

Rural Revitalization Beyond Administrative Boundaries: A Case Study of Villages Surrounding Taihu Lake, China

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Abstract

This study explores cross-boundary rural revitalisation in the “Six Villages around Taihu Lake,” a pilot zone for urban-rural integration in Huzhou, China. Facing challenges such as fragmented governance and resource imbalance, the villages adopted a collaborative model centred on spatial planning, industrial coordination, shared infrastructure, and multi-stakeholder governance. This approach has transformed administrative divisions into functional communities, fostering industrial complementarity and inclusive governance. The model shifts focus from an “administrative region economy” to a more resilient “functional area economy,” offering valuable insights for overcoming boundary constraints and promoting sustainable rural development in China and beyond.

Keywords: Rural Revitalisation; Urban-rural Linkages ; Administrative Boundaries ; Urban-rural Governance

1 Introduction

Against the backdrop of intensifying global challenges—ranging from climate change and land competition to food security crises and ecological degradation—the spatial dynamics of urban-rural interactions are being fundamentally reshaped. These compound pressures impose systemic constraints on regional sustainable development. In this context, Urban-Rural Linkages have emerged as a pivotal concept in the global sustainable development agenda, offering a pathway to address entrenched development dilemmas. The United Nations' 2030 Agenda for Sustainable Development explicitly calls for the strengthening of national and regional planning frameworks to foster social, economic, and environmental connections between urban agglomerations, peri-urban zones, and rural areas (United Nations, 2015). In alignment with this, the UN-Habitat (2019) publication *Urban-Rural Linkages: Guiding Principles* outlines a value-based and operational framework designed to support integrated territorial development through context-specific strategies.

Correspondingly, China has advanced its own agenda through policies promoting urban-rural integration and rural revitalisation, shifting from a historically dualistic spatial structure toward a stage characterised by bidirectional flows of factors and functional complementarity. However, local implementation of these national strategies continues to face significant challenges—chief among them, the constraints imposed by administrative boundaries. These boundaries hinder the efficient flow of resources, perpetuate uneven development, and dilute governance effectiveness. Overcoming such institutional fragmentation is thus critical for advancing regional coordination and integrated development.

This study focuses on the rural areas along the Taihu Lake shoreline in Huzhou, a city within the Yangtze River Delta region that was designated in 2019 as a national pilot zone for urban-rural integration. As an early experimental site for reforms in land allocation, population mobility, infrastructure connectivity, and cross-boundary rural revitalisation, Huzhou offers a valuable case for empirical analysis. This paper addresses three core research questions:

- (1) What specific initiatives have facilitated rural revitalisation across administrative boundaries?
- (2) Which policies and programmes have supported these efforts?
- (3) What outcomes have been achieved as a result?

2 Literature Review

As a major national strategy in China, rural revitalisation aims to stimulate endogenous rural development by promoting thriving industries, liveable environments, social civility, effective governance, and increased prosperity. However, conventional rural development models—predominantly based on individual administrative units—alongside traditional administrative-region-based economies, have increasingly revealed their structural limitations. Administrative boundaries often act as invisible barriers to the free flow of resources, integrated industrial development, joint infrastructure provision, and coordinated ecological governance. These limitations have resulted in inefficient resource allocation, industrial homogeneity, insufficient innovation (Yu and Zhao, 2009),

duplication or inadequacy in public infrastructure, and fragmented responses to cross-boundary ecological challenges. Consequently, they constrain the enhancement of regional competitiveness and the achievement of sustainable development goals.

Given these challenges, traditional governance structures based on administrative divisions no longer suffice to meet the complex demands of rural revitalisation. Breaking down administrative silos and promoting cross-boundary planning, coordination, and collaboration is therefore essential for overcoming rural development bottlenecks and unlocking the systemic benefits of regional integration. It is within this context that trans-boundary planning has emerged as a vital strategy for spatial restructuring, coordinated resource allocation, and collaborative regional development. As urban–rural integration and regional cohesion accelerate, rural areas are no longer isolated or static spaces but rather nodes embedded within multi-level, multi-actor interaction networks.

Trans-boundary planning plays a crucial role in three main respects. First, it enhances resource allocation efficiency, particularly in rural areas where ecological, industrial, and infrastructural advantages are unevenly distributed. Coordinated planning across administrative boundaries enables the optimal mobilisation and integration of such diverse resources (Yang and Chen, 2024). Second, it fosters systemic governance by addressing the integrated nature of ecosystems, infrastructure networks, and cultural landscapes—many of which transcend administrative borders. Governance based on natural or functional spatial units is often more scientific and coherent than purely administrative approaches. Third, it supports collaborative industrial development by enabling innovation ecosystems, industrial chains, and service systems to operate beyond jurisdictional limits, responding more flexibly to cross-boundary demands (Zhu, Sun and Li, 2024).

