Tales of a New Rural

From Furrow to Fiber: E-Commerce-Led Regeneration in the Chinese and Japanese Countryside

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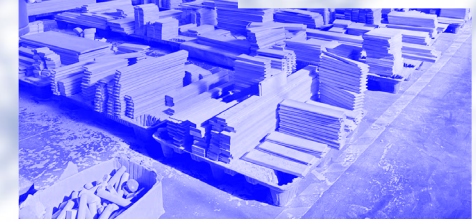

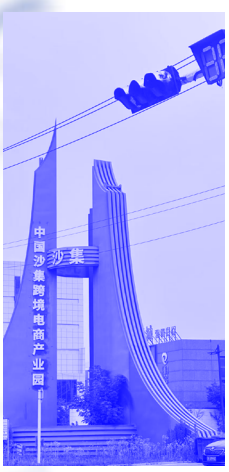

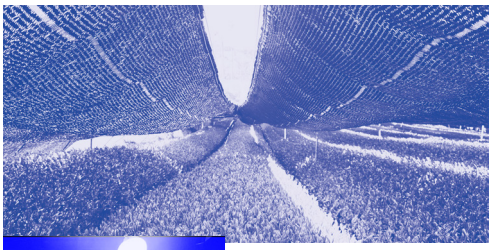

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I have travelled a long way, through many twists and turns, to finally present this master's thesis. Nineteen years of study have taken up one-fifth of my life. Perhaps today marks an ending, or perhaps it is just another beginning. Along this journey, I have faced setbacks and exclusion, but far more often, I have been fortunate—cared for, supported, and deeply loved by many people.

I come from a province in China known for its intense academic competition, where standing out requires extraordinary effort. Perhaps because I was never considered "smart", my college entrance examination—often regarded as a decisive moment in Chineses' life—ended in failure. Despite years of relentless effort from primary school to high school, and despite moments of achievement, the outcome did not change.

I entered an ordinary university in a remote region, but it was there that luck found me once again. My undergraduate supervisors, professors, and senior students gave me solid academic guidance and renewed confidence. With their encouragement, I maintained the top GPA in my major for two years and earned the sole opportunity to study as a visiting student at an university, which is two tiers above my home institution.

Yet at the new university, self-doubt crept back in. I questioned whether I deserved such resources. It was my classmates, roommates, professors, and department head who pulled me out of that mindset. During those two years, they constantly encouraged me—telling me to "jump" and to "reach out for what you want". Their words still echo in my mind today.

With their strength behind me, I took another leap and received the offer to pursue my master's degree at Politecnico di Torino. Here, I encountered a new world: new professors, new courses, new languages, and friendships from all over the globe. "Fiona, you're doing great", "You're capable" ,"You're hardworking and full of energy"—these words became the warmth that carried me forward.

With this support, I overcame numerous administrative problems, completed all the initial procedures in Italy on my own, and, while keeping up with my coursework, applied for international programs made possible by PoliTo's resources. These opportunities led me to Serbia, Japan, and the mountains of the Alps. For the first time, messages and friendships reached me from different parts of the world. I truly felt that I was walking toward the world—and the world was walking toward me.

The road has been long, but today, I have finally reached the moment of earning my master's degree.

I am deeply grateful to my parents, who have always trusted me, encouraged me, and supported me both financially and emotionally.

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I thank my boyfriend Harry, whose love, understanding, and emotional support over the past two years have been my strongest anchor.

I am grateful to all my friends—especially Alice, Alfredo, Alma, Elisa, Hossein, Leo, Maysa, Saman, Stefania, and all the seniors I met in the China Room. Your praise, help, and encouragement have reminded me of the world's kindness and made me love Italy more and more.

I also want to thank all my undergraduate mentors, who taught me to "jump," and gave me the courage to aim higher and go further.

Finally, I want to thank myself—the version of me who never stopped leaping upward.

Fiona,
You've worked so hard.
You've done so wonderfully.

To myself, I say:

Keep lifting yourself up, unconditionally, toward every place you wish to go.

And to everyone:

May we all live brightly in the present, stay true to ourselves, explore the world, and may the world always be at peace.

ABSTRACT

The rapid expansion of e-commerce platforms is fundamentally reshaping rural spaces, embedding them into global circuits of production, logistics, and consumption. This thesis examines the transformation occurring in rural areas through the emergence of e-commerce—a transformation that is altering rural economies and spatial configurations in China and Japan through the lens of critical urban theory (Roy, 2017; Brenner, 2009), logistical geographies (Cowen, 2014), and rural digitalization (Woods, 2012). Moving beyond conventional narratives of rural decline or revival, this research interrogates how digital infrastructures and platform-mediated economies are restructuring labor, land, and governance in non-urban territories.

In China, Taobao Villages exemplify the entanglement of rural spaces with e-commerce-driven development. These villages, integrated into Alibaba's logistical networks, serve as nodes in a broader system of decentralized production and rapid distribution (Lin et al., 2017; O'Connor, 2021). While they generate new economic opportunities, they also reinforce infrastructural dependencies, intensify labor precarity, and reproduce spatial inequalities (Wei et al., 2020). The growth of e-commerce logistics in rural China challenges traditional notions of rurality, as villages become extensions of an expansive digital supply chain.

In contrast, Japan's engagement with e-commerce in rural areas follows a different trajectory, often framed within state-led regional revitalization programs (Reimer and Nagata, 2008). Rather than mass-scale integration into globalized logistics, rural e-commerce in Japan is frequently positioned as a tool for sustaining local economies, promoting high-value niche products, and mitigating the impacts of demographic decline (Weaver et al., 2016). However, similar tensions arise concerning labor sustainability, infrastructural maintenance, and the limits of digital accessibility (Matanle, 2008).

By comparing these cases, the research explores the spatial dynamics of rural digitalization under platform capitalism, highlighting how e-commerce simultaneously enables new forms of economic participation while reinforcing uneven development. Ultimately, this study contributes to broader debates on logistical urbanism, digital economies, and the contested futures of rural transformation in an era increasingly shaped by digital infrastructures and market-driven innovation.

Tales of a New Rural

From Furrow to Fiber:
E-commerce-led Regeneration in the Chinese and Japanese Countryside

When furrow meets fiber, —whose countryside, and who gets to revitalize?

当沟壑遇到光纤，谁的乡村，谁来振兴？

谷が光ファイバーと出会うとき—誰の田舎？誰が再生する？

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PART I

ROOTS AND FLOWS

CHAPTER I: Introduction

Fields and Futures connection

A Study of E-Commerce in Rural China and Japan

1.1 Introduction

Background

Globally, e-commerce has emerged as a key driver of economic growth and development, particularly in developing countries where it plays a vital role in narrowing the urban-rural divide and promoting regional development (Li et al., 2020). As the pace of global digitalization accelerates, e-commerce—as a new business model—continues to propel economic restructuring, especially in rural areas. Since China launched its Rural Revitalization Strategy in 2017, rural e-commerce has emerged as a core component of this initiative. E-commerce has unlocked new economic growth opportunities for rural areas, providing channels to expand markets and enhance production efficiency. It has demonstrated particularly significant effects in improving agricultural product sales and boosting farmers' incomes (Li, 2022).

Since its introduction in 2017, China's Rural Revitalization Strategy has become a key national development priority. It aims to drive comprehensive rural development through measures such as enhancing agricultural productivity, improving rural environments, and increasing farmers' incomes. In this process, the integration of e-commerce has emerged as a pivotal force in transforming the rural economy. Through internet platforms, rural areas can not only expand their markets and boost product sales but also optimize industrial chains and elevate production efficiency via electronic payment systems and logistics networks. China's rural e-commerce initiative began relatively early, particularly in areas exemplified by “Taobao Villages.” Take Daji Town in Cao County, Heze City, Shandong Province, for instance. Through the promotion of e-commerce platforms, it successfully upgraded local specialty industries. Rural e-commerce not only boosts the local economy but also attracts a large number of migrant workers and returning youth. By starting e-commerce businesses, they achieved dual improvements in employment and income(Li, 2022). Similarly, the “Taobao Village” model developed in Zhejiang Province has become a hallmark of China's rural e-commerce success. Through the widespread adoption of digital technologies and the establishment of e-commerce platforms, farmers have not only expanded their sales channels but also increased their incomes through the platform economy(Li et al., 2020).

Compared with China, Japan's rural revitalization strategy began earlier. Particularly in the 1960s, to address the challenges of rural economic decline and labor outflow, Japan implemented a series of rural revitalization policies. These included agricultural product branding, the development and utilization of regional resources, and the promotion of the sixth

WHY CHINA
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industrialization of agriculture. These measures not only revitalize Japan's rural economy but also increase farmers' incomes and promoted urban-rural integration (Jia et al., 2018). Although Japan's rural revitalization strategy began early, the adoption of e-commerce as a development pathway in rural areas started relatively late. Subsequent progress has primarily relied on government guidance through innovative public policies and digital platforms to revitalize local economies. For instance, Japan's “Hometown Tax” (Furusato Nozei) system connects urban residents with rural areas via digital platforms, fostering rural economic growth (Umeda et al., 2024). This model not only provides new revenue streams for Japan's rural revitalization but also advances the commercialization of locally distinctive products.

China and Japan, as vital components of Asia's and the global economy, hold pivotal positions within the international economic system. In recent years, accelerated digitalization has propelled e-commerce into a core driver of economic growth for both nations. Its application in rural areas, in particular, has emerged as a crucial pathway for advancing agricultural modernization, boosting farmers' incomes, and revitalizing rural regions. It is noteworthy, however, that despite the unique characteristics of rural e-commerce development in each country, comparative research in this field remains insufficient. Existing academic research has primarily focused on comparisons between China and South Korea (Xiang and Kim, 2007), China and Southeast Asian nations (Chen et al., 2013) (Bansal, 2011), China and Western Europe/America (Seal et al., 2001), Japan and Western Europe/America (Aoyama, 2001) (Gibbs et al., 2002), Japan and India (Tsukamoto and Dua, 2021). For instance, comparative studies on China-South Korea e-commerce primarily examine platform models and cross-border e-commerce (Xiang and Kim, 2007); China-Southeast Asia comparisons explore application differences in developing country (Chen et al., 2013), while China-Europe/US research focuses more on e-commerce technology, market environments, and consumer behavior. Therefore, although both China and Japan utilize e-commerce as a vital tool in their rural revitalization efforts, existing academic research offers limited comparative analysis between the two countries in this domain. Systematic comparative studies on rural e-commerce in China and Japan remain relatively scarce.

From a more analytical perspective, differences in economic systems, cultural backgrounds, and policy support between China and Japan have shaped distinct paths and practical experiences in the development of rural e-commerce. Therefore, comparative research on rural e-commerce in these two countries not only offers fresh insights for rural revitalization in both nations but may also provide valuable lessons and references for rural e-commerce development across Asia and globally. This paper will address this academic gap by conducting a comparative study of rural e-commerce in China and Japan from a rural revitalization perspective. It will explore the similarities and differences in their approaches to driving the digital transformation of rural economies, offering insights that can inform the development of rural areas in other nations.

The scope of the research

This study begins by examining the developmental contexts of rural areas in China and Japan, analyzing the divergent and convergent paths taken by the two nations in rural revitalization and e-commerce development. Focusing on Shaji Town in Suining County, Xuzhou City, Jiangsu Province, China, the research explores how e-commerce drives local economic growth, agricultural modernization, and rural social transformation. Specifically, through a case study of Dongfeng Village under Shaji Town's jurisdiction, it reveals the effectiveness and challenges of the region's e-commerce model. Subsequently, the study shifts to Japan, selecting Ayabe City in western Kyoto Prefecture as the case subject. It analyzes the city's experiences and strategies in e-commerce development, particularly examining policy support for local e-commerce growth and the roles of corporate and individual participation. By examining individuals, companies, and organizations involved in Ayabe City's e-commerce development process, this study explores how the city leverages e-commerce to revitalize its rural economy.

Following the examination of rural e-commerce transformation pathways in China and Japan, a comprehensive comparative analysis will be conducted. The comparative study encompasses four key dimensions: policy management, the role of e-commerce platforms, production models and labor force dynamics, and the spatial dimensions of e-commerce. Through specific case studies of Shaji Town and Ayabe City, this research will compare the impact of e-commerce on rural revitalization under differing policy frameworks, social contexts, and development trajectories in both countries. This comparative analysis aims to provide valuable theoretical and practical insights for e-commerce development in other rural regions globally.

The Significance of the Research

The development of rural e-commerce in China and Japan is far from a straightforward process, and this paper aims to reveal its complexity. While the proliferation of e-commerce in rural areas may initially appear to stimulate economic growth, improve farmers' incomes, and drive rural revitalization, the reality involves multifaceted challenges and complex factors. China and Japan have pursued distinct paths in advancing rural e-commerce, shaped by differing social, economic, and policy contexts. China's rural e-commerce primarily relies on the transformation of traditional agriculture, while Japan drives the digital upgrade of local economies by integrating modern technology with traditional farming practices.

By comparing differences in policy support, the role of e-commerce platforms, land and labor transformation, and spatial development of e-commerce, this study reveals the multifaceted impacts of e-commerce on rural revitalization. Rural e-commerce involves not only market and technological innovation but is also deeply intertwined with socioeconomic factors such as local culture, industrial structure, and labor mobility. Concurrently, the advancement of logistics urbanization and the refinement

of global logistics systems provide support for rural e-commerce development in both countries, further propelling the growth of the digital economy. E-commerce platforms accelerate the globalization of rural economies by providing convenient market access while driving profound adjustments in local industries and market structures. This comparative analysis of e-commerce development in China and Japan not only fills existing academic gaps but also offers policymakers and local governments strategies to address digital transformation challenges, fostering more sustainable and inclusive rural revitalization. This research not only fills an academic void in comparative studies of rural e-commerce development between China and Japan but also offers forward-looking strategies for policymakers, local governments, and enterprises. It helps them better navigate the challenges of rural economic digital transformation and promotes more sustainable and inclusive rural revitalization.

1.2 Literature Review

To systematically examine the operational mechanisms of e-commerce in rural areas and lay the groundwork for subsequent comparative analysis between China and Japan, this section reviews researches from five perspectives. First, it examines the relationship between e-commerce and rural development, focusing on how e-commerce reshapes rural economic and social structures through the reorganization of markets, production, and information flows. Second, it summarizes research on digital platformization, analyzing how platform mechanisms transform labor, governance, and industrial organization. Third, it reviews studies on logistics urbanization and supply chain spatial dynamics, emphasizing the critical role of logistics networks in facilitating the flow of factors between urban and rural areas and driving spatial restructuring. Subsequently, it examines studies on rural development, rural revitalization, and labor-land transitions to reveal long-term socio-economic transformations in rural areas. Finally, it compiles comparative research on rural economies and agricultural development in China and Japan, providing essential context for understanding institutional differences in their e-commerce development trajectories. Through this five-part review, this section aims to identify major achievements and gaps in existing research while establishing a theoretical foundation for comparative analysis of rural e-commerce in China and Japan.

E-commerce & Rural Development

Growing urban-rural disparities and accelerating depopulation have become a widespread concern in combatting rural decline and urbanization across the globe (Bai et al., 2014; Coates, 1993; Ge et al., 2018a; Li et al., 2016; Liu and Li, 2017; Long and Liu, 2016; Long and Qu, 2018; Long et al., 2019; Rodríguez-Pose and Hardy, 2015; Zhang et al., 2018). The continuous infiltration of e-commerce in both developed and developing countries, such as America, China, Southeast Asia and Africa, is of great significance for vitalizing the world's countryside (Cui et al., 2017; Hudson, 2006; Liang, 2010; Muniafu et al., 2005; Roberts et al., 2017).

Moreover, research consistently emphasizes that e-commerce is profoundly transforming rural economic and social development by reshaping information flows, logistics, and value chain structures. First, the development of rural e-commerce relies on widespread internet access and Information and Communication Technology (ICT) infrastructure. The study indicate that internet connectivity and usage frequency are critical drivers of e-commerce diffusion, with regional disparities leading to significant spatial imbalances (Sadowski et al., 2021).

Second, as ICT coverage expands, geographical constraints in remote areas are significantly mitigated. Rural residents can overcome distance and information barriers in traditional markets through online channels, gaining access to broader trading opportunities (Couclelis, 1996; Hernández et al., 2010). Mueller (2001) further note that in traditional agriculture, information asymmetry has long constrained rural producers from accessing broader markets. Digital information technologies can substantially reduce transaction costs associated with information, thereby enhancing agricultural products' market access and transaction efficiency. Subsequent study focused on developing countries have shown that while rural e-commerce expands opportunities for rural residents to participate in the digital economy, it remains distinctly “urban-oriented.” Rural users still account for a low proportion of internet access and online consumption (Kshetri, 2018). Finally, from a broader developmental perspective, some studies position e-commerce within frameworks of sustainable development and Global South integration, emphasizing its potential as a tool for inclusive growth and poverty reduction through improved regulatory environments, infrastructure, and capacity building (Ullah et al., 2025). Importantly, the consciousness of commercialization and marketization rooted in internet-based retail has become a predominant factor in reshaping rural economic morphology (Soriano, 2007, Zhang et al., 2022).

The impact of e-commerce on rural areas primarily relies on the expansion of information and communication infrastructure, yet the urban-rural digital divide remains pronounced. Taking Italy as an example, De Blasio (2008) finds through empirical analysis that internet usage is significantly higher in urban than in non-urban areas. In the United States, Whitacre (2011) finnds that broadband penetration in rural areas lags behind metropolitan counties. Although local governments worry that online shopping weakens local retail, more rigorous difference-in-differences models show no significant negative impact of broadband penetration on local sales tax revenue. This indicates that e-commerce primarily alters consumption and information-seeking patterns rather than immediately crowding out offline economies. In developing countries, initiatives like Iran's “Rural ICT Centers”—which establish telecommunications and information service stations in villages offering internet access, training, and e-commerce agency services—are regarded as crucial institutional vehicles for narrowing the digital divide and supporting rural e-commerce and entrepreneurship (Jalali et al., 2011). Related study in BRICS countries also emphasize that rural e-commerce development faces common constraints such as weak infrastructure, high logistics costs, insufficient human capital, and inadequate payment systems. These challenges require solutions through broadband planning, public-private partnerships, and training initiatives (Haji, 2021).

In the Chinese context, the relationship between rural e-commerce, county-level economies, and rural revitalization has been systematically examined. Qin et al. (2023) utilized the national “Comprehensive Demonstration Counties for Rural E-commerce” policy as a quasi-natural experiment. Using county-level panel data from 2011 to 2018, they found that the demonstration policy increased county GDP by approximately 3.5% on average. The primary mechanisms involved promoting industrial upgrading and non-agricultural employment growth, while also driving infrastructure improvements. Concurrently, research from “Taobao Village” regions highlights the complex consequences of e-commerce development.

Tang and Zhu (2020) conduct a case study of the shoe manufacturing industry in Zhegu Town, Zhejiang Province, revealing that e-commerce platforms lowered entrepreneurial barriers, attracting substantial external capital and small workshops. This influx rapidly increases local land and labor costs. After farmers' idle houses are extensively converted into production spaces, a “e-commerce-induced informality” emerges, dominated by small-scale, informal workshops. This not only increases the difficulty of environmental and safety regulation but also undermines the brand and bargaining power of leading enterprises. Collectively, existing literature indicates that e-commerce profoundly impacts rural areas through four key mechanisms: First, it improves market accessibility by reducing information and transaction costs. Second, it expands agricultural sales channels while facilitating income and employment structure transformation. Third, it drives new institutional experiments in legal systems, infrastructure, and capacity building across nations. Fourth, it creates a landscape of both opportunities and challenges for rural development, accompanied by new issues such as industrial informalization, governance pressures, and spatial restructuring.

Platformization & Digital Economy

In the digital economy era, this transformation in the management and governance systems of public administration is amplified by digitalization (Dunleavy et al., 2006; Mergel et al., 2019), with governments increasingly embracing opportunities created by digitalization and digital platforms in public policy implementation (Ansell and Miura, 2019; Greve, 2015; Hautamäki and Oksanen, 2018).

“Platformization” has emerged as a crucial analytical framework for understanding the restructuring of economic relations, the transformation of labor organization, and changes in spatial structures. First, Srnicek (2017) argues that platforms, by serving as “fundamental infrastructure mediating between diverse groups,” reshape market dynamics through the construction of “new rules governing data production, value generation, and distribution.” Their core characteristic lies in “the economic exploitation of data and the centrality of data in a new phase of capitalism.” This demonstrates that platforms, as key organizers within the digital economy, are forming systemic forces that influence economic organization through centralized data resources, algorithmic regulatory mechanisms, and cross-scenario business coordination.

Building on this, Van Dijck (2020) further emphasizes platforms' deep embedding within social governance structures. She argues that platforms “form new mechanisms of public power through control at the algorithmic, data flow, and infrastructure levels,” progressively reshaping labor market intermediation, service access methods, and institutional boundaries. This analysis resonates with the “infrastructuralization” trend proposed by Plantin and Punathambekar (2018), wherein platforms

Note:
BRICS: Brazil, Russia, India, China and South Africa.

Regarding the platform governance dimension, Van Dijck (2021) observes that modern society is shifting “from traditional institutional trust in expertise toward a computational-corporate model of trust dominated by data, algorithms, and corporate control.” This shift demonstrates platforms' growing capacity to regulate information distribution and labor processes, thereby influencing social institutions and public governance logic. Concurrently, Woods (2007) argues in his “global countryside” theory that platformization and globalization jointly drive “increasing social polarization” in rural areas, giving rise to “new sites of political authority.” This indicates that platform power not only operates in urban settings but also profoundly reshapes rural labor relations, capital flows, and local power structures.

From a broader regional governance perspective, Steinberg et al., (2022) emphasize that the formation of platform power in Asia relies on the strong integration of super apps and giant enterprises. They note that the logic of super apps stems from large tech companies' dominance over regional markets *“the emergence of super apps is predicated upon...monopoly power”* and further underscore that this power is inextricably tied to the expansion of megacorps *“super apps...are inextricably bound up with the fortunes of megacorps”*. This demonstrates that platformization has transcended the industrial level, extending into regional economic governance structures.

In rural contexts, Yanhao Li's (2024) research demonstrates platformization's direct impact on revitalizing rural industries. He notes that rural e-commerce has become a pivotal force in rural industrial development, providing “solid and strong support” for industrial prosperity. Synergistic mechanisms between demonstration counties, Taobao villages, and digital infrastructure exert a stronger driving effect on industrial development *“synergistic effect...better effect”*. Furthermore, the advancement of digital inclusive finance further amplifies the positive impact of rural e-commerce *“the higher the level...the more significant the positive role”*. Collectively, these studies demonstrate that platformization not only reconfigures urban economic relations but also profoundly shapes rural industrial systems, spatial structures, and factor mobility patterns.

Overall, whether viewed through the lens of global platform capitalism, platform governance, or rural digitalization practices, existing research points to a common trend: digital platforms are systematically altering economic relations, labor organization, and urban-rural spatial structures through data accumulation, algorithmic regulation, and infrastructure development. They are emerging as a new organizational logic governing contemporary socioeconomic operations.

Logistics Urbanization & SpatialTransformation

International research generally recognizes that modern logistics systems represent not merely a technological upgrade in commodity circulation but a spatial force capable of profoundly reshaping urban-regional structures and urban-rural relationships. Chua et al. (2018) note that logistics not only alters the flow of physical goods but also influences “the very rationality by which space is organized,” signifying its transformation from a subsidiary component of economic activity into a core mechanism actively shaping spatial order. This is primarily manifested in the reconfiguration of “the relationship between places and flows,” causing places originally dependent on production layouts to gradually reorganize around the logic of flow (Hesse, 2020).

At the technological level, the proliferation of e-commerce further intensifies this spatial restructuring. As Hesse (2002) observes: “E-commerce is likely to support longer transport distances and often higher delivery frequencies, increasing demand for land due to the establishment of new transhipment points (distribution centers).” This reflects how e-commerce logistics is profoundly reshaping urban-rural logistics spatial structures by increasing transport frequency, extending transport chains, and driving the deployment of new logistics nodes.

Simultaneously, logistics systems are propelling the spillover effects of urbanization onto a larger scale. Brenner and Keil (2014) propose that capitalist urbanization has formed a “planetary ‘fabric’ or ‘web’ of urbanized spaces,” a network that continuously “pushes into the ever more distant hinterlands of erstwhile ‘rural’ zones.” This implies that the expansion of logistics networks not only deepens connections between cities but also reshapes the functional structure of rural areas, progressively blurring the boundaries between urban and rural spaces.

The globalization of logistics has driven the deep integration of production, transportation, and urban space. Cowen (2014) notes that the global production system “has entered a time of logistics space,” with global goods flows forming “transnational circulatory systems” through infrastructure networks. Logistics has thus restructured interregional connections, transforming space from ‘locations’ into “nodes” and thereby constructing a new global spatial order.

Broader urbanization theories further demonstrate that modern logistics systems play a pivotal role in integrating urban and rural spatial structures. Monte-Mór and Castriota (2018) observe: *“The urban virtually gains planetary dimensions and accounts for the extension of the built environment (at various levels onto agrarian or forested regions)*” revealing how urban logic and its infrastructure spill over into traditional rural areas. Simultaneously, “industrialization created the conditions for the explosion of the urban form beyond cities to encompass social space as a whole, reaching progressively all corners of the world,” further demonstrating that the industrialization-urbanization system has integrated agricultural and rural areas into a unified urban-industrial network.

In summary, numerous studies have revealed how logistics systems reshape urban-rural relationships through multiple dimensions, including logistics technology, logistics urbanization, logistics globalization, and extended urbanization. Logistics has become a key mechanism driving the restructuring of rural spaces and promoting coordinated urban-rural development, while also providing a crucial theoretical foundation for understanding the spatial logic of rural e-commerce and rural logistics systems.

Rural Transformation & Revitalization

Rural restructuring is a complex and comprehensive human process (Long and Liu, 2016; Tu et al., 2018; Luo and He, 2017; Marsden et al., 1990; Woods, 2009), which is induced by the optimal allocation of development elements in a rural territorial system under the integrative impact of internal factors and external regulation, which ultimately achieve structural optimization, functional enhancement and virtuous interaction between urban and rural (Ge et al., 2018b; Hoggart and Paniagua, 2001; Long et al., 2012; Luo et al., 2017; Oncescu, 2016; Tu and Long, 2017; Qu and Long, 2018).

Black (1990) emphasizes that rural land use and environmental change do not stem solely from natural causes or individual farmer actions, but are profoundly shaped by external forces operating at larger scales—such as political-economic structures, land tenure systems, and labor migration. These factors collectively shape land pressures, shifts in production methods, and “marginalization” in rural areas (Black, 1990).

Rural development is confirmed as a multilevel, multiactor and multifaceted process that can be summarized into three types—driven by external factors (urbanization, industrialization, etc.), self-development factors (characteristic industries, ecological tourism, etc.) and comprehensive factors (Li et al., 2015; Liu et al., 2009). Okamoto (2013) noted in his study of B2C e-commerce models in rural areas that the position of rural regions within digital commercial systems is being reshaped. With the proliferation of internet and IT-enabled services, traditional geographical disadvantages have been partially mitigated, allowing rural businesses to compete in broader markets. This endows rural areas with “great potential to revitalize the rural economy”. Jarosz (2012) argues that rural development reliant on technological interventions built upon unequal land and resource structures will only deepen inequalities among farmers regarding land, labor, and production resources, thereby undermining the sustainability of rural development. Guan et al. (2023) argue that in resource-constrained and logistically challenging rural areas, e-commerce and branding can help agricultural products overcome temporal and spatial limitations to access broader markets, thereby promoting rural economic development and revitalization.

Overall, these studies collectively form the theoretical foundation of this research, demonstrating that spatial restructuring, land use changes, and labor force transformation in rural areas are influenced by macro-structural forces while simultaneously being reorganized and reshaped through new technological pathways such as digital platforms.

Summary of Litereture review

Overall, existing research, ranging from rural e-commerce, digital platformization, and spatial restructuring to rural revitalization and factor transformation, provides a solid foundation for understanding rural development in China. Current theoretical and empirical findings on rural development, e-commerce, and digital transformation have transcended multiple disciplines and national boundaries.

Image 1.1
Books read for thesis

In China, academic attention to rural e-commerce is particularly focused. Judging from the volume and hot topics of research, Chinese academia has accumulated substantial achievements in this field. A search on CNKI (China National Knowledge Infrastructure) using "rural e-commerce" as a keyword yielded 3759 journal articles and 346 dissertations, representing over 50.6% of the total research output, indicating that rural e-commerce has become a frequently researched topic in Chinese academia (Li, 2021).

Meanwhile, Chinese scholars have also long focused on the policy models and institutional background of rural revitalization in Japan. Extensive research has been conducted on the agricultural modernization, diversified industrial integration, and community building mechanisms that Japan has developed since the 1970s, pointing out that its experience has important implications for rural revitalization in China (Guo et al., 2020; Cao, 2018; Huang, 2024).

On the other hand, Japanese scholars have also gradually increased their focus on China's rural economy and digital development. From rural revitalization and the urban-rural consumption gap to rural e-commerce, Japanese researchers have begun to use empirical methods to explore the mechanisms by which the digital economy operates in rural China. For example, Komatsu Sho (2024) used Jiangsu Province as a case study to analyze the impact of rural e-commerce development on the urban-rural consumption gap, revealing how the growth of e-commerce and Taobao villages has improved rural consumption capacity and narrowed the urban-rural divide. This indicates that a certain degree of transnational research interaction has formed between China and Japan on the issues of digital village construction and rural economic transformation.

Overall, whether it's China's in-depth research on its own rural e-commerce, digital platformization, rural governance, and factor mobility, the systematic learning from Japan's rural revitalization path, or Japanese scholars' focus on China's rural digital development, all indicate that China and Japan have formed multi-dimensional and multi-level academic interactions in the fields of rural development and the digital economy. However, truly systematic comparative studies that use rural areas in China and Japan as a comparison and conduct research on the specific topic of "rural e-commerce—rural economic development—rural revitalization transformation" are still relatively scarce. In particular, there is a lack of comparative studies that simultaneously provide specific case studies from both countries and can deeply reveal the mechanisms of difference. Therefore, this study uses rural areas in China and Japan as dual case studies, attempting to integrate multiple perspectives such as rural e-commerce, platformization development, rural spatial reconstruction, and policy evolution to fill the gap in comparative research in existing literature and provide more explanatory theoretical and empirical support for understanding the differences in rural development paths between different countries under the background of the digital economy.

1.3 Research framework and methodology

The aim of the research

The primary objective of this study is to conduct an in-depth exploration of the pathways, achievements, and challenges in the development of rural e-commerce in China and Japan, particularly examining how e-commerce serves as a key tool for driving rural revitalization and plays a significant role in the economic transformation of rural areas in both countries. By comparing and analyzing differences between China and Japan in areas such as e-commerce policies, platform roles, labor force structures, and rural spatial development, this research aims to reveal the similarities and differences in how rural e-commerce in both nations propels the modernization of their rural economies. Notably, Steinberg (2025) observes in his study on the platformization of Japan's convenience store system that the development of platform economies exhibits strong local characteristics. Different countries and industries often follow distinct institutional pathways and evolutionary logics during platformization. This perspective provides crucial theoretical grounding for the cross-national comparison in this study.

Specifically, this research has three primary objectives. First, to examine the developmental trajectories, evolutionary processes, policy drivers, infrastructure development, and expansion effects of rural e-commerce in China and Japan within the contexts of globalization and spatial restructuring. Second, based on the developmental histories and relevant academic research of both countries, this study conducts a systematic analysis of key factors influencing rural e-commerce development. It will focus on the role of government policies in rural economic development, the multifaceted roles of platforms, and the driving forces of labor structure and spatial changes on rural economies, as well as their impacts on production patterns and regional structures. Through these analyses, this study aims to establish a transnational comparative analytical framework revealing how rural e-commerce promotes rural economic growth and regional integration through digital means, thereby providing scientific support for optimizing relevant policies and formulating development pathways.

Finally, based on a comparative analysis from an industrial perspective, this study summarizes the experiences of rural e-commerce development in both countries and propose development strategies that can be referenced

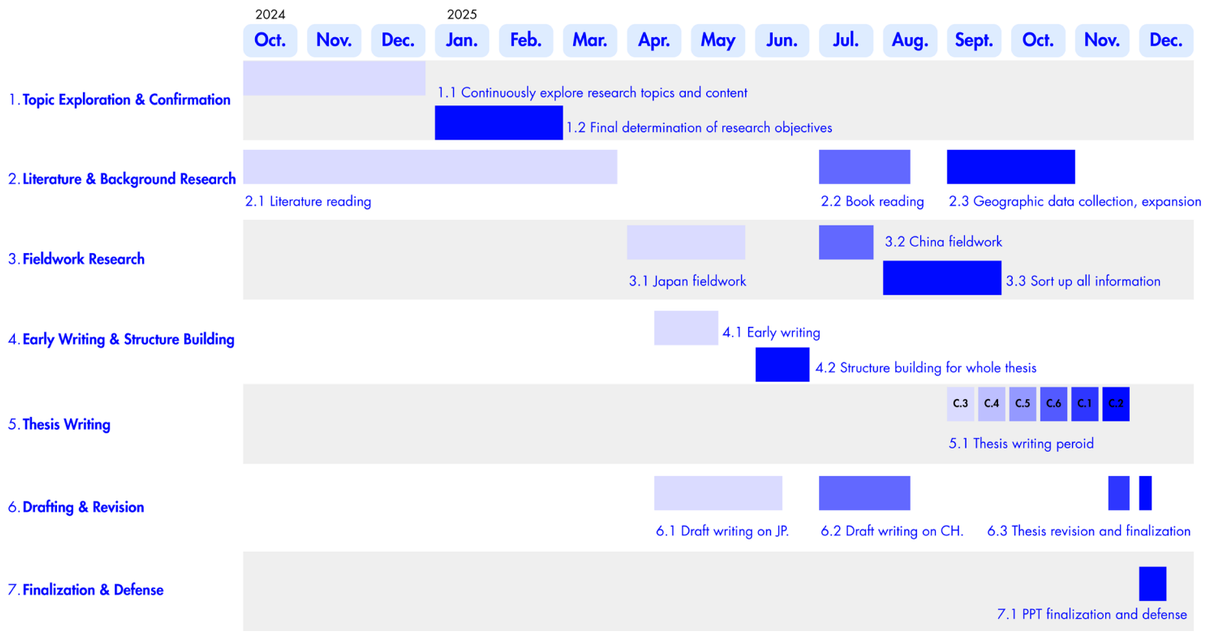


Fig. 1.1
Overall Schedule of the Thesis

by other nations. This will provide theoretical references and practical insights for the development of rural e-commerce in China and other countries and regions. Drawing on Steinberg (2025)'s discussion of platform-based path differentiation, this study further emphasizes how the concrete implementation of platformization in rural areas is jointly shaped by local institutions, industrial structures, and social demands.

Research Questions

The expansion of e-commerce platforms is profoundly transforming production, distribution, and spatial organization in rural areas. Existing research indicates that these platforms are injecting new growth momentum into the rural economy by expanding agricultural product sales channels, enhancing product value-added, and driving the restructuring of supply chains and logistics systems (Chen and Long, 2024). Concurrently, the development of digital infrastructure, the embedding of platform institutions, and the reallocation of key factors such as labor and land are gradually integrating rural areas into broader production networks and consumption systems. Existing research also indicates that the development trends of rural e-commerce and rural revitalization exhibit a mutually reinforcing coupling relationship, with their coordination influenced by factors including digitalization levels, logistics networks, human capital, and infrastructure conditions (Zhu and Luo, 2024). Based on this, this study examines the divergent transformations in economic structure, social relations, and spatial organization occurring in rural areas of China and Japan following the emergence of e-commerce. It further explores the comparative practices of digital infrastructure, platform mechanisms, and rural development institutions in both countries. To achieve these objectives, the study poses the following questions:

Key research questions:

→ How does the emergence of e-commerce reshape rural economies and spatial configurations in China and Japan?

→ What are the socio-economic impacts of e-commerce on rural communities in both China and Japan?

Supplementary research questions:

→ What role do digital infrastructures play in the transformation of labor and land use in rural areas?

→ How do e-commerce platforms integrate rural spaces into global logistical and production networks?

→ How does e-commerce affect local economic opportunities and labor conditions in rural areas?

→ In which ways does digitalization challenge or reinforce existing power dynamics in rural governance and land management?

Research Framework

This study begins by identifying the operational mechanisms of e-commerce, constructing a 4D comparative framework, and applying it to representative cases in China and Japan. It then conducts systematic comparisons based on unified dimensions, ultimately forming a comprehensive evaluation of the two pathways and contributing to theoretical understanding. The research logic unfolds in a progressive structure: moving from theory to case studies, from case studies to comparative analysis, and from comparative analysis to reflection.

Fig. 1.2
Research Framework Steps

Research Approaches & Methodology

Literature Review

This study first conducted a systematic literature review to synthesize theoretical and empirical findings across multiple domains, including e-commerce, digital platformization, logistics urbanization, rural regional development, rural revitalization, globalization, and comparative studies between China and Japan. As a research methodology, the literature review enables the construction of a theoretical foundation and conceptual framework for the research question through systematic and critical integration of existing literature. As emphasized by Baumeister and Leary (1997) and Tranfield, Denyer, and Smart (2003), literature reviews are not merely a means of knowledge collection but a systematic approach to identifying cutting-edge research trends and gaps. Drawing on Webster and Watson (2002), effective and rigorous literature reviews lay a solid foundation for advancing knowledge development and promoting theoretical construction. Through the organization, categorization, and comparison of over forty Chinese and English academic publications, this study identifies key variables, theoretical debates, and research gaps concerning rural e-commerce and rural transformation in existing literature. The implementation of this literature review enables the study to distill analytical perspectives from findings across multiple research domains, providing robust theoretical support for subsequent field investigations, cross-national comparisons, and spatial data analysis.

Fieldwork & Qualitative Inquiry

This study conducts a three-month field investigation across multiple rural locations in China and Japan. Field investigation is an on-site research method characterized by researchers immersing themselves in the natural or social environment of their subjects. Through direct observations, interviews, and other methods, they collect firsthand data to gain deep understanding and analyze the subjects. This study obtains extensive primary data through the three-month investigation.

During the fieldwork, more specifically, the researcher employs a multi-method approach: on-site ethnographic observation, the use of survey questionnaires combined with semi-structured and in-depth interviews, and qualitative case studies of Chinese and Japanese e-commerce practitioners. In the fieldwork, researchers directly enter relevant scenarios within the e-commerce supply chain—such as rural logistics nodes, agricultural product processing sites, family workshops, e-commerce enterprises, local government agencies, and community spaces—to observe labor organization patterns, shifts in production processes, and the interactive mechanisms between e-commerce platforms and local governance. Additionally, the study employs participant observation when necessary to document practitioners' daily routines, labor rhythms, and spatial mobility patterns. This is complemented by contextual analysis, situating individual experiences within broader institutional frameworks and historical contexts.

Specifically, researcher employs open-ended interviews with diverse participants closely tied to rural e-commerce and agricultural development. This includes local government officials, village cadres, agricultural cooperative personnel, e-commerce practitioners, and key community-level actors. All interviews occur within participants' daily work environments or community spaces to ensure authentic and open communication contexts. Open-ended interviews are suited for exploring the motivations behind complex issues and individuals' experiential logic, rather than eliciting standardized, directly comparable responses. Thus, in this study, this approach enables participants to draw from their personal experiences to fully articulate their perceptions and judgments regarding rural e-commerce practices, challenges in agricultural development, policy impacts, and interactions with digital platforms.

Overall, through these qualitative methods, this study captures the micro-level connections between digital platformization and rural social structures, providing a solid empirical foundation for subsequent cross-national comparisons.

GIS-based Spatial–Temporal Analysis

This study also employs publicly available web data and Geographic Information System (GIS) technology to conduct systematic comparisons along both temporal and spatial dimensions of relevant indicators across rural regions in China and Japan during different years. Through geospatial data extraction and visualization, this study maps the spatial distribution of rural e-commerce development, logistics network layout, and population and industrial changes. It further conducts GIS-based spatial analysis, temporal trend analysis, and spatial-temporal data analysis. These methodologies help identify the evolutionary trajectories and spatial pattern shifts in rural areas across different stages, providing macro-level supplementary evidence to qualitative field materials.

Comparative Research

This study employs comparative research as one of its core methodologies. By systematically contrasting the institutional contexts, underlying logics, and spatial mechanisms of rural e-commerce development in China and Japan, it aims to reveal the divergent pathways and structural commonalities

that emerge when e-commerce engages with rural areas under different national contexts.

Comparative methods can highlight significant similarities and differences through cross-case analysis, thereby deepening conceptual formation and theoretical construction. As Collier (1993) emphasizes, comparative research serves not only as a descriptive tool but also plays a crucial role in the analytical process by “strengthening conceptual distinctions, enhancing explanatory power, and promoting theoretical development.”

