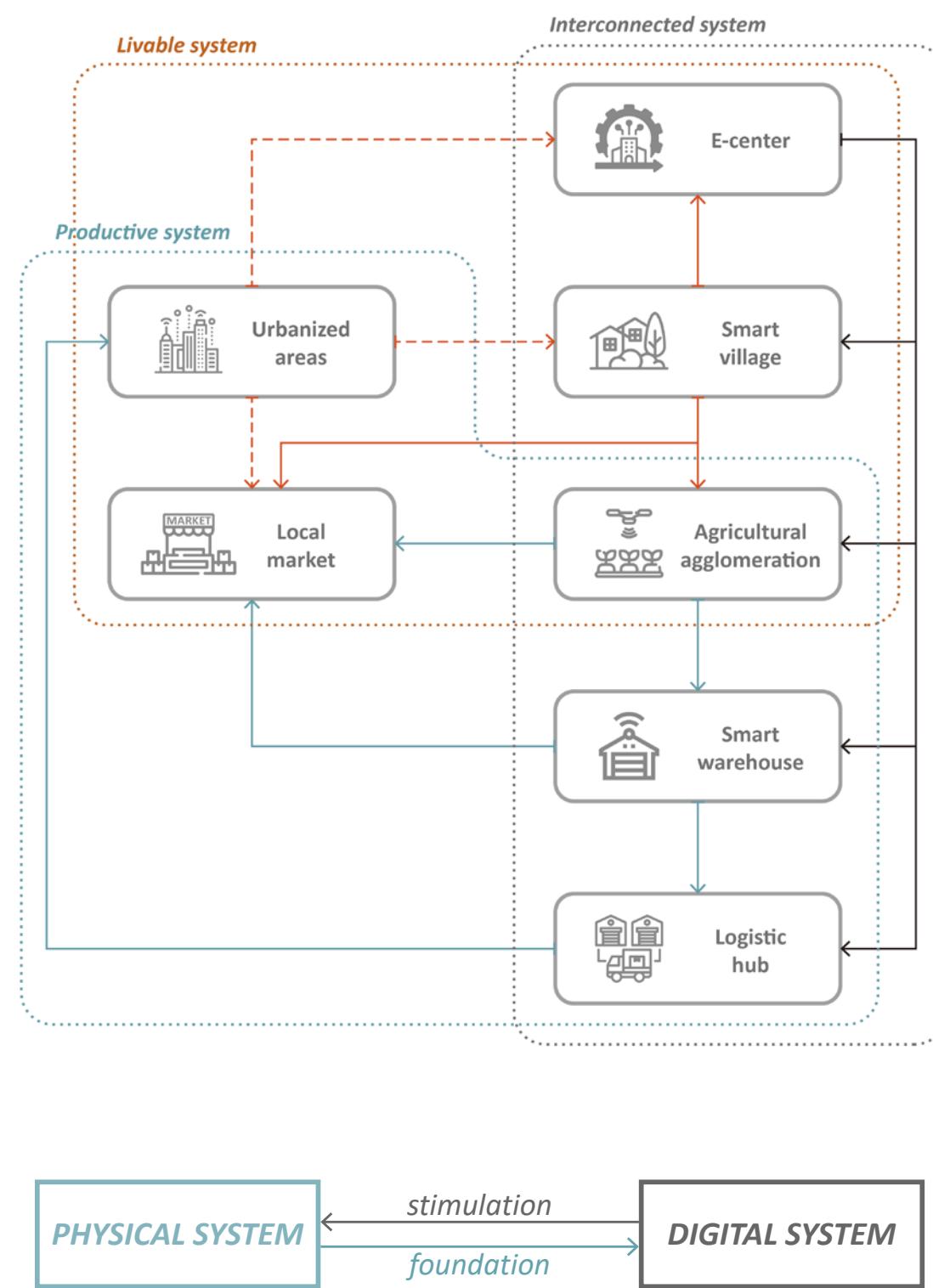


## *Design principles*

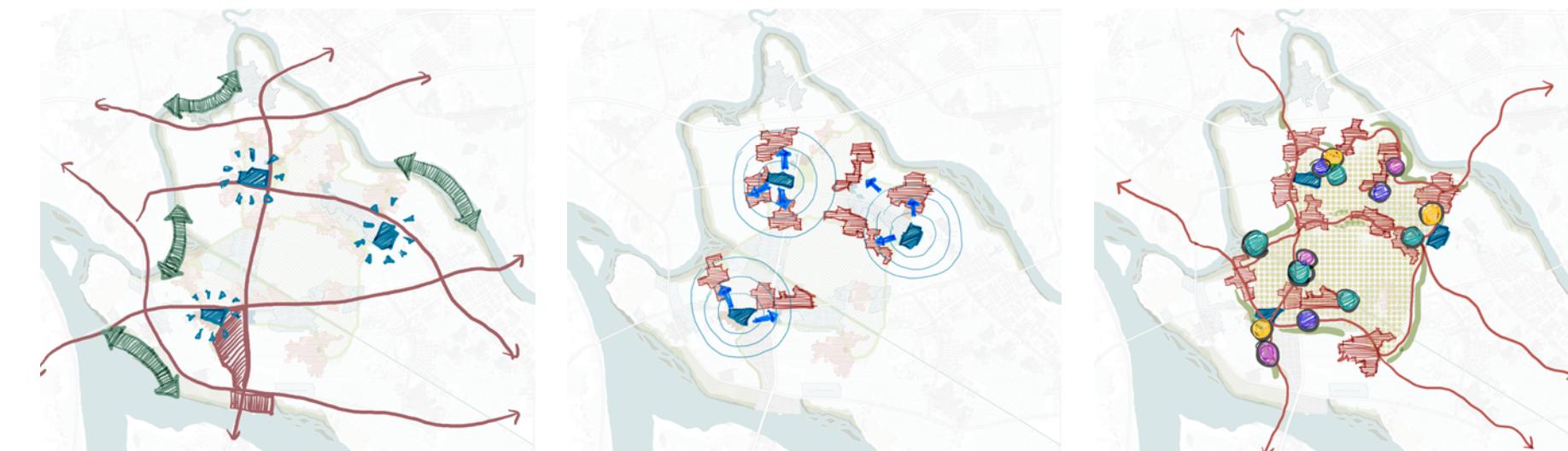


# APPLICATION

How can the network system positively impact the development of localised industrial structures and sustainable agriculture?



**The physical network enable villages cooperate with