Trans-boundary planning in China operates at multiple scales (Luo, Qiu and Liu, 2023). At the macro level, inter-provincial planning forms part of major national strategies—such as the Yangtze River Delta Integration, the Greater Bay Area initiative, and Beijing–Tianjin–Hebei coordinated development (Tao, 2020). These efforts require strong central leadership, high-level institutional mechanisms (e.g. joint conferences between provinces), and aim to address infrastructure, watershed governance, ecological barriers, and market integration (Chen and Zhong, 2017). Inter-municipal planning focuses on collaboration between adjacent prefecture-level cities within a province. With more concentrated coordination mechanisms, these plans address industrial synergies, integrated transport, shared public services, and peri-urban cooperation within urban agglomerations or metropolitan areas (Li, Duan and Jiang, 2025). Inter-county planning, within or between neighbouring prefecture-level cities, is more operationally feasible, tackling development imbalances at county borders, industrial connectivity, environmental protection, and coordinated social governance. It plays a key role in bridging the “last mile” of regional integration. At the micro level, inter-town and inter-village planning targets localised collaboration between adjacent rural settlements, focusing on integrated resource use, reducing redundant competition, and developing functional rural clusters such as agricultural parks or tourism zones. These efforts also support joint public services and the governance of cross-boundary environmental concerns, such as river basins and waste management, boosting collective competitiveness and strengthening grassroots collaboration.

These different levels of planning are interlinked and mutually supportive, forming a multi-scalar, layered coordination framework that spans from macro strategy to micro-level implementation. Together, they provide a robust pathway for advancing rural revitalisation beyond administrative constraints.

In recent years, trans-boundary planning has become a key topic in urban and regional studies, with expanding and deepening academic interest. One central focus has been the design of governance mechanisms, including intergovernmental collaboration, multi-stakeholder participation, and regional governance platforms. Another key area involves planning tools and methodologies, such as integrated spatial planning, functional zoning, and ecological network design—particularly prominent in environmentally sensitive and peri-urban areas.

A third concern relates to interest alignment and policy coordination, as the diversity of stakeholders and the fragmentation of administrative authority pose challenges to cost-sharing, benefit distribution, and sustainable cooperation. However, existing research has largely concentrated on urban agglomerations, metropolitan peripheries, or large-scale cross-boundary zones, with relatively limited attention paid to village- and township-level planning in rural contexts (Yang and Lu, 2023).

In practice, trans-boundary planning spans a wide range of applications. One key area is ecological governance, especially in river basin management and landscape-level restoration efforts, which inherently cross administrative borders and require coordinated action (Li et al., 2021; Talukder et al., 2020). Another is joint tourism development, where multiple villages or counties collaborate to leverage shared natural or cultural resources and build regional tourism brands—benefiting local economies and residents (Manyane, 2017). Additionally, shared infrastructure development—such as road networks, water supply systems, waste disposal, and sewage treatment—has become a practical focus area (Chavez et al., 2013), helping to reduce redundancy and resource waste. Cultural heritage preservation and intangible heritage promotion are also emerging areas, with efforts to jointly apply for heritage recognition, co-organise exhibitions, and coordinate branding and communication strategies.

In summary, trans-boundary planning is transitioning from conceptual exploration to institutionalised practice, from single-sector interventions to integrated approaches, and from isolated examples to more standardised mechanisms. It not only expands the spatial and systemic horizons of rural revitalisation but also catalyses fundamental changes in governance structures and development models. Within the broader context of spatial integration, regional coordination, and urban-rural linkages, trans-boundary planning is set to remain a crucial instrument in shaping new rural geographies and achieving high-quality revitalisation.

3 Study Area: The Six Villages around Taihu Lake in Huzhou

3.1 Geographic Location

The Six Villages around Taihu Lake are located in the northern part of Wuxing District, Huzhou City, along the southern shore of Taihu Lake. The area spans two administrative units: the High-Tech Zone and Zhili Town. It comprises six administrative villages: Huanlou, Xulou, Yanglou, Yigao, Wupu, and Miaodou, covering a total area of 17.1 square kilometres. Situated within the “urban belt along the southern shore of Taihu Lake,” the Six Villages serve as a transitional zone between Huzhou’s urban core and the surrounding lake region. The area lies approximately 15 kilometres from downtown Huzhou and 12 kilometres from Huzhou East High-Speed Railway Station.

To the north, the region borders Taihu Lake and the Ring Taihu Road, while the southern boundary adjoins the Shanghai–Chongqing Expressway. To the east, it connects with the Zhijiang East Expressway. The location benefits from accessibility to three international airports—Shanghai Hongqiao, Hangzhou Xiaoshan, and Nanjing Lukou—all within a two-hour drive.