Within this study's transnational framework, rural regions in Japan and China exhibit distinct differences in institutional structures, cultural contexts, and agricultural development models. Consequently, comparative methods are particularly well-suited to revealing how these variations shape the developmental trajectories of rural e-commerce. Brislin (1976) notes that the value of cross-cultural comparative research lies in uncovering underlying principles and structures through systematic comparisons across different cultures and social units, thereby advancing theoretical depth. He further emphasized that comparative studies should focus on behaviors and practices deemed meaningful by actors in diverse contexts, employing “plausible rival hypothesis analysis” to ensure research is not constrained by single-factor explanations.

Building on this theoretical foundation, this study employs a 4D comparative framework (policy governance dimension, e-commerce platform dimension, labor dimension, rural spatial dimension) to analyze rural e-commerce cases in China and Japan. Structured comparisons across these unified dimensions identify differences and commonalities between the two pathways in terms of national governance logic, platform intervention methods, labor organization, land use, and spatial restructuring. This comparative analysis not only explains why rural e-commerce develops along distinct trajectories under different institutional environments but also provides a robust theoretical foundation for further understanding the linkage mechanisms between the platform economy and rural transformation.

1.4
Main Content of Thesis

This paper examines the divergent paths of e-commerce development in China and Japan, with particular focus on their digital transformation in rural areas and the impact of global logistics systems. The research aims to understand how the interplay between e-commerce digital platforms, local governance, land space, and labor force, along with their transformative development pathways, drives rural economic advancement and achieves rural revitalization. Specifically, through case studies of Shaji Town in China and Ayabe City in Japan, the research compares and examines the complex relationship between rural e-commerce development and socioeconomic conditions, spatial structures, and the socioeconomic benefits and respective developmental strengths and weaknesses brought by these transformations. It also explores how e-commerce can enhance local economies and advance urban-rural integration within the context of globalization.

The entire study is divided into three parts, comprising six chapters in total, with each part consisting of two chapters.

Chapters 1 and 2 of Part One primarily serve as background introductions. Chapter 1 lays the foundation for understanding differences in rural e-commerce between China and Japan by reviewing research contexts, problem awareness, and domestic and international literature. Beginning with global digitalization trends, the chapter highlights e-commerce's pivotal role in institutional embedding, platform expansion, and spatial restructuring within rural areas. It emphasizes significant disparities between China and Japan in policy objectives, platform mechanisms, rural governance, and spatial structures. It further clarifies the research questions, methodology, and 4D comparative framework, establishing analytical coordinates for subsequent case studies. Chapter 2 systematically constructs the comparative context by defining the social foundations underpinning China's “Taobao Villages” and Japan's “Hometown Tax” system, grounded in national institutional backgrounds, rural development trajectories, and historical structures. It also operationalizes core concepts such as e-commerce, platformization, rural revitalization, and logistics urbanization to ensure comparability across national contexts. By pre-establishing the four dimensions of policy, platform, labor, and space, this chapter provides a comprehensive theoretical and contextual framework for the in-depth case studies and comparative analyses presented in Chapters 3 to 6.

In Part Two, following an examination of the developmental context and theoretical foundations of e-commerce in rural areas, Chapters 3 and 4 draw upon the author's three-month field research in China and Japan. Through methods including interviews and questionnaires, combined with extensive qualitative analysis and limited quantitative analysis of collected data, the chapters investigate and summarize the practical experiences of Dongfeng Village in Shaji Town and the “hometown tax” policy in Ayabe City. Specifically, Dongfeng Village in China, a traditional agricultural community, successfully transformed into a hub of the digital economy and became one of the renowned “Taobao Villages.” This transformation stemmed from the entrepreneurial spirit of local residents and a flexible market-driven model, effectively activating interactions between the rural community and global e-commerce platforms. This study explores how this model evolved from small-scale family enterprises into a complete industrial cluster, revealing its profound impact on China's rural economic development. In contrast, Japan's Ayabe City highlights the pivotal role of local government policies and institutional frameworks in advancing rural e-commerce. Through initiatives like the “Furusato Nozei” (Hometown Tax) program, Ayabe City has facilitated a more orderly digital transformation, prioritizing quality control, brand development, and sustainable rural growth. This case demonstrates how government-led policies can guide stable development in rural e-commerce.

In Part Three, following an in-depth analysis and summary of the Chinese and Japanese cases presented earlier, Chapter 5 conducts a systematic comparative analysis of these two cases. This analysis employs a 4D comparison framework, focusing on governance logic, the role of e-commerce platforms, production models and labor, and e-commerce space. Through this comparison, this chapter summarizes the similarities and differences, as well as the strengths and weaknesses, in the development of e-commerce in China and Japan. It extracts experiences and insights that may inform future rural revitalization efforts in e-commerce development. Particularly in the integration of global logistics systems and sustainable economic development, it offers new perspectives on how to promote the sustainable development of rural e-commerce.

Chapter 6 revisits the initial research questions, discussing and re-examining them in light of the comparative findings from the Chinese and Japanese cases. By contrasting these two distinct yet complementary rural e-commerce development paths, this study offers valuable insights for advancing digital economic development within rural revitalization efforts amid global progress. It highlights particular potential in promoting sustainable rural economic development, urbanizing logistics systems, and upgrading digital economic structures. It is hoped that these findings will inform future innovations in rural e-commerce models and policy development, enabling broader application across more regions globally.

CHAPTER II:
Setting the context

When Fibre Meets Furrow, 1+1?2

This chapter aims to lay the analytical groundwork for subsequent comparative studies. By outlining the key differences between China and Japan in rural e-commerce development, rural revitalization, and institutional environment, it constructs the basic context upon which this research is based. To this end, this chapter first outlines the relevant macro-background between China and Japan, then defines the key concepts frequently used in this study, and finally proposes a four-dimensional framework to support the comparative analysis. This provides structural support for the writing of Chapters Three to Six.

2.1
Preliminary Contextual Background: China and Japan

In the existing research literature, while the rural e-commerce and platformization processes in China and Japan have rarely been effectively placed within a comparative framework, studies comparing rural areas or broader societal aspects between the two nations are abundant. Current analyses suggest that many differences between China and Japan initially stem from internal rural factors such as land tenure, agricultural organization, and village social structures. Yet deeper examination reveals how each nation's historical understanding of “rural areas” shaped distinct platformization pathways, and how divergent labor structures and rural revitalization strategies have driven rural economic development.

In China, the understanding of “rurality” has long been profoundly influenced by Fei Xiaotong's concept of the “differential social structure.” Rural society is viewed as a social structure built upon kinship, geographical proximity, reciprocal relationships, and the “intimacy born of the land,” possessing a deep and enduring “rural character.” Although this concept underwent restructuring during the modernization process, it was not entirely supplanted (Ma, 2007, Fei, 1947). Against this backdrop, the rise of “Taobao villages” can be understood as a reinterpretation of rural connections under digital conditions: technological infrastructure has not dissolved the cooperative, trust-based, and interdependent networks of rural society, but rather embedded these traditional relationships within new entrepreneurial and logistical flows. In other words, platformization in China manifests more as an extension and reorganization of existing rural social structures than as a complete replacement.

In contrast, Japan's rural areas emerge along a distinctly different historical trajectory. Their rural character is defined by a post-productivist and institutionalized agricultural social system: agricultural cooperatives, local governance, and an aging population structure collectively shaped a stable yet gradually shrinking rural landscape (Choi, 2013). Within this system, e-commerce and digital tools primarily function as part of a “preservation and diversification” mechanism, helping small-scale producers sustain local economies, traditions, and regional identities. Platformization in Japan is more “incremental” in nature, aiming not to radically transform the countryside but to support a multifunctional rurality that integrates agriculture, tourism, regional branding, and more. Consequently, the introduction of technology tends to be complementary rather than disruptive.

The aforementioned differences are closely tied to the distinct platform structures in both countries. According to Sarah Barns and Mezzadra & Neilson, platformization refers to the ongoing entanglement between space and platform (Barns, 2020; Mezzadra and Neilson, 2013). In Japan, platformization typically unfolds incrementally within the existing cooperative framework. National and local organizations (such as agricultural cooperatives JA, local agencies, and county-level governments) play pivotal roles in digital tools, traceability systems, e-commerce platforms, and logistics management. This platformization primarily supplements agricultural governance structures, aiming to support smallholder producers, strengthen branding, and preserve local food cultures—rather than expanding capital accumulation. In contrast, China's platformization rapidly advanced within a developmentalist trajectory during the “post-austerity era.” Large tech companies (such as Alibaba, JD.com, and Pinduoduo) have collaborated with the state to build new infrastructure that absorbs rural surplus labor and stimulates domestic consumption. Within this system, digital platforms do not merely digitize existing cooperative structures but reconstruct entire rural economic networks, directly connecting small producers to national logistics systems and e-commerce ecosystems. This process is characterized by greater speed, scale, and entrepreneurial dynamism, often driven by local experimentation and flexible governance rather than continuing established cooperative traditions.

Notably, within China's national context, while “Taobao Villages” emerges as grassroots entrepreneurial initiatives, their development is not purely bottom-up. Driven by national digitalization policies such as the “Village-to-Village Connectivity Project” and the “Village and Town Informatization Project,” rural areas gained access to digital infrastructure—including internet connectivity, broadband, and training—laying the groundwork for e-commerce clusters. Subsequently, these localized entrepreneurial networks gains state recognition and are integrated into the broader narrative of rural revitalization through subsidies, policies, and institutional pathways. This dual dynamic—from grassroots to institutionalization—is a defining feature of platformization in China's rural areas.

In summary, placing these two contexts within a comparative framework helps illuminate how the “new rural narrative” is being rewritten. Both China and Japan are leveraging digital technology to reimagine rural futures, yet the resulting visions exhibit marked differences. In Japan, the “new countryside” narrative is built upon continuity, care, and preservation, with technology used to strengthen existing bonds between people, land, and communities. In China, however, the “new countryside” is presented as a frontier of modernization and connectivity. Infrastructure introduces new spatial dimensions and algorithmic operational logic, continually dissolving the boundaries between agriculture and the digital realm.

These emerging rural spaces are neither traditional villages nor fully urbanized areas, but hybrid domains mediated by platforms and carrying new modes of labor, sociality, and governance. Understanding them through the lens of the “New Rural” concept helps reveal how both countries are reshaping the countryside in distinct ways into experimental grounds for the post-agricultural era—spaces rooted not only in soil but also in networks (or, borrowing Manuel Castells' terminology, the interweaving of “spatial flows” and “local spaces”).(Castells, 2020)

2.2 Concepts

E-commerce

E-commerce encompasses both broad and narrow definitions. Broadly speaking, it refers to conducting business activities through information technology. Narrowly defined, it denotes the exchange of information, communication, and the transaction of goods or services via internet platforms. The application of modern information technology in traditional business activities has transformed conventional commercial forms, expanding the breadth and depth of business operations while liberating them from temporal and spatial constraints. Like traditional commerce, e-commerce activities are built upon the foundations of logistics, information flow, and capital flow. The difference lies in the adoption of information technology, which makes business activities more convenient and efficient, diversifies business forms, and significantly expands the operational radius. Ruan (2013) argues that e-commerce involves applying modern information technology to business activities, transforming not only the communication methods of business interactions but also reshaping commercial thinking and shaping the modern business ecosystem. Zheng and Lü (2013) contend that e-commerce, built upon the internet, represents an entirely new market operation model and socioeconomic form, fundamentally constituting a transformation and innovation of commercial relationships. Wu (2010) asserts that e-commerce is not merely the relocation of traditional business activities to the internet, but rather the creation of commercial value and the innovation of commercial relationships for relevant business entities through modern electronic information technology.

Rural e-commerce, or agricultural e-commerce, refers to the application of e-commerce models and technologies in the production, processing, distribution, and exchange of agricultural products in rural areas. It utilizes modern e-commerce models to operate agricultural products and develop the rural economy. In rural areas, e-commerce is a completely new business model. The application of e-commerce technology in rural areas is not only changing the business model of agricultural products, but also profoundly influencing rural consumption concepts, business philosophies, and the commercial ecosystem. Hu and Huang (2012) define agricultural e-commerce as the comprehensive integration of e-commerce systems throughout agricultural production, processing, and transportation. This involves collecting and disseminating agricultural information via online platforms while relying on logistics networks and online payment systems to facilitate product delivery and transactions.

Rural e-commerce is a broad concept, with agricultural product e-commerce forming its core component. Agricultural products distributed through e-commerce channels include both fresh produce and durable, processed goods, each demanding significantly different logistics and distribution systems. Agricultural inputs such as pesticides, seeds, and fertilizers also constitute a component of rural e-commerce. As agricultural operations scale up, the volume of agricultural inputs circulating through e-commerce platforms will continue to grow. With the progression of rural non-agriculturalization, the proportion of rural households engaged in non-agricultural activities will gradually increase. More families will produce industrial goods or handicrafts, and a significant portion of rural handicrafts will be distributed through e-commerce channels.

E-commerce Model (Wang, 2015)

(1) Business to Customer (B2C) Model

The B2C e-commerce model leverages the internet to facilitate transactions of products or services between businesses and consumers. Most everyday online purchases by ordinary consumers occur through this model. Businesses may establish their own e-commerce platforms, such as COFCO's Womai.com, to market their products online, partially or fully replacing traditional retail channels. Alternatively, they may utilize third-party platforms like Taobao, Amazon, Yihaodian, or Vipshop.

(2) Business to Business (B2B) Model

The B2B e-commerce facilitates transactions between enterprises. Agricultural or rural sectors leverage e-commerce platforms for procurement, production, logistics, and trading, streamlining processes and reducing transaction costs. In this model, enterprises serve as the primary transactional entities, with both organizations and individuals acting as buyers. A prominent example is Alibaba International Trade Platform, which primarily provides services and support for domestic enterprises engaging in international trade.

(3) Customer to Customer (C2C) Model

The C2C involves transactions between individuals, primarily facilitated by third-party e-commerce platforms like Taobao. These platforms enable information posting, product display, transaction negotiation, and payment completion. Characterized by relatively low transaction amounts and high transaction frequency, this model relies on third-party platforms due to the limited bargaining power of individual participants.

(4) Government to Customer (G2C) Model

The G2C represents information dissemination platforms between governments and users. In rural e-commerce, this primarily refers to the China Agricultural Information Network, which operates from the national to local levels. This government-sponsored platform serves impoverished regions, providing agricultural policy promotion, technological services, farmer education, and agricultural product information.

(5) Online to Offline (O2O) Model

The O2O is an e-commerce model integrating online and offline interactions. Consumers first complete online product searches and payments via e-commerce platforms before visiting physical locations for consumption and experiences. Unlike other e-commerce models, O2O enhances consumer experiences, consolidates resources, and overcomes temporal and spatial constraints. The recently introduced Shuandaili First application of this model extends user experience to the community. Consumers can first visit physical locations to experience product craftsmanship, try on items, and test products before purchasing via the e-commerce platform upon satisfaction. This significantly enhances user experience and boosts customer satisfaction.

(6) Farmer to Cooperation to Business (F2C2B) Model

The F2C2B refers to e-commerce among farmers, cooperatives, and enterprises. Agricultural associations or cooperatives consolidate dispersed agricultural products into unified offerings, then collaborate with enterprises involved in production, processing, transportation, and sales within the agricultural product or industry's origin region. This approach creates a certain scale of e-commerce, elevates farmers' market positioning, and strengthens their bargaining power in e-commerce transactions with enterprises.

(7) Focus to Online (F2O) Model

The F2O represents “Focus Event E-commerce,” a novel e-commerce model. Event-specific coverage, TV dramas, wellness programs, and similar content stimulate audience emotions, understanding, and consumer psychology. Broadcast through television media, it creates a massive ripple effect, rapidly forming a substantial consumer market. E-commerce businesses respond swiftly to meet consumer demand. The recent hit documentary “A Bite of China” familiarized viewers with regional cuisines, sparking consumption desires and creating hotspots.

(8) Customer to Business (C2B) Model

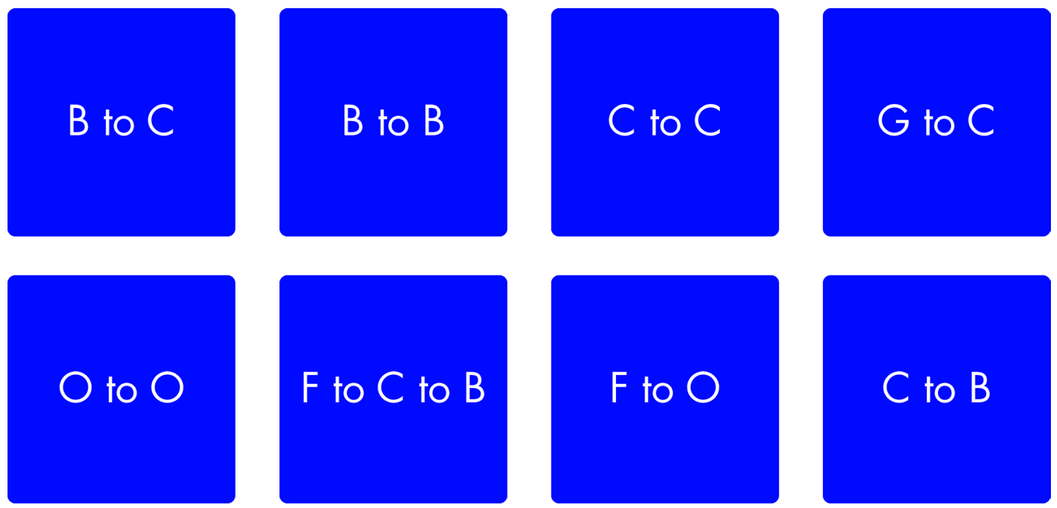
The C2B, also known as the pre-sale model, originated in the United States. The process involves: During the pre-sale period, consumers reserve products by paying a partial deposit. After confirming product type and style and completing payment, they receive the goods after a designated period. Unlike traditional e-commerce, prices decrease as more consumers participate during the pre-sale cycle. This model enables precise demand management by aggregating dispersed consumer needs, optimizing supply chains, centralizing procurement, reducing costs, and increasing profits. The C2B model offers three primary advantages: First, “premium quality at low prices” achieved through bulk purchasing. Second, personalized customization, allowing consumers to participate in the production process and receive tailored products based on their needs, thereby enhancing satisfaction. Third, supply chain optimization by presale period enables merchants to manage procurement, production, and shipping efficiently, minimizing inventory and reducing capital tied up in stock.

Rural Regeneration and Rural Revitalization

Rural regeneration originates from Europe's regional planning and urban regeneration frameworks, emphasizing the revitalization of declining rural areas through physical spatial transformation, industrial restructuring, and community capacity building. It is typically viewed as a problem-solving oriented concept, frequently appearing in the policy systems of countries such as the United Kingdom, Europe, and Australia. As Cloke (1985) notes in his study of counterurbanization in the UK, rural regeneration often accompanies population re-concentration, improved employment opportunities, and enhanced local receptivity—key indicators of rural areas regaining developmental momentum from a state of decline.

At the policy implementation level, research by the Shucksmith (2000) further emphasizes that rural regeneration extends beyond economic concerns, being closely intertwined with addressing social exclusion, employment integration, affordable housing, and community empowerment. Consequently, within the international context, rural regeneration functions both as a development strategy and a social policy tool to enhance the participation of vulnerable groups and strengthen local governance capacity.

From a broader developmental perspective, Marsden (2016) notes that rural regeneration is embedded within the larger global framework of transitioning toward a “post-carbon era.” This process involves multiple dimensions, including sustainable governance, distributed ecological economies, and financial and institutional restructuring. Marsden emphasizes that rural regeneration is not a linear economic recovery but a complex, competitive, and multi-scalar process of rural restructuring shaped jointly by government, markets, communities, and ecosystems.



Thus, the core of rural regeneration lies in addressing structural challenges—such as population outflow, land abandonment, and declining public services—through policy interventions that achieve economic recovery, ecological restoration, and social re-stabilization. In this sense, rural regeneration carries distinct connotations of “rebuilding” and “repairing,” while also serving as a comprehensive process of re-embedding rural areas within broader regional economic, social policy, and sustainable development frameworks.

In contrast, rural revitalization is understood in international research as a pathway for proactive development and sociocultural reactivation, emphasizing how rural areas regain endogenous momentum through cultural heritage, tourism, innovative agriculture, community innovation, and migration policies (Gladwin et al., 1989). This concept is most prevalent in Japan, South Korea, and North America, where its core lies not in repairing decline itself, but in rebuilding multifunctionality and diverse values oriented toward the future.

Within the Japanese context, Yao (2020) notes that rural revitalization occurs within a “post-growth society,” highlighting the integration of national policies with grassroots creative practices. It emphasizes the role of new rural migrants and returnees in reshaping local communities and lifestyles. Concurrently, research by Onitsuka and Hoshino (2018) indicates that rural revitalization relies on cross-community networks, local leadership, and effective communication mechanisms—factors that collectively support the reconstruction of social capital. Ecological studies emphasize sustainable pathways, such as the eco-village model proposed by Takeuchi et al. (1998), which promotes the regeneration of rural environmental and social systems through ecological resource management and urban-rural interactions.

Overall, international literature generally views rural revitalization as a comprehensive process transcending economic recovery. It integrates diverse drivers including population return, community governance innovation, ecological regeneration, and entrepreneurial development, aiming to reimagine the role of rural areas in the post-agricultural era.

Within the Chinese context, the Rural Revitalization Strategy possesses a clear policy framework and systematic implementation pathways. Compared to revitalization in the international context, it exhibits greater holistic coherence and directionality at the national strategic level. As Shi and Yang (2022) point out, the Rural Revitalization Strategy is a development strategy specifically formulated to address the unique developmental challenges faced by China's rural areas, demonstrating distinct relevance and necessity.

This strategy is guided by the so-called Twenty-Character overarching requirements proposed by the State Council: “Thriving Industries, Ecologically Pleasant Living Environments, Civilized Rural Customs, Effective Governance, and Prosperous Livelihoods.” This twenty-character policy encompasses all aspects of agricultural and rural modernization, possessing inherent integrity and indivisibility. It serves both as a requirement and a direction. In advancing rural revitalization, “thriving industries” occupy a central position (Zhang, 2018).

Note:
Twenty-Character in Chinese: 产业兴旺、生态宜居、乡风文明、治理有效、生活富裕.

This requirement extends beyond traditional “production development,” emphasizing that industries are the fundamental driving force for rural revitalization. “Ecological livability” stresses not only clean and orderly village environments but also highlights the harmonious coexistence of humans and nature. It guides farmers' pursuit of “better lives” and clarifies that rural areas should become more livable and attractive for work, comparable to urban areas (Yang, 2022). Notably, China's rural revitalization strategy transcends policy planning to shape the institutional backdrop for rural digital economic development. The emergence and expansion of “Taobao Villages” has played a pivotal role within this strategic framework. Leveraging improved rural e-commerce infrastructure, enhanced logistics, and digital governance capabilities, clusters of Taobao Villages have become vital drivers for advancing rural industrial upgrading, expanding income channels for farmers, and fostering community mobilization. These digitally platform-driven rural industrial organizations engage in positive interaction with the nation's goals of modern agriculture, innovative rural governance, and common prosperity, showcasing new pathways for China's rural revitalization strategy in the digital age.

Taobao Village and Furusato Nozei (Hometown tax)

As Wei et al., (2020) point out, “Taobao villages” represent a novel development model emerging in China's rural areas based on Alibaba Group's Taobao e-commerce platform, formed through the clustered adoption of e-commerce in these regions. Research indicates that Taobao villages emerged under the backdrop of economic restructuring and institutional transformation, driven collectively by multiple actors including local entrepreneurs, enterprises, and local governments. They typically adapt to evolving economic contexts through organizational restructuring and external network interactions. Their growth heavily relies on support from ICT enterprises and local governments, promoting the rooting and diffusion of e-commerce in rural areas via technological upgrading, innovation enhancement, and value-added activities. As an emerging form of regional development, Taobao villages are considered to offer new pathway options for rural development in other developing countries.

Concurrently, Li (2017) notes that Taobao villages first emerged during the clustered development of e-commerce in China's rural areas, referring to rural e-commerce industrial clusters formed alongside the expansion of the Taobao platform. Since the mid-2000s, with the rapid growth of China's e-commerce sector, some rural regions witnessed highly concentrated online store operations, gradually becoming known as “Taobao villages.” The diffusion of Taobao villages not only heightened external attention to rural e-commerce potential but was also viewed as a crucial pathway for economic revitalization and poverty alleviation in underdeveloped rural areas. Within this framework, the development of rural e-commerce is inextricably linked to the interplay between national policies, internet companies, and local social forces.

Particularly since the central government began promoting the “Internet Plus” strategy and e-commerce poverty alleviation policies in 2014, Taobao villages have become a landmark phenomenon in China's rural digital transformation.

Unlike the formation of China's Taobao villages, a single policy proved pivotal in Japan's local e-commerce development: the Furusato Nozei Policy. As noted by Fu and Fujii (2023), Furusato Nozei (Hometown Tax) is a unique tax reform implemented in Japan since 2008. It allows taxpayers to donate to any municipality of their choice and subsequently receive corresponding income tax and resident tax deductions in the following year. Depending on the taxpayer's choice, the tax reduction from Hometown Tax primarily takes two forms: first, income tax reduction in the year of donation and resident tax reduction in the following year; second, full resident tax reduction in the following year through the “one-stop special system,” provided the number of donated municipalities does not exceed five.

The deduction ceiling depends on factors such as the taxpayer's annual income, income/resident tax rates, and family dependency status. If the donation destination is not the taxpayer's residence, they may also receive reciprocal gifts from local producers, such as agricultural products, crafts, alcoholic beverages, or tourism vouchers. Using resident tax reduction as an example, the literature further illustrates: If a taxpayer originally owed ¥200,000 in resident tax to City A but donated ¥50,000 to both City B and City C through the “one-stop special system,” they would receive a ¥48,000 resident tax reduction from City A the following year while also receiving reciprocal gifts from both City B and City C.

From the perspective of local governments, hometown tax donations have become a crucial mechanism for enhancing regional appeal and promoting local products and tourism. In recent years, the vast majority of municipalities have participated in this system, viewing donations as an important financial source for addressing local social issues and advancing sustainable development projects (Fu and Fujii, 2023).

2.3
4D Comparison System

2.3.1 Policy Dimension

In both case studies of this research, the development paths of rural e-commerce are closely intertwined with national and local governance logics, yet they do not fit neatly into a binary “top-down” or “bottom-up” framework. Taking Dongfeng Village in China as an example, its initial growth stemms from the spontaneous market exploration of the local furniture industry and individual entrepreneurs, rather than state planning. However, as the scale expands, the local government gradually intervens in market governance, industrial upgrading, and infrastructure development, ushering it into an institutionalized phase (Cui et al., 2024). Conversely, e-commerce and regional revitalization in Japan's Ayabe City are embedded from inception within institutional frameworks like the “hometown tax” system. Local governments design fiscal incentives and platform participation mechanisms (Fukasawa et al., 2020; Pu et al., 2024; Umeda et al., 2024). This divergence in “market-policy embedding” makes the policy dimension a crucial entry point for understanding the development models of rural e-commerce in China and Japan.

China's rural e-commerce trajectory has followed a distinct policy path from Japan's. Although early Taobao villages like Dongfeng Village emerged from grassroots market forces, the strategic importance of rural e-commerce was elevated to the national level. Under the Internet Plus strategy, the central government continuously introduced policies positioning e-commerce as a core driver for transitioning from an “export-led to domestic consumption-driven” economic structure. These policies positioned “mass entrepreneurship and innovation” alongside public service provision as new drivers of industrial upgrading, integrating rural e-commerce as a key component in achieving “a moderately prosperous society (Xiaokang shehui).” They also aligned with national strategies such as “new-type urbanization” and “targeted poverty alleviation” (Li, 2017). In the evolution of Taobao Towns, government-led investments in infrastructure construction, transportation conditions, and regional planning have provided crucial institutional support for upgrading from dispersed nodes to interconnected networks (Cui et al., 2024). Furthermore, Tang and Zhu (2020) note that the expansion of rural e-commerce in China “has been highly supported and promoted by China’s Central Government.” The government views e-commerce as an engine for driving rural economic growth and social improvement, playing a leading role alongside local governments in the rapid development of Taobao Villages.

Note:
Xiaokangshehui in Chinese: 小康社会.

In comparative terms, Japan's rural e-commerce development exhibits a distinct institutionally driven trajectory. Fukasawa, Fukasawa, and Ogawa (2020) note that following the implementation of the Furusato Nozei (hometown tax donation) system, local governments have engaged in “excessive competition for donations” by boosting “return rates” or offering “reciprocal gifts” such as local specialties and electronics to attract taxpayers. This intense fiscal competition may even “reduce net revenue by at least 7.5%.” With the entry of private digital platforms, the system underwent a “radical transformation,” where platformization redistributed resources among taxpayers, local governments, and SMEs through “increased cross-sectoral interactions” (Umeda et al., 2024). However, the study also notes that overreliance on economic incentives “obscures the system’s original goal of rural and regional development,” necessitating a renewed governance balance between “economic incentives” and “shared social goals.” The United Nations University policy brief further notes that as “a unique tax decentralization initiative,” the digitalization of hometown tax contributions enhances local “tax revenue” through tax adjustment and payment facilitation, holding particular fiscal significance for regional governments facing population decline or industrial underdevelopment (Pu et al., 2024).

Therefore, this study's focus on the policy dimension extends beyond merely comparing “who acts first.” It analyzes how the state and local governments intervene, respond to, and reshape rural e-commerce at different stages. Specifically: First, it examines how national strategies and local development plans support or regulate rural e-commerce through various policy tools—such as China's rural revitalization, e-commerce expansion into rural areas, and targeted poverty alleviation initiatives, alongside Japan's tax reforms and regional revitalization efforts. Second, it compares the timing and methods of government intervention: whether it occurs through “late institutionalization” via standardization, regulation, and institutional development after market trials mature, or whether it dominates the development path from the outset through fiscal tools, institutional design, and brand oversight. Third, it analyzes governance relationships among multi-level actors, including the division of responsibilities between central, local, and village (or municipal) governments, as well as coordination mechanisms between governments and platforms, industry associations, and community organizations.

2.3.2 E-commerce Platform Dimension

In the development of rural e-commerce, platforms serve not only as intermediaries for information matching but also as key drivers reshaping transaction methods, logistics systems, and farmer participation. As rural e-commerce evolves from early individual experimentation toward systematic development, platforms have progressively become vital nodes for resource integration, rule-setting, and industrial organization. Therefore, in both Chinese and Japanese cases, the platform dimension is not only a crucial lens for observing rural e-commerce operational mechanisms but also a fundamental basis for explaining the origins of differences between the two countries.

First, examining China's experience reveals that the rapid expansion of

rural e-commerce heavily relies on the penetration of large, comprehensive platforms. Zhang (2020) points out that the evolution of China's platform ecosystem reflects a "dynamic model of technological and cultural transformations." Large platforms such as Alibaba continuously expand their market power through "mechanisms of participation, datafication, selection, and commodification," and in the long run, they form "more symbiotic relations" with the state, thereby more effectively "extracting the surplus value generated through the labor of platform-based petty capitalists." The platform-led development model not only laid the structural foundation for China's e-commerce system but also deeply embedded the development path of rural e-commerce into the technological and institutional logic of these "monopoly platform ecosystems"—the rise of Taobao villages such as Dongfeng Village is a typical example.

Moreover, China's platformization process is not merely a market phenomenon but manifests as a deeply embedded force within the social structure. de Kloet et al., (2019) note that China's digital platformization manifests as a “penetration of economic, governmental, and infrastructural extensions.” The ‘ubiquity’ of platform companies, coupled with state policy support, enables their continuous expansion and control across sectors like news, transportation, and retail. This has formed a “fast process” of “platformization of Chinese society” that spans multiple social dimensions. In the realm of rural e-commerce, this infrastructure-building and governance logic of platforms directly propels the digital transformation and spatial restructuring of rural industries.

Concurrently, Wei (2023) further reveals the deep penetration of commercial platforms in China. He argues that platforms achieve this by “deeply embedding platform logic into the social system and influencing or even controlling the operation of the social system.” They leverage the combined effects of “data + algorithm” to enhance user “platform stickiness,” then penetrate deep into the foundational layers of social and economic structures through “the infrastructuralization of platform.” In other words, China's rural e-commerce development relies not only on platforms' transactional functions but also on their systemic support in logistics, payments, algorithms, and reputation systems. Consequently, China's rural e-commerce system often exhibits a “platform-centric, merchant-dependent” structural characteristic.

In contrast, Japan's rural e-commerce platform ecosystem emerged under a different institutional backdrop, displaying stronger policy embeddedness and multi-stakeholder collaboration. Umeda et al., (2024) note that Japan's Furusato Nozei system, after digitalization and platformization, formed a “digital marketplace where municipalities, donors, and local Small and Medium Enterprises (SMEs) interact.” Platforms “play a central role” in cross-sectoral interactions and serve as “intermediaries in interactions between cross-sectoral stakeholders.” This platform ecosystem has driven “the growth in donation volumes and the creation of a digital marketplace” while also enabling the “digital transformation... and the emergence of interactive governance in public value creation” within local public sectors. Evidently, Japan's development in local and rural areas similarly relies heavily on e-commerce platforms as core mechanisms for resource flows and value creation.

Meanwhile, Japan's platform-based development path extends beyond tax systems, with platforms playing a structural role in broader local industry and regional revitalization. Tang et al., (2025) emphasize that since its implementation in 2008, the Furusato Nozei system has enabled taxpayers to select their preferred local municipalities for contributions through digital platforms, allowing funds to be directly allocated by local governments for cultural, educational, and local industry projects. Its platform-based mechanism not only “supports traditional culture and educational programs” but also enhances brand value and the efficiency of return gift distribution, becoming a vital pillar for local revitalization. This signifies that the development of Japan's rural areas and local industries relies heavily on platform-based fiscal mechanisms and commercial pathways.

Furthermore, Steinberg (2019) observes from a broader historical perspective of the digital economy that Japan's digital economic system has long been shaped by platform models. The early i-mode platform formed a typical multilateral market by “regulating the flow of data, commodities, and money between users, third-party providers, and device manufacturers,” and “significantly impacted the Japanese Internet imaginary.” This platform-centric “transactional platform” model established Japan's internet development trajectory as “a site for purchasing contents, services, and goods,” laying the structural foundation for the evolution of local industries, e-commerce systems, and regional economies within the platform ecosystem.

In summary, while rural e-commerce in both China and Japan relies on platforms as key enablers, their approaches exhibit distinct differences:

China is dominated by large integrated platforms, following a market-driven path characterized by deep platform penetration and algorithm-enhanced competition; Japan, driven by institutional frameworks, has developed a multi-platform “institutional platform” model emphasizing interactive coordination among government, platforms, and local entities.

Nevertheless, both countries demonstrate the structural significance of platforms in rural e-commerce development: serving as transactional infrastructure, logistics nodes, information governance systems, and conduits connecting local industries, platforms have become irreplaceable institutional and technological hubs within rural e-commerce ecosystems. Consequently, within this comparative framework, the platform dimension is not only pivotal for explaining differences between China and Japan's rural e-commerce models but also serves as a crucial entry point for understanding the digital evolution of rural economies in both nations.

2.2.3 Individual Labor Dimension

With the rapid expansion of e-commerce, profound changes are occurring in the structure of the labor market and in the production and employment patterns of individual workers. These changes are not only reflected in the restructuring of industrial chains and innovations in business models but also

directly impact local labor's employment opportunities, wage structures, and career paths. Therefore, the “individual dimension” has become a crucial entry point for understanding rural e-commerce. As Bauer and Fernández Guerrico (2023) emphasize, over the past decade, "the increase in the presence of online retailers (Amazon, eBay, Alibaba, Zappos, Newegg, Safeway, etc.) has led to the rapid growth of e-commerce transactions.“ As ”a key local economic activity,“ retail accounts for 11% of total U.S. employment. This implies that e-commerce expansion will ”have important distributional consequences in local labor markets, primarily attributable to changes in employment and wages in retail and retail-related industries". In other words, e-commerce is not only transforming industries but also profoundly reshaping workers' employment structures, labor boundaries, and livelihoods.

China's experience demonstrates that the rapid expansion of rural e-commerce is reshaping labor supply structures and workers' identity recognition. First, China's labor market itself is undergoing profound structural adjustments. Zhang et al., (2021) note that the pandemic and industrial transformation have led to “considerable impact on China’s labor market,” with the digital economy and e-commerce platforms emerging as new employment spaces amid persistent labor contraction and intensifying shortages. This trend indicates that rural e-commerce is not merely an expansion on the consumption side but is playing a pivotal role in employment absorption and labor restructuring.

Simultaneously, livestreaming e-commerce and platform mechanisms deeply intervene in rural workers' production processes and identity construction. Duan et al., (2023) find that the entrepreneurial prospects of livestreaming e-commerce are attracting large numbers of migrant workers back to their rural homes, “migrant workers are being drawn back to their rural homes by the techno-entrepreneurial prospects of live e-commerce”. At the level of labor organization, platform mechanisms enable “livestreaming platforms to transform the labor process of rural produce sellers,” driving the digitization, visualization, and embedding of labor processes within platform logic. The authors further note that this process “reproduces, rather than subverts, the subjectivities of e-commerce sellers and the power structures in which they are cemented,” signifying that workers' livelihoods and subjectivities are being reshaped into a new type of “new farmer” characterized by entrepreneurial spirit and platform skills.

In stark contrast to China, the labor structure of rural e-commerce in Japan is more deeply embedded within existing industrial chains and corporate systems. Tachiki et al., (2004) note that the diffusion of e-commerce in Japan is influenced by corporate affiliation systems (Keiretsu). “*Keiretsu firms play an important role in adopting business-to-business technologies, but the small and medium-sized enterprises in the retail sector... are more active in adopting business-to-consumer technologies*” indicating that labor participation is achieved more through corporate systems than individual entrepreneurship. The authors further emphasize that Japanese enterprises and their employees must “overcome the barriers and inefficiencies in the existing political economy” to adjust production and operational methods during e-commerce diffusion. Consequently, rural e-commerce in Japan exhibits institutionalized and stabilized labor patterns: SMEs, family businesses, and part-time workers form the primary participants, while space for individual-level spontaneous innovation remains relatively limited.

Collectively, the individual dimension concerns not only shifts in labor supply structures but also how workers reposition themselves within the digital economy. Chinese workers in platform environments tend toward greater entrepreneurship and flexibility, with identities rapidly reshaped by platform logic, Japanese workers, however, remain more reliant on established corporate systems, exhibiting a more stable labor structure significantly influenced by institutional regulations. Thus, the individual dimension not only complements analyses from the policy and platform dimensions but also reveals how digitalization drives the restructuring of industrial logic and rural society at the most micro level of labor. Establishing this dimension provides a crucial foundation for subsequent case studies and is key to understanding the divergent development paths of rural e-commerce in China and Japan.

2.3.4 Land and Spatial Dimension

In rural e-commerce research, the spatial dimension is widely regarded as a key factor embedded within industrial operational mechanisms, particularly manifesting in logistics systems, distribution pathways, and the organization of production-living spaces. The development of e-commerce fundamentally relies on node density, transportation networks, spatial costs, and locational relationships. This inevitably links it to the evolution of “logistics urbanization” and the “global logistics” system: the concentration of logistics infrastructure, the hierarchical structuring of urban-rural circulation nodes, and the restructuring of cross-regional transportation networks all directly influence how e-commerce diffuses across different regions and embeds itself within local industries. Therefore, understanding the differences between rural e-commerce in China and Japan also requires an examination from a spatial perspective.

At the macro level, traditional trade “impedes the movement of goods and services between locations,” leading to small cities and remote areas being long constrained by high logistics costs and insufficient commodity accessibility. E-commerce, by “eliminating the fixed costs of entry and reducing the effects of distance on trade costs,” significantly improves access conditions for small cities and remote areas (Fan et al. 2018). Fan et al. further find that China's online consumption share is negatively correlated with population size and market potential, indicating that e-commerce is reducing spatial inequality in living standards, particularly benefiting small cities and remote areas.

Second, from the perspective of rural spatial network structures, the development of rural e-commerce in China has generated new agglomeration phenomena. Wang et al., (2023) find that rural e-commerce tends to cluster in “e-commerce cluster areas” within Chinese rural regions, exhibiting a network centrality characteristic where “in-degree

is higher than out-degree". The study further indicates that e-commerce can "enhance the connectivity of spatial networks in rural settlements through scale effects, traffic, and job matching," propelling rural spatial connections from isolation toward "broader external markets". This implies that e-commerce not only alters logistics routes but also reshapes the structure and connectivity of rural spatial nodes.