each other to connect a solid bond**



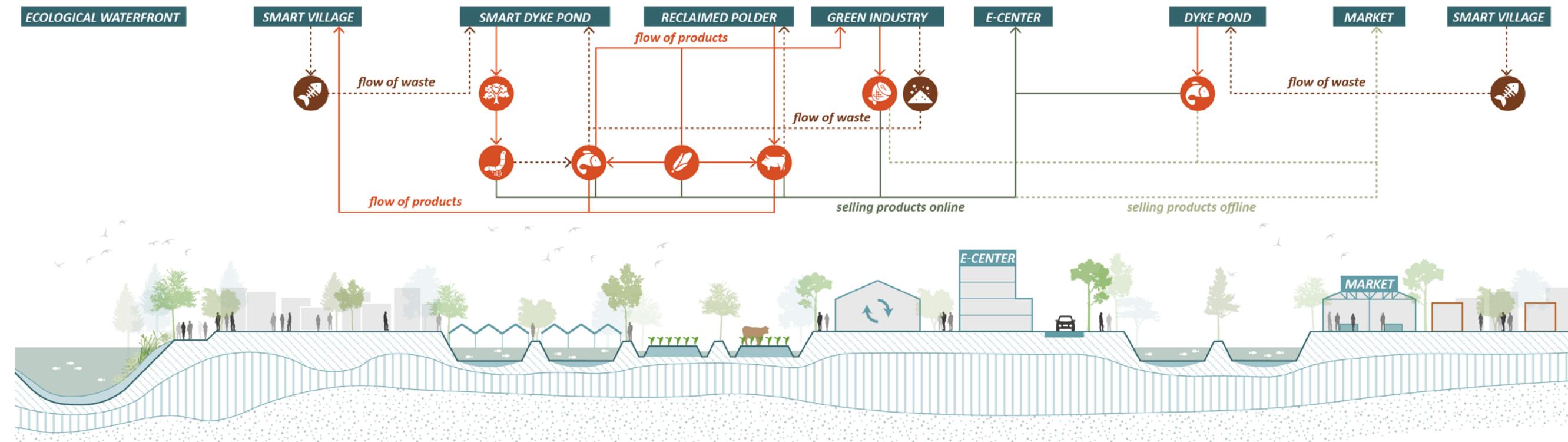
**The Internet network supports village development with an integrated system**



## APPLICATION

How can the network system positively impact the development of localised industrial structures and sustainable agriculture?