3.2 Resource Endowments

The “Six Villages around Taihu Lake” are situated in the core area of the Taihu Lougang waterway system, endowed with unique and rich resources. The Lougang system is an ancient hydraulic engineering network developed by early settlers to adapt to the low-lying, water-rich environment along the Taihu lakeshore. Its hallmark lies in distinctive wetland drainage techniques, an engineered structure of transverse ponds and longitudinal channels, and a complementary set of water management infrastructures. Originating in the Xia and Shang dynasties and undergoing extensive embankment construction and channel regulation from the Spring and Autumn period to the Five Dynasties, the system gradually perfected the lakeside dykes and sluice gate waterways that regulate Taihu’s water storage and discharge. This facilitated the gradual transformation of tidal flats into a complex landscape of rivers, farmlands, settlements, towns, and an integrated water management regime, establishing the Taihu Lougang and Tangpu Weitian systems and turning the Taihu basin from a sparsely populated land into a prosperous “land of fish and rice”. By the Song dynasty, intensified land use and the rise of commercial agriculture along the Lougang embankments led to rapid growth in high-value industries such as sericulture and aquaculture, positioning Huzhou as a nationally important production centre for agricultural products and textiles.

The Six Villages boast an 8-kilometre lakeside scenic corridor along Taihu Lake, characterised by picturesque natural landscapes of paddy fields, egrets, and streams, evoking the poetic imagery of the Jiangnan water towns. Notably, the water quality of Taihu has significantly improved in recent years, achieving national standards for a good-quality lake throughout the year for the first time. The Lougang water system forms the ecological backbone of the area, underpinning the urban green and blue infrastructure. Numerous historical and cultural assets are closely intertwined with this water system.

This area also possesses a profound historical and cultural heritage, serving as the core zone of Taihu Lougang culture. Yigao Village preserves a wealth of ancient architecture, including the Taihu Lougang Culture Exhibition Hall, the Woodblock Printing Art Museum, and the Lake Mirror Hall, collectively known as the “Six Halls, One Institute, and One Plaza”. Local cultural vitality is further expressed through traditional agricultural festivals such as the “Taihu Lougang Folk Tourism Harvest Festival”, which actively promotes the Lougang cultural identity. Additionally, the Six Villages have nurtured related cultural strands including canal culture, rice cultivation culture, and silk culture, creating a distinctive cultural corridor.

To safeguard and transmit these resource endowments, Huzhou City has enacted protective regulations to institutionalise the conservation of the Taihu Lougang system. Complementary cultural events continue to foster the cultural heritage of the region. Through cluster-based rural operations, the Six Villages have established market-oriented entities that connect stakeholders’ interests, attracting over 60 new industrial and business projects annually with a total investment exceeding 1.5 billion RMB.