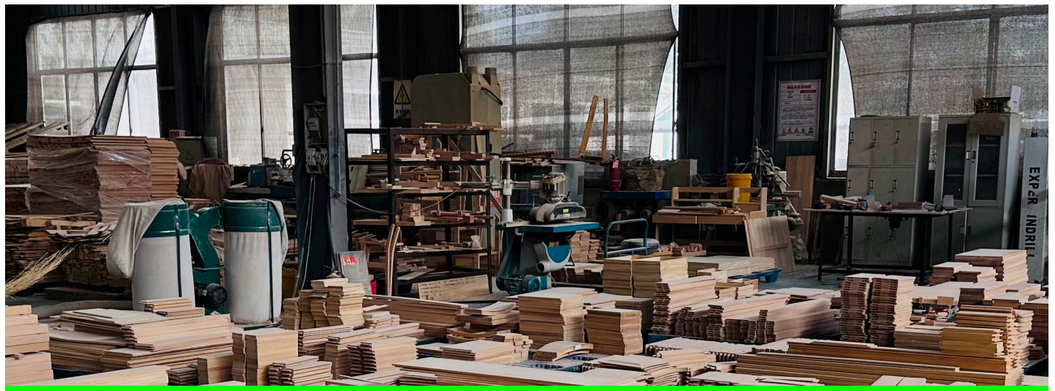
Third, Japan's experience demonstrates that the spatial distribution of e-commerce logistics facilities is significantly influenced by transportation infrastructure, population density, and commercial location. De Silva et al., (2019) note that the spatial distribution of Japanese e-commerce logistics facilities is heavily influenced by "accessibility to expressways," with "pure online retailers choosing low-density locations with strong expressway accessibility." Their spatial distribution closely resembles "the locational patterns of traditional distribution logistics". This indicates that e-commerce logistics site selection remains heavily regulated by existing urban structures, forming a stable spatial pattern distinct from China's.

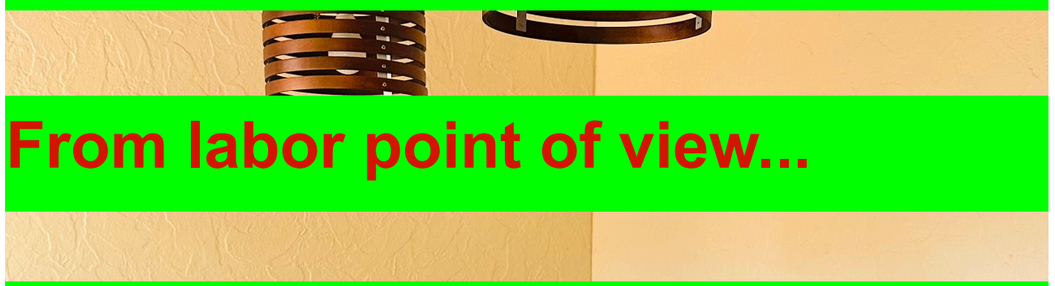
Moreover, Japan's logistics system is undergoing restructuring amid the expansion of e-commerce. De Silva et al., (2019) analyze the spatial organization of e-commerce logistics facilities in the Tokyo region, noting that e-commerce expansion has spurred the rapid emergence of "new forms of logistics facilities, commonly known as fulfillment centers," which have become core nodes in the logistics network. The study further emphasizes that the location selection of these fulfillment centers exhibits high sensitivity to "settlement form and accessibility to transport infrastructure," particularly concentrating near highway hubs. The author also notes that the spatial layout of e-commerce logistics has become "a driving force of changing geographies of logistics facilities," significantly impacting urban and regional logistics patterns. These findings indicate that e-commerce in Japan has not altered the fundamental modes of goods circulation but is instead modernizing distribution methods and restructuring the logistics node system.

In a conclusion, Logistics costs and spatial accessibility determine e-commerce's diffusion pathways between regions; rural logistics nodalization drives the restructuring of rural spatial networks; in Japan, logistics spaces are profoundly shaped by institutionalized urban logistics systems; and at the global scale, logistics urbanization and global logistics networks further amplify e-commerce's reshaping of spatial structures.

Building on this, the study introduces a spatial dimension to examine differences in logistics nodes, transportation accessibility, production-living spatial layouts, and locational logic between rural e-commerce in China and Japan. This provides a foundation for understanding the spatial embeddedness mechanisms underlying the distinct rural e-commerce trajectories in both countries.

Based on these four dimensions, subsequent sections of this study will present case analyses of China and Japan respectively, followed by systematic comparisons. By adopting a multidimensional framework encompassing policy, platform, individual, and spatial levels, this research reveals the similarities and differences in rural e-commerce development models across varying scales. It offers a systematic analysis and personal insights into understanding the structural disparities in rural digital transformation between China and Japan.





PART II

WAYING THE DIGITAL COUNTRYSIDE

CHAPTER III:
China's Path

From Workshop to Taobao Village:
A Replicable Path to "Thousands Village, Single Look."?

In the Chinese section of this study, Dongfeng Village in Suining County, Xuzhou City, Jiangsu Province, has been selected as the primary case study.
This chapter primarily examines how Dongfeng Village evolved from a traditional, predominantly agricultural village into an e-commerce hub acclaimed as ‘China's First Taobao Village’. Firstly, it traces the origins and pivotal moments in Dongfeng Village's e-commerce development over time, revealing the driving forces behind its transition from artisanal production to online sales. Secondly, it analyses the development trajectory and operational models of the local e-commerce industry through the entrepreneurial journeys of typical practitioners. Subsequently, it examines the spatial dimensions of industrial clustering and territorial expansion driven by two decades of rapid e-commerce growth. Finally, by synthesising the "Shaji Path", it defines the defining characteristics and underlying logic of its evolution from the initial "Shaji Phenomenon" into a stable and mature "Shaji Model".

3.1
The Origins of Dongfeng Village: China's Premier Taobao Village

Dongfeng Village is situated in the eastern part of Shaji Town, Suining County, Xuzhou City *(Map 3.1-3.5)*. It borders Suqian City to the east and Shaji Town to the west. Provincial Highway No.324 traverses the village from east to west along its northern edge, connecting to the Xuzhou-Suqian Expressway exit 3 kilometres to the east *(Map 3.6)*. Covering a total area of approximately 5 square kilometres, the village had 1,457 households as of 2021, with a registered population of 5,727 and a permanent resident population of 4,939.

Dongfeng Village was once a typical rural settlement centred on agriculture. Throughout its modern development, it has cultivated considerable entrepreneurial acumen. Compared to neighbouring areas, this community exhibited a pronounced commercial ethos as early as the beginning of the twenty-first century, with its residents primarily engaged in various sideline occupations and small-scale businesses. According to Mr Wang, the accountant at the local community committee:

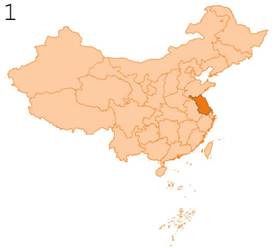
"In our Dongfeng Village, the folk have always possessed a keen business acumen. In earlier years, with traditional farming being the mainstay, villagers established vermicelli production factories. Later, poultry and pig farming thrived, and the recycling of waste plastics grew into a substantial operation. At the height, over 800 villagers travelled nationwide collecting plastic waste – a truly courageous endeavour for the villagers to venture across the country in pursuit of livelihoods. Later, we even sourced waste from Europe and America, earning the village a reputation as a "rubbish village" far and wide. However, the financial crisis eventually took its toll, and many of these waste collection operations simply couldn't sustain themselves."

Accordingly, prior to venturing into the online furniture trade, Dongfeng Village residents had primarily engaged in three industries: agricultural processing, animal husbandry, and plastic recycling. He also noted that *"before 2006, roughly half of Dongfeng Village's 2,600 labour force would leave their hometown to seek work elsewhere."*

Dongfeng Village rode the wave of modern development to become China's premier Taobao furniture village, rapidly establishing an ‘e-commerce + furniture’ industrial cluster. This transformation began in 2006 with the entrepreneurial venture of a young villager. At that time, while some Dongfeng villagers engaged in farming and others endured environmental pollution from waste plastic processing, Sun Han embarked on his business of ‘replicating IKEA furniture’ for sale on Taobao. Concurrently, during Taobao's formative years, minimal oversight existed regarding the authenticity of online products to attract customers. This regulatory vacuum effectively equated to unprotected intellectual property rights, inadvertently paving the way for Sun Han's counterfeit-based venture. It also sowed the seeds for subsequent intellectual property and quality issues within Dongfeng Village's furniture industry.

Sun Han's personal entrepreneurial journey evolved into Dongfeng Village's transformation as China's premier Taobao furniture hub, progressing through six distinct phases.

3.1



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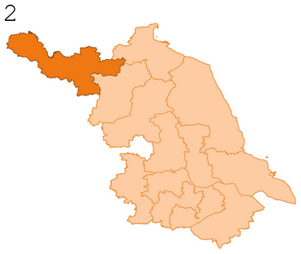

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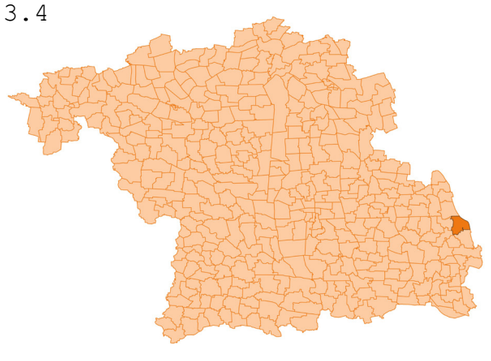
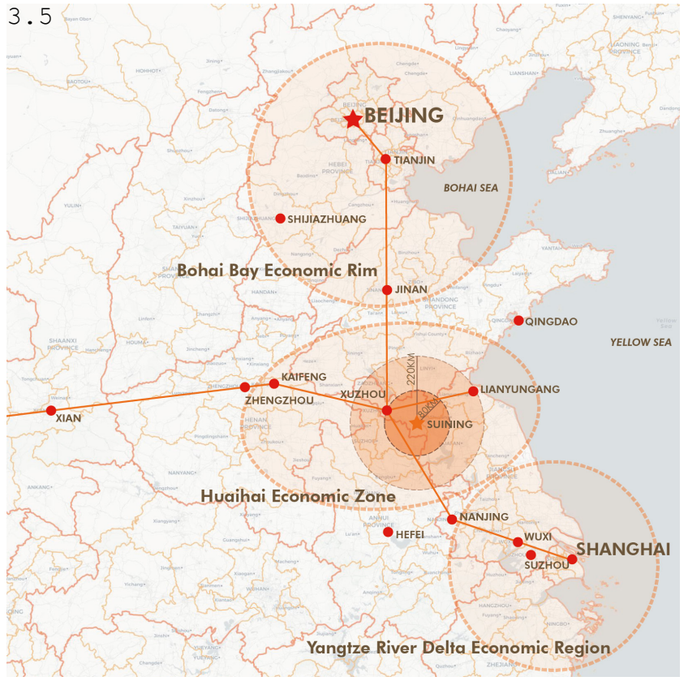


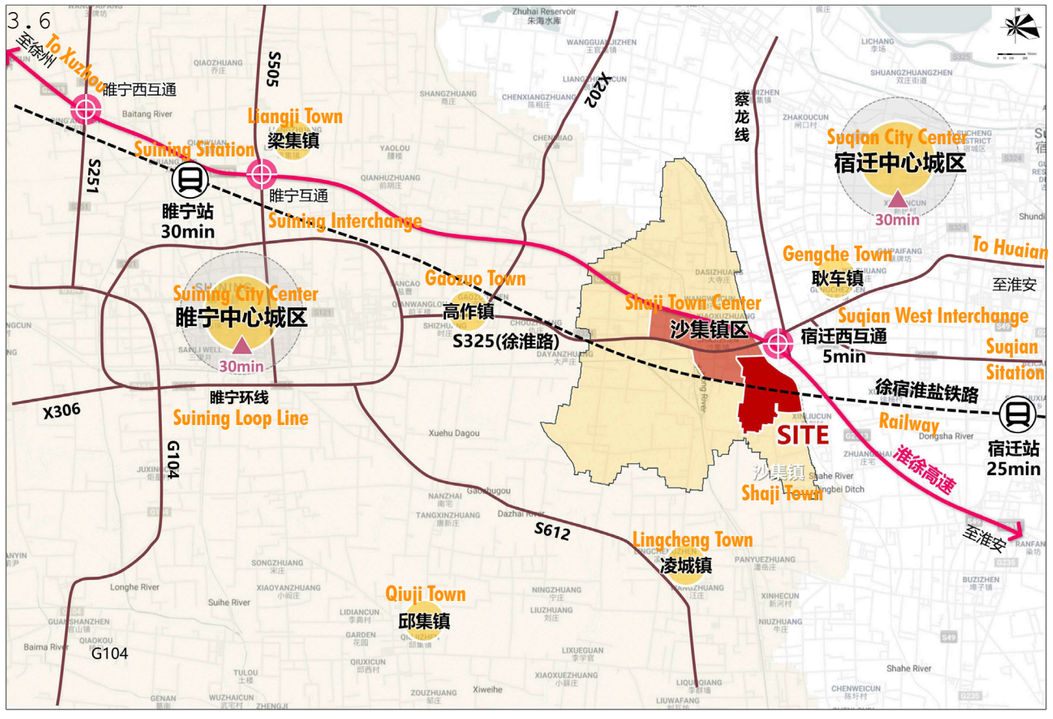
Map 3.1-3.4
Site location overview

1.Jiangsu Province · China
2.Xuzhou City · Jiangsu
3.Suining County · Xuzhou
4.Dongfeng Village · Suining

Map 3.5
Economic site analysis

Map 3.6
Regional Transportation
and Site Access Map





Phase One: Sun Han's Personal Enterprise

Sun Han's entrepreneurial venture commenced as a small-scale personal business operating within the family unit. During its initial stages, his parents funded the purchase of a computer. With approval from the Shaji Town Telecommunications Bureau, the first residential broadband connection was installed in Dongfeng Village. A loan of 8,000 yuan (equivalent to approximately 800 euros in 2006) was secured from the Suining Branch of the Agricultural Bank of China to finance the start-up, alongside the establishment of online banking facilities. At that time, Dongfeng Village was remote and lacked a courier service point. Sun personally liaised with the town's sole courier to transport goods to the neighbouring city of Suqian, from where they were dispatched nationwide.

His initial venture involved jewellery and small gifts, though profit margins were low. At the 2007 IKEA Simple Furniture Exhibition in Shanghai, Sun Han recognised the products *"novel designs, simple forms, ease of self-assembly, and substantial profit potential"* thus embarking on his journey to replicate IKEA's home furnishings model.

Phase Two: Five-Person Team Entrepreneurship

After Sun Han pioneered the establishment of a Taobao online store and achieved success, his entrepreneurial experience gradually began circulating within the village on a small scale. Initially, he proactively shared his Taobao management expertise with fellow villagers Chen Lei and Xia Kai. Soon after, villagers including Wang Huaizhong faced financial hardship due to setbacks in their waste plastic recycling business and sought to emulate Sun Han's venture. Initially, Sun Han was reluctant to impart his knowledge. However, Wang Huaizhong was his next-door neighbour. Pressured by social obligations and the influence of their close-knit community, Sun Han ultimately agreed to their request. Starting from scratch, he taught Wang Huaizhong, who had only primary school education, how to use a computer and set up an online shop on Taobao. Wang Huaizhong then passed this knowledge on to his elder brother, Wang Yue. Thus, Dongfeng Village formed a small entrepreneurial group of five individuals.

Phase Three: The Village's Initial Surge in Online Furniture Sales

The 2008 financial crisis plunged the waste plastic recycling industry into a slump, causing many recycling plants to close down. In contrast, Sun Han's group saw their shipment volumes surge. Trucks constantly came and went from their factory gates, hauling away box after box of large furniture items. Word spread of Sun Han's staggering profit margins of 200-300%. Even Wang Pu, who "only had primary school education" began using computers to conduct online business. Inspired, villagers started emulating them by opening their own online shops. At this stage, other villagers engaged in small-scale entrepreneurship merely conducted basic online sales, still sourcing goods from factories like Sun Han's. They functioned solely as online retailers.

Phase Four: From Social Pressure to Knowledge Diffusion

Traditional Chinese society, particularly in rural areas, operates an ethical evaluation system. This establishes a societal framework that rewards those who show gratitude and condemns those who are ungrateful, rendering individual endeavour meaningless(Luo, 2013).In rural communities, where relationships are deeply rooted in mutual obligations, people inevitably owe favors to one another. Failure to reciprocate these favors invites condemnation from the entire community.

Confronted by Dongfeng Village residents' fervent eagerness to learn, Sun Han and his peers grew hesitant about imparting their expertise in full. They feared that increasing the number of practitioners would multiply their competitors, gradually driving down prices and eroding their profit margins. Consequently, within their five-member group, they reached an agreement to cease imparting their "path to prosperity" to outsiders.

This decision provoked discontent among the villagers, who perceived Sun Han as lacking in compassion and believed neighbours should assist one another. This led to numerous conflicts arising. This incident reflects the social dynamics of China's rural communities. Fearing increasingly vocal condemnation from neighbours, which could jeopardise their business and social standing, Sun Han's group ultimately yielded to social pressure. They shared their expertise and methods with villagers seeking guidance, thereby disseminating the once-guarded knowledge and skills *(Fig. 3.1)*.

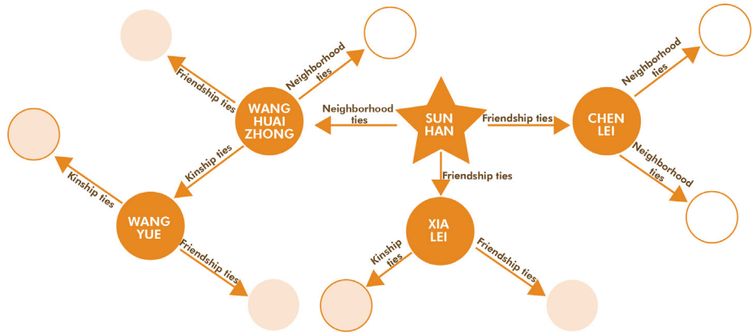


Fig. 3.1
Diagram of Network Merchant Diffusion in Dongfeng Village

Phase Five: Village-Wide E-commerce Adoption and Endogenous Industrial Transformation

Following the sharing of Taobao shop management expertise, the number of e-commerce businesses in Dongfeng Village surged dramatically. Concurrently, the village's dramatic transformation prompted young migrant workers to return home to establish their own enterprises. Referencing research data from other scholars in 2013, by the end of 2006, there were only three Taobao shops. By 2008, this had expanded to one hundred, and just three years later, there were already over a thousand. Furthermore, Dongfeng Village's sales revenue from 2012 to 2018 had reached tens of millions *(Fig. 3.2-3.3)*.

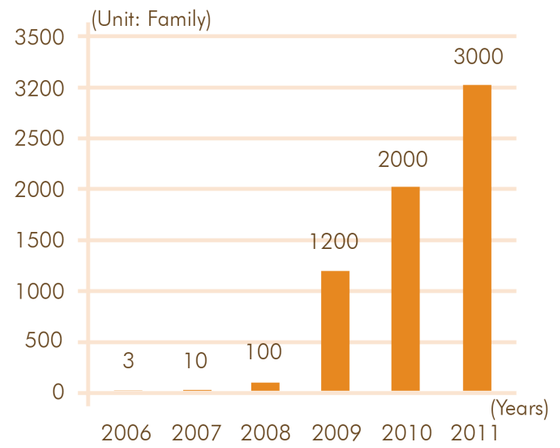


Fig. 3.2
Changes in the Number of Online Shops in Dongfeng Village, 2006-2011

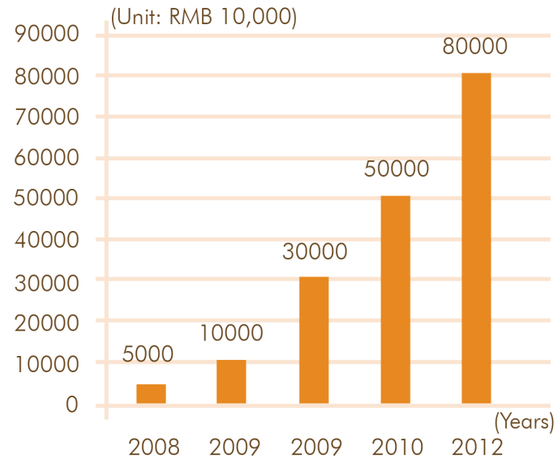


Fig. 3.3
Annual Online Sales of Dongfeng Village, 2008-2012

During the initial phase of experience sharing, owing to low entry barriers and substantial profit margins, some successful merchants such as Sun Han had already established their own factories. When many villagers ventured into entrepreneurship by opening Taobao shops, they predominantly entered the market as "middlemen". Rather than manufacturing directly, they sourced goods from established factories and resold them. A lack of awareness regarding intellectual property protection also led them to sell products on Taobao through simple rebranding. As demand grew, these merchants gradually accumulated capital and mastered basic furniture production techniques, prompting them to establish their own factories. This enabled a transition from purely e-commerce sales to a diversified identity as "e-commerce operators + manufacturers".

Fig. 3.2-3.3 Note:
Source:
Luo Jianfa, *The Research on the E-commerce & Furniture Industrial Cluster of Shaji Dongfeng Village based on Actor-Network Theory: Generation, Structure & Transformation of the "Shaji Mode"*. (Master's thesis, Nanjing University, 2013), P18

Concurrently, the industry's expansion fuelled demand for production workers. Family-run or husband-and-wife operations became prevalent: older members, possessing greater carpentry experience, typically handled frontline production, while younger spouses leveraged their digital literacy for e-commerce operations and sales. Within these partnerships, men often managed logistics, transportation, and dispatch – the "hard" aspects – while women primarily handled customer service and sales duties.

Phase Six: Initial Formation of an 'E-commerce Sales + Furniture Production' Industrial Cluster

The entire Dongfeng Village formally embarked upon the "sales + manufacturing" industrial model once again in 2009. As Accountant Wang recounted during the interview: "*By this time, the number of online shops in this area had reached over 400.*" The village roads were clearly unable to keep pace with the rapid growth of e-commerce, alongside logistics, internet connectivity, and power supply. With no logistics facilities within the village, merchants had to travel to Suining County town to dispatch goods, consuming nearly half a day for the round trip. Internet access was also a major issue, as he recalled: *"In the early days, everyone used dial-up connections. Opening a webpage took ages – it was terribly inconvenient."* Power supply issues became increasingly evident as factories multiplied. During field interviews, Mr. Cao, owner of a board manufacturer, recalled: *"Back then, frequent power cuts made business impossible. With over a dozen factories operating round the clock, the grid couldn't cope – outages lasting a day or two were common. As board manufacturers, our customers relied on our materials for further processing. We were driven to distraction by their constant demands."*

Upon witnessing this situation, Wang Min, then Party Secretary of Dongfeng Village, leveraged his connections to approach the Deputy General Manager overseeing operations at Deppon Logistics. He provided a detailed account of Dongfeng Village's development journey with Taobao, demonstrating the factory's round-the-clock production and the mountains of goods piled high awaiting dispatch. Deppon Logistics swiftly established operations in Shaji, prompting a wave of other logistics enterprises to follow suit. Concurrently, a series of measures were implemented: laying fibre-optic cables, renovating premises, and constructing roads *(Timeline of Dongfeng Village's Early Development as Shown in the Fig. 3.4)*.

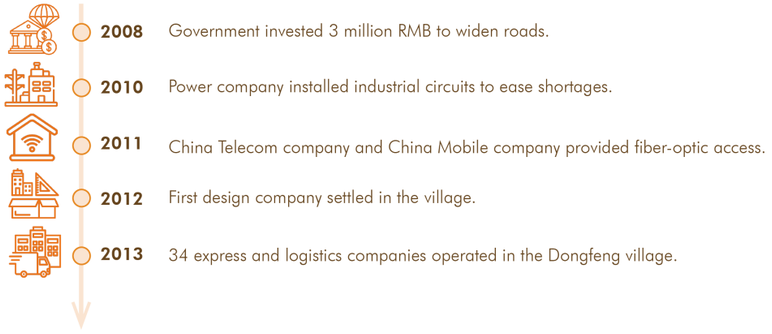


Fig. 3.4 Infrastructure Development Timeline

Image 3.1
Packaging Warehouse

Image 3.2
Drop-shipped Goods

By this stage, Dongfeng Village had become home to over a hundred furniture manufacturers, thousands of online retailers, alongside diverse logistics providers, couriers, raw material suppliers and component manufacturers, all concentrated within its five square kilometres. This gave rise to Dongfeng Village's e-commerce and furniture industry cluster. In 2013, the village was formally recognised by Alibaba Group as "China's Premier Taobao Village".

3.2
Case Study of Dongfeng Village

Over the course of more than two decades of development in Dongfeng Village, entrepreneurship has remained a persistent trend, with the village's entrepreneurial landscape continually expanding. This process is reflected in villagers' e-commerce practices and the deepening penetration of broadband networks and e-commerce platforms. An increasing number of villagers have embraced e-commerce, transforming individual ventures from isolated endeavours into collaborative family businesses. Couple-run shops, family-operated stores, and businesses involving relatives have emerged, with product ranges expanding from rudimentary furniture making to encompass diverse categories such as television cabinets, bunk beds, timber panels, and cardboard boxes. This diversification has broadened the pathways for rural economic development. Concurrently, the penetration of networks and platforms has facilitated the gradual establishment of digital support services such as accounting firms, 3D design companies, and multi-brand logistics enterprises. These developments not only create new employment and entrepreneurial opportunities for villagers but also drive the optimisation and upgrading of the local industrial chain. Following a month of field research, interviews with local entrepreneurs, and review of historical records, Dongfeng Village's entrepreneurial models can be categorised into three distinct types.

Model One: Top-Down Leadership by Village Cadres

In rural China, village officials wield considerable influence. As a village cadre, Wang Wanjun led by example during the village's economic transition, establishing a Taobao store and actively encouraging neighbouring villagers to engage in e-commerce. Leveraging his position to secure policy resources and demonstrating through personal practice, he gradually spearheaded the expansion of e-commerce in Dongfeng Village from the top down.

Throughout the 1990s, Dongfeng Village operated a scrap plastic recycling business. While highly profitable, this industry improved villagers' livelihoods and the village's economic development, it also resulted in ubiquitous waste and polluted water bodies, adversely affecting daily life for most residents. Beginning in 2008, as government policies strengthened, environmental remediation efforts intensified, and the ‘e-commerce to the countryside’ initiative gradually took root, Wang Wanjun began contemplating new avenues for the village's development through e-commerce.

Initially, he invested his own funds to purchase equipment. Despite his family's opposition, he persisted in honing his computer typing skills, progressing from slow one-finger typing to eventually handling multiple roles such as customer service, dispatch, and liaison. He also persuaded his son, who was working away from home, to join him in running the online store. To learn about online operations and the cost-effectiveness of various logistics options, he made multiple trips to furniture markets in other regions to observe practices. As order volumes surged, supply couldn't keep pace. He subsequently established his own workshop, hiring skilled carpenters. This integrated "online sales + production" model not only stabilised operations but also led to the creation of his signature product: vertical ceiling-mounted wall cabinets crafted from aerospace-grade aluminium. This innovation has propelled his family's Taobao store to become an eleven-year veteran on the platform.

3.3

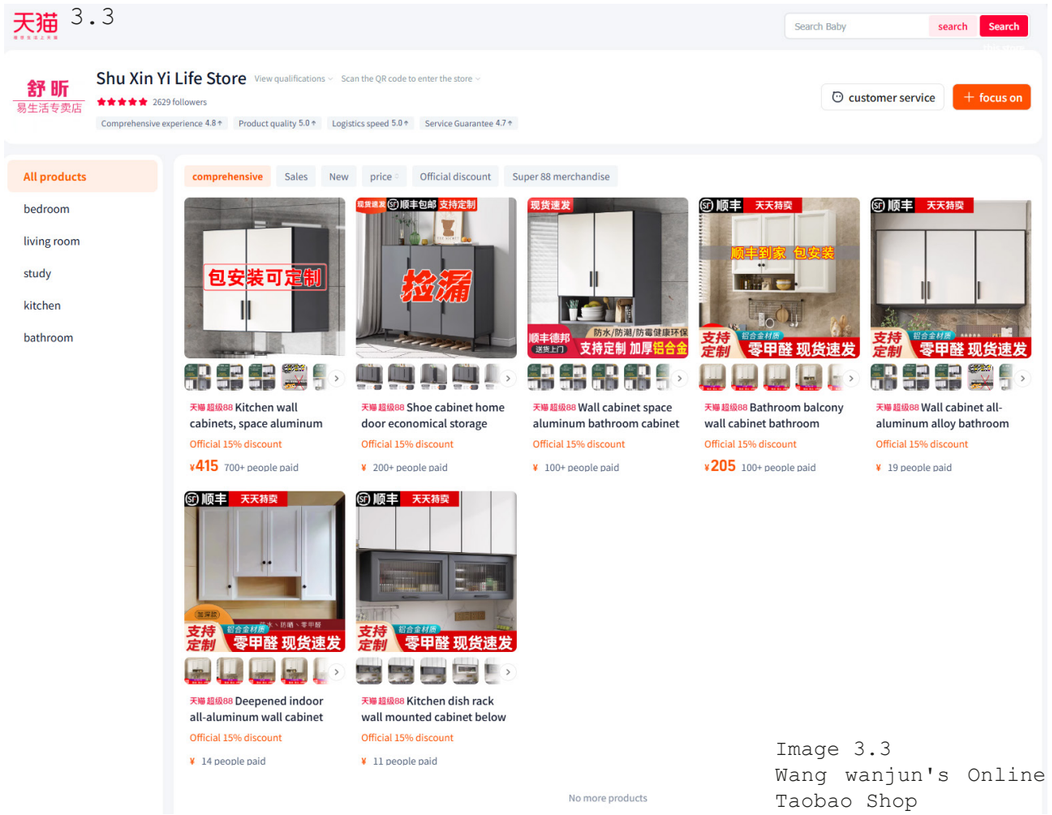


Image 3.3
Wang wanjun's Online Taobao Shop

During the interview, Wang Wanjun remarked: *"As a Party cadre who grew up among the people, earning their trust and support requires delivering tangible results."* While building his own enterprise, he has guided 11 households to launch online shops and assisted four families in establishing furniture factories. He further noted that "*Dongfeng Village's diverse ‘industrial development’ initiatives mutually reinforce the village committee's ‘modern governance’ efforts. The village committee is now diversifying collective income streams by guiding e-commerce practitioners to pay taxes and*

utilising communal storage facilities. The village collective economy has begun investing in youth start-ups, third-party operation platforms, and e-commerce cooperatives to foster vusing, shared logistics, and standardised training systems to enhance overall competitiveness."

Image 3.4
Interviewing with Wang wanjun

Model 2: Brand-Building Pathways by Entrepreneurs

Cheng Huaibao stands as a pivotal figure in Dongfeng Village's e-commerce development. His furniture brand ‘Jindoxi’ secured the honour of Suining County's Outstanding E-commerce Brand as early as 2017. His entrepreneurial approach emphasises a branding strategy, starkly contrasting with the majority of fellow villagers who rely on low-end product sales and pursue high volume. From the outset, Cheng Huai-bao viewed e-commerce not merely as a means to generate income, but as a career endeavour, with his objective being to establish his own brand. As he stated in an interview: "My path differs from others. Most treat e-commerce as a tool for profit, whereas I approach it as a career. I aspire to build my own brand, taking my parent-child beds and other infant furniture nationwide and globally."

2010 marked Cheng Huibao's inaugural year in e-commerce. Though his initial investment in the Taobao store amounted to merely a few thousand yuan, and his product range was confined to children's furniture, he had already recognised that quality and brand-building were the cornerstones of sustainable growth. *"When developing products, my focus wasn't purely on sales, but on how to establish my offerings as a brand,"* Cheng Huibao recalls. This distinct positioning compared to other e-commerce sellers helped him establish a foundation of differentiation from market competitors early on.

By 2012, Cheng Huibao had begun to turn a profit and invested further capital, expanding production lines and opening a second store. As brand recognition grew, he continually innovated and refined his products, such as switching to eco-friendly materials better suited for children. *"Children's furniture demands superior materials and craftsmanship; it cannot follow a low-end approach,"* he emphasised. He specifically noted that material selection for children's furniture must not only meet safety standards but also prioritise durability and comfort – aspects often overlooked by many peers. By elevating product quality standards, Cheng Huibao's brand gradually established a firm foothold in the market.

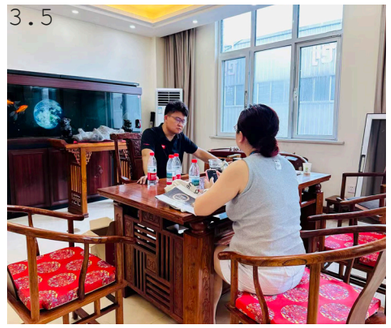


Image 3.5
Interviewing with Cheng Huaibao

Image 3.6
"Jinduoxi" Factory

Image 3.7-3.10
"Jinduoxi" Children's Furniture Displays

However, Cheng Huaibao was not content with merely succeeding in the domestic market. He recognised that the path to branding required carving out new territory in broader markets, prompting him to venture into cross-border e-commerce in recent years. In an interview, he stated: *"My goal is to establish a children's furniture brand with international influence. Though this journey is still in its preliminary stages, and the domestic market remains crucial, the opportunities for international expansion are far more extensive."* Actual data indicates his products have reached Southeast Asian markets via sea freight. For instance, an export customs declaration from 2023 shows Cheng Huaibao's Jindoxi brand shipped goods through Lianyungang Port. After transiting through Singapore, the shipment arrived at Port Klang in Malaysia, valued at US$59,049 with a total weight of 12,150 kilograms. The primary category comprised children's furniture. Propelled by cross-border e-commerce platforms, his brand has progressively expanded beyond domestic borders into broader international markets, securing a foothold within global logistics and production networks.

Cheng Huaibao's success stems not only from product quality and branding but also from his innovative marketing strategies, which have cemented his market position. During the interview, he remarked: *"I don't merely produce goods; I cultivate brand marketing. I aim for 'Jindoxi' to be instantly recognised as a renowned and reliable children's furniture brand."* He connects product design with consumer sentiment, emphasising "heartwarming design" and "humanised after-sales service" to enhance customer loyalty. This customer-centric approach is increasingly shaping the trajectory of Dongfeng Village's e-commerce sector.

Concurrently, Cheng Huibao has not neglected production optimization. He has evolved from an initial 'front shop, back workshop' family workshop model into a professional factory, employing villagers from Dongfeng and neighbouring townships as production workers. While expanding his own factory premises, he has also contributed to Dongfeng Village's economic development. For instance, he once halted production for a month, investing over 500,000 yuan to equip his workshop with pulse-jet sealed grinding dust collection units to reduce dust emissions. Though this shutdown incurred financial losses, his initiative undoubtedly created a better working environment for his own employees while setting an exemplary model for other factory owners across the village. He further emphasised: *"In manufacturing, we do not pursue "fast-moving consumer goods" but rather products that stand the test of time."* Under his influence, an increasing number of Dongfeng Village entrepreneurs have begun to prioritise intellectual property and brand patent development, gradually aspiring to move beyond low-end competition.

Model 3: Global Expansion through Cross-Border E-commerce

Throughout Dongfeng Village's revitalisation and development, integrating into globalised networks and logistics systems has consistently been a high-level challenge. Whilst many enterprises aspire to achieve this goal, only a handful of factories have genuinely succeeded in exporting their products overseas. Yu Yongliang and his Xuzhou Chenhao Creative Home Furnishings Co., Ltd. exemplify a globalisation pathway centred on cross-border e-commerce. Unlike most e-commerce ventures reliant on domestic markets and retail channels, Yu Yongliang's enterprise has become the village's largest contract manufacturing board factory and the leading local exporter of such products. He not only fulfils domestic sales via the 1688 retail platform but has forged close ties with overseas markets through cross-border e-commerce platforms, embedding Dongfeng Village's products within global logistics and supply chain networks.

Yu Yongliang admits that, *"like many villagers, I initially entered e-commerce through Taobao. Yet I soon realised that 'profit margins in the domestic market are limited; one must venture abroad to find new growth opportunities.' But where should I go? What path should I take to be distinctive and build genuine competitiveness?"* To find answers, he actively attended industry exchanges and exhibitions, learning from peers' experiences. This led him to establish a cross-border e-commerce warehouse model centred on Original Equipment Manufacturer (OEM) production *(Fig. 3.5)*. Leveraging his advantages in scale, equipment, raw materials, and labour, he forged partnerships with contract manufacturers in the US, Australia, Japan, and beyond.

He remarked, *"Though this path proved arduous initially, with no existing client network, connections are like tree roots—intertwined and expansive. One can always leverage technical expertise and strengths to extend reach."* Presently, much of his business transcends domestic shipments alone. Through cross-border platforms like 1688 and Amazon, he engages overseas clients to secure long-term orders. Goods are shipped directly by sea from Lianyungang Port to designated overseas warehouses, where clients undertake secondary processing and design before delivery to end-users, forming a complete transnational supply chain system.

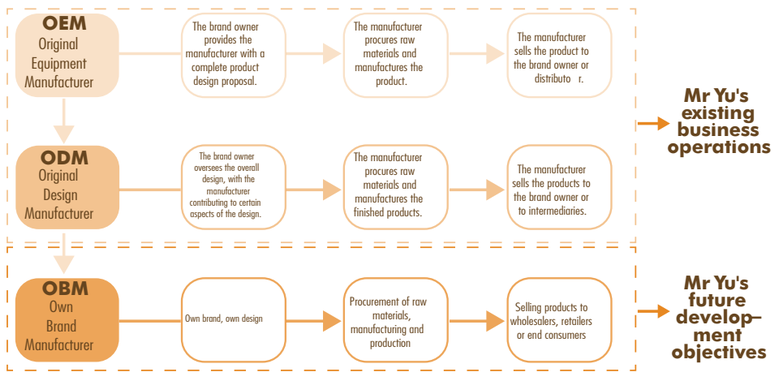


Fig. 3.5 OEM, ODM, OBM Models

During the interview, he repeatedly emphasised the differentiation in his company's positioning: *"I don't engage in high-volume Taobao sales; instead, I focus on contract manufacturing and cross-border trade. While the contract manufacturing model has its limitations, it enables us to gain stable access to international markets."* This cross-border e-commerce expansion, underpinned by contract manufacturing, has allowed Dongfeng Village's e-commerce industry to transcend geographical and market constraints, connecting directly with global consumers and brand owners.

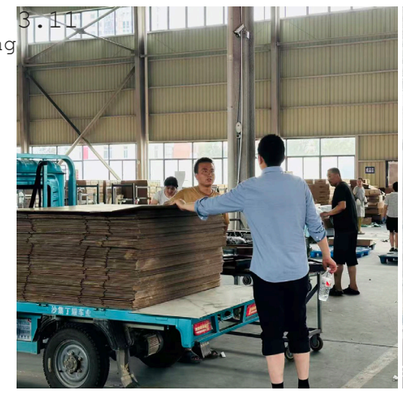
As operations scaled up, his factory relocated from its original "shopfront-cum-workshop" setup on Taobao Avenue to an industrial park in the village's northern sector. "Organising small workshops and scaling up larger factories" has long been the motto of Shaji Town's Planning Office, and Yu Yongliang actively embraced this initiative. He explained, *"We're a family enterprise where all relatives are involved. The factory is not only our livelihood but also a vital channel for our family to witness external development and global progress through our work."*

Currently, Yu Yongliang's factory employs around 150 people, most of whom are family members or villagers from neighbouring communities. While providing substantial employment opportunities, he also actively promotes technical training, teaching workers to operate mechanised and automated equipment. This has enabled the production process to gradually achieve semi-automation, thereby enhancing overall production efficiency.

Although Yu Yongliang's factory currently operates primarily under an OEM model with relatively limited profit margins, he has recognised that transitioning to an Original Brand Manufacturing model (OBM) is essential for genuinely enhancing value-added potential. During the interview, he stated: *"Contract manufacturing is the immediate path, but branding represents the future. We aspire to be more than just a factory; we want our products to have a name and influence."* This underscores that amid the rapid expansion of cross-border e-commerce, local enterprises still face the challenge of upgrading from contract manufacturing to building their own brands.