*The creation of a circulation system for cooperation between agricultural-based industry*

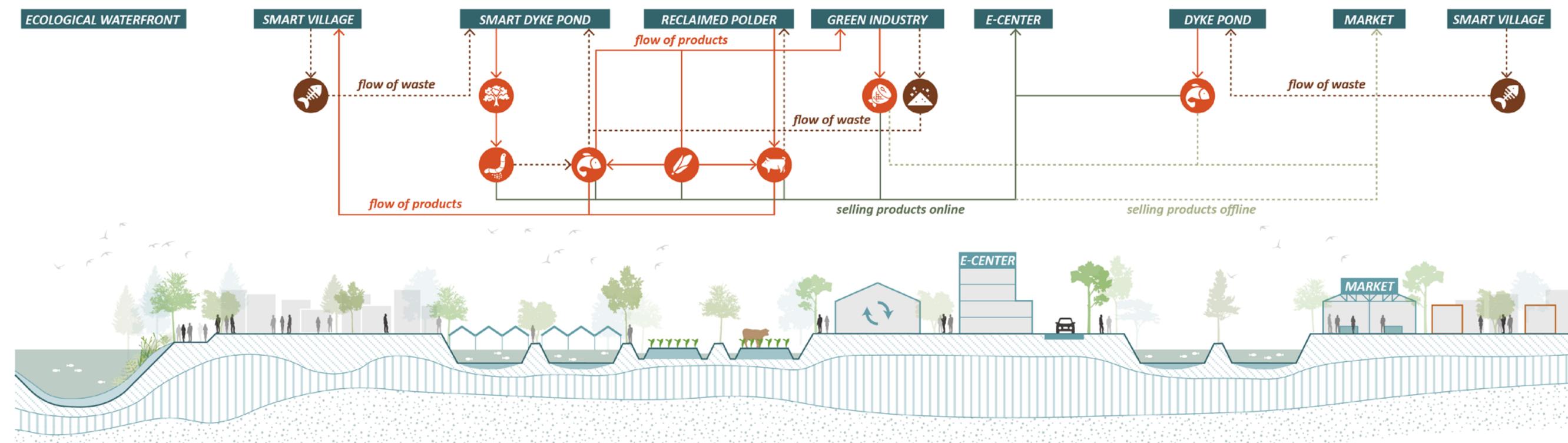


# APPLICATION

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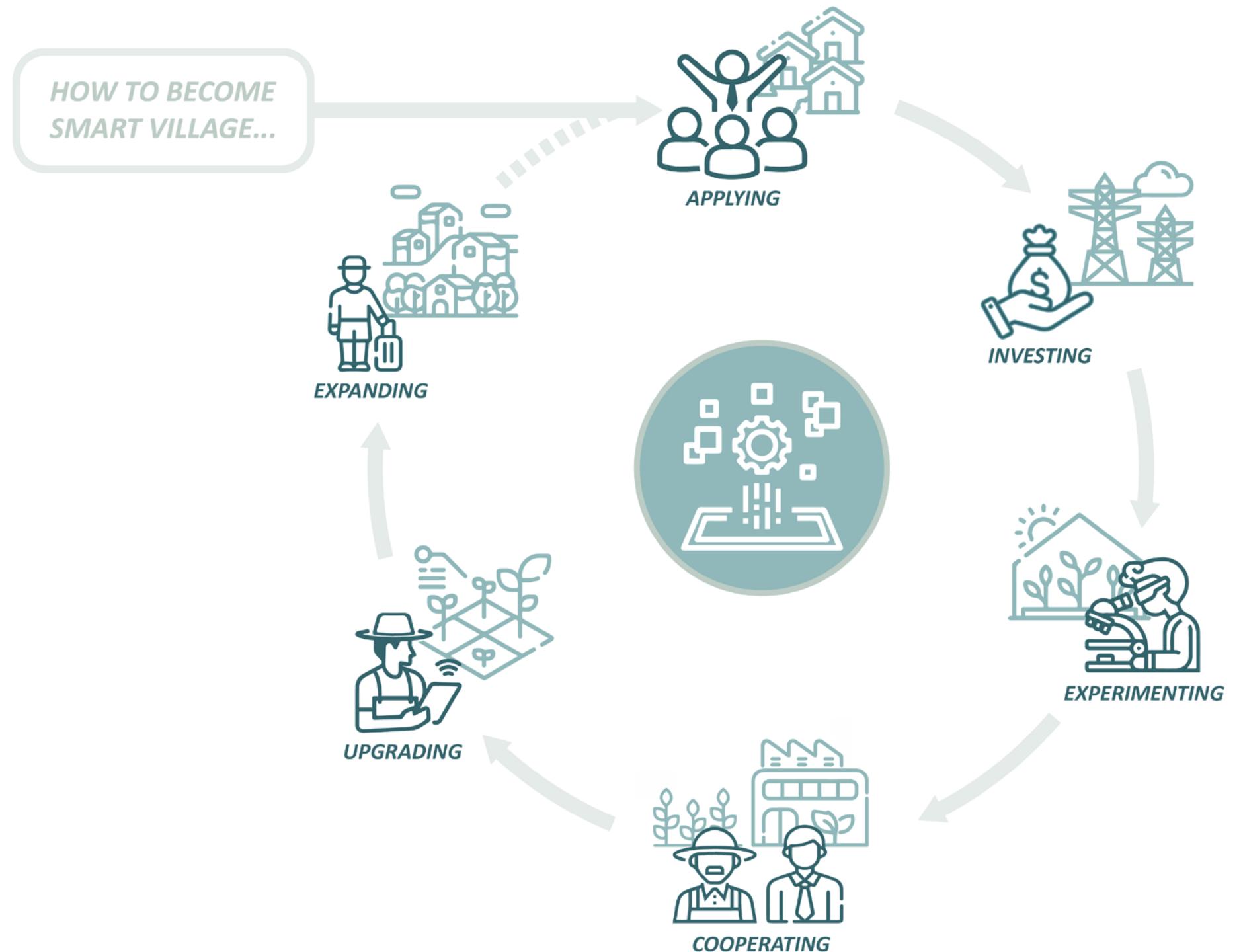
*The creation of a circulation system for cooperation between agricultural-based industry*