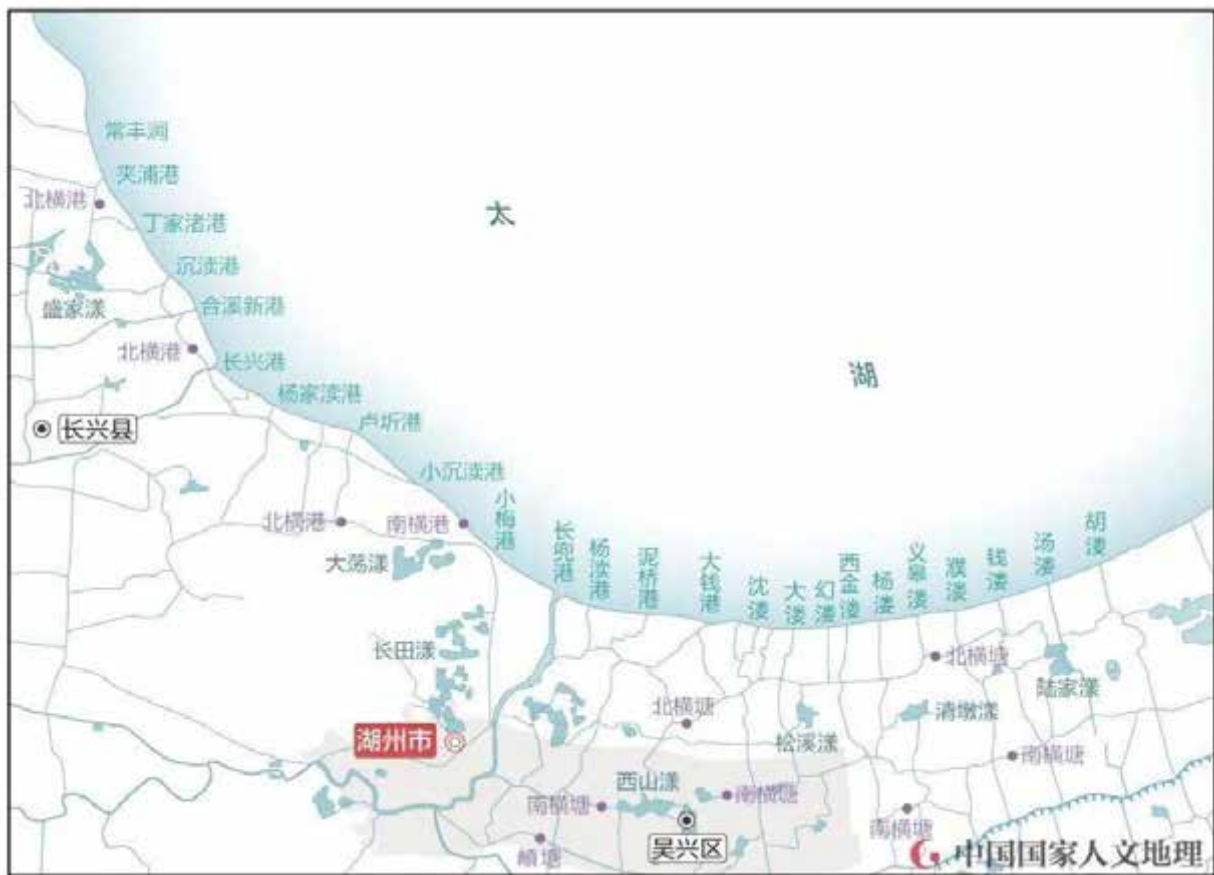


Figure 1. Distribution Map of the Lougang Waterway System in Southern Taihu
(Source: https://m.sohu.com/a/425597230_434584)

3.3 Development Challenges

The traditional advantage industry of the Six Villages around Taihu Lake lies in aquaculture, with crab farming being a key activity. Villages such as Xulou, Huanlou, and Yanglou primarily focus on fruit and vegetable cultivation, with Xulou Village having a relatively sizeable loquat plantation; however, its development has been constrained by limited brand recognition. At the outset of their collective development efforts, the Six Villages faced multiple challenges. Firstly, there was uneven resource endowment across the villages, each encountering distinct development bottlenecks: some were constrained by land scarcity limiting project capacity, others struggled with a narrow industrial structure and short value chains, while some suffered from low visibility and insufficient local attraction. Secondly, based on their individual development situations, villages often adopted a “go-it-alone” mentality—leading early-developing villages to fear resource dilution and loss of

competitive advantage, culturally rich villages to worry about losing their core status, and weaker villages to risk industrial marginalisation, resulting in varied willingness to collaborate. Furthermore, cross-administrative coordination required overcoming the traditional fragmented ‘each village for itself’ approach, with the absence of unified planning and benefit-sharing mechanisms increasing the cost of cooperation. Additionally, industrial homogeneity among the villages was evident, with a lack of clear, effective differentiation in industrial roles, which risked internal competition rather than fostering synergies.

Table 1. Basic Industries and Primary Sources of Income for Villagers in the Six Villages around Taihu Lake
Source: Compiled by the author based on the *Wuxing District ‘Six Villages around Taihu Lake’ New Era Beautiful Countryside Model Area Planning Scheme*

Administrative Village	Primary Industries	Main Sources of Income for Villagers
Huanlong Village	Small-scale aquaculture, Taihu Lake fishing, vegetable cultivation	Income from Taihu fish market (fishing), home-based children's clothing workshops
Xulong Village	Crab aquaculture, loquat cultivation, leisure agriculture, organic vegetables	Home-based children's clothing work-shops, loquat cultivation
Yanglong Village	Crab aquaculture, vegetable cultivation, guesthouses	Home-based children's clothing work-shops, vegetable cultivation
Yigao Village	Historic village tourism, crab aquacul-ture, vegetable cultivation	Tourism services, home-based children's clothing workshops
Wupu Village	Aquaculture, fruit cultivation, vegetable cultivation	Home-based children's clothing work-shops, gardening and landscaping work
Miaodou Village	Aquaculture, fruit and vegetable culti-vation	Home-based children's clothing work-shops, aquaculture

4 Cross-Administrative Boundary Rural Development Practices in the Taihu Lake Region

4.1 Integrated Spatial Planning: Crafting a Unified Development Blueprint

Huzhou’s “Six Villages around Taihu Lake” have broken free from the spatial governance constraints typical of traditional administrative villages by employing cross-scale spatial restructuring combined with integrated multi-plan coordination. This has established a systematic framework for regional collaborative development. At its core, the approach is guided by principles of functional complementarity and factor mobility, reconfiguring dispersed village spaces into an organically connected “regional economic community.” From a planning perspective, a comprehensive spatial industrial layout covering all six villages has been developed, clearly defining differentiated functional roles—such as catering services, homestay clusters, cultural tourism experiences, youth innovation incubation, agricultural production, and new industry experimentation—resulting in a spatial structure of “core nodes – functional clusters – network system.” This integrated planning not only enables the holistic allocation of land, ecological, and cultural resources but also promotes infrastructure connectivity (e.g., cross-village greenways, waterway routes) and shared public services, reducing regional transaction costs and providing a physical foundation for industrial collaboration and factor flow. Fundamentally, this model transforms the “divisive effect” of administrative boundaries into a “cohesive effect” of functional complementarity through institutional innovation in spatial planning, offering a valuable practical example of spatial governance for urban-rural integration at the county level.