Image 3.11
Yu Yongliang Talking with Worker

Image 3.12
Workers in Factory



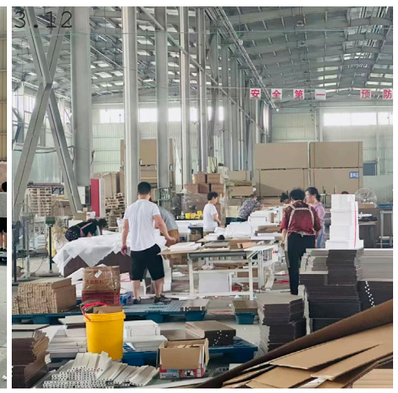


Image 3.13 Workers

Image 3.14-3.15
Female Worker

Image 3.16
Workers after Working

Image 3.17
Cargo and Freight Forwarder

Image 3.18-3.19
Furniture Goods

Image 3.20
Main Road in Dongfeng Village

Image 3.21
Factory and Fields

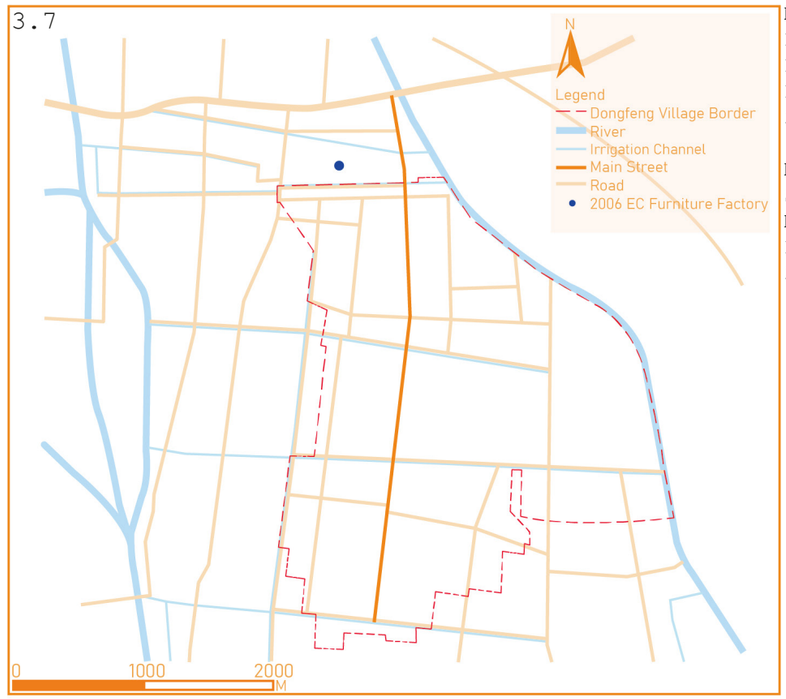
Image 3.22
Semi-automated Production Zone

3.3
Spatial Aggregation and Development in Dongfeng Village

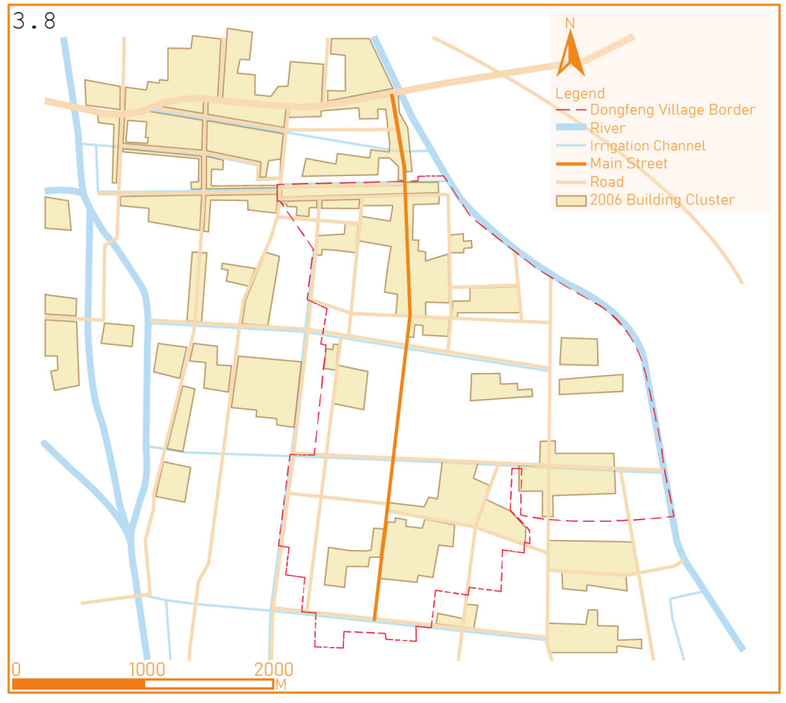
Dongfeng Village ranks among Suining County's fastest-growing e-commerce villages, emerging in 2009 as one of the first three "Taobao Villages" recognized by Alibaba's Taobao Research Institute. The other two Taobao Villages are located in Xingtai City and Yiwu City. Unlike these two locations with long-standing trade and export experience, Dongfeng Village was once an ordinary village relying on recycled plastic waste. However, within just three years, it successfully transformed into the first Taobao Village in Central China and joined the ranks of the nation's inaugural Taobao Villages. This transformation not only boosted the local economy but also provided a demonstration effect for surrounding townships.

In 2006, Shaji Town had only one furniture factory—Sunhan Furniture Factory *(Map 3.7)*. Located along Suizhu Road, the main thoroughfare of Dongfeng Village, the factory enjoyed a prime location with convenient transportation links to Suqian City and Suining County. Inspired by Sunhan Furniture Factory's success, friends and relatives in the surrounding area began emulating its model by launching e-commerce businesses. During this period, e-commerce enterprises in Dongfeng Village primarily adopted the 'front shop, back workshop' model. Most were distributed along the main thoroughfare, operating on a small scale without forming a significant industrial cluster effect.

Architecturally, Dongfeng Village showed little change during this phase *(Map 3.8)*, largely retaining its original 2006 village layout. Settlements clustered near the northern and southern ends, separated by large tracts of other land uses (primarily farmland). Small-scale 'mom-and-pop shops' dotted Suizhu Road but remained inconspicuous. During this period, the core area of Shaji E-commerce—Dongfeng Village—saw a slight increase in buildings but no significant changes.



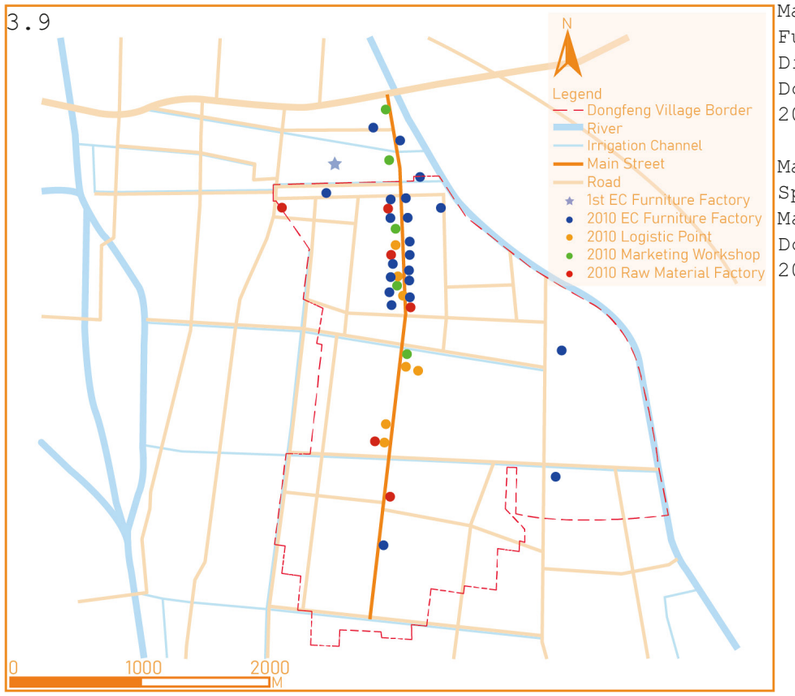
Map 3.7
Furniture E-commerce Distribution Map of Dongfeng Village in 2006



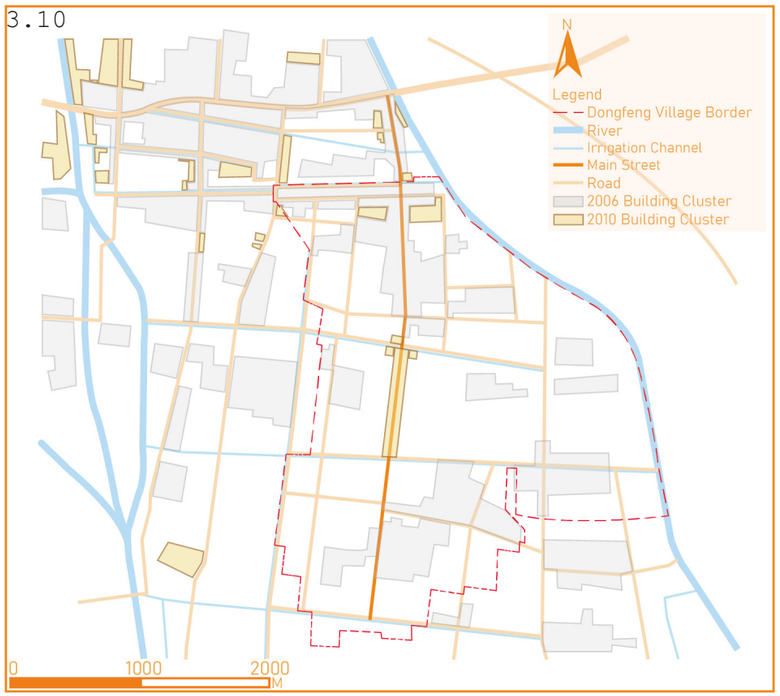
Map 3.8
Spatial Distribution Map of Buildings in Dongfeng Village in 2006

With the continuous development of the e-commerce industry in Dongfeng Village, Shaji Town, the cluster diffusion effect has become increasingly pronounced *(Map 3.9)*. Starting from a single business in 2006, driven by demonstration effects, a large number of family-based e-commerce groups gradually gathered along Suizhu Road—the north-south main thoroughfare of Dongfeng Village—between 2006 and 2010. Their numbers steadily increased, and scattered businesses began appearing on both sides of Suizhu Road, though they had not yet formed a significant scale. Simultaneously, supporting enterprises began clustering along Suizhu Road, gradually forming a strip-like distribution pattern.

According to the theory of functional and morphological compatibility, changes in the function of a space or region inevitably lead to alterations in its spatial structure. Between 2006 and 2010, Dongfeng Village residents purchased residential plots along Weizhu Road and constructed buildings integrating housing, business operations, and daily living *(Map 3.10)*. These structures are primarily aligned with the north-south orientation of Weizhu Road, with supporting facilities exhibiting a similar distribution pattern. During this period, furniture e-commerce enterprises and their supporting businesses gradually distributed themselves along the north-south axis of Weizhu Road. Although the intervals were relatively long and the scale was small, a strip-like distribution trend gradually emerged. Concurrently, the existing buildings in Dongfeng Village also met the needs of ‘micro’ manufacturers operating within the e-commerce system at its maximum scale.



Map 3.9
Furniture E-commerce Distribution Map of Dongfeng Village in 2010

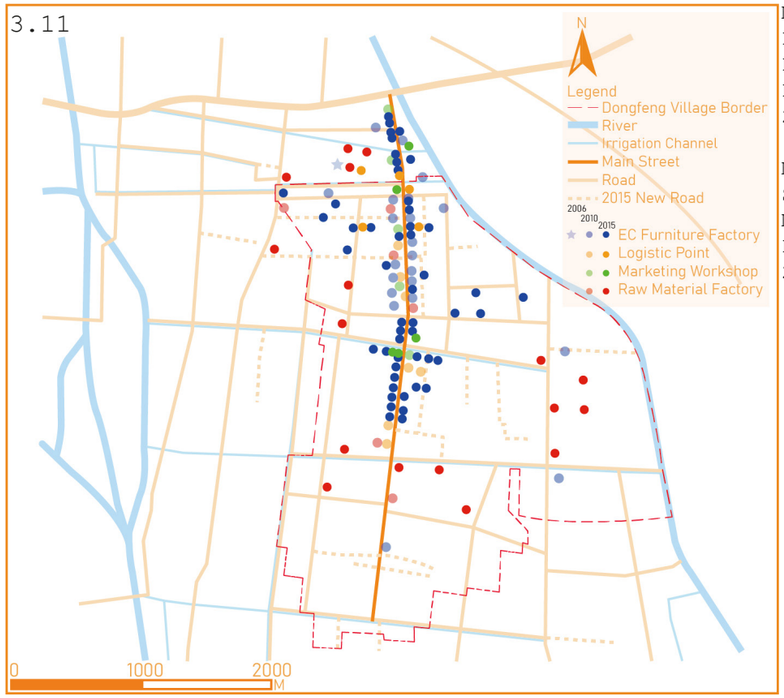


Map 3.10
Spatial Distribution Map of Buildings in Dongfeng Village in 2010

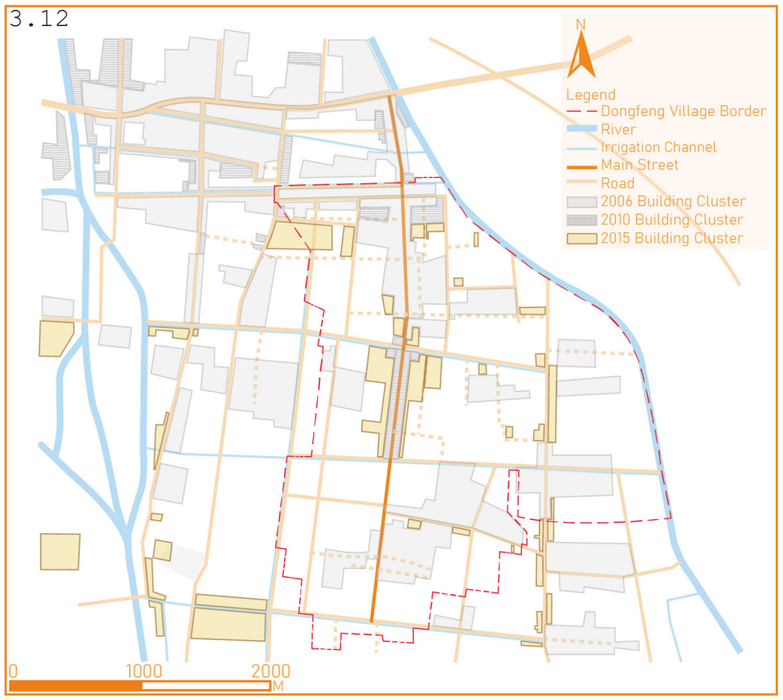
Between 2010 and 2015, Dongfeng Village's furniture e-commerce industry expanded rapidly. As related enterprises and supporting service factories—such as accounting studios and 3D design studios—increased, the scale of the e-commerce cluster continued to grow. The distribution of e-commerce enterprises and supporting businesses remained centered along Suizhu Road *(Map 3.11)*, showing a clear trend of expansion toward both sides, particularly along the road's periphery. This trend reflects the shift from linear distribution to area-based expansion within the e-commerce sector, indicating that various enterprises are gradually extending into broader territories.

Specifically, the blue and red markers in the figure represent furniture e-commerce factories and supporting enterprises, respectively. Blue points are concentrated in the middle section of Suizhu Road and along its northern and southern stretches, revealing the cluster's expansion into surrounding areas. Notably, the northern expansion extends distinctly northwest along Suizhu Road, closely tied to local government policies planning an e-commerce industrial park in this area.

Based on spatial distribution, yellow and orange zones indicate newly constructed buildings between 2010 and 2015 *(Map 3.12)*, signifying that surrounding structures and infrastructure continue to grow alongside the e-commerce industry's rise. Building coverage notably increased in the central section of Suizhu Road and the northwest part of Dongfeng Village. E-commerce enterprises and related industries in Dongfeng Village exhibited a belt-like expansion pattern from northwest to southeast. Particularly in the northwest direction, local government-driven e-commerce policies accelerated industrial park development, serving as a key catalyst for cluster expansion.



Map 3.11
Furniture E-commerce Distribution Map of Dongfeng Village in 2015

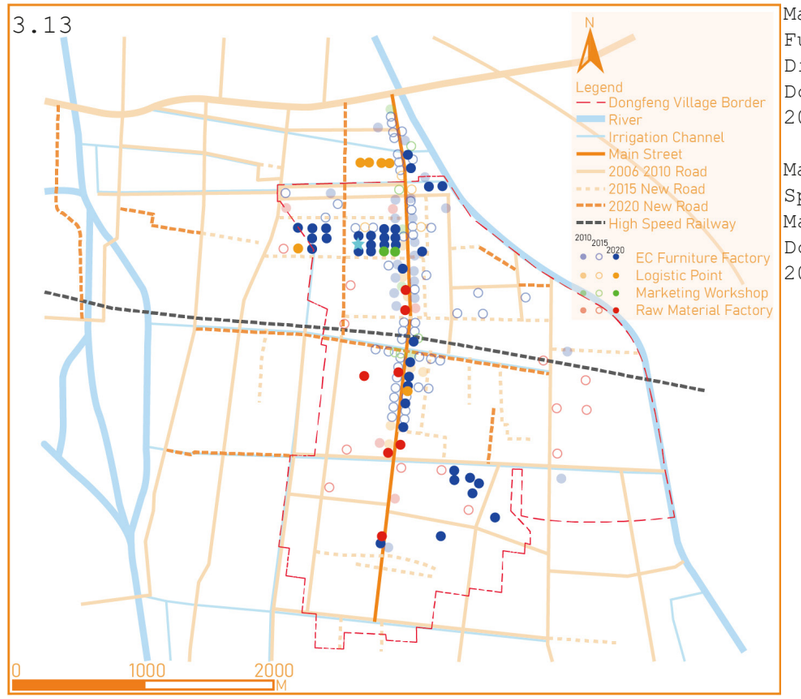


Map 3.12
Spatial Distribution Map of Buildings in Dongfeng Village in 2015

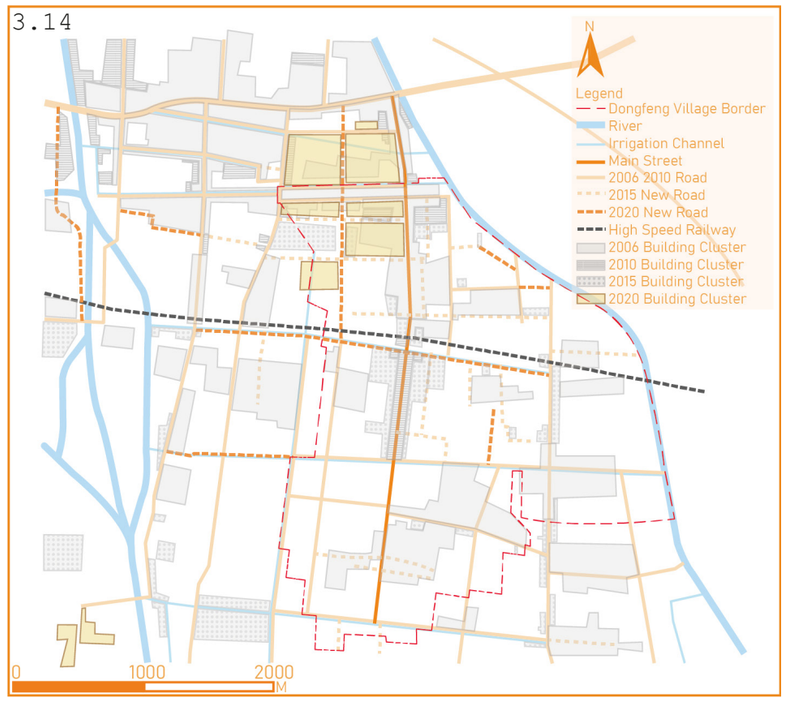
Between 2015 and 2020, Dongfeng Village's furniture industry entered a phase of rapid e-commerce development. This was evident in the rapid increase of furniture factories engaging in e-commerce along Suizhu Road, which gradually evolved into a "Taobao E-commerce Street." *(Map 3.13)* Concurrently, the government-funded e-commerce industrial park was completed and put into operation during this period, prompting some furniture e-commerce businesses with initial scale to relocate their factories into the park. Moving into the industrial park represented both an active response to government policy initiatives and a strategic choice, as "formal" factory buildings offered superior safety and production expansion capabilities compared to the previous "front-shop, back-factory" model, better supporting business growth. Alongside the concentrated development of e-commerce, supporting industries gradually matured—3D design firms, advertising agencies, accounting firms, small logistics companies, and panel suppliers emerged successively, transforming Dongfeng Village's e-commerce supply chain from its initial stages into a comprehensive ecosystem.

Spatially, the village's overall architecture remains largely unchanged, with adjustments concentrated in the northern part of the village and adjacent northern areas *(Map 3.14)*. According to an interview with Director Guo of the Town Government Planning Office, the relocation plan was guided by three key considerations: "*First, the designated plot is adjacent to the town government, facilitating greater governmental support for e-commerce practitioners in approvals and business exchanges. Second, locating the industrial park in the north minimizes disruption to agricultural land, aligning with current stringent requirements for farmland protection under national spatial planning. Third, the northern location borders Provincial Highway S325. Given the furniture industry's heavy reliance on logistics, proximity to the highway effectively reduces transportation costs and enhances efficiency.*" Thus, spatial aggregation changes in this phase primarily manifest in the planning and construction of the northern e-commerce industrial park, with no significant adjustments to building forms in other areas.

Image.3.23
Interview with Director Guo of the Planning Office at Shaji Town Government



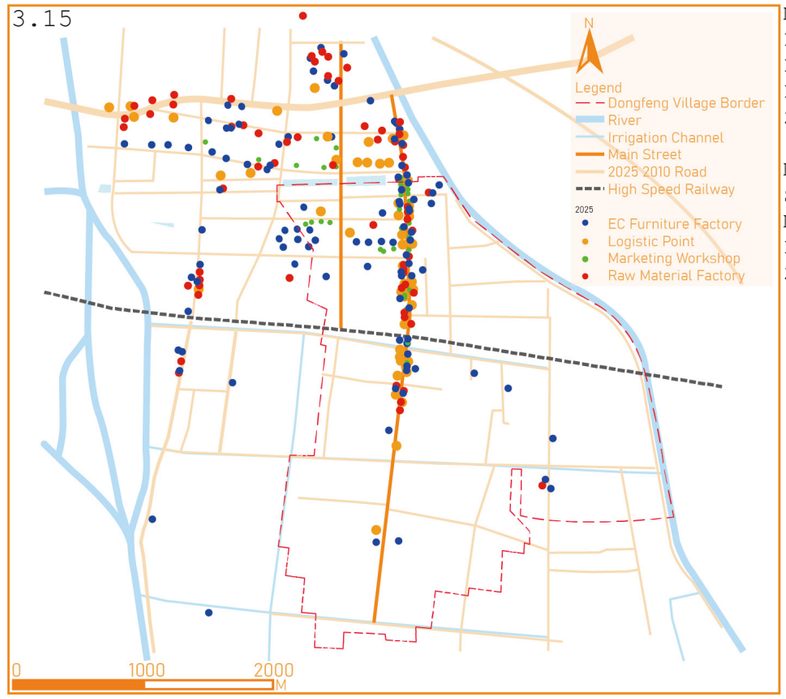
Map 3.13
Furniture E-commerce Distribution Map of Dongfeng Village in 2020



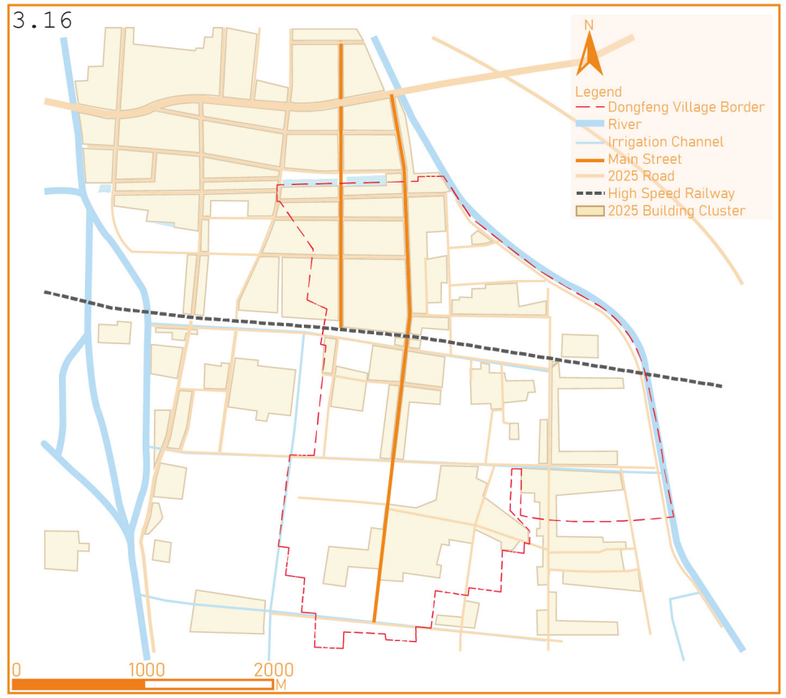
Map 3.14
Spatial Distribution Map of Buildings in Dongfeng Village in 2020

Between 2020 and 2025, Dongfeng Village's e-commerce development expanded beyond its existing industrial cluster belt to encompass the entire township. As shown in Map 3.15, Suizhu Road remains the primary hub for furniture e-commerce practitioners, while some e-commerce businesses and supporting enterprises (such as raw material processing plants) have relocated westward to areas approximately two to three kilometers from Dongfeng Village. Simultaneously, under Dongfeng Village's radiating influence, Shawei Village—located in the central western part of the town—also began developing its e-commerce industry. During the research, introduced by Dongfeng Village Committee leader Wang Wanjun, I interviewed Liu Xingli, the village director of Shaxu Village. Director Liu stated, "*I am originally from Dongfeng Village and was involved in furniture e-commerce in the early days, specializing in custom cabinets and seating. Later, due to the town government's talent transfer policy, I was assigned to Shaxu Village to lead local industrial development.*" His strategy involves encouraging villagers to engage in e-commerce while addressing issues of fragmentation and poor management among small manufacturers. This is achieved by consolidating promising small-scale operators into unified production facilities within large workshops. Implementing a partnership model for outlet branding aims to collectively build brand recognition and enhance market visibility. This demonstrates that Dongfeng Village's industrial cluster continues to exert a significant agglomeration effect, exerting a sustained radiating influence on the development of surrounding villages. This trend presents both opportunities and latent challenges.

Spatially, this phase witnessed large-scale planning and construction in Dongfeng Village and Shaji Town, primarily manifested through building renewal and north-south contiguous development. First, regarding building renewal, two technology industrial parks *(Map 3.16)* and one logistics industrial park were newly constructed over five years in the northern plot of Dongfeng Village and the area near the northwest of Shaji Town. Upon commissioning, these replaced the original scattered small-scale buildings, forming large-scale, standardized industrial and logistics facilities. Leading domestic logistics companies like Deppon, Yunda, and SF Express have established operations here, providing robust support for the furniture industry's logistics needs. Second, in the southern "Zhucao" area of Dongfeng Village, while the village footprint has not significantly expanded, building structures have markedly improved compared to the previous decade. Following joint rectification efforts by the town government's E-commerce Office and Planning Office, an increasing number of villagers have entered the furniture e-commerce sector, rapidly popularizing the 'front shop, back workshop' model. However, the furniture industry involves wood processing, posing prominent fire hazards. According to Director Xu of the E-commerce Office, *"Following a fire incident at a home workshop within the village, the government gradually established an inspection system—initially annual, then twice-yearly major inspections supplemented by random spot checks. This effectively standardized safety issues related to haphazardly constructed workshops and promoted facility renovations.Concurrently, driven by e-commerce-fueled economic growth, residential areas surrounding the Dongfeng Village Committee have undergone renewal. Some villagers converted their original single-story*



Map 3.15
Furniture E-commerce Distribution Map of Dongfeng Village in 2025



Map 3.16
Spatial Distribution Map of Buildings in Dongfeng Village in 2025

houses into two-story buildings, while others moved into newly constructed residential buildings behind the village committee office. Many expressed their delight, saying, 'We now live in apartment buildings right in the countryside village.'"

Over the past two decades, Dongfeng Village's furniture e-commerce industry has gradually transitioned from dispersion to clustering and from individual operations to a systematic framework. Its development trajectory has broadly progressed through three stages: an initial phase of "home workshops—front-store-back-factory" a middle phase of "roadside strip clustering—industrial park concentration" and a recent phase of "cross-village diffusion—regional linkage".

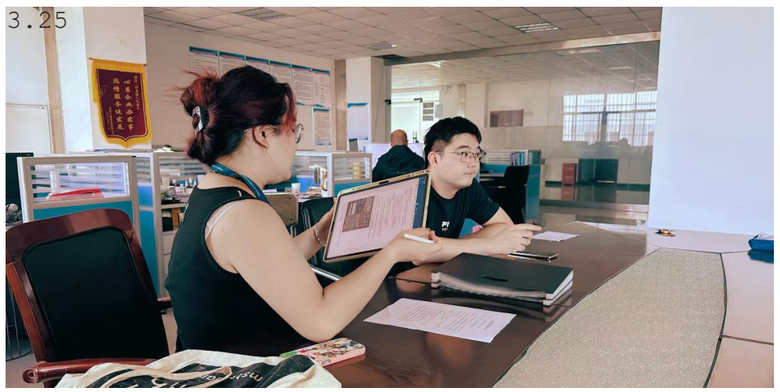
Throughout this process, government-funded industrial parks and logistics hubs emerged as pivotal nodes for industrial upgrading. These facilities not only enhanced production and fire safety conditions but also facilitated the refinement of upstream and downstream supply chains. Simultaneously, building upon its stable agglomeration pattern, Dongfeng Village gradually developed the capacity to radiate and drive surrounding villages, propelling industrial linkage and spatial restructuring within the region. This evolution from point to belt, and from village to town, not only shaped the agglomeration effect of Dongfeng Village's e-commerce industry but also laid a dual foundation for its sustainable development—both in spatial layout and industrial structure.

Image 3.24
Interview with Liu Xingli, Village Chief of Shawei Village

Image 3.25
Interview with Xu Zipeng, Director of the E-commerce Office of Shaji Town

3.24

3.25



It is important to emphasize that the outward expansion of Dongfeng Village's e-commerce did not occur in isolation but was specifically built upon the deep integration of supporting systems. Leveraging professional services such as product design, visual planning, accounting and auditing, packaging, and warehousing, e-commerce entities in Dongfeng Village and even Shaji Town achieved standardized processes and cost optimization from production to transaction. The corresponding multi-tiered logistics network (industrial park distribution hubs—regional sorting centers—national trunk lines—last-mile delivery) has significantly enhanced delivery timeliness and accessibility. This enables the Shaji brand to maintain stable nationwide coverage while progressively integrating into the global logistics system, forming a distribution framework oriented toward international markets.

The images below were captured by the author during field research, aiming to visually showcase the refined landscape of supporting service institutions and logistics facilities within Dongfeng Village's e-commerce ecosystem as of 2025.

Logistic Space

1

Image 3.26
SF EXPRESS

Image 3.27
DEPPON EXPRESS

Image 3.28
ZTO EXPRESS

Image 3.29-3.30
SXJD FREIGHT

Image 3.31
YUANTONG EXPRESS

Image 3.32
GUITONG EXPRESS

Image 3.33-3.35
BEST EXPRESS

Image 3.36-3.37
ane Express

Image 3.38
Shaji E-commerce Service Station

Image 3.39
Suining County Rural Logistics Service Center

Image 3.40
YUNDA EXPRESS

Logistic Space

2

Image 3.41
DEPPON EXPRESS

Image 3.42
LIANHAOTONG EXPRESS

Image 3.43
UC EXPRESS

Image 3.44
TIANLIAN EXPRESS

Image 3.45
JT EXPRESS

Image 3.46
CHINA POST EXPRESS

Image 3.47
GUANGYUAN EXPRESS

Image 3.48-3.49
YUNDA EXPRESS

Image 3.50
KY EXPRESS

Image 3.51-3.54
ZTO EXPRESS

Image 3.55
SHUNDA EXPRESS

Supporting Industries Space

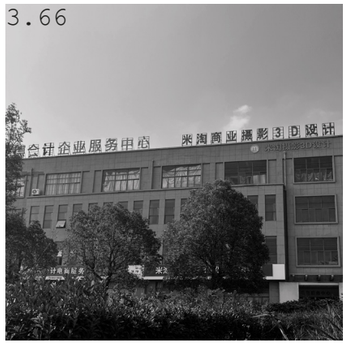


Image 3.56-3.59
3D Design Studio

Image 3.60-3.63
Design Workshop

Image 3.64-3.66
3D Design and Video Making Workshop

Image 3.67
3D Modeling Studio

Image 3.68
Visual Design Studio

Image 3.69-3.70
3D Design Studio

Supporting Industries Space 2

Image 3.71-3.72
Accounting Studio

Image 3.73
Patent Studio

Image 3.74
Operating Agency

Image 3.75
Media Studio

Image 3.76
Legal Service

3.4 The Shaji Path: The Power of Aggregation–from "Shaji Phenomenon" to "Shaji Model"

Whereas the origins of Dongfeng Village's e-commerce, as described in Section 3.1, primarily reflected individual and household experimentation, the ‘Shaji phenomenon’ represented an expansion and clustering of this initial endeavour. This phenomenon also served as an academic and media-driven conceptualisation of the rapid dissemination of Dongfeng Village's e-commerce practices. Since 2006, as increasing numbers of farming households embraced e-commerce, the village gradually adopted a ‘front shop, back workshop’ production-sales model. Residential dwellings became inextricably linked with industrial production, leading to a rapid proliferation of Taobao stores and their high spatial concentration within a short timeframe. It was precisely during this process that e-commerce not only transformed the village's economic structure but also laid the groundwork for the subsequent "Shaji Model" and the "Shaji Crisis".

3.4.1 The ‘Shaji Phenomenon’

The "Shaji Phenomenon" specifically refers to the spontaneous emergence, fission-like growth, and inclusive development of online merchants among farmers in Shaji Town *(Fig. 3.6)*. "Spontaneous emergence" denotes that the online stores and processing industries established by Shaji farmers—from inception, development, to expansion—have fundamentally relied on the self-organising capabilities of local farmers, sprouting and growing organically.

"Fission-style growth" describes the rapid replication process from 2006, when Dongfeng Village saw its first farmer-run online business, to 2010 when 600 online merchants and over 2,000 online shops across Sha Ji Town mutually supported and expanded. This propelled the entire furniture industry chain from inception to achieving annual sales of 300 million yuan. "Inclusive development" denotes both the local farmers' ability to enjoy the conveniences and commercial opportunities of the digital economy on par with urban dwellers, and the participation of villagers of all ages and genders in the thriving online sales and manufacturing activities (Ye and Wang, 2016).

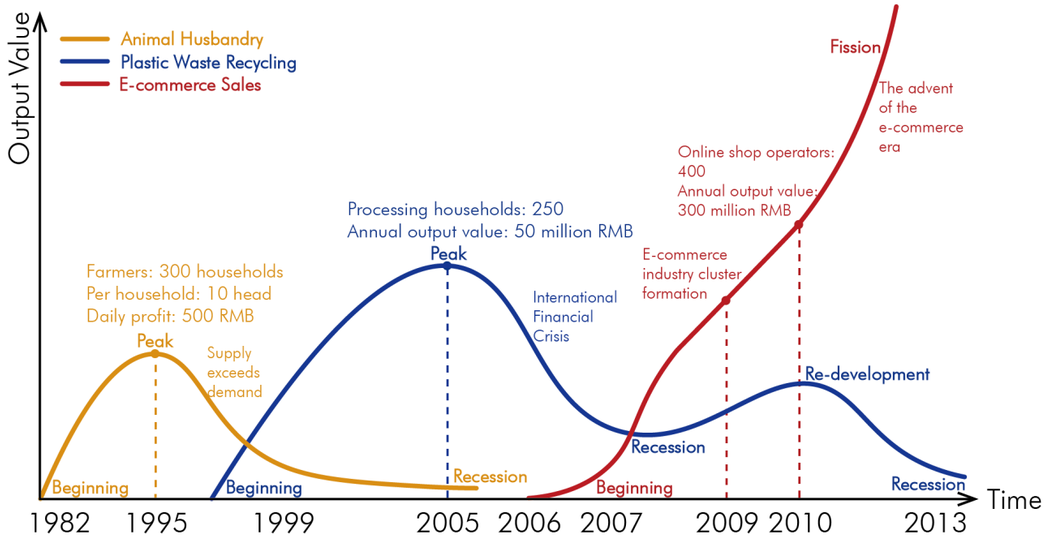


Fig. 3.6 Summary of the Stages of Economic Development in Dongfeng Village

Fig. 3.6 Note:
Source:
Book,Ye and Wang , *The Shaji Model of E-commerce in China's Rural Area: Survey in Dongfeng Village of Jiangsu Province*, P24.

The Shaji phenomenon can be traced back to the 1980s. At that time, most villagers still engaged in traditional agriculture as farmers, while the northern Jiangsu region, with its widespread saline-alkali soils, saw substantial investment in crop cultivation yielding meagre returns. Following the implementation of the rural contract responsibility system, pig farming gradually emerged in Dongfeng Village. At its peak, each fattened pig could yield a profit of 400–500 yuan. By 1995, pig farming reached its zenith, becoming a vital income source for farmers. However, the 1997–1998 Asian financial crisis triggered a sharp decline in pork prices. Coupled with prior overcapacity expansion, this led to oversupply, steadily eroding profit margins and even resulting in losses, causing the industry to decline.

Subsequently, influenced by the neighbouring town of Gengche, villagers turned to the recycling and processing of waste plastics. At its peak in 2005, annual output value reached 50 million yuan. However, similarly impacted by the global financial crisis, China's foreign trade contracted, demand plummeted, and scrap prices fell sharply. Although there was a subsequent recovery, the environmental pollution caused by waste plastic processing became increasingly severe. Tighter policies and strengthened controls forced many small factories to close.

From 2006 onwards, Sun Han's personal entrepreneurial endeavours catalysed a new wave of transformation. Riding the wave of the internet revolution, villagers from Dongfeng Village and Shaji Town swiftly seized the opportunities presented by e-commerce. Within a mere three years, a nascent e-commerce industrial cluster took shape within the village, revitalising this once-declining community. By 2010, the village's online sales had reached 300 million yuan, with its affordable, high-quality furniture products finding markets in Beijing and Shanghai, and even exporting to South Korea, Japan, and Hong Kong. The 'Shaji Phenomenon' had fully emerged.

During the formative stages of the "Sha Ji Phenomenon", the Sha Ji Town government remained largely absent. Even as late as 2010, just before Sha Ji Town was honoured by Alibaba Group as the "Best E-commerce Fertile Ground",local authorities were preoccupied with attracting investment from outside regions. Ironically, this absence and inaction proved beneficial for Dongfeng Village's e-commerce-furniture cluster. Absent governmental intervention, Dongfeng Village's "shanzhai" industry – operating with disregard for intellectual property protection – flourished. Once the e-commerce and furniture cluster had taken root, Ning County adopted a policy of non-interference, declaring it would "not interfere with Dongfeng Village's grassroots entrepreneurial spirit, providing farmers with maximum space for enterprise", this manifested as "no fees, no inspections, no fines". It was precisely this "non-intervention" that afforded the "Shaji Phenomenon" the greatest freedom and support to evolve into the "Shaji Model".

The development of the "Shaji phenomenon" into the "Shaji model" and its subsequent promotion throughout the surrounding areas and nationwide can be attributed primarily to two defining characteristics: the unique nature of the online merchant community and the rapid advancement of e-commerce.

The characteristics of the online merchant community manifest in three key aspects. Firstly, a bottom-up spontaneity. During the early stages of the "Shaqi phenomenon", ordinary villagers like Sun Han spontaneously chose e-commerce as a livelihood, independently developing products, commissioning carpenters for bespoke furniture, and expanding operations on a household or clan basis with human-centred management. Subsequently, they shared their experiences, encouraging more villagers to join the e-commerce sector, leading to a rapid increase in the number of online merchants. Secondly, there was a trend towards large-scale operations. As the number of practitioners grew, both sales volume and employment expanded simultaneously, gradually revealing the economies of scale inherent in the e-commerce economy. Finally, there was diversification. The range of products offered continually broadened, encompassing items such as wall cabinets, timber panels, chairs, tables, and bunk beds. Product categories increasingly catered to younger demographics, aligning with market demands. Concurrently, the integrated production-sales model enabled many pioneers to reduce costs, enhancing overall economic efficiency and income levels. It is precisely these distinctive characteristics of the online merchant community, coupled with the rapid development of e-commerce, that have transformed the "Shaji phenomenon" into the "Shaji model" – a replicable blueprint for other villages and towns.

3.4.2 The "Shaji Model"

The "Shaji Model" refers to farmers spontaneously transforming into online merchants by utilising market-oriented e-commerce platforms to connect directly with markets. This cell-like replication and expansion of online sales drives the development of manufacturing and supporting industries, with various market elements continuously following suit. This shapes a new commercial ecosystem centred on companies, where multiple entities coexist and thrive. This new ecosystem further stimulates farmers' online innovation and even their comprehensive development. The interplay between "farmers + internet + companies" drives rolling development, forging a path to entrepreneurial prosperity for farmers in the information network era (Ye and Wang, 2016).