## REFLECTION

### *A guidance of Smart Village development*

智慧乡村发展指引



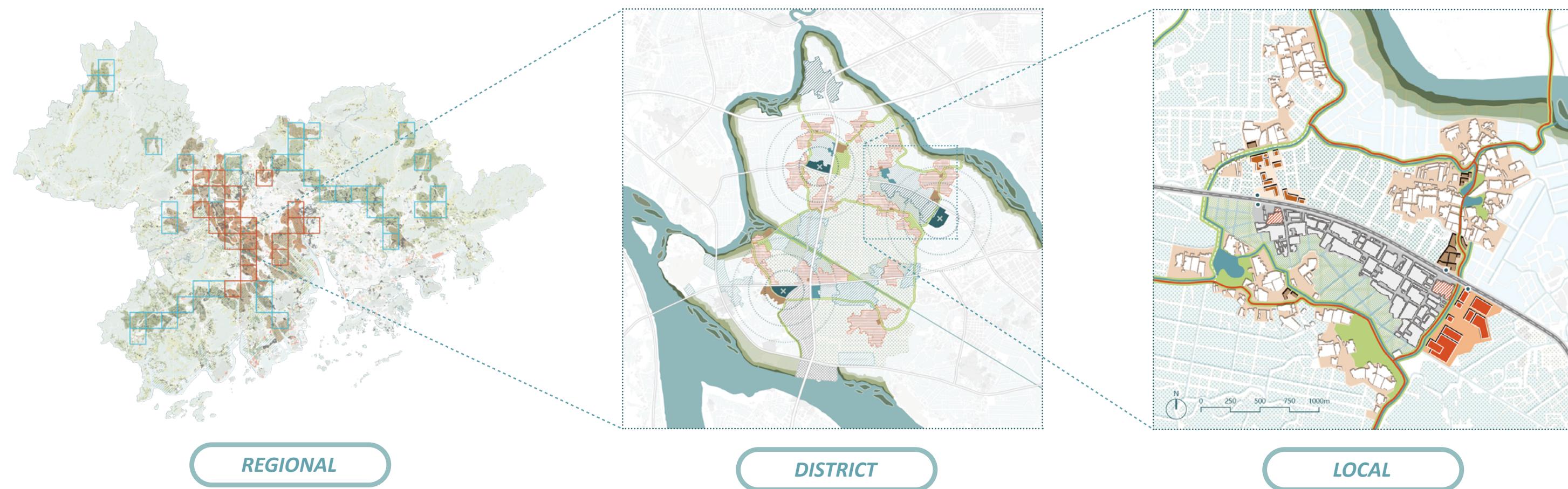
*Smart village as an independent developing framework for rural areas*