Figure 2: Functional Zoning Plan of the “Six Villages around Taihu Lake”
(Source: Agriculture and Rural Affairs Bureau of Wuxing District, Huzhou City)

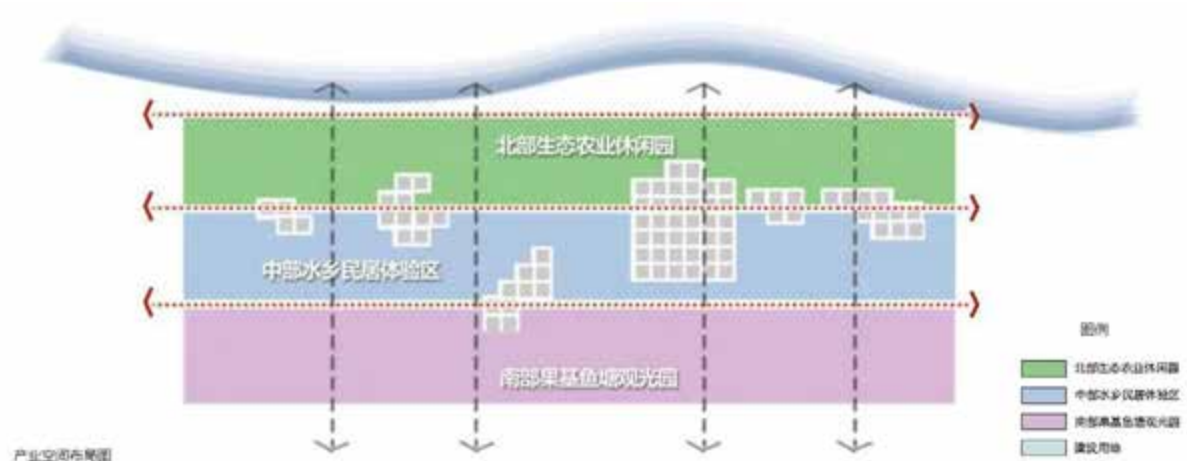


Figure 3: Industrial Layout Plan of the “Six Villages around Taihu Lake”
(Source: Wuxing District ‘Six Villages around Taihu Lake’ New Era Beautiful Countryside Model Area Planning Scheme)

4.2 Economic Development Coordination and Complementary Specialised Industries

The Six Villages around Taihu Lake have established an industrial coordination model characterised by differentiated positioning, integration of industrial chains, and cross-village flow of factors. Based on the principle of ‘one village, one product’ with specialised divisions of labour, a complementary industrial layout has been formed:

Huanlou Village focuses on dining (such as the 'Yili Xiang' Food Street), Yanglou Village specialises in homestays, Yigao Village develops cultural tourism (Lougong Cultural Park), Wupu Village introduces youth entrepreneurship ventures (cafés, creative spaces),

Xulou Village advances specialised agriculture (loquat cultivation), and Miaodou Village expands modern tourism (low-altitude economy, RV camping sites). Each village's industrial positioning is precisely differentiated, effectively avoiding homogeneous competition and jointly forming a complete consumption chain covering food, accommodation, tourism, creativity, agriculture, and emerging business models.

At the level of industrial integration, the six villages focus on the deep fusion of agriculture, culture, and tourism as the core development path. Speciality agricultural products (such as loquats and lake crabs) have extended from simple production to experiential consumption, creating a full value-added chain from cultivation through processing to cultural tourism experiences. Typical examples include loquat picking in Xulou Village, the cultural-tourism operation of the 'Yang Guizhen' Crab Manor, and large-scale crab farmers driving over 200 households across the six villages to participate in bundled packaging. This transforms agricultural resources into cultural-tourism attractions, achieving an average household income increase of 20,000 yuan. This integration not only enhances the added value of agricultural products but also strengthens regional industrial resilience through diverse activities such as educational tours, team-building exercises, and festivals.

Another key feature is the free flow and collaboration of industrial factors across villages. Production factors overcome administrative village barriers to achieve efficient allocation: labour is divided across villages within the crab industry chain (for example, crab farming in Xulou and joint processing involving all six villages); customers are shared across villages through unified brand marketing and integrated tourism route design (such as combined tickets for dining, homestays, and cultural experiences); and capital and social projects (such as cafés and camping sites) are established according to each village's differentiated positioning. This dynamic circulation activates resources across the entire region, forming an industrial ecosystem characterised by 'distinct village specialities and coordinated regional linkage.'