The core elements of the Shaji model can be summarised in three aspects: Shaji farmers, the e-commerce network, and the online shops operated by the farmers themselves (i.e., their own companies) *(Fig. 3.7)*. These three components interact to form a virtuous cycle system. Within this system, farmers are no longer a group isolated from the market and engaged in passive production. Instead, they can directly connect with the market from their homes, proactively access information, independently manage their operations, and produce according to demand. The farmers' initiative drives the growth of online sales, which in turn relies on market-oriented public e-commerce platforms such as Taobao, rather than systems dominated by government investment or state-run institutions. This model achieves significant results at low cost without requiring state financial support. The expansion of online sales further stimulates manufacturing growth, charting a path where "information technology drives industrialisation and rural industrialisation" – a stark departure from the traditional ‘industrialisation first, then informatisation’ model. Here, e-commerce transcends its role as a mere production auxiliary, becoming the primary operational paradigm.

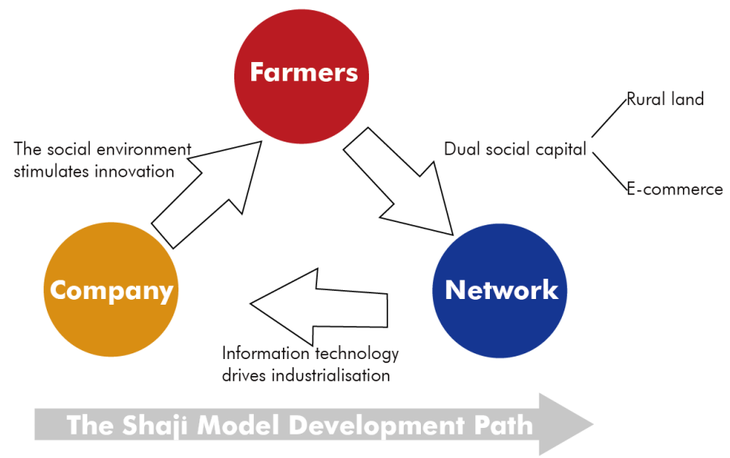


Fig. 3.7 The Shaji Model Development Path

Concurrently, China's unique rural social networks play a vital role, where neighbourly mutual aid and competition intertwine, fostering an environment that encourages continuous innovation and development among farmers.

In terms of outcomes, at the macro level, the Shaji Model has exerted a profound influence on China's rural development. The emergence and evolution of the Shaji Model stem fundamentally from the intrinsic, spontaneous drive of farmers. Within this framework, it has transformed farmers' information acquisition patterns and altered their traditional market position—that of mere producers. Particularly within the framework of "farmers + internet + companies", farmers utilise the internet to identify demand and secure orders. This enables them to develop their industries purposefully, directionally, and consciously, ensuring products align with market needs. Consequently, this directly stimulates rural economic prosperity and introduces structural changes to the rural economy. This novel model empowers farmers to establish businesses from home, connecting directly with markets, thereby emerging as a new paradigm for addressing China's "agriculture, rural areas, and farmers’ issues".

At the micro level, the Shaji model has delivered significant economic and social benefits to Shaji Town. According to the latest data *(Fig. 3.8)*, Shaji's e-commerce transaction volume surged from less than 10 billion yuan in 2013 to 14 billion yuan in 2024. Sales on Double 11 sales revenue day rose from under 300 million yuan in 2014 to over 1.02 billion yuan in 2023 *(Fig. 3.9)*. Logistics revenue has more than doubled between 2017 and 2024 *(Fig. 3.10)*. The town now employs 20,000 local e-commerce workers and 7,600 non-local personnel *(Fig. 3.11)*, reflecting the sector's robust vitality and sustained expansion. The furniture sector has partially transitioned from scattered workshops to clustered industrial parks. The town now hosts 900 furniture manufacturers, 469 logistics and express delivery firms, and 131 e-commerce service providers, establishing a preliminary integrated industrial chain encompassing production, logistics, sales, and services.

Fig. 3.8-3.9 Note: Source: Data collected during fieldwork from the exhibition in the Town Living Room; figure drawn by the author.

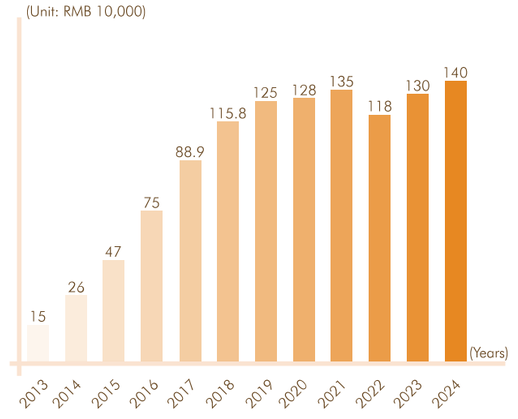


Fig. 3.8
E-commerce Transaction Volume in Shaji Town, 2013-2024

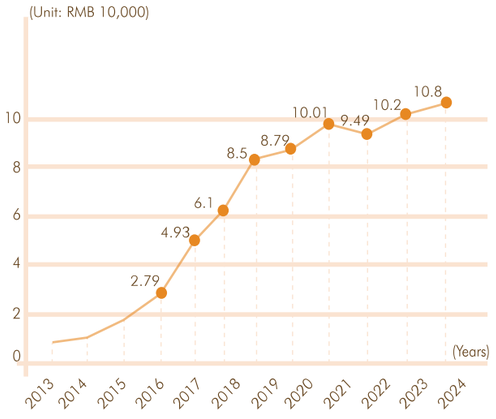


Fig. 3.9
Double 11 Sales Revenue in Shaji Town, 2013-2024

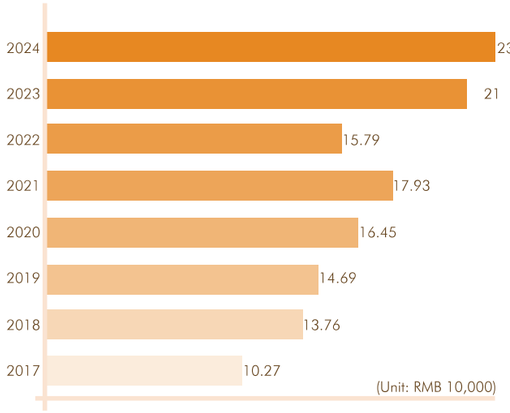


Fig. 3.10
Logistics Revenue in Shaji Town, 2017-2024

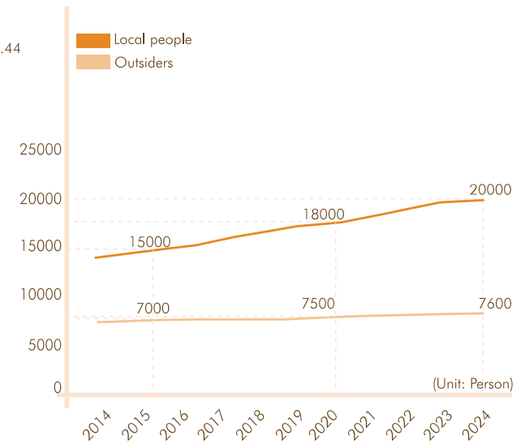


Fig. 3.11
E-commerce Practitioners in Shaji Town, 2014-2024

Fig. 3.10-3.11 Note:
Source:
Data collected during fieldwork from the exhibition in the Town Living Room; figure drawn by the author.

In terms of regional spillover effects, by 2025, the Shaji model had not only driven local e-commerce development but also exerted a significant radiating influence on surrounding townships *(Map 3.17)*. Leveraging its cluster advantages in furniture manufacturing, e-commerce operations, and logistics support, Shaji Town gradually emerged as a core node for regional e-commerce development, spurring the rise of rural e-commerce in multiple counties and districts including Sihong, Siyang, Shuyang, and Suyu. In terms of coverage, the Shaji model has extended to over twenty townships, forming a "point-line-area" diffusion pattern. Lingcheng Town has established 22 e-commerce entities, while Qiuji Town and Gaozu Town have developed 14 and 13 entities respectively. Suicheng Subdistrict has 13 entities, demonstrating strong agglomeration effects. Simultaneously, surrounding townships like Gupizhen, Jinsuozhen, and Lijizhen have gradually cultivated e-commerce industries under the Shaqi model's influence, establishing varying numbers of e-commerce nodes. This approach not only strengthens Shaqi's role as the core of the regional e-commerce industrial chain but also creates new employment and entrepreneurial opportunities for neighboring townships. It drives local industrial upgrading and increases farmers' incomes, becoming a vital force propelling regional rural revitalization.

From a temporal perspective, analysis of data from Alibaba's Taobao Village Annual Report (2009-2022) reveals that Taobao Villages first emerged in 2009, with Dongfeng Village in Suining County becoming one of the earliest Taobao Villages in Xuzhou City and across China *(Map 3.18-31)*. Subsequently, the number of Taobao Villages within Suining County has shown a sustained and rapid growth trend. From the first Taobao Village in 2009 to 97 certified Taobao Villages by 2018, the growth pattern demonstrated significant quantitative changes and accelerated development. From 2009 to 2013, Shaji Town housed Suining County's sole Taobao Village—Dongfeng Village. By 2015, Taobao Villages began expanding beyond Shaji Town, adding 22 new villages across Lingcheng Town, Gaozu Town, Qiuji Town, and Suicheng Subdistrict. From 2016 to 2017, the number of Taobao Villages continued to grow within Suining County, though at a relatively slower pace, failing to cover all townships. In 2018, the number surged dramatically. Data indicates that by the end of 2018, every town and subdistrict across Suining County's 15 towns and 3 subdistricts had at least one Taobao Village. The 2018 data reveals a clear expansion trend for Taobao villages in Suining County. After reaching saturation in eastern towns, the expansion shifted toward western and northern regions. Between 2018 and 2020, the number of Taobao villages continued to grow steadily, surpassing 100 by 2020, with Suining County hosting a total of 129 Taobao villages. The growth rate slowed between 2020 and 2022, partly due to the impact of COVID-19, which imposed restrictions and controls on various aspects of China's economy. During this period, the number of Taobao villages increased from 129 to 132. As evident above, the proportion of Taobao villages in Shaji Town and its adjacent townships is relatively high, making the Shaji model a core demonstration example for Taobao village development in Suining County and surrounding areas. This model has driven rapid growth in local e-commerce and rural economies, while also advancing regional economic transformation and rural development under the national rural revitalization strategy.

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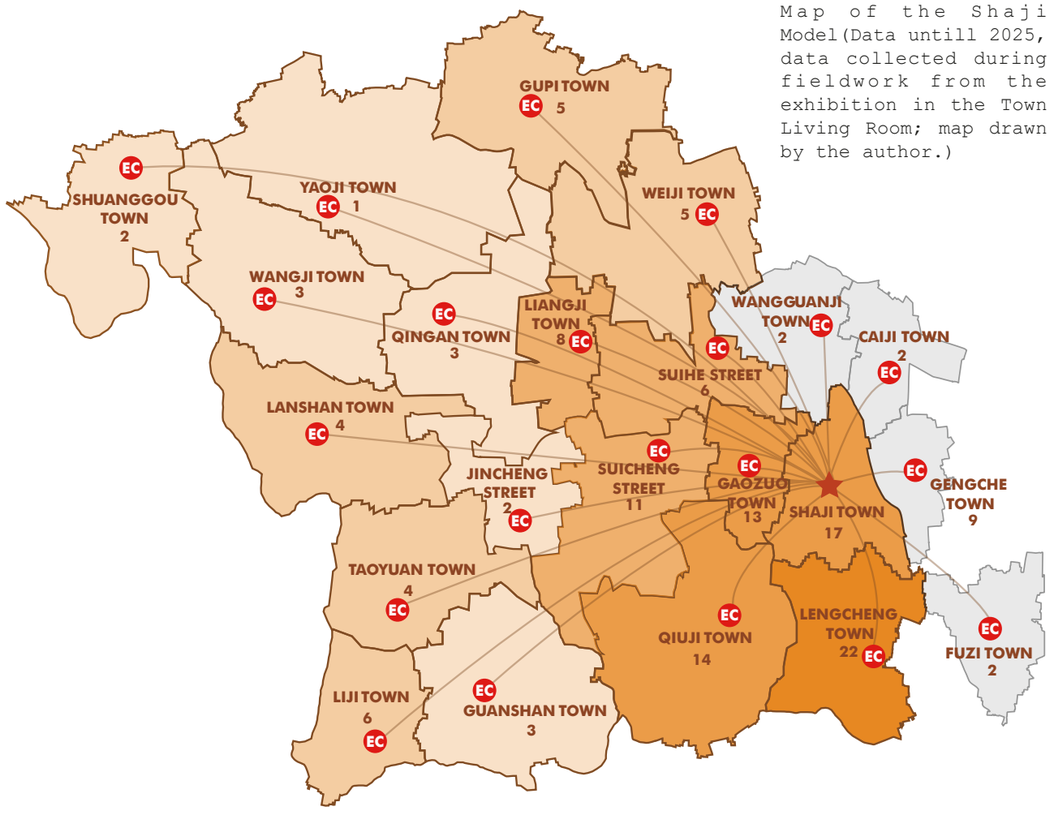

Map 3.17
Radiation and Promotion Map of the Shaji Model(Data untill 2025, data collected during fieldwork from the exhibition in the Town Living Room; map drawn by the author.)

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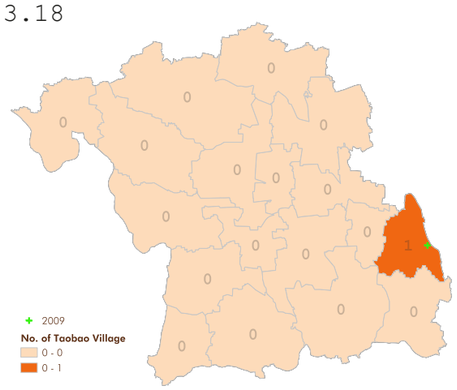

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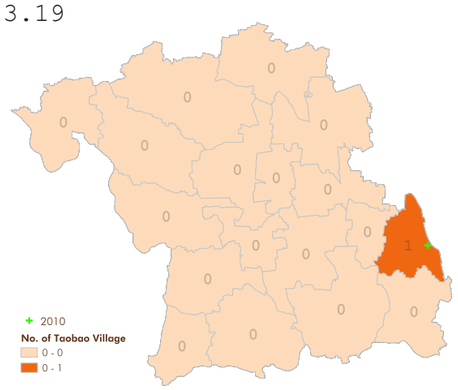

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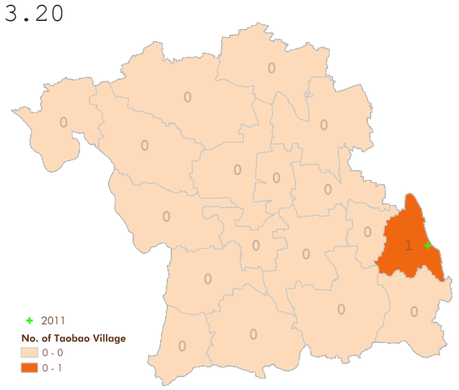

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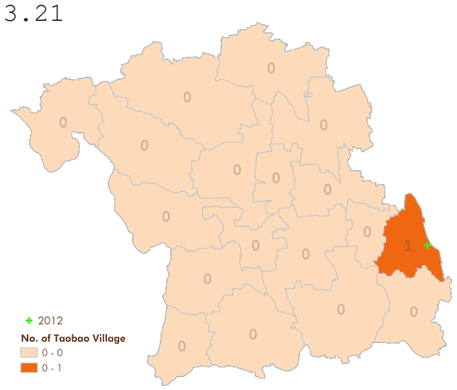

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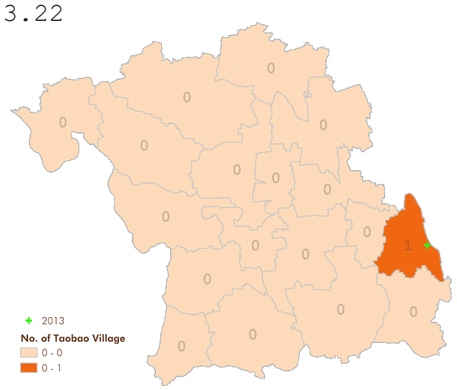

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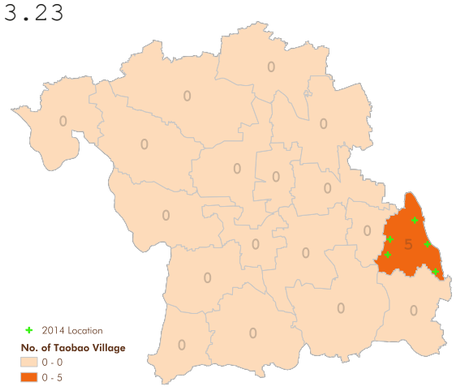

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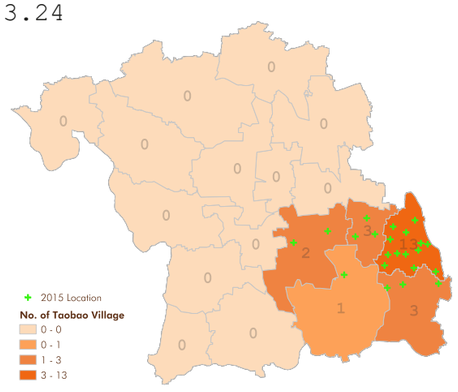

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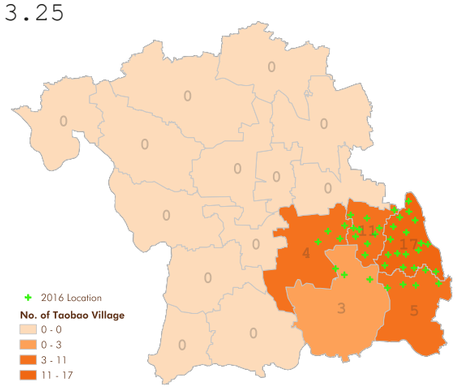

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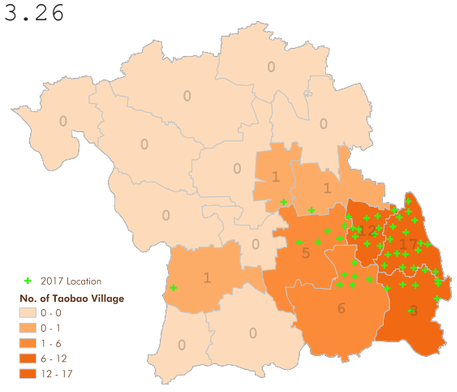

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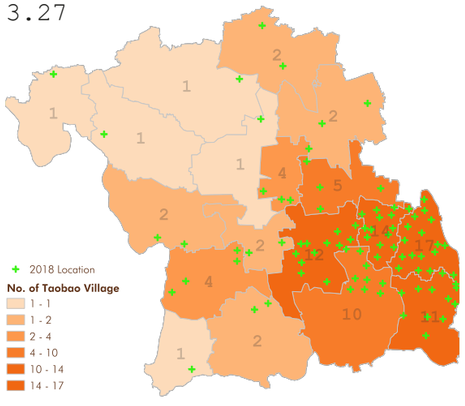

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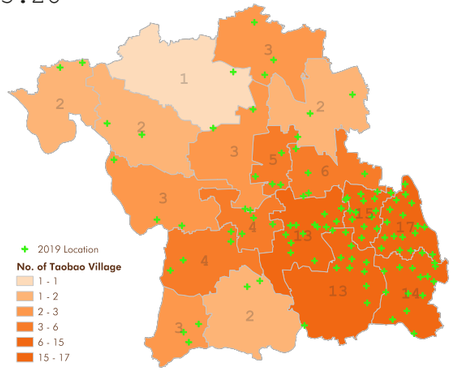

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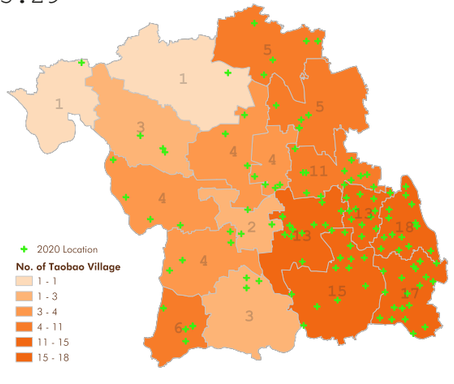

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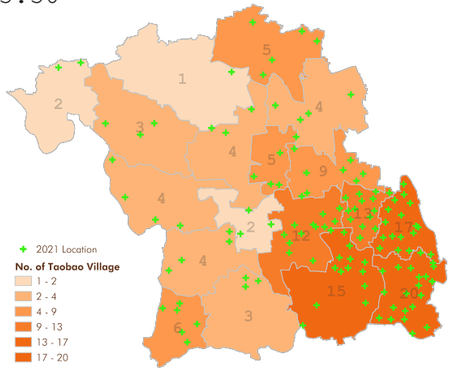

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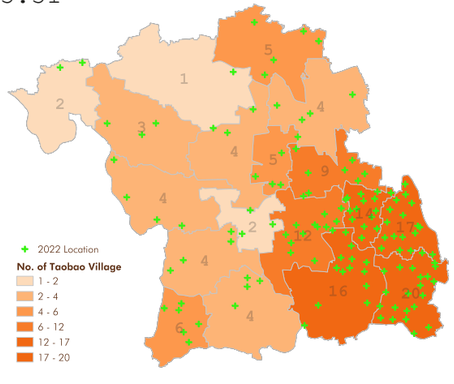


Map 3.18-3.22
Distribution Map of Taobao Villages in Shaji Town
2009,2010,2011,2012,2013

Map 3.23-3.27
Distribution Map of Taobao Villages in Shaji Town
2014,2015,2016,2017,2018

Map 3.28-3.31
Distribution Map of Taobao Villages in Shaji Town
2019,2020,2021,2022

In terms of employment and income, the Shaji model has significantly improved the living conditions of farming households. The e-commerce industry has generated wage income, business income, and property income. In 2024, the disposable income of Shaji farmers reached 32,700 yuan *(Fig. 3.12)*, while Dongfeng Village's collective income amounted to 1,138,100 yuan. Dongfeng Village comprises 1,105 households and 5,277 residents, with 3,800 individuals engaged in e-commerce or related industries. The village hosts 480 physical enterprises, each employing an average of approximately 20 people. The average annual household income exceeds ¥300,000, significantly surpassing the average levels of Suining County and neighbouring townships. This model has effectively advanced rural poverty alleviation and common prosperity, serving as a vibrant case study in rural revitalisation.

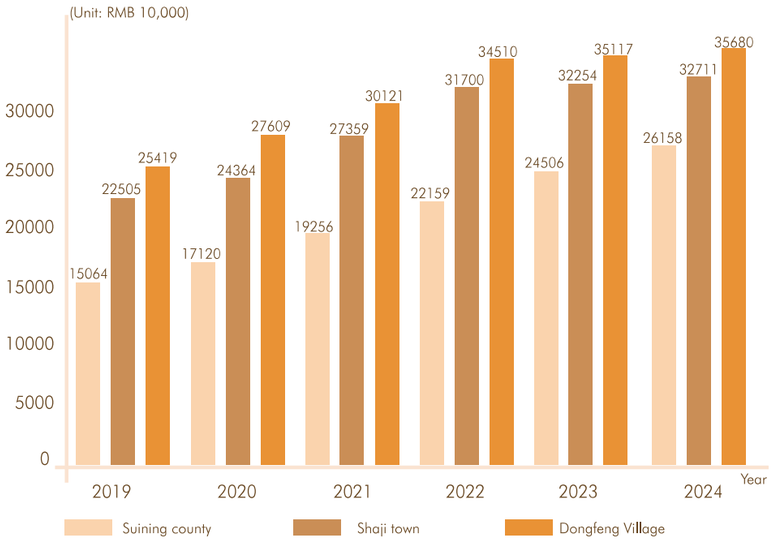


Fig. 3.12 Note:
Source:
Data collected during fieldwork from the exhibition in the Town Living Room, figure drawn by the author.

Fig. 3.12
Per Capita Income of Rural Residents in Dongfeng Village, Shaji Town, Suining County

During the development of the "Shaji Model" the government's role became increasingly prominent, particularly between 2014 and 2020 when both township and county authorities successively introduced a series of supportive policies. These measures encompassed loan facilitation, establishing e-commerce industrial parks, promoting broadband network coverage, and introducing e-commerce platforms. The Xuzhou municipal government further coordinated agreements between districts and counties with Alibaba Group to establish Rural Taobao service stations across villages. Cooperation was expanded to include in-depth partnerships with e-commerce platforms such as JD.com and Yihaodian, actively advancing the "E-commerce into Rural Areas" initiative. By 2018, the city boasted over 30,000 online agricultural product stores selling more than 200 types of produce, alongside nearly 20 rural e-commerce parks and dozens of township-level e-commerce service centres.

Against this backdrop, local authorities not only actively introduced major e-commerce platforms like Taobao, Tmall, and 1688, but also established industrial parks and live-streaming bases in Shaji. This enabled the "Shaji Model" to transcend village boundaries, gradually becoming a typical example for rural e-commerce across northern Jiangsu and the nation. Concurrently, government investment in urban development has steadily increased, with the construction of functional facilities including Water Street, Gold Street, an E-commerce Cultural Park, and 220,000 square metres of commercial housing. These developments provide essential living and consumption support for online merchants. By 2024, Shaji Town's fiscal revenue reached 157 million yuan, its built-up area expanded to 5.94 square kilometres, and its permanent resident urbanisation rate reached 67%, with the registered population urbanisation rate also reaching 65%.

Overall, the "Shaji Model" has not only significantly boosted output value and employment levels in Dongfeng Village and surrounding townships, facilitating a transformation in farmers' roles, but has also driven industrial restructuring through multi-party interaction between government, platforms, and markets. It has provided a replicable pathway for rural revitalisation. However, this farmer-centric, household-based working model, heavily reliant on platform support, also laid the groundwork for the subsequent emergence of the ‘Shaji crisis’.

CHAPTER IV:
Japan's Path

An Experiment in the Digital Reconstruction of a Valley Marketplace

In the Japanese case studies, this chapter focuses on Ayabe City to examine local innovation and policy guidance in its e-commerce development. As a typical regional city, Ayabe has undergone a transformative shift from traditional agriculture to modern e-commerce over the past two decades.

First, we briefly analyze the chronological development of Ayabe's e-commerce landscape, particularly its digital transformation under the policy frameworks of Furusato Nozei and Japan Agriculture Coopreative. Second, by examining the entrepreneurial journeys of various e-commerce practitioners, it demonstrates how they leveraged policy guidance and digital platforms to break away from traditional sales models, ascending from single offline markets to established online brands. Next, from a spatial development perspective, it explores how Ayabe City promoted the mutual growth of the regional economy and e-commerce through a dual-track (online + offline) e-commerce development model, thereby achieving regional revitalization. Finally, by summarizing the "Ayabe Path," this study presents the city's specific development trajectory and practical approaches in transitioning from traditional markets to building online brands.

4.1
Overview of E-commerce in Ayabe City

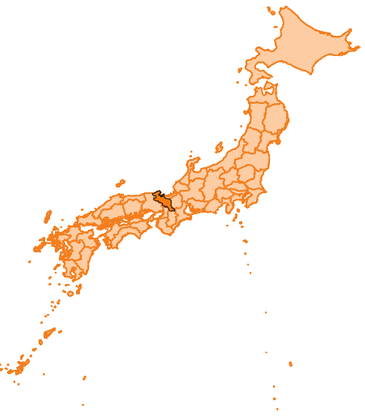
Basic Overview

Ayabe City is located in northern Kyoto Prefecture, Japan *(Map 4.1-4.3)*. With a total area of approximately 500 square kilometers, it lies at the eastern foothills of the Ōe Mountains, bordering Fukuchiyama City to the east and Maizuru City to the west. The city administers 8 districts and 216 townships.

Map 4.1-4.3
Site Location Overview

1.Kyoto Prefecture·Japan
2.Chutan Area·Kyoto prefecture
3.Ayabe City·Chutan Area

4.1

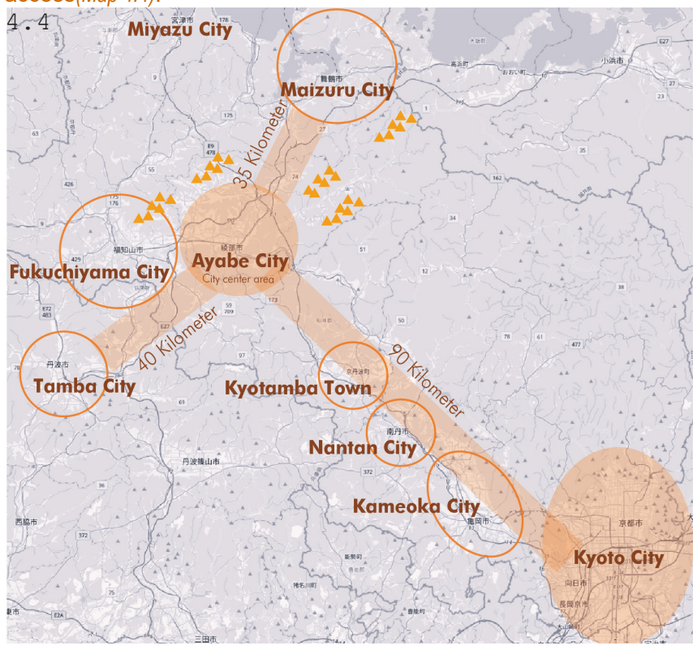


4.2

4.3

Geographically, Ayabe City is relatively close to Kyoto City, positioned nearly at the center of Kyoto Prefecture. It serves as a crucial transportation hub where the Maizuru Line railway and the Kyoto Direct Expressway intersect. The distance from Ayabe City to Kyoto City is approximately 90 kilometers, taking about one hour by car, offering relatively convenient transportation access*(Map 4.4)*.

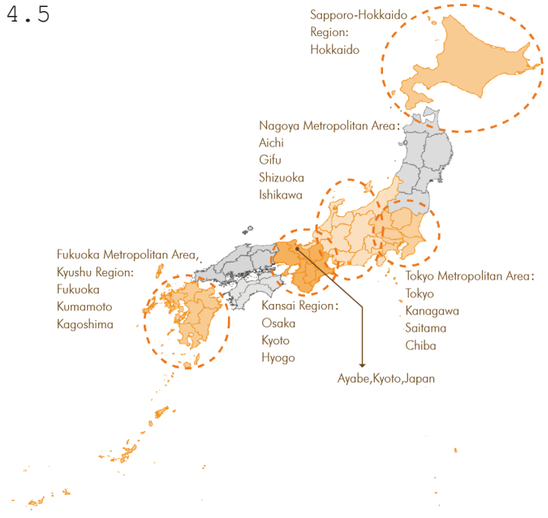
4.4



Map 4.4 Transportation Accessibility of Ayabe City

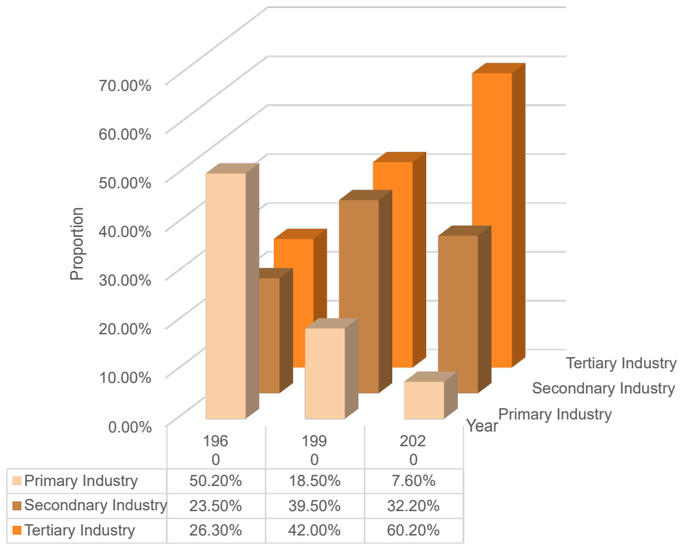
From a macro-geographical perspective, Ayabe City belongs to Japan's Kansai Economic Zone *(Map 4.5)* and is a vital component of the Kinki region—one of Japan's three major metropolitan areas—situated at the heart of the Japanese archipelago. This location endows Ayabe with dual attributes as both an urban-rural transition zone and a transportation hub, laying the foundation for its rural revitalization and industrial development.

4.5



Map 4.5 Ayabe City within Japan’s Metropolitan Structure, Highlighting the Kansai Region

As a typical mountainous city, Ayabe boasts abundant natural resources and a profound historical and cultural heritage. Agriculture dominates the local economy, with rice, tea, and vegetable production holding significant importance. Washi paper and textiles represent Ayabe's vital traditional cultural industries. According to the city's 2022-2025 Development Plan, its industrial structure has undergone notable changes *(Fig. 4.1)*. In 1960 (Showa 35), the primary industry sector accounted for 50.2%, the secondary industry sector for 23.5%, and the tertiary industry sector for 26.3%. By 1990 (Heisei 2), the primary industry sector's share had fallen to 18.5%, the secondary industry sector rose to 39.5%, and the tertiary industry sector increased to 42.0%. By 2020 (Reiwa 2), the primary industry sector's share had further declined to 7.6%, the secondary industry sector to 32.2%, while the tertiary industry sector's share had reached 60.2%. This demonstrates a clear trend of industrial restructuring, with the economic focus gradually shifting toward services and modern industries.



	196 0	199 0	202 0
Primary Industry	50.20%	18.50%	7.60%
Secondnary Industry	23.50%	39.50%	32.20%
Tertiary Industry	26.30%	42.00%	60.20%

Fig. 4.1
Industrial Distribution Map in Ayabe

In terms of population, Ayabe City reached its peak of 54,055 residents in 1950 (Showa 25), but has declined annually since then *(Fig. 4.2)*. By 1980 (Showa 55), the population stood at 42,552, and by 2020 (Reiwa 2), it had fallen to 31,846—a decrease of approximately 25.2%. Furthermore, the proportion of young people has continued to decline, decreasing by 10.3%, while the elderly population ratio has reached 38.7% and is projected to continue rising. The challenges of population decline and aging are becoming increasingly severe.

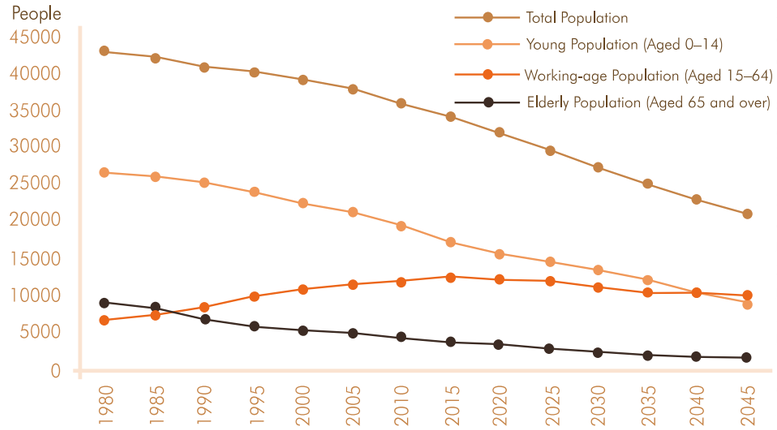


Fig. 4.2 Note 1: Source: Census of Japan (Ministry of Internal Affairs and Communications), and Regional Population Projections for Japan (National Institute of Population and Social Security Research)
Note 2: Figures after 2025 are projections based on data published in March 2018 by the National Institute of Population and Social Security Research.

Fig. 4.2
Population Trends at Ayabe from 1980 to 2045

Furusato Nozei and JA's Policy Guidance System

In the development of e-commerce in Ayabe City, the "Hometown Tax" (Furusato Nozei) system has played a significant role.

The Furusato Nozei Program, or Hometown Tax Donation Program, is a tax incentive scheme established by the Japanese government to generate and support the economic vitalisation of small and under-funded municipalities. Under the system, taxpayers can choose to donate to a municipality or prefecture of their choice, and in some cases a specific policy area of that local body that they want to support as well, such as social and environmental programs and aid in times of disaster. In return, they are exempted from a portion of their income and resident taxes. The provisions of the furusato nozei tax are set out in Section 37 of the Regional Tax Law and were promulgated in the spring of 2008. The specifics of the law allow an individual to contribute up to 20% of taxes owed to Furusato Nozei program contributions, with the tax deduction then being the amount over ¥2,000 (Raush, 2019).

Under the "hometown tax donation" system in Ayabe City, for example, when a donor contributes 50,000 yen, they can receive a 5,000 yen income tax deduction and a reduction of approximately 43,000 yen in resident tax. Additionally, donors bear a fixed fee of 2,000 yen and receive return gifts valued at up to 15,000 yen (not exceeding 30% of the donation amount). Through this system, donors not only support local development but also enjoy tax deductions and receive high-value return gifts.

For the recipient municipality of Ayabe City *(Fig. 4.3)*, the local government and collaborating businesses (including individual merchants) participate in the program to provide return gifts to donors. The value of return gifts is typically capped at 30% of the donation amount (¥15,000 in this example). Additionally, the recipient region bears transaction fees and shipping costs incurred during the donation process. Ultimately, local governments retain over 50% of the donation amount to support local projects and promote regional development.

	Example: Donation amount ¥50,000 Yen				
Donor Section	Donor's own cost: ¥2,000 (fixed)	Income tax deduction: ¥5,000 (10%)	Resident tax deduction: ¥43,000		
Business & Municipality Section	Return gift worth up to ¥15,000 (≤30% of donation)		Shipping	Handling fees	Amount retained by municipality: approx. ¥25,000 (over 50%)

Note:
Income tax is refunded, resident tax is reduced in the following year.
The return gift must not exceed 30% of the donation value.

Benefits for Donors

· Can contribute to a region they care about.
· Eligible for tax deductions.
· Effectively receive high-value local gifts for only about ¥2,000.

Benefits for Local Businesses

· Boosts store and product recognition (PR).
· Expands sales channels and gains repeat customers.
· Easier expansion through online shop operations.

Benefits for Municipalities

· Secures independent financial resources.
· Enhances local appeal and awareness.
· Revitalizes regional industries.
· Increases the number of engaged residents or visitors.

Fig. 4.3 Overview of the Furusato Nozei (Hometown Tax) System

Fig. 4.3 Note:
Source: Based on original promotional materials provided by the Planning and General Affairs Department, Planning and Policy Division, Ayabe City, with explanations by Yoshihito Sakurai. Translated, organized, and illustrated by the author.

In advancing the digital transformation of local industries, the municipal government has closely integrated this system with local e-commerce platforms. This approach not only supplements fiscal revenue but also serves as a vital mechanism for propelling agricultural products and regional specialties into the national market. Operationally, Ayabe City's digital "hometown tax" platform is primarily managed through collaborations between local governments and e-commerce enterprises. Small and medium-sized e-commerce operators, artisan merchants, and agricultural producers within the city can voluntarily participate in this system, showcasing and selling their products on a dedicated "Hometown Tax Donation Gift Platform." Consumers (i.e., taxpayers) who select Ayabe City as their donation recipient via the online platform receive local specialty products as gifts in return, achieving the dual effect of "online shopping" and "local support" *(Fig 4.4-4.5)* .

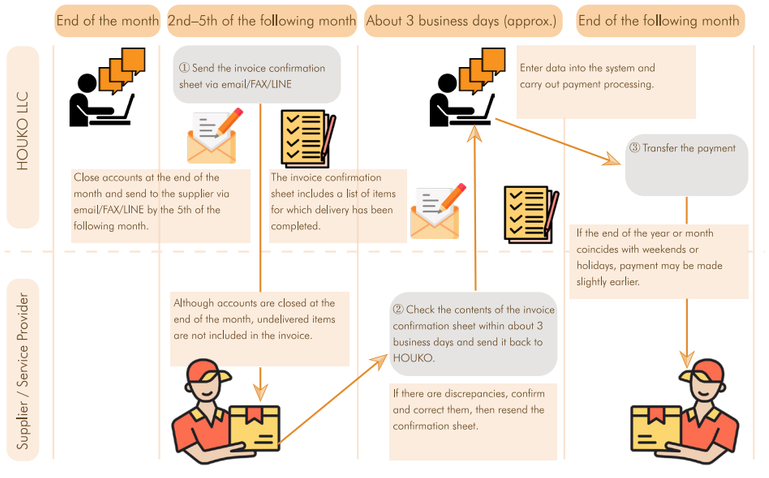


Fig. 4.4 Flow from Product Shipment to Invoice and Payment

Fig. 4.4 Note:
Source: Based on original promotional materials provided by the Planning and General Affairs Department, Planning and Policy Division, Ayabe City, with explanations by Yoshihito Sakurai. Translated, organized, and illustrated by the author.