*Agricultural-based strategies are essential principle for rural revitalisation*

*Spatial conditions are the basis for the thriving of smart village development*

## *Smart village as an independent developing framework for rural areas*

智慧乡村是乡村区域的独立发展框架



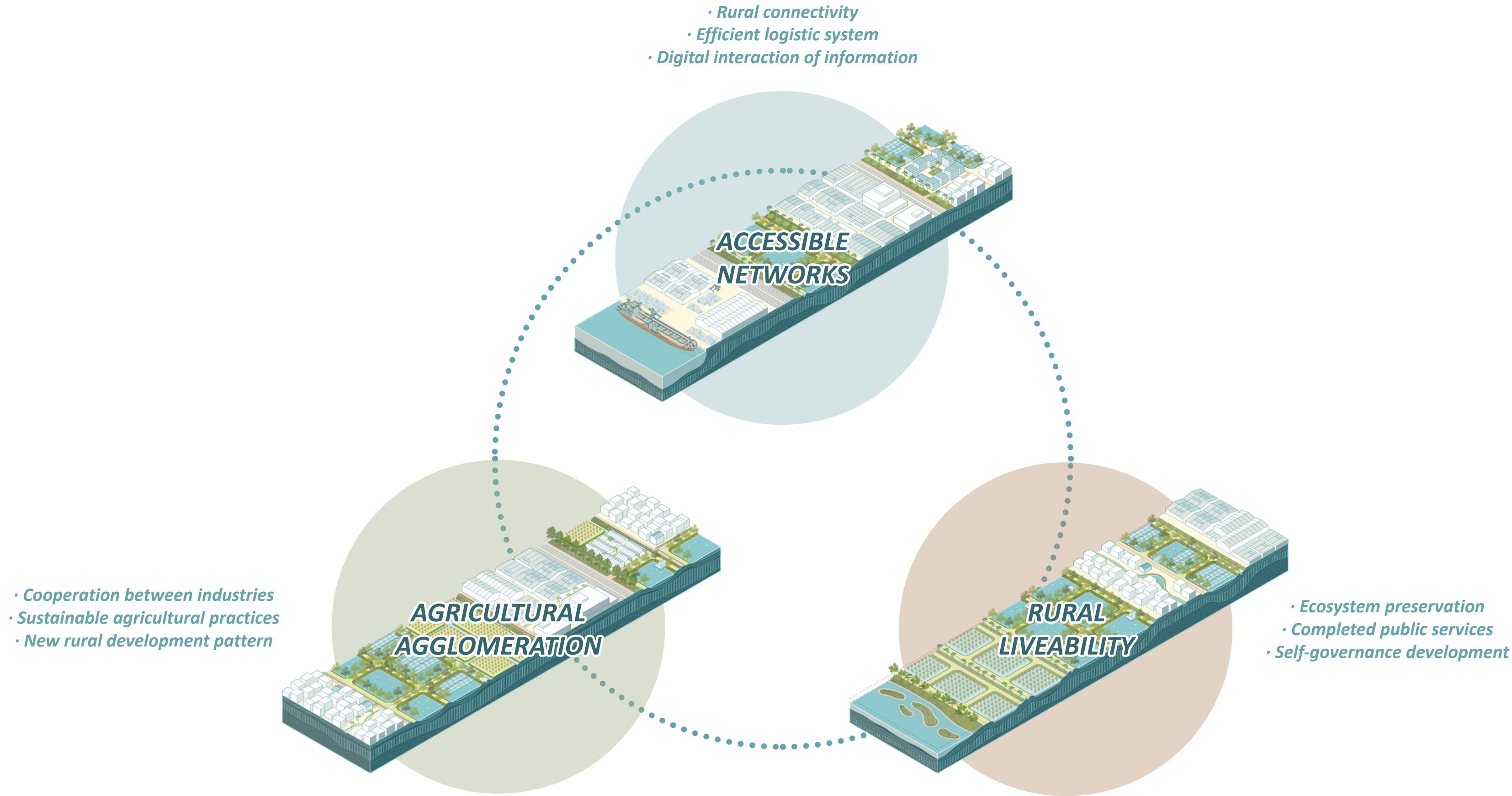
## *Agricultural-based strategies are essential principle for rural revitalisation*

农业策略是乡村振兴的基本原则



*Spatial conditions are the basis for thriving smart village development*

空间条件是智慧乡村发展的基础



**Let's look forward to a smart future!**