Table 2 Collaborative Economic and Industrial Model of the Six Villages around Taihu Lake (Source: Compiled by the author)

Coordination Mechanism	Specific Practices	Typical Cases	Outcomes
Differentiated Industrial Roles	'One Village, One Speciality' with precise positioning: • Huanlou (Dining), Yanglou (Homestays), Yigao (Cultural Tourism) • Wupu (Youth Entrepreneurship), Xulou (Agriculture), Miaodou (Emerging Industries)	Huanlou's 'Yili Xiang' food street accommodates 2,000 diners; Wupu cafés attract young entrepreneurs	Avoids internal competition and builds a complementary industrial chain
Industrial Chain Integration	Agricultural extension into secondary and tertiary sectors: • Agriculture (Loquat/Crab) → Processing → Cultural tourism experiences (e.g., fruit picking, educational tours, cuisine)	Crab farmers expand operations across villages, involving 200 households with an average income increase of ¥20,000; Yang Guizhen Crab Manor certified as a National 3A Tourist Attraction	Extends the value chain and increases the premium of local produce (e.g., crab farming)
Cross-Village Flow of Factors	Cross-village movement of labour, visitors, capital, and branding: • Labour: Division of labour in the crab industry chain • Visitors: Tourism routes linking all six villages • Branding: Unified regional IP operation	Joint development of the 'Six Villages around Taihu Lake' tourism brand; Village-hopping routes integrate homestays, dining, and cultural sites	Activates underutilised labour and generates income across the entire region

4.3 Joint Infrastructure Development and Regional Resource Sharing

4.3.1 Integrated Transport Infrastructure

The Six Villages around Taihu Lake have implemented a coordinated approach to transport infrastructure by integrating resources to construct a 6.9-kilometre interconnected pedestrian greenway and a 2.6-kilometre circular waterway. These routes not only facilitate daily travel for local residents but also provide convenient corridors for tourists. In addition, the scenic enhancement project of the Huxue Road, spanning 4.5 kilometres and covering Yanglou, Huanlou, and Wupu villages, included façade renovations, utility line upgrades, greening and lighting improvements, and landscape nodes. Another key initiative, the Shuichan Road upgrading project, stretches 7.5 kilometres from Huanlou to Wupu and comprises road surface improvements, roadside landscaping, and upgrades to adjacent industrial park access roads. Shared mobility facilities, such as public bicycles, have also been introduced to enhance local mobility and connectivity.

4.3.2 Shared Public Services Infrastructure

The six villages have jointly mobilised multi-level public funds totalling 628 million yuan, of which 370 million yuan has been allocated to infrastructure support. These funds have supported the upgrading of village-level infrastructure and living environments, including the development of parking facilities, parks, and cultural exhibition spaces. For instance, the former silk cocoon station in Yigao Village has been repurposed into the Taihu Lougang Culture Exhibition Hall, enhancing the village's cultural atmosphere and identity.

4.3.3 Digital Transformation and Smart Countryside Development

A digital upgrading initiative has been launched across the six villages to modernise service infrastructure. Rooted in local resource endowments, geographical features, industrial strengths, and cultural heritage, this initiative aims to build future-oriented rural settlements that are distinctive in character, well-functioning, industry-driven, environmentally appealing, digitally connected, and governed with integrated smart systems. The vision encompasses an ecologically sustainable, economically productive, and socially vibrant countryside that reflects the principles of common prosperity.

4.3.4 Ecological Restoration and Environmental Enhancement

Infrastructure development in the Six Villages has been closely aligned with ecological conservation objectives. Wuxing District has systematically promoted ecological governance across the Lougang region, including ongoing dredging of waterways and the ecological restoration of lakes and ponds. To date, 7.51 million cubic metres of silt have been cleared and seven key Lougang channels leading into the lake have been expanded. A further 16.9 kilometres of lakeside greening has been implemented, enhancing the ecological landscape. The area has also developed a 25-kilometre section of the Zhejiang Loop Trail encircling the villages. Within the cluster, 21 bus stops have been installed along two main roads, with six public e-scooter stations currently in place and 14 more planned, significantly improving accessibility and transport connectivity across the region.

4.4 Social Capital Investment and Rural Operation

The *Six Villages around Taihu Lake* (Binhu Six Villages) in Huzhou have demonstrated notable success in exploring innovative models of rural operation. At the heart of this success lies the construction of a collaborative governance and development mechanism involving multiple stakeholders. Throughout this process, both municipal and district-level governments have played a pivotal role in strategic planning and policy support.

Specifically, the Huzhou Municipal Government and Wuxing District Government jointly led the formulation of the *Special Development Plan for the Binhu Six-Village Cluster*, which defined the region's overall development orientation, designated responsible construction entities, and clarified the direction for leading industries. In parallel, a dedicated working group – the *Binhu Six Villages Green Common Prosperity Taskforce* – was established, with earmarked fiscal investment allocated to ensure the delivery of infrastructure upgrades and the implementation of key projects.

Under the guidance of government, a multi-layered participation structure has emerged. At the village level, each administrative village has actively embraced the group-based development strategy, pooling resources and coordinating planning to jointly forge the 'New Lougang of Taihu' regional brand. This has significantly strengthened inter-village cooperation and complementary development.