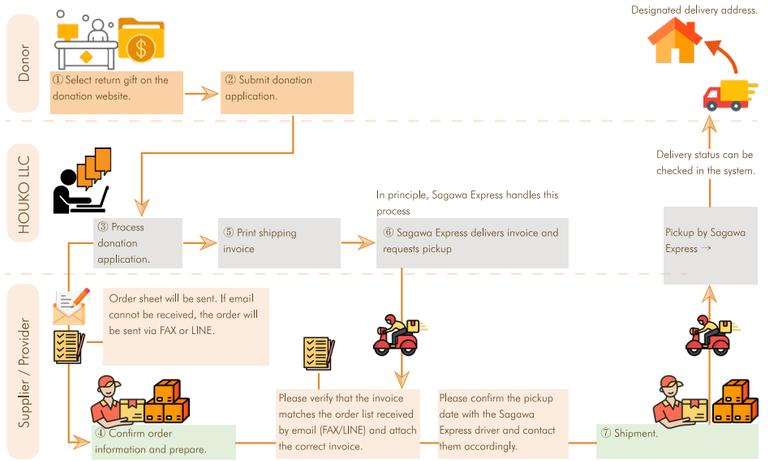


Fig. 4.5
Flow from donation to product shipment

Fig.4.5 Note:
Source: Based on original promotional materials provided by the Planning and General Affairs Department, Planning and Policy Division, Ayabe City, with explanations by Yoshihito Sakurai. Translated, organized, and illustrated by the author.

The "hometown tax" platform in Ayabe City is jointly operated by the local government and e-commerce companies. Small and medium-sized businesses, agricultural producers, and traditional craftspeople within the city use this platform to promote local products as return gifts. Consumers selecting Ayabe City as their donation recipient through the online platform can obtain regional specialties while supporting the local economy, achieving the dual goals of "digital donation" and "regional revitalization."

Most local e-commerce operators are small-scale individuals. Beyond selling on their own websites or major platforms like Rakuten and Yahoo! Shopping, they actively participate in the hometown tax return gift system. The government provides policy support, including sales commission subsidies, digital marketing training, and logistics service optimization. Collaborating with Kyoto Prefecture and Japan Post to enhance cold-chain delivery systems, it reduces e-commerce participation costs for SMEs, driving the digitalization and branding of local industries.

The hometown tax return gift program features representative products of Ayabe City, including organic rice, Kyoto tea, washi paper goods, honey, and traditional textile crafts. Among these, "Ayabe Organic Tea" and "Ayabe Washi" have performed exceptionally well in gift sales, enhancing the local brand image while injecting new growth momentum into traditional industries. Some initiatives integrate local culture with experiential consumption, such as tea garden picking experiences and washi paper crafting workshops. This expands hometown tax contributions beyond mere goods exchange into a vital pathway for promoting local cultural dissemination and digital rural revitalization.

In the development of e-commerce in Ayabe City, another crucial supporting institution that advanced alongside the Furusato Nozei policy and facilitated farmers' industrialization through e-commerce is Japan's agricultural cooperative system—particularly Kyoto Prefecture Agricultural

Cooperative (JA Kyoto) and its parent organization National Federation of Agricultural Cooperatives (ZEN-NOH). Together, they have established a vertically integrated system spanning from local to national levels, playing a pivotal role in online sales of agricultural products, brand promotion, and market consolidation.

Japan Agricultural Cooperative operates under a three-tier organizational structure: local, prefectural, and national *(Fig. 4.6)*. JA-Zenchu oversees guidance and supervision, while ZEN-NOH handles nationwide agricultural product marketing and material procurement. This framework ensures comprehensive management across the entire value chain—from farm production to distribution, processing, wholesale, and export—empowering local JAs with institutionalized supply chain capabilities during their e-commerce transformation (Kikuchi, 2016).

Fig. 4.6 Note: Source: Yamashita Kazuhito, using material by JA-Zenchu and others (2015)

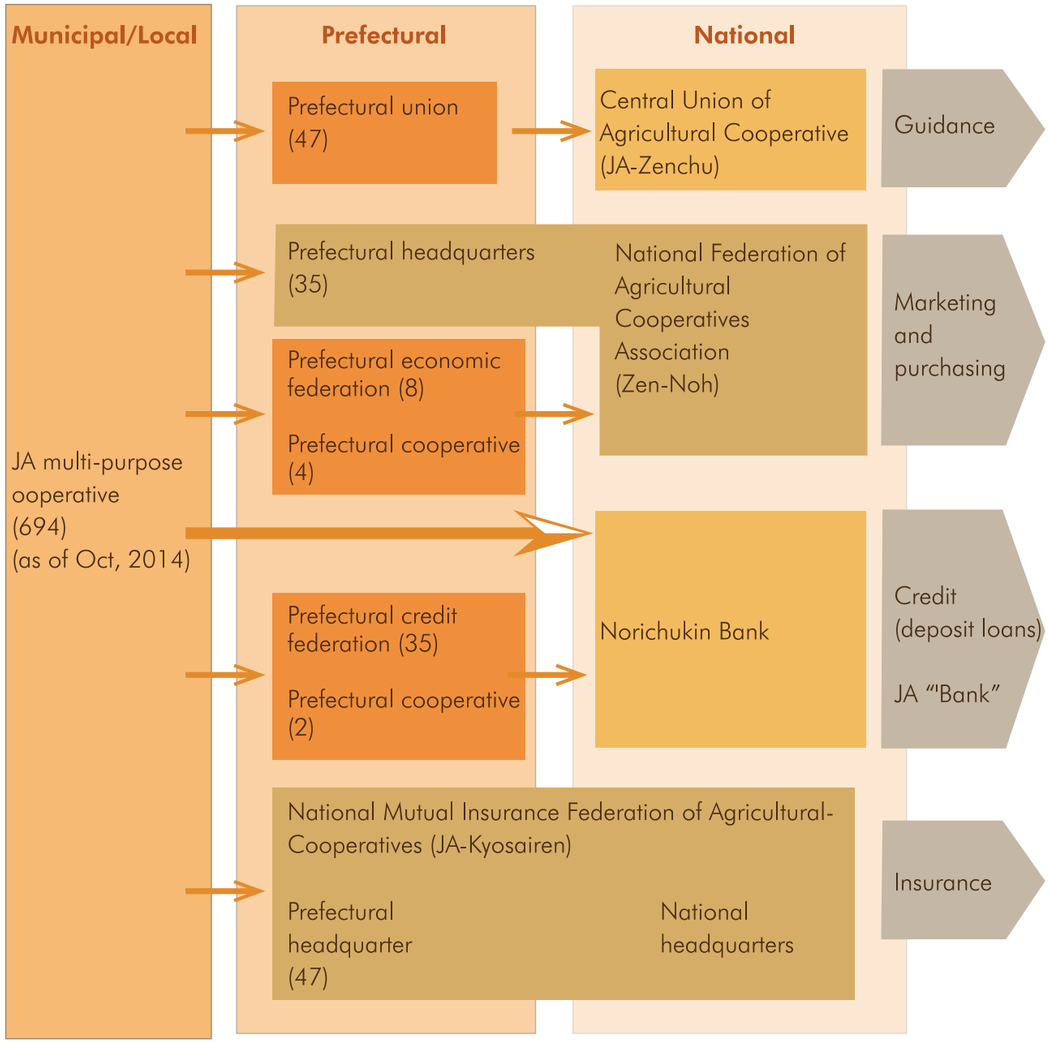


Fig. 4.6 Principal Organization of the JA Group

During an interview with the JA KYOTO officers, they said: "*Our primary focus now is selling Kyoto-produced agricultural products and processed goods nationwide via online channels, targeting a broader consumer base beyond the prefectural market. Local agricultural products are no longer confined to traditional offline channels but now reach nationwide markets through e-commerce platforms like Rakuten and Yahoo! Shopping. We currently sell specific agricultural products to regions across Japan via online stores. Additionally, we participate in agricultural exhibitions annually from October to November, followed by concentrated online promotions. However, we do not yet have overseas operations.*" This indicates that while e-commerce adoption is widespread, internationalization remains limited.

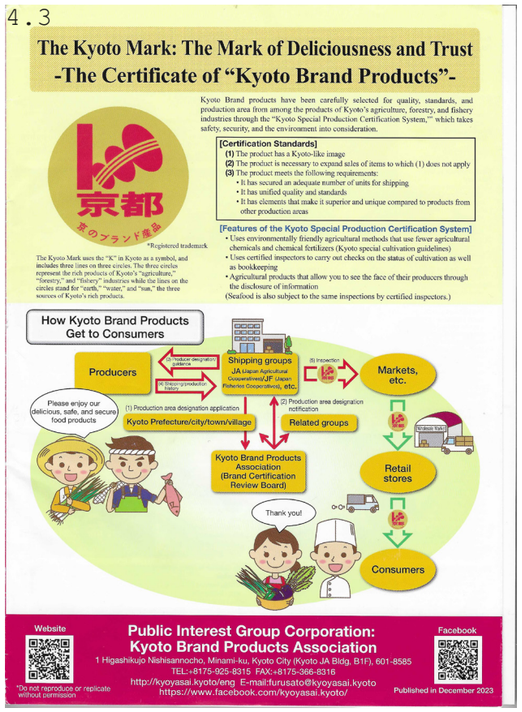
4.1

Image 4.1 Interview with JA Kyoto, Zen-noh Officers

In product management and sales, JA Kyoto has established a relatively standardized procurement and distribution mechanism. "*Farmers don't need to handle product distribution themselves—we collect all produce centrally and sell it through e-commerce platforms.*" They emphasize that this model not only alleviates market pressure for individual farmers but also fosters a more unified brand image. Concurrently, JA Kyoto regularly hosts agricultural product exhibitions to deepen consumer understanding of Kyoto's farming culture. As one interviewee noted, *"We strive to showcase Kyoto's cultural heritage and the stories behind each farm, so consumers don't just buy products—they feel the warmth of the region."*

4.2

4.3



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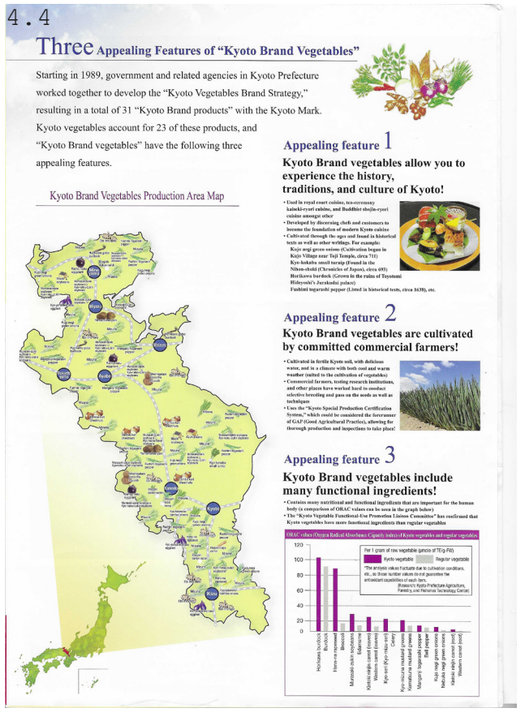


4.7

Image 4.2-4.4
Kyoto Brand Products
Posters

Image 4.5-4.7
Kyoto Brand Products
Posters

In coordination with this, ZEN-NOH assumes broader coordination and branding functions at the Ayabe City level. According to interviews with ZEN-NOH in Ayabe City, Takami, the Agriculture and Economy Chief of JA Kyoto Ninokuni, emphasized that *"the current priority is assisting local farmers in expanding their online sales channels, particularly by providing operational support and training for those lacking digital experience. Many farmers are older now, so we send staff to help them learn basic e-commerce operations, even managing their stores and handling orders on their behalf."* This "agency operation" model significantly boosts farmer participation, enabling traditional agriculture to persist and evolve within the digital landscape.

Image 4.8
Interview with Takami ,the Agriculture and Economy Chief of JA Kyoto Ninokuni

4.8

For brand development, ZEN-NOH collaborated with JA Kyoto to launch the "Kyoto Origin Branding Strategy." By establishing unified packaging standards and promotional plans, it strengthens the overall image of agricultural products from Kyoto Prefecture. For instance, when promoting the specialty "Kyoto Chili Pepper," ZEN-NOH collaborated with multiple producers to develop a shared brand narrative and advertising strategy, emphasizing regional distinctiveness and quality assurance. This collective branding approach enhances the recognition of local agricultural products in the national market. The interviewee noted: *"Consumers may still prefer familiar brands, but we aim to attract younger demographics through brand building, helping them recognize that 'Kyoto-produced' signifies quality and trust."*

4.9

4.10

Image 4.9-4.10
Kyoto Brand Products Posters

Overall, Ayabe City's e-commerce development has leveraged national policies and unified platforms to establish a top-down digital transformation pathway. Driven by the "hometown tax" system, an increasing number of farmers have proactively engaged in online sales, broadening distribution channels for agricultural products. Concurrently, JA Kyoto and Zen-Noh have facilitated the integration of local agricultural products into national and global logistics networks through centralized procurement and online sales, while also playing a pivotal role in brand development and market expansion. The involvement of the cooperative system has enhanced farmers' competitiveness, reduced operational risks, and opened new development opportunities for local agriculture within the digital economy. Through institutionalized collaboration and brand cultivation, Ayabe City has gradually established a sustainable development model centered on the "cooperative-e-commerce platform-local brand" framework.

4.2
Case Study of Ayabe City

Manganjiamatō: A kind of pepper product by Ayabe.
Murasaki zukin: A kind of beans product by Ayabe.
Kokudaizu: A kind of black beans famous on Chutan area.

The Rise of Individual Business Brands under a Dual-Track Approach: The Akahori Farm Case

Keiji Akahori and Miyuki Akahori are a farming couple living and working in Ayabe City. They are also merchants on the online e-commerce platform "Food Market." On the YAMATO FOOD MARKET platform, they primarily sell crops grown on their own farm, including Manganjiamatō, Murasaki zukin, Kokudaizu and rice.

In 2011, Keiji Akahori and Miyuki Akahori moved from Kyoto City to Ayabe City in northern Kyoto Prefecture, embarking on their agricultural journey. Initially focused on traditional farming, they began transitioning to more sustainable cultivation methods in 2015. As they explained in an interview: *"We mix the Manganji chili pepper that we can't ship with purple beans and rice straw to make our own compost. This is a recyclable, zero-waste compost. We let it mature for a year, then apply it to our greenhouse every spring. We've been doing this for many years."* With their greenhouse established, they began cultivating Manganji chili pepper, purple beans, rice, and other local specialty crops.

Image 4.11
Keji Akahori
and
Miyuki Akahori

4.11

Keiji and Miyuki didn't just stick to traditional farming methods; they also recognized the potential of online platforms and began selling local agricultural products like Manganji chili pepper on e-commerce platforms, initially targeting the domestic market. However, Keiji Akahori also became aware of the limitations of working within the agricultural cooperative framework, particularly regarding pricing: *"If we deliver our products to the agricultural cooperative, they set the price. The cooperative buys all the produce we deliver, while e-commerce companies ship based on orders."* Now developing e-commerce in Ayabe City, they face not only challenges with price flexibility but also restrictions similar to those encountered through cooperative sales. Despite this, they recognize the potential for market expansion through e-commerce. Keiji mentioned in an interview, *"Our sales aren't stable, but we still use online platforms to sell our products, even though logistics and marketing costs are high."* The couple also emphasized that while e-commerce offers advantages by eliminating middlemen, it introduces new challenges, particularly in packaging, shipping, and market volatility.

4.12

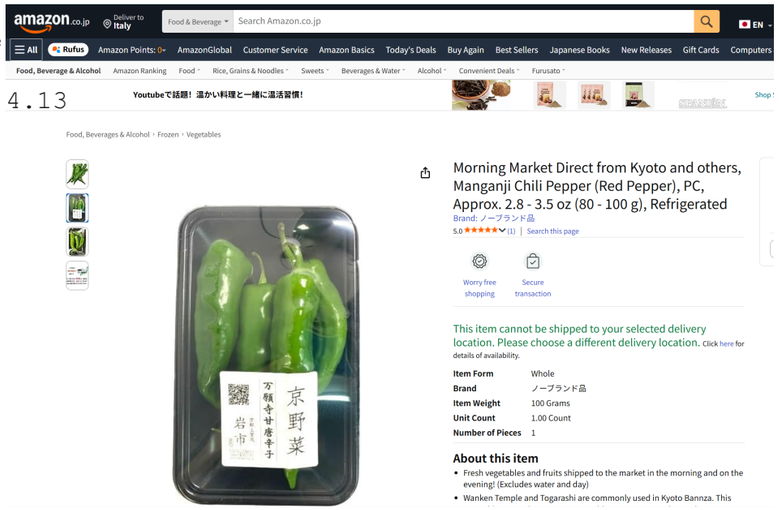
Image 4.12
Manganji Pepper at JA Kyoto Office for Exhibition.

The integrated online-offline brand development strategy represents the logical conclusion of Keji and Miyuki's long-term exploration. Online, they operate their own Food Market platform for food e-commerce, while some growers also sell specialty agricultural products like Manganji pepper on Amazon Japan. Offline, they maintain traditional market sales channels and collaborate with local agricultural cooperatives such as JA Kyoto and Zen-Noh, which handle product distribution and market expansion. Take Manganji pepper as an example: this specialty variety, initially confined to local circulation, has gradually become a representative regional agricultural product through collaboration with JA Kyoto.

As grower Keiji Akahori explains: *"The cooperative purchases our products*

based on the quantity we deliver, but they set the price. In contrast, e-commerce channels offer more flexible pricing, but they come with higher transaction fees." This balancing act between the "stable security of the cooperative system" and the "flexibility and autonomy of e-commerce platforms" reflects the reality faced by most local farmers navigating digital transformation. While JA Kyoto provides a stable sales network, the limitations of its pricing and sales model have prompted operators like Keiji and Miyuki to explore bypassing the cooperative system and establishing independent e-commerce channels. As Keiji stated:" *I'm considering launching my own e-commerce business to gain full control over product pricing and sales."*

Image 4.13
Manganji Sales Online at Amazon Japan.



In developing their independent e-commerce sales, the Akahori couple sought greater control over the pricing and distribution of their agricultural products. Keiji explained, "The traditional system lacked the flexibility to respond to market demands. While e-commerce offers more flexibility, it also presents its own challenges". Through their online sales channels, they successfully expanded the market for vegetables like Manganji pepper, demonstrating the success of their branding strategy. Beyond this, they are dedicated to preserving local culture and promoting food education—core tenets of their business philosophy that strengthen the connection between local production and consumption.

農業には知恵が必要だ。

Agriculture requires wisdom.

これまで、綾部市に移り住んで農業を始めたことを一度も後悔したことはありません。

Up to now, I have never once regretted moving to Ayabe and taking up farming.

きっと私たちはこれからも努力して耕し続けることでしょう。

I'm sure we'll keep working hard and continue cultivating the land!

The Path to E-commerce Transformation for Farmers Leveraging Policy Support (Yoshihito Farm Case)

Yoshihito Sakurai is a tea farmer in the Ayabe region. He and his wife manage his tea plantation here and participate in the Furusato Nozei program, selling his tea and related products on the Furusato Nozei platform.

Yoshihito Sakurai did not come from a traditional tea farming family. Instead, his interest in agriculture developed during his university years through internships at ranches in Okinawa and Hokkaido, followed by three years of agricultural studies in the United States. They relocated to the Ayabe region around 2006. It was during this period that the local government introduced a series of rural revitalization and digital support policies, including Furusato Nozei (Hometown Tax Donation), laying the foundation for their subsequent e-commerce transformation. However, unlike farmers who directly relied on policy subsidies, the Sakurais viewed these policy resources more as "leveragable external conditions" rather than the core driving force for their development.

Initially, the Sakurais cultivated and processed tea, relying primarily on the local agricultural cooperative (JA) system for sales. Yet, as rural populations dwindled and consumer channels diversified, they recognized that solely depending on JA purchases could not sustain long-term growth. The catalyst for their shift to e-commerce wasn't direct government guidance, but rather an online sales seminar hosted by the regional agricultural bureau. As Yoshihito Sakurai recalled, "*I hadn't initially considered selling my tea products online. It was only after accidentally attending a lecture on online sales that I realized this might be an opportunity.*" After hearing e-commerce success stories, they conceived the idea of establishing independent sales channels. Subsequently, the pair enrolled in a training program organized by the local agricultural improvement center, learning skills such as online product promotion, packaging design, and customer relationship management.

Image 4.14
Yoshihito Sakurai with His Tea

4.14

In the early stages of their transition, the couple had virtually no experience in design or marketing. "*We considered hiring someone to build our website or take promotional photos, but that would have required additional expenses.*" Therefore, they chose to learn how to build their website, shoot their own promotional materials, and write their copy—all while managing the daily labor of their tea farm. This self-reliant approach, though time-consuming, embodied their practical spirit of "leveraging policy momentum without relying on policy frameworks." Rather than relying solely on the Furusato Nozei platform for sales, they maintained a balanced approach by simultaneously managing both offline and online sales channels.

Their e-commerce venture was not a blind follow-the-crowd move, but rather built upon a rational assessment of policy logic. Since its implementation in 2008, the Furusato Nozei system has aimed to stimulate regional economic circulation and agricultural sales through the donation of local specialty gifts. After thorough research, the Sakurais chose to leverage it with a "refer to but not depend on" approach: they did not fully integrate their main products into the gift system, instead treating it as a supplementary channel for brand exposure and credibility building. As they put it, *"The policy offers visibility, but what truly delivers lasting returns is the product's inherent quality and its story."*

Image 4.15-4.18
Sakurai's Tea Online Products Introduction

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The introduction of e-commerce has indeed altered their daily rhythm. Website updates are primarily handled by Fumi Sakurai, while agricultural labor often leaves them little time for page maintenance. *"Our lives are busier than before, but this busyness is worthwhile."* Through the internet, they have not only expanded their customer base but also attracted visitors to participate in tea-making experiences and tea garden tours. *"We call this initiative 'Ayabe Green Tea Tourism,' transforming the tea fields from mere workplaces into spaces for human connection."* This model integrates agricultural production, community tourism, and local cultural promotion, positioning the farm as a vital hub for regional social revitalization.

Image 4.19
Sakurai Farm's In-Person Tea Tasting Event

The Sakurai couple's transformation strategy can be summarized as "using policy as a bridge, with self-reliance at its core." They registered their branded tea products on the Furusato Nozei platform while simultaneously launching an online store on their self-operated e-commerce website Base, establishing a dual sales structure of "official channels + self-operated platform". According to survey results, their e-commerce sales account for less than 20% of total revenue, with primary customers concentrated domestically in Japan. Significant income growth has yet to materialize. However, as Fumi Sakurai noted in an interview: *"Online sales have taught us anew how to tell our product's story and introduced more people to our tea gardens in Ayabe."*

In terms of logistics and marketing strategies, they maintain self-direction across logistics, packaging, and promotional efforts. For instance, to reduce shipping costs, they primarily utilize Japan Post channels while personally managing online orders and customer interactions rather than outsourcing to third-party platforms. The "boost" provided by government policies manifests during initial exposure and credit-building phases, whereas long-term sustainability stems from their proactive investments in brand development and market maintenance. Yoshihito Sakurai remarked on government support: *"Policy assistance is useful, but it shouldn't be relied upon. To keep people buying our tea, it shouldn't be because it appeared on Furusato Nozei, but because they remember its taste."*

Unlike many farmers who rely solely on e-commerce as their export, the Sakurai couple have consistently maintained close ties with their local community. They actively participate in regional agricultural exchange activities, integrating tea-making experiences with agricultural education to form an integrated business structure encompassing "production-sales-cultural dissemination". This approach allows them to retain their autonomy within the policy support system, rather than becoming subsidy-dependent "recipients of assistance". Notably, they mentioned in the questionnaire that while the Furusato Nozei system is "somewhat helpful" for business expansion, they still consider product innovation and customer relationships as their core competitive advantages. From an academic perspective, this attitude reflects active adaptation to institutional embeddedness: rather than passively following policy logic, farmers redefine and leverage policy resources to reconstruct their own business models.

Image 4.21-4.22
Interviewing with Yoshihito Sakurai at His Farm

Image 4.20
Sakurai Tea Farm

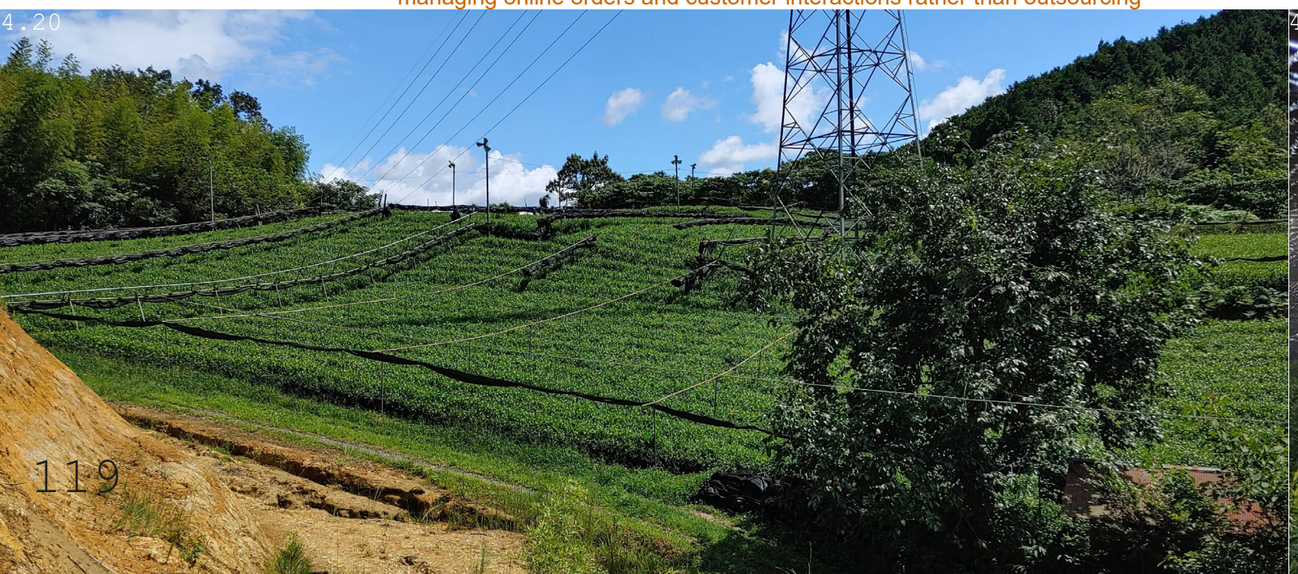

Image 4.23
Sakurai's Tea Farm

Reviving Traditional Industries through Intergenerational Inheritance and E-commerce Integration

Kurotani Washi is a traditional handmade paper craft originating from the Kurotani district in northern Aya City, Kyoto Prefecture, with a history spanning over 800 years. Its origins trace back to legends of Heike clan refugees fleeing into the mountains and sustaining themselves through papermaking, which later evolved into a village-based handmade paper production system. Today, Kurotani Washi is not only designated as an Intangible Cultural Property of Ayabe City but also stands as one of Japan's oldest continuously operating washi production sites. Due to its remote location and limited accessibility, Kurotani has long maintained a closed production model characterized by a self-sufficient artisan community. During the author's interview, Ms. Yamashiro explained that only about ten people currently engage in paper production and sales, all working within family units that have produced washi for generations.

In recent years, with the advancement of regional revitalization and cultural digitization policies, the Kurodani washi paper-making community has begun exploring online platforms to promote cultural dissemination and market expansion. As Ms. Yamashiro, one of the interviewees, stated: *"To introduce Kurodani washi paper to a wider audience, we believe online sales are a worthwhile avenue to pursue alongside local sales."* Guided by the local craft revitalization association, they established an official website and joined gift-in-kind platforms like Furusato Nozei, hoping to reach a broader consumer base through digital channels. However, progress in their e-commerce transformation has been slow due to the products' high added value and strong handmade nature, compounded by severe labor shortages.

Currently, online orders for Kurodani Washi are handled and packaged by a small number of artisans. Ms. Yamashiro described the situation: *"Currently, each workshop has only one or two people handling online orders, while others remain focused on production and training."* This highly specialized production structure ensures product quality but limits flexibility in responding to the online market. Simultaneously, the additional tasks brought by e-commerce—such as customer communication and logistics arrangements—have increased the workload for artisans, placing them under the dual pressures of production and sales.

Image 4.24
Interview with Yamashiro

Image 4.25-26
Kurodani Washi Paper

Image 4.27-29
Washi Paper in 1950 Autumn

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The gallery of washi paper in Kutotani Ayabe.....

Image 4.30-4.35
Washi Paper in 1950-1960 Autumn

Image 4.36-4.41
Washi Paper in 1960 Autumn

Image 4.42-4.44
Washi Paper in 1990 Spring

Image 4.45-4.47
Washi Paper in 2025 Summer

Despite this, the Kurotani Washi community remains committed to an e-commerce philosophy centered on "preserving craftsmanship while renewing expression." They view the internet as a medium for showcasing authentic handmade processes, rather than merely a sales channel. Their official website and promotional materials frequently emphasize narratives like "crafted with heart, one piece at a time" and "integrating washi into daily life," blending artisanal craftsmanship with lifestyle aesthetics. This approach prioritizes cultural resonance over efficiency, using narrative content to deepen cultural identity and allowing consumers to experience the spirit of craftsmanship during purchase. Operationally, they employ a hybrid model combining their own website with partnerships like Furusato Nozei. The official site focuses on brand image and cultural dissemination, while the gift-returning platform provides exposure and sales opportunities. Despite limited sales volume, this structure allows them to maintain cultural integrity while sustaining stable external connections. Some younger artisans also experiment with channels like Instagram, BASE, and Visit Ayabe to share production videos, attracting urban visitors to book Washi Making Experiences, creating a circular online-offline communication mechanism.

"The economic benefits of online sales are limited, yet they have brought new significance in terms of intergenerational transmission and social recognition. When we receive messages from new customers online and see that they are willing to give our paper as gifts, we feel truly delighted." This feedback from the outside world allows artisans long isolated in mountainous regions to perceive the social value of their craft. Rather than being a profit-making tool, e-commerce has become a pathway for cultural regeneration—a way for traditional crafts to re-enter the public eye through digital dissemination.


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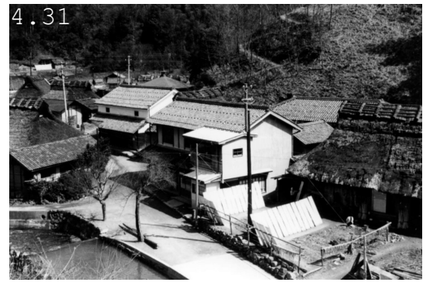
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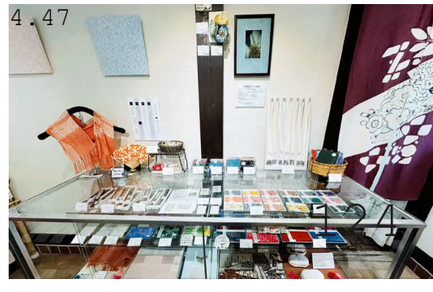
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Coincidentally, during the author's research in the Ayabe region, she also met Mai-san, a jam maker who is actively participating in the Furusato Nozei e-commerce initiative to expand her product offerings.

Nestled among the mountains in the southwest of Ayabe City, Inakaya Sorashido is a small-scale rural homestay business integrating agricultural experiences, dining, jam-making, and online sales. Operated by Mai Morishima, who hails from a local family primarily engaged in rice cultivation, the venture evolved after she inherited her grandfather's farmland. She gradually developed an agricultural processing brand centered on the core philosophy of "the connection between food and life." Her entrepreneurial journey wasn't driven by commercial motives but rather by the continuation of a life philosophy: *"Nowadays, eating isn't just about filling your stomach; it's about creating your own way of life."*

Unlike many traditional farmers, Mai has always viewed e-commerce as an extension of her daily life rather than merely a sales tool. In an interview, she noted: "For me, making jam, cooking rice, and sharing glimpses of our life online are all part of the same continuum." This philosophy is reflected in her brand development—her official website, blog, and Instagram platform serve not merely as marketing channels, but as windows into the daily rhythms of farm life, seasonal meals, and local traditions. By weaving "agricultural products" with" rural life narratives," Inakaya Sorashido has carved out a distinctive cultural identity within the fiercely competitive local specialty market.

Image 4.48
Mai Morishima

In terms of sales channels, Mai employs a multi-path approach combining her own website, the BASE e-commerce platform, and the Furusato Nozei return gift system. Survey data indicates that e-commerce sales account for 50%–80% of her total revenue, making her one of the few individual farmers in the Ayabe region achieving online profitability. She primarily distributes products through major return gift platforms like Rakuten Furusato, Furusato Choice, and Satofull, while maintaining independent operation of her own website to retain control over brand image and customer engagement. Mai believes, *"Furusato Nozei is an excellent opportunity, but it must be integrated with your own story."* This "policy-driven, narrative-centered" approach allows her to leverage the system while preserving brand independence. Production and management duties are primarily shared between Mai and her mother.

Given the small scale of the operation, website maintenance, order processing, and shipping are all handled by family members. She jokes, *"Our e-commerce store operates 24/7—orders can come in at any hour."* Primary logistics partners include local delivery companies like Yamato, Japan Post, and Sagawa. Despite the increased workload, she feels e-commerce hasn't disrupted her rhythm: *"I'm still a farmer, just delivering the taste of the farm in a different way."*

It is noteworthy that while Mai's entrepreneurial journey received some support from the government and local organizations—such as e-commerce training and gift certification—she consistently emphasized "self-defined rural renewal." She pointed out: *"Government assistance is helpful, but ultimately, you have to tell your own story. Only when others remember that flavor will they return to buy."* This statement resonates with Yoshihito Sakurai's earlier perspective, reflecting the widespread sense of agency among farmers in the Ayabe region—actively shaping their own narratives and product value within a policy-enabled framework. Unlike traditional "industrial revitalization" her goal isn't to expand production or profits, but to use digital means to make local lifestyles visible and experiential. Her brand narrative, visual storytelling, and return-gift mechanism collectively form a cyclical structure where "cultural narratives drive consumer identification." As Mai concluded in the interview: *"Through these small jars of jam, I hope people remember the taste of the countryside. Perhaps this is the 'legacy' our generation can create."*

Image 4.49
Mai Morishima's Physical Store (A corner of the room)

Image 4.50
Interviewing with Mai-san's Family

Image 4.51
Mai Morishima Online Store Promotional Image

4.3
Ayabe City's E-commerce Landscape: An Innovative Path of Dual-Track Advancement

The development of e-commerce in Ayabe City also follows a people-centered approach. Unlike business models driven by centralized platforms, Ayabe attracts young urbanites back to rural areas through its "relocation policy," empowering newcomers as the core force for local economic revitalization. These migrants, equipped with urban experience and digital literacy, have gradually built a multi-layered e-commerce system with the support of local governments and organizations like the Agricultural Cooperatives. By integrating the "Hometown Tax" policy with local brand development, they have created a framework that balances online and offline channels, fosters urban-rural interaction, and promotes local symbiosis. This system not only facilitates the wider distribution of agricultural products but also reconfigures the relationship between local industries and living spaces, becoming a crucial fulcrum for regional revitalization.

It should be noted that geographical and corporate information regarding Japan's local e-commerce is not fully publicized, lacking quantifiable spatial data and enterprise distribution records. While partial lists can be obtained through official and local channels, this paper refrains from naming specific entities due to corporate privacy considerations. Consequently, the analysis of Ayabe City's e-commerce space primarily relies on policy and institutional documents, network node information, and visualization materials.

This section's analysis unfolds across three dimensions: First, at the macro-policy level, it examines the policy framework and network structure of Ayabe City's e-commerce ecosystem. Second, from the perspective of individual implementation, it analyzes the ethical connections between "human return" migration policies and e-commerce innovation. Finally, focusing on spatial patterns, it explores the spatial distribution of logistics and sales nodes, alongside the dual-track model of "online sales + offline experience." Through multidimensional analysis, this section reveals the formation logic and regional innovation characteristics of Ayabe City's e-commerce space.

Macroeconomic Policy

From a policy perspective, the formation of Ayabe City's e-commerce ecosystem is built upon the institutional guidance of the local government and the network layout of the Agricultural Cooperative organization. The Ayabe City Government's Regional Economic Analysis Report (2025) indicates that the local industrial structure is supported by two core sectors: manufacturing and retail *(Fig. 4.7)*. Manufacturing contributes an added value of 15,304 million yen, with a specialization coefficient more than double the national average, demonstrating robust industrial output capacity and high industrial concentration. While wholesale and retail trade lag behind manufacturing in added value (approximately ¥6,532 million), they feature a larger number of business entities—over 200 establishments *(Fig. 4.8)*—forming a dynamic layer of the regional economy. This "manufacturing-supported, distribution-expanded" industrial structure provides a stable supply chain and consumer market foundation for the rise of local e-commerce. Concurrently, the added value of lifestyle services such as healthcare and welfare reached ¥7,333 million, employing approximately 2,700 workers *(Fig. 4.9)*. This reflects Ayabe City's economic transition from a traditional manufacturing orientation toward a comprehensive, lifestyle-oriented industrial system, cultivating new social demand for subsequent digital distribution and online consumption.

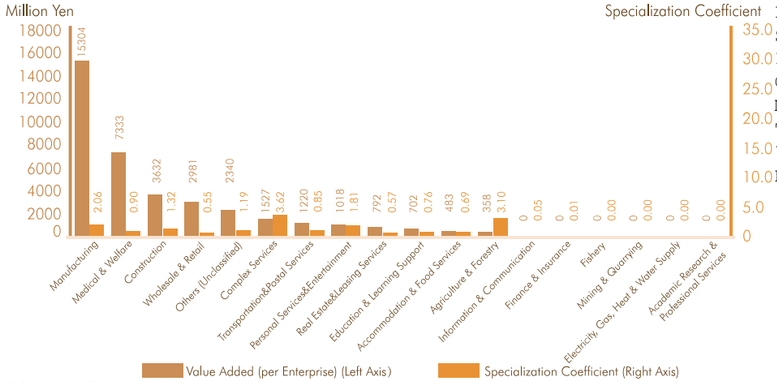

Fig. 4.7 Note: Source: Ministry of Internal Affairs and Communications / Ministry of Economy, Trade and Industry, "Economic Census for Business Activity" (Reprocessed Data)

Fig. 4.7:
Value Added by Broad Industrial Category at Ayabe in 2021

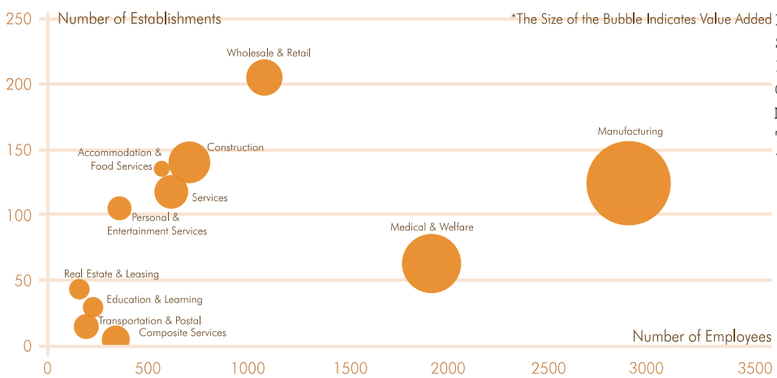

Fig. 4.8 Note: Source: Ministry of Internal Affairs and Communications / Ministry of Economy, Trade and Industry, "Economic Census".

Fig. 4.8: Scale of Each Industry at Ayabe in 2021

Fig. 4.9 Note:
Source: Ministry of Internal Affairs and Communications, "Economic Census for Business Frame"; and Ministry of Internal Affairs and Communications / Ministry of Economy, Trade and Industry, "Economic Census for Business Activity" (Reprocessed Data)

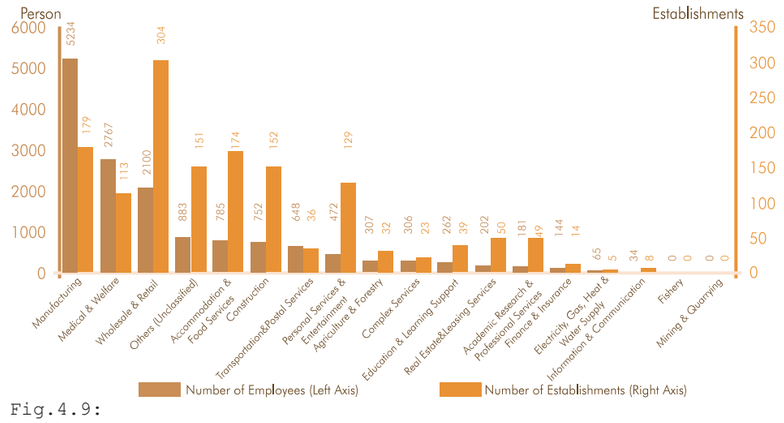

Fig.4.9:
Proportion of Sales by Industry Category at Ayabe in 2021

At the administrative level, the city government of Ayabe not only promotes industrial digitization through policy support but has also established a dedicated internet consumer consultation window. It has created a guidance page specifically for "overseas shopping" to enhance residents safety awareness and transaction capabilities in cross-border e-commerce and online consumption. This approach reflects local governments emphasis on consumer education in e-commerce promotion: policies now extend beyond industrial subsidies and investment attraction to include building residents' digital literacy and shaping market culture. The goal is to foster an online consumption ecosystem where institutional frameworks integrate seamlessly with daily life.