Village collectives have also contributed by participating in project construction and providing key resources such as land, thereby sharing in the added value generated by rural operations.

On the market side, professional rural operation firms have been introduced, while private capital has also played an increasingly proactive role. For instance, Huzhou Miqi General Aviation Services Co., Ltd. invested in and operates an aerial sightseeing project in Huanlou Village, adding diversity to the local tourism offering. From the perspective of civil society, successful rural activation initiatives—such as *Gudui Xiangchuang* in Longshan Village, Miaoxi Town—have provided valuable reference points for creative revitalisation across the Binhu Six Villages.

Professional operating firms serve as central coordinators within the Binhu model. Wuxing Xinglou Construction and Development Co., Ltd. exemplifies such a role, taking responsibility for unified infrastructure planning, project investment promotion, and long-term operational management. Their standardised project implementation has markedly enhanced the rural built environment and overall quality. More importantly, the firm has systematically integrated the six villages' resources to build the 'New Lougang of Taihu' regional brand, which has accelerated the integration and value uplift of agriculture, culture, and tourism sectors. This in turn has improved regional visibility, attracted tourist footfall, and drawn external investment. Furthermore, Wuxing Xinglou has proactively partnered with leading national cultural-tourism operators, bringing in specialised expertise to elevate operational standards.

In terms of financial sustainability, Binhu Six Villages have pioneered a diversified investment and financing model, combining state-owned capital leverage, private sector participation, financial sector backing, and village collective co-funding. This mechanism has ensured stable capital flows to support the smooth implementation of numerous integrated agriculture-culture-tourism projects.

Talent revitalisation is another critical pillar underpinning the model. Wuxing District has introduced a series of targeted policies to facilitate the return of rural talent, including platforms for young people to launch rural start-ups and the rollout of the *Youth in the Village Initiative*. These efforts have attracted 45 entrepreneurial teams and over 900 young professionals to settle and innovate in rural areas. Capitalising on the collaborative development model, the Binhu Six Villages have emerged as a 'New Era Rural Community', characterised by strong resource agglomeration, compelling investment potential, and a high degree of attractiveness to both talent and capital. A supportive entrepreneurial ecosystem and broad development prospects have, in turn, rekindled enthusiasm among young people to return to and invest in rural revitalization.



Figure 4. Operational Framework for Rural Development in *The Six Villages around Taihu Lake* (Source: Compiled by the Author)

5 Conclusions

The case of the Six Villages around Taihu Lake in Huzhou represents an innovative and pioneering approach to collaborative rural revitalisation across administrative boundaries. At its core lies an institutional breakthrough and systemic reorganisation that effectively integrates dispersed administrative villages into a functionally complementary and synergistically linked *regional economic community*.

In terms of spatial planning, the villages have adopted a unified planning framework to dismantle traditional administrative barriers. A territory-wide industrial spatial layout was developed, assigning differentiated roles to each village and establishing a networked spatial structure. This integrated approach enables the holistic coordination of land, ecological, and cultural resources. By enhancing infrastructure connectivity and enabling the joint development and sharing of public services, the initiative transforms the 'fragmentation effect' of administrative boundaries into a 'convergence effect' of functional synergy. It thus provides a new spatial governance paradigm for urban-rural integration at the county level.

From an economic perspective, the Six Villages have adopted an industrial coordination strategy centred on differentiated positioning, industrial chain integration, and cross-village factor mobility. Through clear functional specialisation, the villages avoid redundant competition and jointly build a comprehensive and diversified consumption chain. Deep integration of primary, secondary, and tertiary industries extends the value of local agricultural products from basic production to cultural and tourism experiences, thereby enabling full-chain value enhancement. The free movement of productive factors—labour, visitor flows, and capital—across village boundaries ensures efficient allocation and underpins the formation of a resilient regional industrial ecosystem characterised by 'village-level specialisation, regional-level synergy'.

Shared infrastructure serves as the physical foundation of this regional collaboration. The integration of transport systems, public services, and ecological governance enhances the support capabilities of the region. Concurrently, digital transformation and the construction of smart villages have improved overall development resilience. Environmental restoration and ecosystem enhancement efforts not only safeguard ecological security but also lay the groundwork for sustainable industrial development.

Crucially, multi-stakeholder collaborative governance ensures the sustainability of the model. The government plays a leading role in planning and policy guidance, while professional operating companies are responsible for infrastructure development, brand operation, and commercial investment. Social capital and village collectives participate through equity-based resource contributions, enabling a hybrid governance structure that combines the efforts of government, market actors, and local communities. A diversified financing mechanism—leveraging public enterprise capital, private investment, financial support, and village collective funds—has ensured a stable flow of resources to key rural development projects. Meanwhile, targeted talent revitalisation policies have reactivated rural innovation potential, successfully attracting over 900 young entrepreneurs and 45 startup teams back to the villages, thereby injecting long-term vitality into the region.