Furthermore, the linkage between local finances and e-commerce development is particularly evident. In recent years, Ayabe City has actively leveraged the "Furusato Nozei" (hometown tax donation) system as a policy lever, using tax incentives to drive online sales and brand development of local specialty products. According to data from Japan's Ministry of Internal Affairs and Communications and the Nikkei newspaper *(Fig. 4.10)*, Ayabe City's hometown tax donations have steadily increased from ¥10 million in fiscal year 2016 to ¥190 million in fiscal year 2024, demonstrating a sustained upward trend. The period from 2019 to 2024 saw particularly significant growth, with donations rising from ¥90 million to nearly ¥200 million, reflecting both increased market recognition for local products and enhanced online distribution capabilities. Statistics for fiscal year 2023 reveal that Ayabe City received 3,184 donations totaling approximately ¥136.01 million. Of this, ¥99.67 million—over 70%—was allocated to regional development projects, with the remainder primarily directed toward educational advancement, revitalization of aging communities, and social welfare initiatives. This funding structure demonstrates how local governments leverage e-commerce-based fiscal mechanisms to tightly integrate industrial development with social reinvestment, achieving a dual cycle of economic and social advancement.

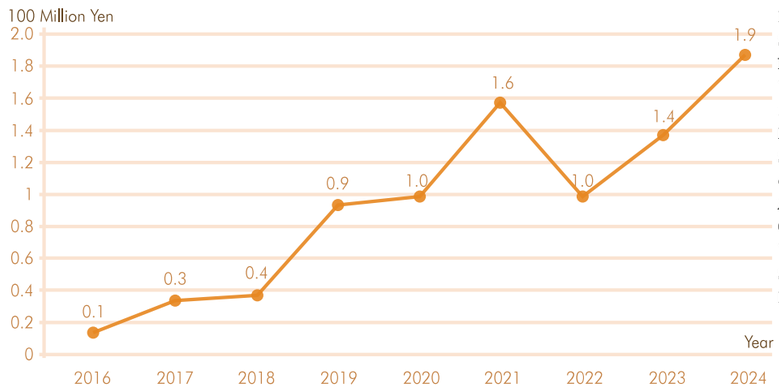

Fig. 4.10 Note:
Source: Nikkei (The Nihon Keizai Shimbun), "Furusato Click: Trends in Hometown Tax Donations Seen on the Map" (based on Ministry of Internal Affairs and Communications, "Survey on the Current Status of Hometown Tax Donations")

Fig.4.10:
Trends in Hometown Tax Donations at Ayabe from 2016 to 2024

Meanwhile, data from major e-commerce platforms like Furusato Choice shows that the number of products listed by Ayabe City surged from 15 in 2010 to 6,046 in 2024—an increase exceeding 400-fold *(Fig. 4.11)*. Product categories encompass agricultural goods, tea production, woodcrafts, and natural material items, gradually forming a local economic model centered on "regional branding + online sales." This phenomenon indicates that Ayabe City's e-commerce system is not driven by a single market force but rather constitutes a composite structure shaped by the combined effects of government policies, local organizations, and consumer culture. Policy incentives provided institutional safeguards, while online platforms built spatial carriers. Meanwhile, trends toward industrial diversification and branding injected sustained vitality into the market. Overall, Ayabe City's e-commerce space exhibits an "institutional-network" development pattern: its core logic is not traffic-driven market expansion, but relational innovation achieved through institutional design and social participation. This offers a sustainable digital pathway for regional revitalization in Japan.

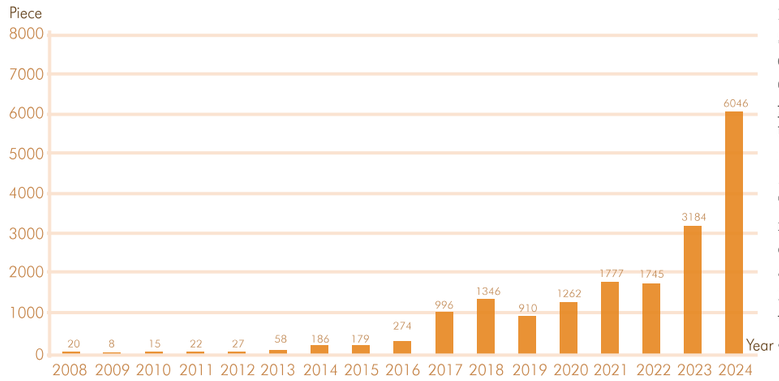

Fig. 4.11 Note:
Source: Furusato Choice Official Website — Ayabe City, Kyoto Prefecture page, Japan.
URL: https://www.furusato-tax.jp/city/info/26203
The data represent the number of hometown tax donation cases and amounts from 2008 to 2015, compiled and visualized by the author.

Fig.4.11:
Number of Hometown Tax Donations by Years from 2008 to 2024

Executing Entity

Building upon the policy framework and network distribution outlined in the previous section, the innovation within Ayabe City's e-commerce ecosystem does not rely solely on institutional design. Instead, it is rooted in the renewal process of local social actors. While implementing policies like the "Hometown Tax Donation" program, the local government has simultaneously guided the reconstruction of population structure and community vitality through its "Relocation and Settlement Policy." This initiative has facilitated the entry of new labor and production entities into rural areas, positioning them as the core driving force behind e-commerce innovation and regional revitalization.

According to Oishi (2019) research, since establishing its "Relocation and Settlement Support Center" in 2003, Ayabe City has successively introduced systems like the "Vacant House Bank", housing renovation subsidies, and employment matching programs. In 2014, it enacted the "Town Where People Want to Live Ordinance", forming a relatively systematic support framework for relocation and settlement. By 2018, the city had 678 officially registered vacant properties. The local government and residents' associations jointly operate a matching system, lowering settlement barriers for migrants through on-site visits, information registration, and matching mechanisms. This system not only alleviates population aging and labor shortages but also provides conditions for younger generations to rebuild the local economy with new lifestyles.

During our field interview with Ayabe City's "Settlement and Exchange Department", staff noted that recent migrants primarily consist of young and middle-aged individuals aged 30 to 50. Many possess urban living experience and backgrounds in the information industry, maintaining interest and skills in agriculture, handicrafts, and digital sales. Numerous new residents continue their original digital-related work after settling or utilize information technology to support online sales and promotion of local products. The influx of this demographic has partially alleviated the region's longstanding structural challenges of labor shortages and population aging while accelerating the transformation of rural industries. Staff members Kousuke Nishiyama and Yumi Goto remarked: *"Though their numbers remain modest, the impact is palpable—they assist elderly farmers in establishing online sales accounts and provide training in digital marketing."*

Image.4.52
Interview with Ayabe City Settlement and Exchange Department,Kousuke Nishiyama, Yumi Goto

Meanwhile, the "vacant housing bank" system has become a key mechanism for attracting migrant populations. Through this initiative, many urban residents secure affordable housing and gradually integrate into local communities with community support. Government officials stated in interviews: *"We aim not only to provide housing but also to help them become genuine members of the community. For instance, we assist them in building connections with neighbors and arrange volunteer or agricultural experiences tailored to their individual backgrounds."* This life-centered policy logic strengthens interpersonal networks, making it easier for migrants to participate in local production activities and commercial systems, thereby creating a virtuous cycle of "people-community-industry".

These "migrants" generally possess high levels of information literacy and digital proficiency. Their return has reshaped the production and distribution logic of local communities. As Oishi (2019) research noted, many new residents collaborate with local organizations (such as Satoyama Net Ayabe) and agricultural cooperatives (JA) after settling, participating in agricultural product branding and online sales promotion, thereby driving the digital transformation of local industries. Simultaneously, the "Half Farming, Half X" concept emerging in Ayabe City further strengthens this innovation spirit centered on individual practice. By embracing a lifestyle that blends agriculture with creative pursuits, it organically integrates labor, self-realization, and local industries, forming a new local economic and cultural paradigm guided by life ethics.

The influx of these new residents not only supplements the population *(Fig. 4.12)* but more importantly introduces new values and digital literacy. They represent a "reversal of lifestyles"—a shift away from the utilitarian logic of cities toward the natural environment and self-fulfillment found in rural areas. Some migrants operate under the "half-farming, half-X" concept, blending traditional agriculture with creative e-commerce through handicrafts, local specialties, and experiential farms. For instance, individual entrepreneurs selling homemade agricultural products on platforms like Furusato Nozei are predominantly run by these "new farmers". Innovation originating from individual practices has transformed e-commerce into a vital medium for connecting urban and rural resources and reshaping local identity.

Fig. 4.12 Note:
Source: Original data from "Results of Settlement Support (2008-2023)" provided by the Settlement and Regional Policy Division, Ayabe City; compiled and illustrated by the author.

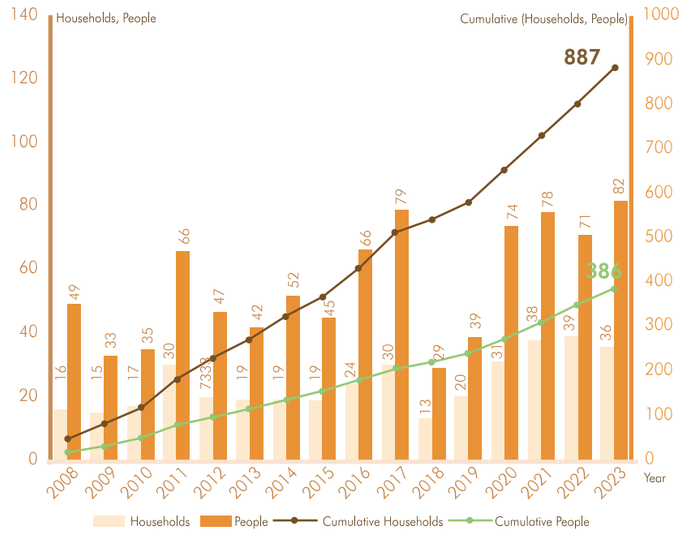

Fig. 4.12:
Changes in Migration and Settlement in Ayabe from 2008-2023

Overall, Ayabe City's migration policy has not only altered its demographic structure but also reshaped the ethical and economic foundations of rural society. Local government institutional support combined with migrants' technical expertise and innovative concepts has collectively facilitated the evolution of e-commerce from an "institutionally driven" to a "relationship-driven" model. It is precisely this interactive mechanism, rooted in endogenous social renewal, that has endowed Ayabe's e-commerce ecosystem with an intrinsic logic of symbiosis among people, industry, and place.

Spatial Layout

The development of e-commerce in Ayabe City exhibits a multi-layered spatial configuration. Its operational mechanism relies on both the "online circulation space" constructed by digital networks and the "offline living space" deeply rooted in the local community. The growth of e-commerce networks does not replace traditional geographical spaces but represents a process of spatial reconfiguration mediated by information flows and social relationships. Since 2009, with the continuous restructuring of transportation, logistics, and industrial networks, Ayabe City's e-commerce space has gradually formed a dual structure supported by "offline logistics space" and extended by "online relational networks". This structure not only reflects the spatial embedding process of the digital economy at the local level but also reveals the pathways through which local communities achieve regeneration and innovation via e-commerce systems. Consequently, logistics systems, brand systems, and consumption systems have been spatially reconfigured, shaping a new local economic form where "virtual networks" and "physical settlements" coexist and intertwine.

According to Japan's National Statistical Information, between 2009 and 2015, Ayabe City established a transportation backbone supported by

railways and expressways, laying the material foundation for the development of e-commerce logistics.

Two major railway lines traverse the city: the San'in Line runs east-west through the city center and southern districts, while the Maizuru Line extends northward from the city center toward Maizuru. These lines converge at the central district of Ayabe, with six station nodes distributed throughout the entire area *(Map 4.5)*. This transportation structure, characterized by a "central hub with multi-point radiation" ensures highly integrated flow of goods and people between the city's northern and southern ends. Additionally, three expressways—the Tsuruga Line, the Tamba-Ayabe Road, and the Ayabe-Miyazu Road—intersect within Ayabe City, forming a vital transportation hub connecting northern Kyoto with the Wakasa Bay coastline.

This integrated transportation system provides dual support for both online and offline logistics flows, enabling swift delivery of agricultural products and local brands from rural areas to urban centers. By 2015, Ayabe City's logistics framework had taken shape. Sixteen Japan Post nodes are distributed across major settlements throughout the city. These nodes, combined with the offline market "JA Saisaikan Ayabe" and a logistics service center located in "3-chome" form a logistics network centered on the urban core with supplementary coverage in surrounding agricultural areas. This node distribution embodies a spatial structure characterized by "central concentration and peripheral dispersion," providing essential support for localized e-commerce distribution.

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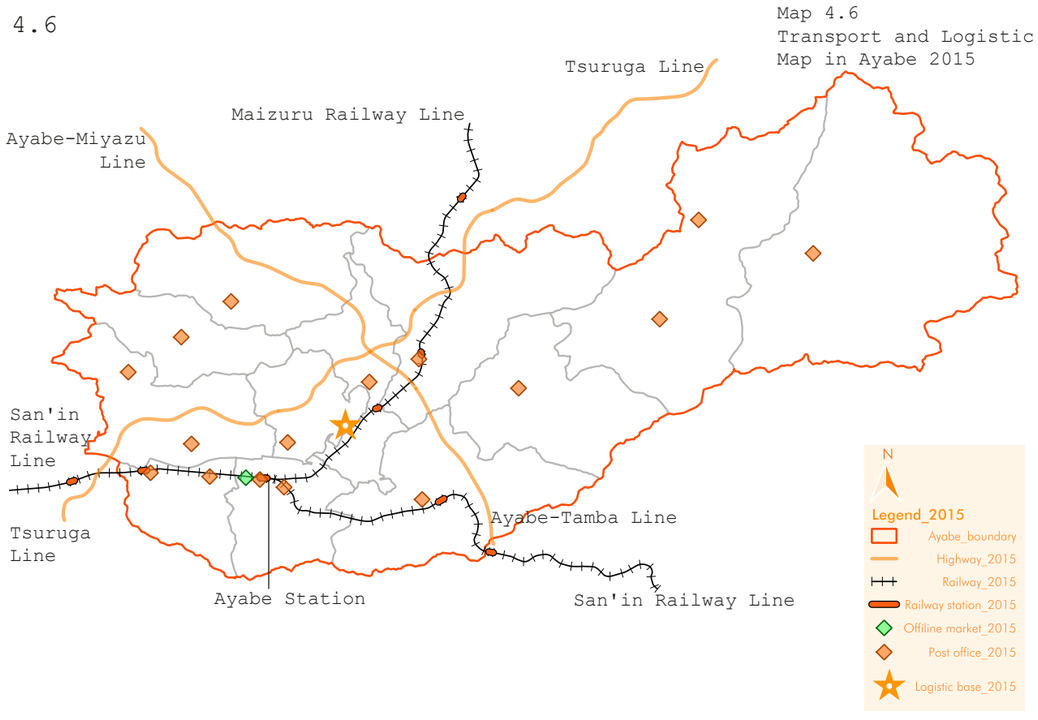

Notably, according to the 2021 special statistics on national key logistics routes from Japan's National Statistical Database *(Map 4.6)*, Ayabe City demonstrates heightened nodal significance within the national logistics network. That year's data marked the first time "logistics routes" were designated as an independent spatial category. Their distribution patterns closely align with the existing railway and expressway networks traversing Ayabe City, forming a tripartite integrated transportation system comprising railways, highways, and dedicated logistics lines. Particularly crucial is the "Kyoto Prefectural Road Ayabe Interchange Line," which spatially connects rail freight and expressway transport, serving as the key passage linking the San'in Line and the Ayabe-Miyazu Road. This crisscrossing logistics pattern elevates Ayabe's role in the regional transport system beyond a mere "transit node." It gradually evolves into a logistics hub city capable of undertaking warehousing, distribution, and re-delivery functions.

From a spatial structure perspective, the formation of this connecting road not only enhances logistics efficiency but also achieves a "point-line-area" functional aggregation geographically. The railway network handles long-distance, cross-regional trunk transportation, while the expressway system facilitates rapid circulation between urban clusters. Crucially, the network of major logistics roads strengthens short-distance connectivity between the city center and surrounding rural areas. The synergistic effect of this multi-tiered transportation system provides a more stable material foundation for Ayabe's e-commerce development.

According to the 2024 Japan National Statistical Information and the author's 2025 field research findings *(Map 4.7),* Ayabe City's transportation backbone has undergone no significant changes over the past decade, with its highway and railway systems remaining stable. However, the number and types of logistics nodes and offline markets have experienced structural expansion.

On one hand, existing offline markets (such as JA Saisaikan Ayabe) have begun transforming into integrated online-offline sales centers, launching online sales of agricultural products under the "JA Kyoto" brand. On the other hand, the entry of major logistics companies like YAMATO Transport has further refined the city's e-commerce delivery system.

Newly established logistics and freight points predominantly align with railway and highway corridors, exhibiting a typical "line-based growth" pattern. Compared to pre-2015 distributions, their quantity has significantly increased. This shift indicates that Ayabe City's e-commerce space has evolved from a single-node structure dominated by the "postal system" to a multi-center system composed of "local logistics—branded markets—corporate networks," providing efficient logistical support for online e-commerce operations.

Map 4.7

Important Logistic Road in Ayabe 2021

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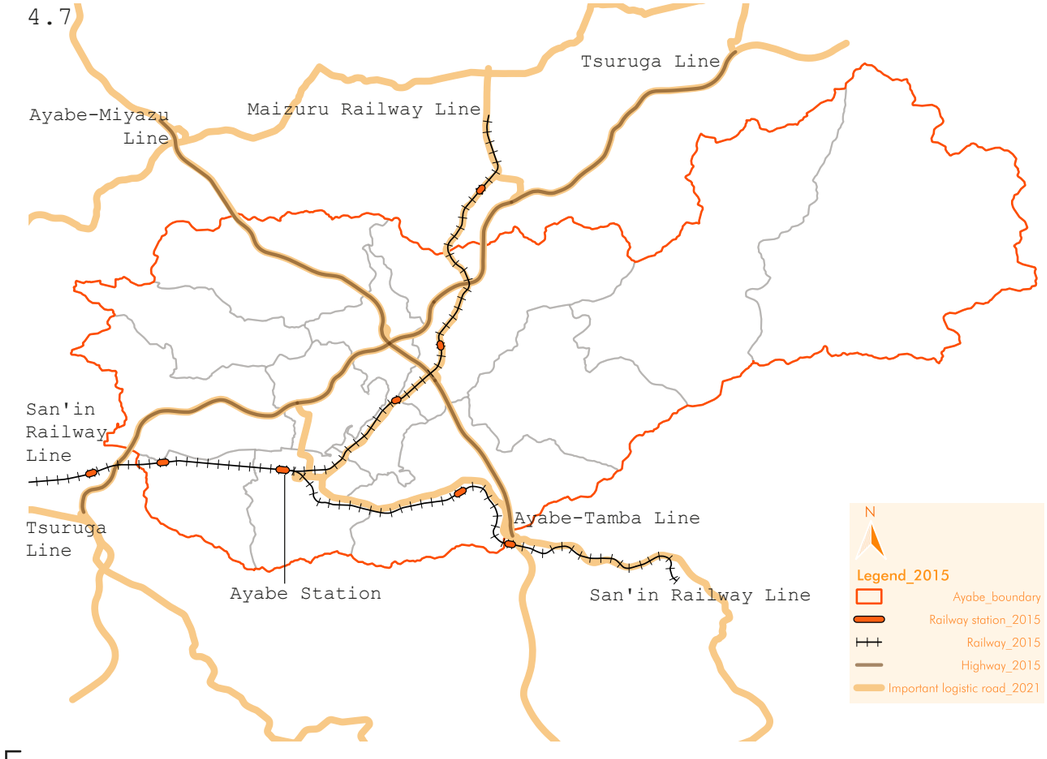

Map 4.8

Transport and Logistic Map in Ayabe 2025

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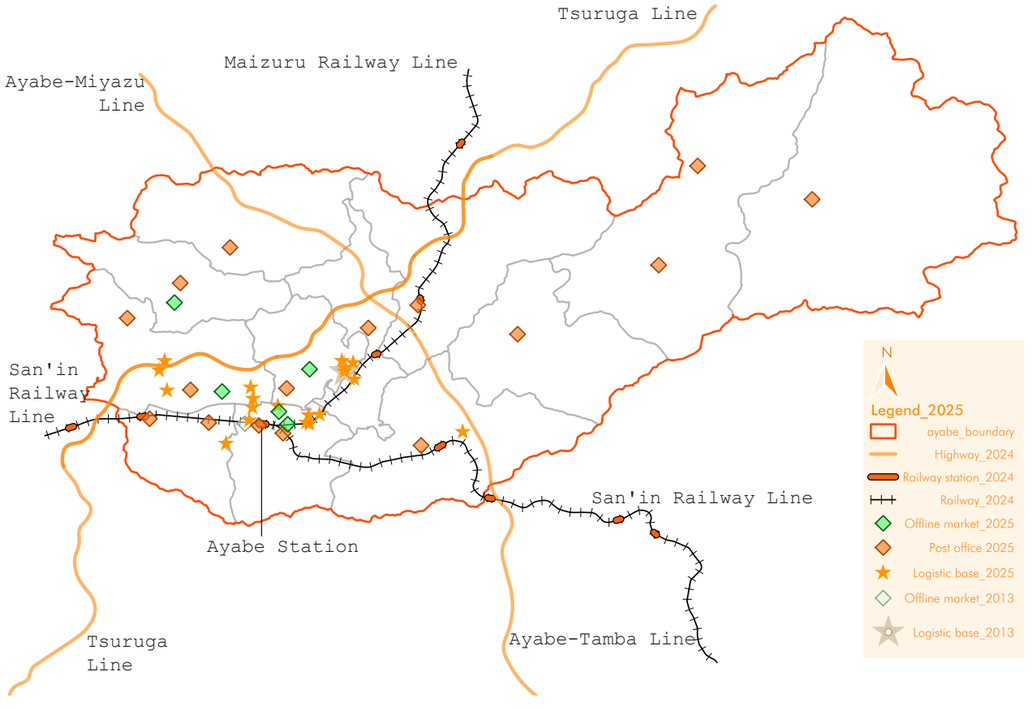


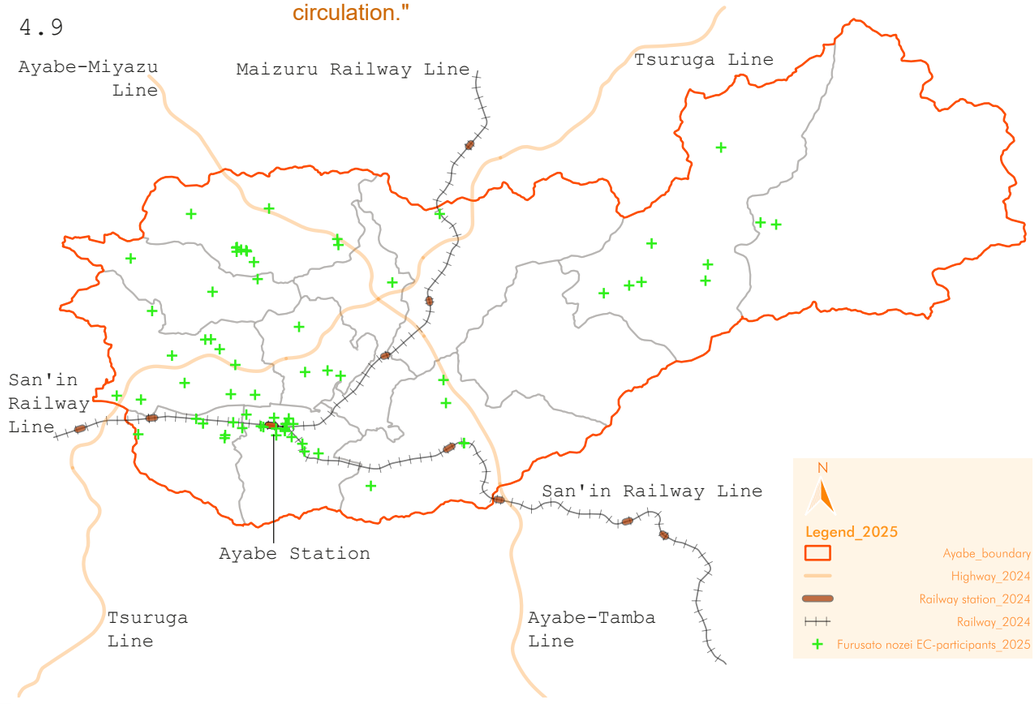
With robust transportation and logistics infrastructure, Ayabe City's e-commerce sector has gradually shifted from "the circulation of goods" to "the circulation of relationships." Local brands and community organizations have emerged as new connecting nodes within the spatial system. Producer groups represented by brands such as Kurotani Washi paper, Kamibayashi eggs, and Shigagō organic produce have formed relational networks encompassing production, promotion, and cultural dissemination through organizations like the Agricultural Cooperative (JA), Satoyama Net Ayabe, and local community associations. These networks not only enhance the efficiency of product circulation but also re-embed local life and cultural elements into the space of the digital economy.

According to the author's 2025 survey data *(Map 4.8)*, e-commerce operators participating in the "Furusato Nozei (Hometown Tax Donation)" program are primarily dispersed across rural villages and mountain valleys, exhibiting distinct characteristics of "individual part-time entrepreneurs": they often simultaneously serve as farmers and e-commerce operators, independently producing, processing, packaging, and establishing their own brands, thereby achieving a transformation from "producers" to "brand entities."

The spatial distribution of these individual e-commerce operators exhibits decentralization—while some wagashi and pastry shops cluster around the center of Ayabe, others selling meat, tea, chestnuts, and textiles are located within agricultural settlements, forming a new decentralized e-commerce landscape. This e-commerce model, driven by local entities and supported by part-time farmers, endows Ayame's e-commerce ecosystem with characteristics of "virtual-physical symbiosis and internal-external circulation."

Map 4.9
Approximate Locations of Furusato Nozei E-commerce Participants in Ayabe,2025

4.9



A comprehensive review of Ayabe City's e-commerce spatial practices reveals that its evolution is not merely a digital transformation process, but rather a locally-centered mechanism for socio-spatial regeneration. At the organizational level, local governments, agricultural cooperatives (JA), and community self-governance bodies jointly constructed a social network spanning production, sales, and experiential activities. Spatially, the transportation backbone formed by railways and highways, with logistics hubs serving as nodes, provided stable logistical support for e-commerce logistics. At the individual level, new migrants collaborated with local farmers and artisans in brand creation and online dissemination, reconfiguring relationships into a trinity of "living-producing-consuming."

Thus, while Ayabe's e-commerce development partially replicates the "centralized platform" model as a top-down digital experiment, simultaneously, it extends local industry boundaries through digital means while re-embedding local communities by restructuring social relationships. This transforms e-commerce beyond a mere business model, and its participants beyond isolated individuals—it becomes an institutional innovation process. By connecting transportation infrastructure, brand systems, and population mobility, it enables local areas to reclaim a "sustainable development logic" in the digital economy era.

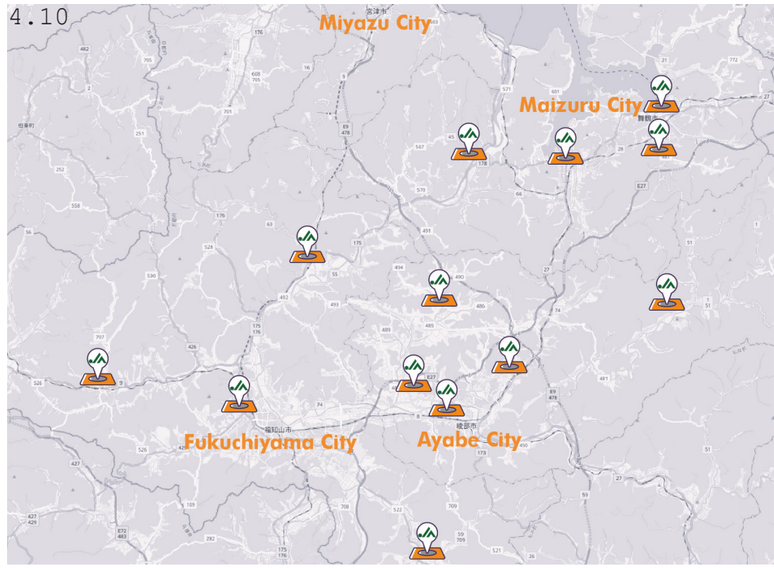
4.4
The Ayabe Path: Market Economy Transformation—from Traditional Sales to Online Brand Emergence

If the development of e-commerce in Ayabe City, as presented in the preceding sections, represents a process of gradually weaving a denser fabric from policy networks to spatial structures, then the deeper driving force behind it is a digital reconstruction experiment unfolding in the valley. From its initial reliance on offline sales through traditional markets and agricultural cooperatives, to its online expansion leveraging the "hometown tax" policy and local brand cultivation, Ayabe's e-commerce journey was neither a bottom-up spontaneous evolution nor a simple policy transplant. Instead, it emerged as a complex innovation process involving multi-stakeholder collaboration among local government, agricultural cooperatives, and individual entrepreneurs. Local governments shaped the foundational environment through fiscal subsidies and institutional design, while farmers and individual entrepreneurs continuously experimented and adapted through digital practices, forging a transformation path "from geographic trust to digital trust." This transition reflects the exploratory logic of Japan's regional cities in confronting population decline and industrial hollowing-out—how to cultivate a new, network-based economic vitality within the geographical and social constraints of mountainous rural areas.

4.4.1 Ayabe's Traditional Markets and Sales

Located in the mountainous basin region of northern Kyoto Prefecture, Ayabe City features undulating terrain and scattered villages. Within this typical mid-mountain environment, the market serves as the central hub connecting production and daily life. It functions both as a venue for the circulation of goods and as a space for social interaction and information exchange. Farmers rely on the market to sell homegrown vegetables and fruits, handcrafted woodwork, and processed foods. Through face-to-face transactions, they sustain household income while strengthening familiar networks within the community. The market thus fulfills dual economic and social functions—it exchanges not only goods but also relationships and trust. Indeed, Ayabe's market economy extends the "community of daily life," serving as the foundational logic underpinning the everyday operations of local society.

Entering the 21st century, the traditional sales system in Ayabe began undergoing structural changes amid growing urban consumer demand and accelerating local aging. Guided by policy initiatives, the local agricultural cooperative (JA Kyoto Nokuni) established 13 "direct sales centers for agricultural products" *(Map 4.9)*, creating vital channels for farmers to access urban markets. Unlike individual stalls at traditional markets, these centers implemented unified purchasing, centralized display, and standardized management, gradually organizing agricultural sales into a more structured framework. This transformation preserved the farmer-centric sales model of traditional markets while formally introducing market mechanisms. Farmers primarily sold local specialty products—such as Ayabe tea, mountain honey, handmade miso, and wooden crafts—which embodied regional artisanal traditions and reflected the transition from "self-production and self-distribution" to "local branding". Overall, however, this evolution remains an extension of the "marketplace logic": transactions still rely on geographical familiarity for trust, pricing is heavily influenced by social connections, and adaptability to external markets remains limited. In other words, while sales channels have expanded, awareness of marketization and digitalization remains constrained.



Map.4.10
Approximate locations of furusato nozei e-commerce participants in ayabe,2025

The true catalyst propelling Ayabe's sales system from local distribution to external markets was the combined impact of policy changes and generational shifts after 2008. With the implementation of the "hometown tax" system, local governments gained a new platform to showcase and sell regional specialties. This enabled Ayabe's agricultural cooperatives, individual entrepreneurs, and family workshops to participate in nationwide distribution through online channels.

Image 4.53-4.56
New Immgrants to Ayabe

Younger farmers and returning entrepreneurs began leveraging e-commerce platforms to sell tea, honey, and farm-processed goods, infusing traditional products with new marketing methods and market awareness. However, since most operators lacked professional e-commerce backgrounds, online operations often relied on family members' experiential learning and sporadic investments, resulting in limited promotional capabilities and sustainability. While government training and subsidies somewhat lowered entry barriers, they also exposed the vulnerability and learning costs faced by local individuals in the digital economy.

Overall, the traditional sales system in Aya Village has undergone a gradual transformation from marketplaces to direct sales, and from personal connections to online networks. While preserving the cohesive nature of local communities, it now faces structural reshaping driven by digitalization. It is precisely within this tension between tradition and modernity, geography and networks, that Aya Village's e-commerce exploration has forged its own unique path—a digital reconstruction experiment originating from the valley, now entering a new phase.

4.4.2 The Rise and Development of Online Brands

Compared to traditional markets, the development of e-commerce in Ayabe demonstrates a new spatial logic—redefining local visibility and connectivity through digital platforms. Since the introduction of the "hometown tax" system in 2008, local governments have leveraged policy incentives and platform traffic support to guide individual entrepreneurs and agricultural cooperative members into online sales. For producers in mountainous regions, this policy not only provides a cross-regional showcase for agricultural products but also subtly fosters the formation of local brands. Many farmers who previously sold tea, honey, or handmade foods only at local markets began participating in online sales as individuals or family units. They leveraged e-commerce platforms to shape distinctive "origin identities." In this process, "local specialties" gradually became packaged as brand symbols imbued with regional narratives and cultural memories, achieving a transformation from mere commodity circulation to the dissemination of meaning.

At the policy level, driven by the dual forces of the Furusato nozei initiative and market dynamics, Ayabe's e-commerce sector has gradually evolved into a multi-platform online ecosystem. As illustrated, local businesses not only leverage major comprehensive platforms like "Furusato Choice," "Rakuten Furusato Tax," and "Satofuru," but also actively participate in cross-sector sales networks spanning Amazon, Yahoo Japan, and ANA. This diversified channel strategy enables local brands to achieve greater visibility across varied consumption scenarios and audience segments. For Ayabe, situated in a mountainous region, this "geographical extension through platforms" compensates for its physical isolation, allowing the local economy to be rediscovered within the digital sphere.

4.57

Image 4.57
E-Commerce Platforms Supporting Ayabe's Furusato Nozei Program

In terms of brand building and promotion, individual users have also made significant strides in their branding efforts. They have begun leveraging social media platforms like Instagram and Facebook for brand dissemination, aiming to break through the boundaries of Japan's domestic consumer market. Unlike the LINE-dependent local communication model, these cross-platform practices exhibit a distinct outward orientation, reflecting local operators' ambition to enter the international spotlight. Some farmers have cultivated brand identities centered on "rural life experiences" by sharing visual content showcasing fieldwork, traditional production processes, and seasonal landscapes. They further attract overseas visitors through initiatives like "farm stays" and "tea culture experiences," encouraging participation in the local economy via experiential consumption. This trend

has elevated Ayabe's e-commerce practices beyond mere product sales, transforming them into a process of reconfiguring the relationship between people and place.

At the logistics level, this global orientation relies on Japan's sophisticated logistics infrastructure and local government support for supply chains. Through partnerships with Japan Post, JR Logistics, and regional courier Yamato Transport, Ayabe City has established a cold chain and express delivery network anchored by Kyoto Prefecture as a transit hub. This enables agricultural products cultivated in mountainous regions to reach Japan's major cities within 48 hours, while cross-border logistics collaborations facilitate exports to Asian markets. For local small-scale farmers, the extensibility of this logistics system redefines spatial distance—traditionally "remote" mountain villages gain tangible pathways into global consumption systems through dual digital and logistical advancement. E-commerce platforms and logistics networks jointly form the infrastructure of Ayabe's "digital space," enabling local brands to be positioned and recognized within national and global economic cycles.

Overall, Ayabe's e-commerce development represents not merely an economic model transformation, but an interwoven experiment in restructuring geography, society, and digital space. From traditional markets to multi-platform e-commerce, and from local produce to brand narratives, Ayabe's practice exemplifies collaborative exploration among local government, community, and individuals. This process has not only reshaped the circulation structure of the local economy but also, supported by digital infrastructure and global logistics systems, formed a new local paradigm—transitioning from "being seen" to "being consumed" and then to "being experienced." This has brought the "city in the valley" to the world's attention.

Jam products awaiting shipment from Mai store

PART III

GROWING FORWARD

CHAPTER V:
A Comparision of China and Japan E-commerce Development in Rural Areas

At the Intersection of Similarities and Differences: Why Do Paths to 'Digital Villages' Diverge?

In the analysis of the preceding two chapters, rural e-commerce development in China and Japan has unfolded along distinct trajectories: one exemplified by “Taobao villages,” embodying bottom-up social mobilization and market innovation; the other centered on the “Furusato Nozei” policy as the axis for e-commerce development in the Ayabe region, reflecting top-down policy-driven approaches and regional governance logic. While previous sections examined the emergence and evolution of these distinct pathways, this chapter aims to juxtapose them within a unified analytical framework, revealing their similarities and differences in governance logic, digital platforms, logistics systems, and production structures.

This “juxtaposed perspective” does not seek to establish a singular comparative hierarchy but rather employs a composite comparison to illuminate how digitalization is absorbed and reconfigured within different social structures. China's rural e-commerce leverages robust market vitality and digital infrastructure to achieve rapid economic regeneration, while Japan's local e-commerce demonstrates a more gradual, composite trajectory supported by institutional embeddedness and community networks. Where these two pathways converge, they not only reflect distinct configurations of state-local relations but also prompt us to rethink the diverse possibilities of “digital villages” within a globalized context.

Accordingly, this chapter explores four core dimensions: First, comparative governance logics; Second, divergent roles of e-commerce platforms; Third, comparative production models and labor dynamics; Fourth, comparative e-commerce spaces. Through this interwoven analysis, the chapter seeks to delineate the regenerative logic and inherent tensions of these two “digital village” models within distinct institutional contexts.

5.1
Contextualizing the Comparision

Before embarking on a comparative analysis of governance logics, it is essential to place China's Shaji Town and Japan's Ayabe City within the same analytical and comparative framework. Despite belonging to distinct political-economic systems, both entities have assumed similar experimental roles at pivotal junctures of social transformation. Serving as crucial test cases for their respective nations' “Digital Village” policies, they are situated in near-peripheral zones at the urban-rural interface, exploring e-commerce-driven regeneration pathways built upon traditional agricultural economies.

In terms of administrative hierarchy and governance structure, Shaji Town in Suining County, Xuzhou City, Jiangsu Province, China, operates within the county-level administrative system. It is directly managed by the Shaji Town Government and overseen by the Suining County Government. As an administrative entity at a relatively lower level, the town government nevertheless plays a direct intermediary and organizational role in policy implementation, industrial coordination, and infrastructure development, serving as a key driver in the later stages of local e-commerce cluster formation. In contrast, Ayabe City, as a grassroots local government (municipal level) under Kyoto Prefecture, Japan, is administered by the Ayabe City Government. The local government implements the Furusato nozei policy and actively promotes local industrial revitalization and new population migration and settlement. Simultaneously, the city government possesses a high degree of autonomy in community planning, demonstrating characteristics of local self-governance.