The Six Villages model demonstrates three key transitions:

- **From 'administrative islands' to a 'functional community':** Spatial reorganisation through cross-scalar planning incorporates fragmented settlements into an integrated development framework, allowing for more efficient and coordinated allocation of resources and functions.
- **From 'homogeneous competition' to 'complementary symbiosis':** With differentiated division of labour, integrated industrial chains, and dynamic factor flows, a robust and flexible regional economic network has been created.
- **From 'single-agent control' to 'multi-stakeholder governance':** A cooperative governance model has emerged in which government, enterprises, collectives, and villagers share benefits and jointly assume responsibilities, ensuring inclusive and sustainable development.

This model, through the coordinated transformation of spatial structure, industrial organisation, and governance mechanisms, redefines the concept of the traditional 'administrative-region economy' as a 'functional-region economy'.

It not only enhances economic performance and improves livelihoods but also offers a replicable pathway for rural revitalisation by overcoming the limitations of administrative fragmentation through institutional innovation. Its core value lies in demonstrating that functional integration can unleash the endogenous potential of rural areas and unlock systemic dividends from regional collaboration—offering a scalable paradigm for urban-rural integration and cross-boundary revitalisation at the county level across China.

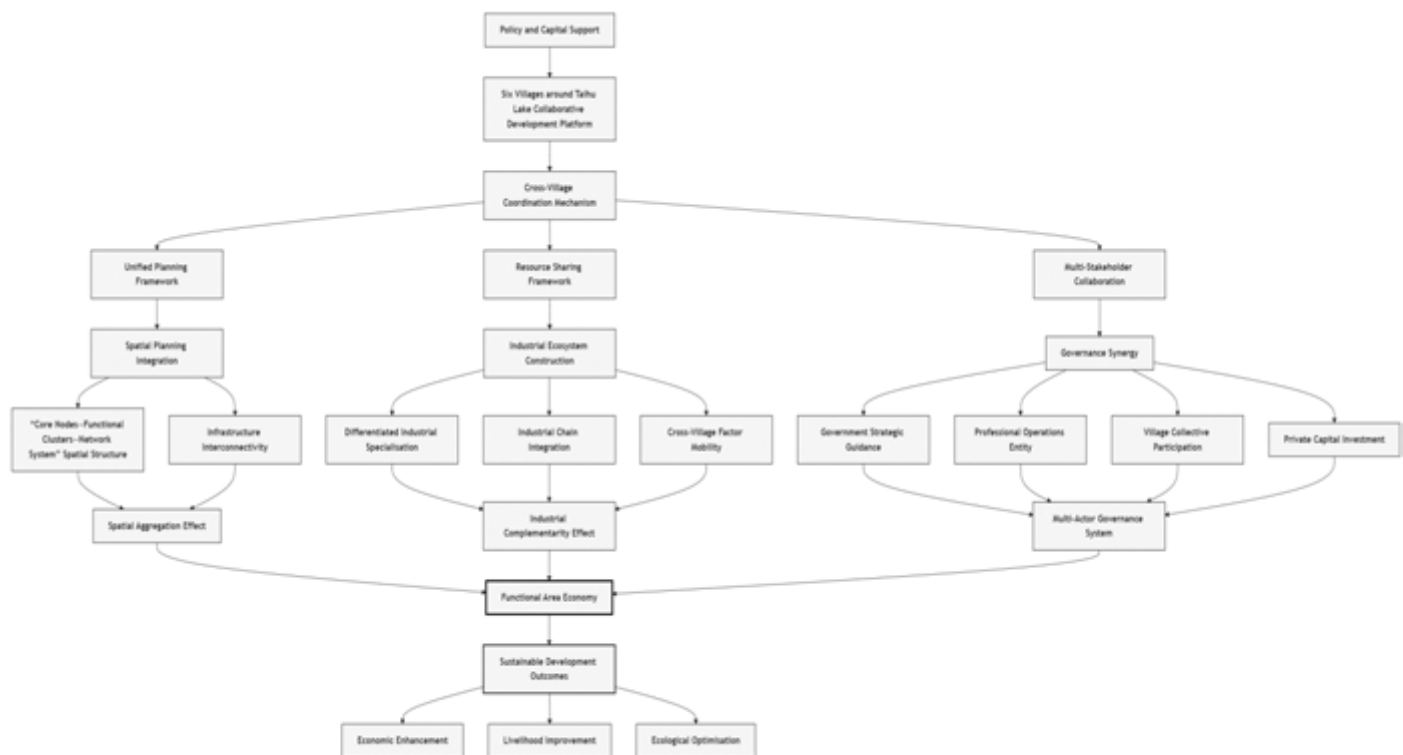


Figure 5. Cross-Boundary Rural Revitalisation Pathway of the Six Villages around Taihu Lake (Source: Compiled by the author)

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