Although the two entities do not correspond exactly in their statutory administrative levels *(Fig. 5.1)* — one being a town-level administrative unit in China, the other a city-level local government in Japan — they both occupy

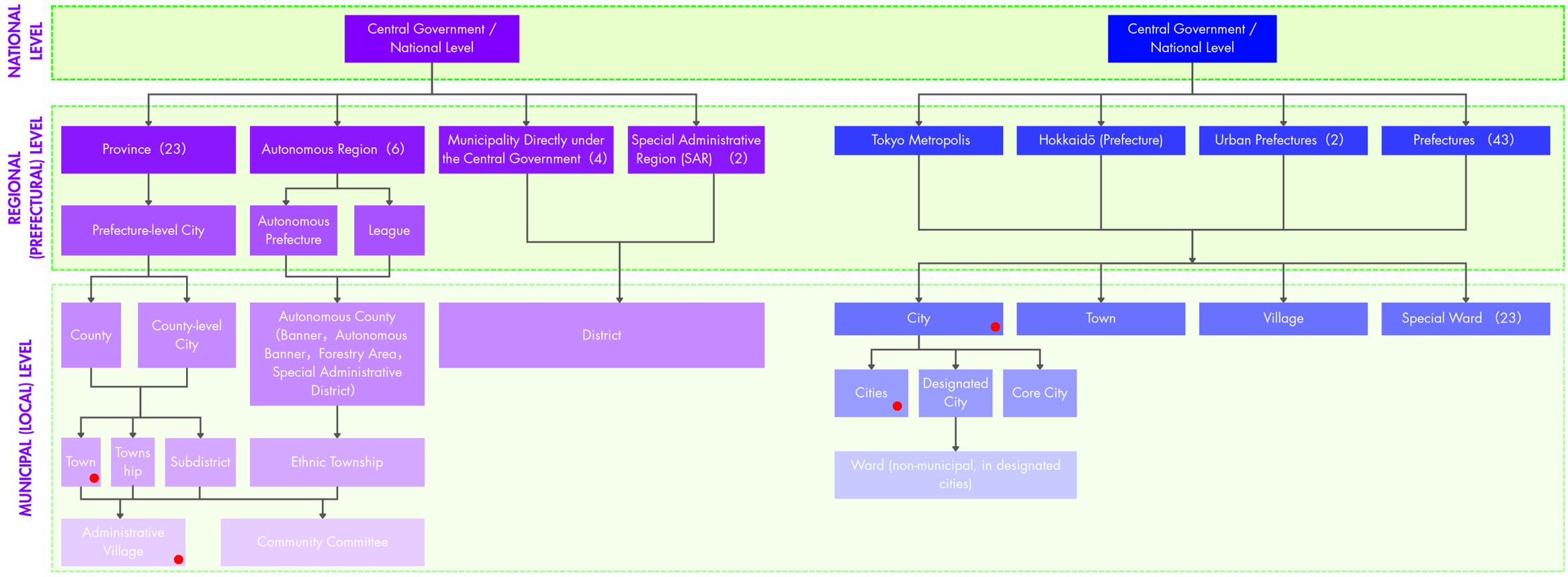


Fig. 5.1 China and Japan's administrative hierarchy

the local governance level within their respective national governance systems. Each plays a crucial role in implementing national policies and mobilizing local communities. In other words, both Shaji Town and Ayabe City functionally represent the interface between national strategy and local practice: the former achieves bottom-up economic regeneration through market linkage and administrative guidance, while the latter promotes incremental top-down local revitalization through autonomous coordination and institutional embedding. It is precisely this similar positioning in governance functions that lends them comparative validity and research value.

In terms of economic and industrial structure, both Shaji Town and Ayabe City relied primarily on agriculture before the rise of e-commerce, featuring relatively monolithic local economies dependent on natural resources and traditional labor inputs. Shaji residents predominantly engaged in farming and small-scale, individual recycling resource collection and processing—characterized by low industrial sophistication and strong external dependency. Ayabe City, meanwhile, maintained a regional economic model centered on agriculture and light industry, sustaining its basic production system through cooperatives. Both regions faced similar developmental challenges—labor outflow, industrial obsolescence, population aging, and declining regional appeal—leading to long-term structural stagnation and contraction in their local economies.

However, it is precisely this shared pattern—rooted in agriculture with constrained labor and industrial structures—that provides comparable starting points for both regions in their digital transformation *(Table 5.1)*. The year 2008 marked a pivotal institutional and technological turning point: China's e-commerce platforms—such as Taobao, 1688, and JD.com—experienced rapid growth during this period, forming open commercial infrastructure accessible to rural areas. It was within this wave of marketization that Shaji Town seized new development opportunities.

	SHAJI, CHINA	Ayabe, JAPAN
Main Industry (Before 2008)	Small-scale resource acquisition and processing in agriculture and physical industries	Agriculture and light industry
Industry Features	Low industry level, strong external dependence	Low industry level, low local business vitality
Development Challenges	Labor outflow, industry aging, population aging, and regional attractiveness decline	
E-commerce platform Introducer and Influencer	Dongfeng Village local residence—Sun Han	Furusato Nozei (Hometown tax) Policy
E-commerce Platform	Taobao, 1688, JD	Rakuten Furusato Nozei, Furusato Choice, ANA Furusato Nozei
E-commerce Business Roles	E-commerce itself is the main platform and driving mechanism for local economic transformation	E-commerce is more of an auxiliary tool embedded within the policy framework.

Table 5.1 Comparision of Digital Transformation between China and Japan

Meanwhile, Japan's Furusato Nozei (Hometown Tax) policy, driven primarily by government initiatives, utilized e-commerce platforms as intermediaries to connect local products with urban consumers. In other words, in China, e-commerce itself serves as the primary platform and driving force for local economic transformation. In Japan, e-commerce functions more as an auxiliary tool embedded within policy frameworks, supporting broader goals of local fiscal and industrial revitalization. Thus, the divergence stemming from differing institutional logics and platform roles—despite similar starting points in industrial structure—provides a sound basis and research significance for comparing Shaji Town and Ayabe City.

From the perspective of population and geographical scale, Shaji Town is under the jurisdiction of Suining County, Suqian City, Jiangsu Province. According to the “Suining County Permanent Resident Household Registration Population and Seventh National Population Census Results” (2024), it has a permanent resident population of 48,095 and a land area of 65.18 square kilometers, exhibiting a typical settlement pattern of townships in the eastern plains of China. Nishikibe City, located in northern Kyoto Prefecture, Japan, has a population of approximately 30,000 and a total area of 347.1 square kilometers. Its terrain is predominantly hilly and mountainous, resulting in a relatively low population density. Despite differences in population size, area, and topography, both settlements exhibit several comparable characteristics in their spatial and social structures prior to the rise of e-commerce.

First, both locations occupy “secondary hub” positions within their regional networks, neither core cities nor entirely peripheral areas, which exhibiting openness and dependency toward urban markets. Second, in terms of demographic structure, both have experienced simultaneous outflows of young and middle-aged populations alongside aging, forming a dual social composition of “surplus labor + returning entrepreneurs”. This provides a mobilizable human resource base for e-commerce. Third, spatially, though differing in topography—Shaji's flatland villages versus Ayabe's valley settlements, where both exhibit shared characteristics of “dispersed settlements” and “point-based economic nodes.” This makes digital infrastructure development and logistics node planning critical prerequisites for e-commerce growth. Meanwhile, at the socio-cultural level, Shaji Town leverages family and neighborhood networks to foster strong informal mobilization capacity and bottom-up entrepreneurial vitality. In contrast, Ayabe City's social capital is more embedded within formal institutions and community organizations, where residents predominantly participate rhythmically and actively in family units, reflecting top-down coordinated governance. It is precisely this juxtaposition of “structural similarity + social operational differences” that provides these two locations with comparable starting points and necessary contrasts in rural regeneration mediated by e-commerce. This juxtaposition also establishes a unified context for subsequent comparative analysis of platform roles, logistics-service spaces, and production-labor structures *(Table 5.2)*.

	SHAJI, CHINA	Ayabe, JAPAN
Population	48,096	29,752
Area (Km^2)	65.18	347.1
Terrain	Plain	Hills and Mountains
Regional Location	"Sub-center" location — neither a core city nor a fully peripheral area	
Social Structure	A dual social structure of "surplus labor + returnee entrepreneurs"	
Spatial Form	"Scattered settlement" and "point-shaped economic nodes"	
Production Mode	"Shop in front, factory behind" "Home workshop + forming factory	
E-commerce Participants	Whole family investment	Mostly the younger generation

Table 5.2 Comparision of Overall Situation between China and Japan

In summary, the comparison between Shaji Town and Ayabe City is not based on superficial similarities. Instead, it reveals the adaptability and flexibility of the “Digital Village” concept across diverse national contexts by contrasting their economic transformation pathways within different institutional, social, and cultural frameworks. The necessity of this comparison lies precisely in its ability to transcend geographical and institutional boundaries, reflecting both the diverse forms and shared logic of local regeneration in the context of globalization.

5.2
4D Comparision between China and Japan

5.2.1 Comparative Governance Logic

In the development of rural e-commerce, governance logic determines the path and pace of local revitalization. The difference between China and Japan lies not in technology or products themselves, but in the organizational approach to government-market-society relations: the former relies on social networks and platform economies, exhibiting bottom-up, diffusion-driven evolution; the latter is embedded within policy and local government systems, forming top-down, guidance-oriented governance. The following comparison uses Dongfeng Village and Ayabe City as case studies.

China's Dongfeng Village was not initiated by the government, but rather by individual entrepreneurs who pioneered breakthroughs *(Fig. 5.2)*. Operators like Sun Han leveraged family capital and personal networks to transition from unemployment to opening Taobao stores. The successful model of his Taobao shop spurred imitation and diffusion among other villagers, rapidly increasing the number of family-run shops and small teams. As orders grew, the village's production model evolved from “front-end retail” to a “front-store/back-workshop” or “front-store/back-factory” setup, enabling local completion of packaging, simple processing, and the production and assembly of semi-finished and finished furniture. In governance, township and village authorities adopted a permissive regulatory approach during the initial phase (“no fees, no inspections, no fines”), characterized by low barriers, minimal intervention, and ample space for experimentation. This provided a trial-and-error window and growth buffer for the emerging business model. During the mid-development phase around 2012-2013, as transaction volumes and business entities surged, the government began assuming preliminary intermediary and coordination roles: connecting express delivery and trunk logistics networks, refining distribution-to-end systems, investing in public infrastructure like roads, power, and communications, and facilitating credit access from banks and financial institutions to alleviate cash flow pressures. Around 2019-2020, after the “e-commerce retail + furniture manufacturing” model matured, the government further advanced spatial planning and industrial standardization. This guided the sector from scattered workshops to centralized production, and from single-retail operations to composite “e-commerce + manufacturing” identities. Concurrently, it institutionalized aspects like branding, quality control, labor practices, and safety.

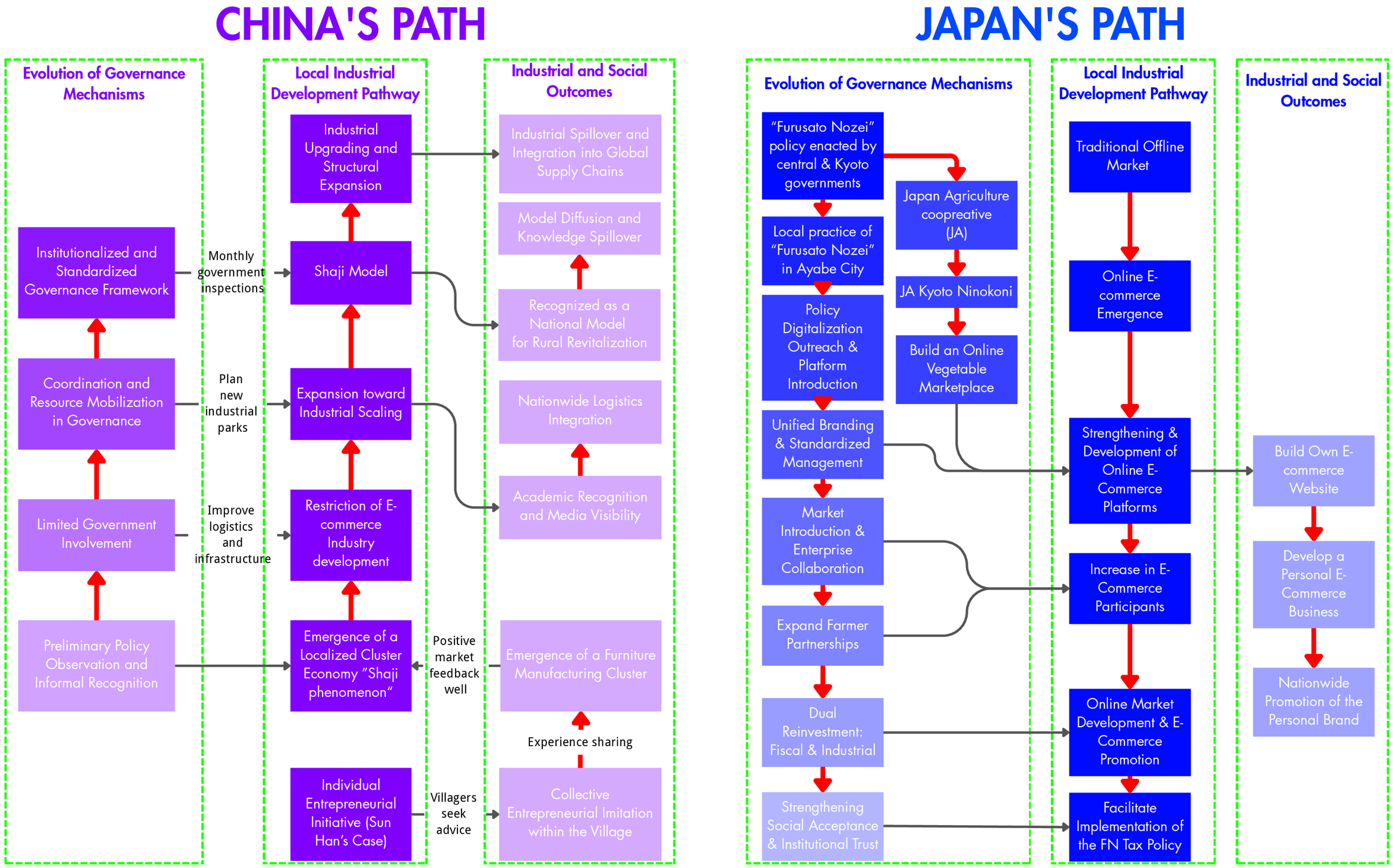


Fig. 5.2 Comparision of E-commerce Path between China and Japan

The strengths of this path lie in low entry costs, rapid diffusion, and synergistic effects from social networks and platform traffic. Limitations include weak early-stage standard-setting and intellectual property protection awareness, high dependence on platforms and logistics, and the need for subsequent governance to address environmental and labor standards. Overall, it can be summarized as a governance logic of “market-led—government embedded—gradual institutionalization.”

In contrast, Ayabe City's e-commerce development is embedded within Japan's centralized institutional chain spanning the national, prefectural, and municipal levels. Following the establishment of the “Furusato Nozei (Hometown Tax)” system in 2008, the national government set boundaries and incentives through tax incentives and return gift regulations. Kyoto Prefecture oversees coordination, guidance, and resource allocation, while Ayabe City handles specific implementation and operations, forming a division of labor where “national rules are set, prefectures coordinate, and municipalities execute.” The municipal government complies with central and prefectural directives by selecting return gift catalogs, establishing quality and traceability standards, and adhering to price ratio requirements. It partners with platforms like Furusato Choice, Satofuru, Rakuten Furusato, and ANA to launch official campaign pages, positioning e-commerce platforms as digital conduits for policy implementation rather than independent market drivers. The implementation mechanism operates on two parallel tracks: First, through intermediary organizations like city offices, chambers of commerce, and agricultural cooperatives (JA), top-down training and certification, standardized packaging and labeling, and regulated processes for listing, shipping, and after-sales service ensure public standards and risk control. On the other hand, compliant operators are permitted and encouraged to establish self-operated stores on these platforms. By integrating tourism experiences and local product gift boxes with offline scenarios, a closed-loop system is created: “online tax payment → offline experience → online repeat purchase” *(Fig 5.2)*.

Overall *(Table 5.3)*, both regions share the commonality of re-embedding local industries through e-commerce. However, their key differences lie in governance logic and platform positioning: China emphasizes market-driven approaches with government post-embedding, prioritizing speed and scale expansion; Japan centers on institutional guidance and local government collaboration, highlighting brand identity and quality consistency.

In China, this market-led, government-gradually-embedded model has endowed Dongfeng Village's development with distinct grassroots flexibility. Its strengths lie in efficient resource mobilization and tight social networks, enabling rapid economic spillover effects from individual entrepreneurship to cluster diffusion—exemplifying low-cost, high-growth characteristics. This bottom-up diffusion strengthens mutual aid and trust mechanisms among villagers, allowing commercial networks and social relationships to develop in tandem, providing an internal driving force for the self-sustaining growth of the local economy. However, its limitations are equally evident: the early lack of unified planning and institutional constraints led to a fragmented industrial structure, severe product homogenization, and lagging brand and quality standards. Simultaneously, the high dependence on e-commerce platforms and external logistics systems limits the local industry's resilience to macro-policy shifts and market fluctuations. Dongfeng Village's experience thus exemplifies the classic “efficiency-order” tension: trading flexibility for speed, sacrificing institutionalization for diffusion, ultimately compelling institutional formation through sustained expansion.

In contrast, Japan's e-commerce development has been accompanied by institutional governance and quality control. Its hallmarks—traceable, high-quality return gifts; consistent brand narratives; and stable fiscal incentives—foster local industries' transition toward premium products and long-term reputation-building. However, this approach is constrained by its relatively slow pace of advancement and high dependence on institutional coordination and organizational collaboration, limiting the innovation and flexibility of small and medium-sized entities. Overall, Ayabe City's model can be summarized as a top-down governance logic of “policy-led—municipal coordination—platform mediation—stakeholder participation,” achieving gradual local revitalization through stability and standardization.

	SHAJI, CHINA	Ayabe, JAPAN	Similarities and Differences	
			Similarities	Differences
Development Model(Governance Pathway)	Bottom-Up	Top-Down	○	●
Initiating Entity	Local Villagers	Government-Driven	○	●
Government Involvement	Government Involvement (Both Countries)		●	○
Timing of Government Involvement	China: Grassroots Initiation; Mid-Stage Government Entry; Macro-Level Market Guidance	Japan: Direct Government Entry; Multi-Level (Central → Prefecture → City); End-to-End Involvement	○	●
Standardization Strategy	Standardized Review & Filing Systems (Both)		●	○
Role of Intermediaries	Third-Party Intermediaries (e.g., China’s Agri E-Commerce Associations; Japan’s JA Co-ops)		●	○
Regulatory & Coordination Mechanism	China: Later-Stage Regulation; Built Out in Recent ~5 Years (e.g., Municipal Office — Regular Inspections)	Japan: Early-Stage Regulation; Continuous Refinement; (e.g., Municipal Brand-Led Farmer Outreach/Procurement & Roundtables)	○	●
Quality & Traceability Control Capability	Weaker Product Quality & Traceability	Stronger Product Quality & Traceability	○	●
Resource Mobilization	Market-Led; Macro Government Oversight	Government-Led Management	○	●
Brand Building & Promotion	Individual-Led Branding First; Govt-Approved Local Brands Emerging	Government-Created Local Brands & Promotion First, Individual-Led Branding	○	●
Feedback & Correction Mechanism	Platform Database and Routine Inspections (Both)		●	○
Fiscal & Social Benefit	E-Commerce Growth Attracts Youth Return/Relocation for Entrepreneurship in both country		●	○
Sustainability & Global Logistics Integration	Some Local Firms Expanded Exports Globally	Strong Domestic Dissemination & Promotion	○	●

Table 5.3 Comparision of E-commerce Governance and Development between China and Japan

An intriguing observation is that China and Japan exhibit markedly contrasting institutional characteristics in the governance logic of rural e-commerce development. As a socialist nation, China's government has long played a central role in economic regulation and development guidance, while Japan, as a quintessential capitalist country, emphasizes the spontaneous operation of market mechanisms and local autonomy. Yet in the two case studies examined here, this macro-level institutional divergence manifests in a “reversed” pattern. The e-commerce development in Dongfeng Village was not government-led but driven bottom-up by market entities.

Early entrepreneurs leveraged social networks and family capital for exploratory ventures, forming a “grassroots” development path where individual innovation spurred collective diffusion. The government did not act as a catalyst in this process but rather as a later coordinator and supporter. It primarily provided institutional space and developmental safeguards for private innovation through infrastructure development, financial support, and policy deregulation.

In contrast, Japan's Ayabe City exhibits highly centralized characteristics. Although Japan adheres to a capitalist market economy, under the “Furusato Nozei (Hometown Tax)” policy framework, the national level establishes institutional boundaries through fiscal incentives and regulatory frameworks. Kyoto Prefecture assumes responsibility for coordination and resource allocation, while local governments handle implementation and operations. This forms a centralized governance logic of “national rule-setting—local execution—market coordination.” Within this system, the government serves not only as the initiator and overseer of policies but also as the primary driver of industrial digital transformation. E-commerce platforms function more as conduits for policy dissemination and implementation rather than dominant players in market competition.

This phenomenon of “institutional inversion” is not accidental but rather a rational choice by both nations regarding governance costs and development risks under their distinct political-economic systems. China's path prioritizes market efficiency and social dynamism, trading flexibility for expansion speed through a “market-first, regulation-later” approach. Japan's path emphasizes order and public interest, ensuring compliance, stability, and quality control via a “regulation-first, market-later” strategy. Both reflect distinct national governance logics and institutional resilience: China pursues order through spontaneity, while Japan accommodates innovation within established order.

5.2.2 Comparative Roles of E-commerce Platforms

In the development of rural e-commerce in China and Japan, platforms serve not only as transaction intermediaries but also as crucial interfaces for policy implementation and local industrial upgrading. China and Japan have formed two distinct approaches to platform positioning: China adopts a primarily market-driven model, where platforms function more as “accelerators” for local industrial upgrading; Japan, however, prioritizes institutional guidance, with the Furusato Nozei platform system serving as a digital policy conduit and stakeholder connector. Concurrently, some e-commerce participants have gradually established proprietary websites and social sales channels, forming a supplementary ecosystem outside the official policy framework. This integration of market-driven elements into Japan's institutionalized approach has introduced a degree of market spontaneity into its regulatory path.

In China, Taobao was the earliest platform to gain widespread adoption *(Fig 5.3)*. Alibaba launched Taobao in 2003, and by 2005 it had become China's largest online retail platform. Its early strategies—free storefronts for sellers, convenient returns and exchanges for buyers, a credit rating system with Alipay escrow transactions, a clean webpage design, and Aliwangwang customer service communication—significantly lowered barriers to entry, attracting a large number of small and medium-sized sellers(Yu, 2010). Sun Han from Dongfeng Village also entered the market during this phase, followed by other villagers opening Taobao stores. However, Taobao's initial focus on scaling up at the expense of authenticity control and intellectual property protection objectively facilitated the rapid proliferation of imitation furniture. Compounded by strong imitation effects, the village faced pronounced issues of product homogenization and “brandlessness.” As China's e-commerce market gradually standardized and consumer demands for quality and service increased, platforms began strengthening governance and raising entry barriers. For example, in 2011, Taobao raised its annual technical fee from 6,000 yuan to 30,000–60,000 yuan based on scale(Luo, 2013), prompting some Dongfeng Village merchants to shift to emerging platforms like JD.com and Pinduoduo. Simultaneously, major platforms shifted their governance focus from “user acquisition” to “source control + capacity building.” They not only provided transaction channels but also deeply engaged with local industries through technological empowerment, brand packaging, and targeted training. Collaborating with local governments, they achieved integrated optimization across branding, logistics, and supply chain segments. Platforms evolved from mere commercial infrastructure into “partners in rural revitalization.” Over the past five years, the recovery of foreign trade combined with the “e-commerce going global” trend has prompted larger enterprises in Dongfeng Village to expand into cross-border e-commerce and contract manufacturing. Leveraging global platforms like Amazon, they export products to markets in Australia, the Americas, Japan, and beyond. Consequently, Dongfeng Village has progressively integrated into a framework spanning village-level networks—provincial/national markets—and global supply chain and logistics systems, driven by domestic platforms. This evolution represents an upgrade path shaped collectively by market forces, platform empowerment, and government collaboration.

In contrast, Japan's Furusato Nozei system operates within a government-led institutional framework *(Fig 5.3)*. Platforms collaborating with the Furusato Nozei policy primarily serve as intermediaries to “digitize, visualize, and operationalize” tax policies, rather than engaging in pure market competition. During the early stages of Japan's e-commerce market development, the long-established offline distribution network—deeply trusted across all age groups—actually hindered the smooth advancement of online retail. Against this backdrop, the Furusato Nozei policy employed a “tax deduction + return gift” strategy to connect donors, municipalities, and gift providers (i.e., suppliers on FN e-commerce platforms). By collaborating with platforms like Furusato Choice, Rakuten, Satofuru, Furunavi, and other platforms, it translated policy provisions into operational interfaces: platforms provided website architecture, payment systems, and selection interfaces; municipalities vetted participants, ensured quality and traceability, and integrated local SMEs and farmers as gift suppliers. Notably, the FN platform—a website enabling citizens to donate online and select gifts----

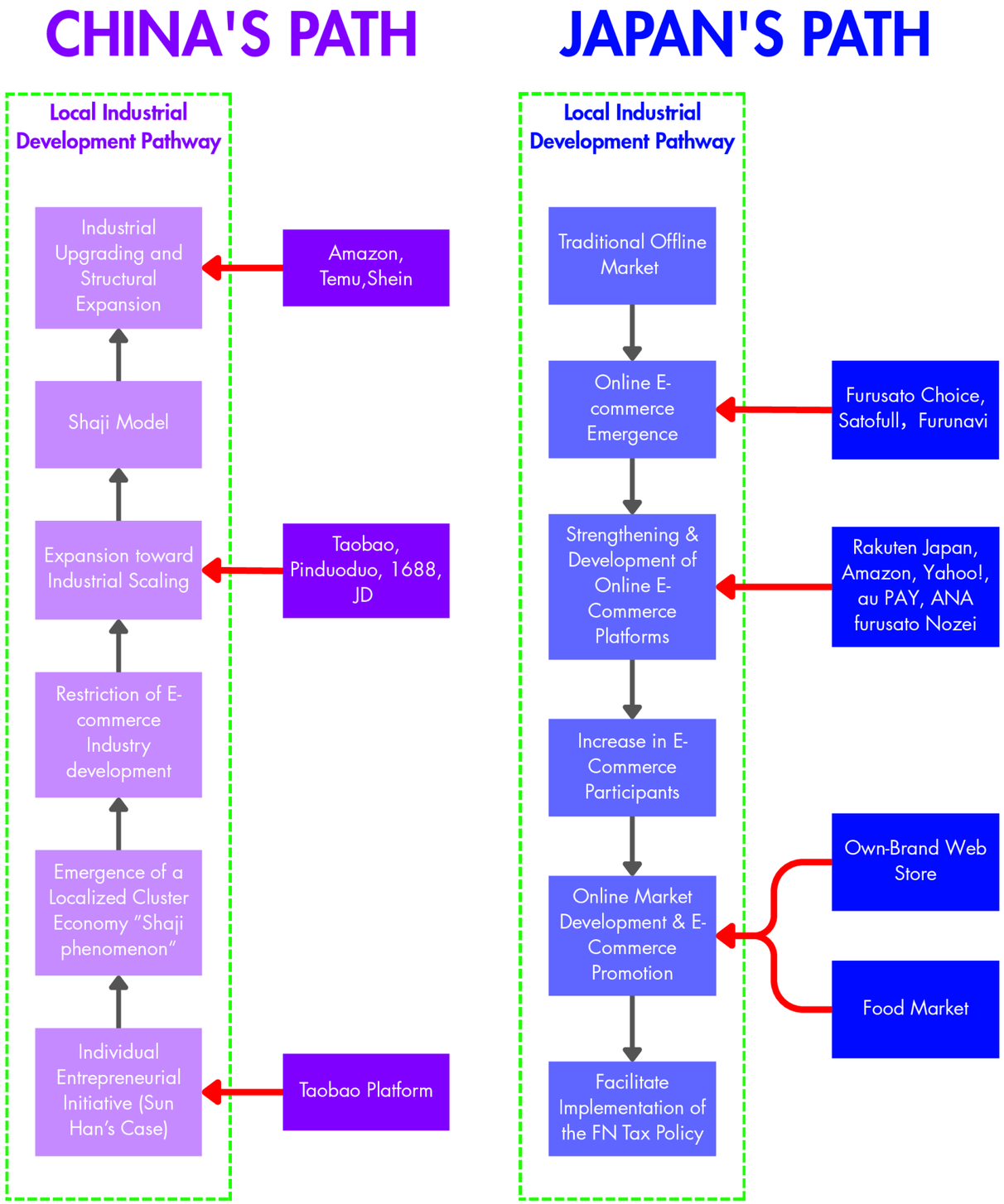


Fig. 5.3 Comparision of Local Industrial Development Path between China and Japan

has undergone substantial refinement since other platforms joined. This ecosystem of collaborative platforms not only broadens donation pathways for contributors but also provides suppliers with multi-channel brand exposure. This synergy has driven donation growth while fostering interactions among municipalities, donors, and local SMEs, ultimately catalysing the emergence of a digital marketplace.

The policy was implemented in 2008. After 2012, private platforms entered the scene, accelerating the "platformization" process. Online donations surged starting in 2014, reaching a peak by 2022. Nationwide donations through the FN platform grew by 2384%, with the number of donors increasing from 13,400 to 8.9 million. with the majority being urban residents(Ministry of Internal Affairs and Communications, 2023), (Umeda et al., 2022). The emergence of platforms significantly expanded participation scale, revitalized previously static local fiscal mechanisms, and enabled governments, markets, and local industries to redefine their interactive logic within the digital space. Simultaneously, within a framework combining institutionalization and platformization, some practitioners and local enterprises have also attempted to build supplementary channels such as self-operated websites and food e-commerce platforms, operating in parallel with official platforms. This has formed a multi-layered structure: "central system—local implementation—platform mediation—subject self-construction." The former ensures compliance and quality control, while the latter enhances brand narrative and customer reach. Together, they support the dual-track practice of "online tax payment + offline experience" in places like Ayabe.

Overall *(Table 5.4)*, while both China and Japan's e-commerce platforms play pivotal roles in driving local industrial digitization and spatial re-embedding, their platform positioning and cooperation models exhibit significant differences. China's e-commerce platforms primarily assume the core functions of intermediation and matchmaking within the e-commerce ecosystem. As typical C2C platforms, Taobao, Pinduoduo, and others not only facilitate direct communication between buyers and sellers but have also gradually evolved into diversified development models featuring parallel B2C and C2C operations. Local e-commerce groups, exemplified by Dongfeng Village, leverage these mature platforms to complete the entire process from transaction to logistics, sustaining continuous activity in the online marketplace. As regulatory frameworks mature and platform governance strengthens, platforms not only ensure product quality for buyers but also actively support sellers—by offering e-commerce training, operational assistance, and market guidance, thereby creating favorable conditions for local merchants to engage in e-commerce activities. As the e-commerce ecosystem matures, China's platform ecosystem has evolved from "localized individual transactions" to a "diversified, scaled, and globalized layout," achieving vertical expansion and functional extension from rural markets to international supply chains.

	SHAJI, CHINA	Ayabe, JAPAN	Similarities and Differences	
			Similarities	Differences
Initial E-commerce Platform	Taobao	Furusato Nozei Choice	○	●
E-commerce Model	Mainly C2C, gradually expanding to B2C and B2B	C2C and B2C operating in parallel	○	●
Existence of Offline Service Centers	Yes, some platforms have offline service centers for seller training and operational guidance	No, mainly through online operations and collaboration with local authorities	○	●
Diversification of Platform Cooperation	From early to later stages, multiple e-commerce platforms have participated, forming diversified online cooperation networks		●	○
Platform Empowerment	Focused on merchant training and seller empowerment	Focused on platform–government compliance review, with sellers responsible only for product supply	○	●
Inclusion of Small and Medium Enterprises (SMEs)	Both countries' platforms include local individual and family-based operators		●	○
Brand Promotion Mechanism	Seller-driven market-oriented brands	Government/municipality-certified local brands	○	●
Quality Standards and Regulations	Both countries' platforms have strengthened requirements for product quality and standardization; however, China's standards are still being refined, while Japan's are more mature		●	○
Intellectual Property Governance	Platforms' brand and intellectual property protection remain relatively weak	Platforms strictly enforce brand compliance and exhibit stronger intellectual property awareness	○	●
Dependency Type and Systemic Risk	Mainly reliant on platform traffic and algorithmic mechanisms	Mainly reliant on tax incentives and policy frameworks	○	●

Table 5.4
Comparision of E-commerce Platform Roles and Development between China and Japan

As mentioned earlier, China's e-commerce ecosystem, characterized by a market-driven approach with subsequent government intervention, enabled platforms to drive local production, employment, and brand development with remarkable efficiency during its early stages. However, this process also exposed multiple underlying concerns: insufficient early regulation led to weak product quality and intellectual property protection, while the concentration of platform traffic and algorithmic mechanisms intensified competitive pressures on small and medium-sized businesses. In other words, while China's e-commerce platforms have fostered industrial clustering and economic expansion, they have also reinforced dependency on the platform ecosystem itself. Their rapid growth has, to some extent, come at the expense of standardization and sustainability. This trade-off has, in turn, increased the difficulty for governments to regulate local product branding and compliance. Nevertheless, the deepening of platform governance in recent years has yielded significant progress in standardization and brand cultivation.

In contrast, Japan's e-commerce platforms exhibit greater institutionalization and policy orientation. Their development trajectory has been closely intertwined with government policies from the outset, becoming integral components for policy implementation and execution. The FN platform system, exemplified by the Furusato Nozei policy, is built upon the tax system framework. Its core mechanism guides citizens to provide economic support to their “hometown” regions through tax-deductible donations, thereby achieving fiscal redistribution and revitalizing local industries. In this process, local governments proactively develop local producers to attract more donors, gradually positioning them as key participants in e-commerce. While advancing policy implementation, local authorities also enhance product visibility and market exposure by assisting producers in brand creation and providing marketing support.

Simultaneously, FN platforms (such as Furusato Choice) incorporate e-commerce sales functionality and collaborate with Japan's mainstream C2C platforms (like Rakuten and Yahoo). This integration of “donation” and ‘consumption’ creates a hybrid market system involving multiple stakeholders. While this institutionalized market structure enhances fiscal recycling and governance transparency, it also sparks debates over the commodification of return gifts and potential “mission drift.” Overly stringent institutional constraints have somewhat stifled innovation and market flexibility. Overall, Japanese platforms excel in compliance, quality control, and fiscal security, but their development pace remains relatively slow. They exhibit high dependence on policy incentives and have yet to fully transition from system-driven expansion to market-led diffusion.

5.2.3 Comparative Production Models and Labor

Production models and labor structures exhibit both differences and commonalities in the development of rural e-commerce in China and Japan.

The rise of e-commerce has not only accelerated product circulation and economic growth but also redefined local social structures concerning “who produces, how production occurs, and who benefits.” In China, e-commerce has driven digital transformation in rural areas, attracting large numbers of migrant workers to return home and start businesses. This has fostered an industrial landscape rooted in family workshops that is gradually evolving toward scaled enterprises. The current coexistence of “front-store, back-factory” models and large-scale factories has made flexible employment a key pathway for absorbing rural labor. In contrast, Japan's e-commerce is more embedded within policy and institutional frameworks. Through interactions among local governments, small and medium-sized enterprises, and individual users, it has established a stable system characterized by “standardized production” and “part-time labor.” This section examines the differentiated impacts of the digital economy on rural revitalization across distinct institutional contexts, exploring dimensions such as social identity and its transformation, educational attainment, labor costs, and labor governance.

In China's “Taobao Village” model, the social identities of e-commerce participants have undergone significant transformations during development. Early participants were predominantly farmers or migrant workers whose primary livelihoods remained tied to traditional agriculture or low-skilled manual labor. With the proliferation of e-commerce and the rise of mobile internet, this group began leveraging online technologies and market intelligence to achieve identity transformation. Many young individuals, influenced by family backgrounds or inspired by their migrant worker experiences, used their savings to purchase computers and learn online business skills. They gradually established personal online stores, becoming representative figures of grassroots entrepreneurship. The low barriers to entry in e-commerce enabled them to acquire new economic identities within a relatively short timeframe—transitioning from “farmers” to “self-employed individuals”—while simultaneously updating their social status and self-identity.

" Our family has been running this shop for over a decade now. When e-commerce first took off, my son was the one who started the online store. I usually helped him with packaging and shipping, and gradually learned to handle customer service too. I wasn't very good at writing neatly back then, so my son taught me how to type and take photos. Now we can handle many orders in a single day. I guess you could say we learned the business by following our child's lead." (Int, 07.2025)

" We used to rely on orders for our furniture business, but now we sell directly online. Customers pick their designs, and we handle production, packaging, and shipping right here in the village. The workshop is right outside our door, making it easy to hire people—young folks are eager to come back and work in this field." (Int, 07.2025)

In this process, the family structure and gender division of labor within local communities have also undergone adjustments. Taking Dongfeng Village as an example, early e-commerce entrepreneurs primarily operated as family units, with spouses jointly participating in production and sales, forming a family-labor-centered entrepreneurial model. As business scales expanded, some families gradually achieved intergenerational succession. The younger generation, equipped with higher digital skills and business acumen, propelled the transformation of family workshops into enterprise-level operations. Women played a crucial role throughout this evolution, transitioning from initial roles in packaging and customer service to managing store operations and brand development. This shift reflects the elevation of rural women's labor roles and the reshaping of their social status within the digital economy.

Overall, participants in China's rural e-commerce sector exhibit characteristics of both grassroots origins and social mobility in terms of their social identities and cultural backgrounds. Most originate from groups with lower educational attainment and limited cultural capital. Yet, through the open architecture of e-commerce platforms and digital empowerment, they have gained new opportunities to enter markets, increase income, and achieve social re-mobility. This bottom-up socioeconomic participation model not only reshapes local labor structures but also drives profound transformations in rural society's occupational aspirations and identity formation.

At the production organization level, China's rural e-commerce has developed a highly flexible “front-store, back-factory” model by leveraging family and village social networks. E-commerce has driven a production organization centered on family collaboration, supplemented by local temporary workers handling packaging, shipping, quality inspection, and other processes. This has created an industrial structure combining flexibility with deep local integration. This “family workshop + village labor force” model has significantly reduced production costs and increased employment absorption rates. However, it has also led to the informalization of the labor structure and a lack of occupational safeguards. The temporary worker group primarily consists of local villagers or returning youth. Their employment relationships lack contractual constraints, and their wage levels are highly susceptible to fluctuations in order volume and platform traffic, resulting in a labor relationship characterized by “flexible employment—informal work.”

As e-commerce expands at scale and competition intensifies, labor costs and governance mechanisms have become critical factors affecting the sustainable development of rural e-commerce. In the early stages of China's rural e-commerce, labor costs were relatively low and labor supply was abundant. However, against the backdrop of platform expansion and industrial clustering, labor shortages and rising labor costs have gradually emerged. On one hand, platforms have continuously enhanced practitioners' skill levels through government training and collaborations with social organizations, facilitating the transition of some family workshops toward enterprise-based and institutionalized operations. On the other hand, some enterprises still rely on highly fluid, unprotected temporary labor to reduce labor costs. While this flexible employment mechanism boosts production efficiency in the short term, it undermines the stability of the rural labor force and the coverage of the social security system in the long run.

In contrast, the primary participants in Japan's rural e-commerce sector are predominantly middle-aged and elderly farmers, local small and medium-sized enterprises, and members of local cooperatives. Among these cooperatives, membership extends beyond the local working-age population to include “new locals” who have relocated from urban areas through the “resettlement” policy. These groups typically possess higher education, corporate work experience, accumulated wealth and networks, along with relatively advanced business concepts and technologies. Unlike China's more grassroots entrepreneurial paths, they arrive in rural areas with higher educational backgrounds and resource endowments. Once settled, they leverage e-commerce platforms to sell and expand their self-produced agricultural goods, local specialties, and related products like livestock goods, handicrafts, and textiles. Overall, e-commerce serves more as a new platform and supplementary income source for them. After transitioning from “urban residents” to “rural residents,” most still identify primarily as "farmers" rather than “businessman.”

" I still consider myself a farmer. After all, before selling tea, everything began with growing it. From tending the tea plants to harvesting and processing—to me, all of this is part of agriculture. So I see myself as engaged in farming. Even though we now sell tea online, if we ever forget that tea is an agricultural product we cultivate and craft with our own hands, treating it merely as a business, I believe its charm will fade." (Int.04.2025)

" First off, I don't see myself as a farmer. I consider myself a promoter specializing in the rice noodle sector. While everyone knows about it now, when we started, almost no businesses were making rice noodles. So when people mention Kyoto's rice noodle industry, I believe my name should come up." (Int.05.2025)

" After starting online chili sales, I had to take on more responsibilities and often wrestled with my role. On one hand, in terms of actual division of labor at home, I handle more online coordination, making me proportionally closer to a ‘merchant.’ Yet at the same time, I still sow seeds daily, hoping the land will yield better chili peppers and taro—clearly the actions of a ‘farmer.’ Now, farming by day and coordinating with various platforms in my spare time is beneficial for me, but it also brings significant pressure." (Int.04.2025)

In summary *(Table 5.5)*, participants in Japan's rural e-commerce sector tend to view e-commerce as a supplementary business practice and income stream. Their self-identity remains primarily rooted in their roles as “farmers” or their original social identities, and e-commerce has not fundamentally altered their occupational identities.

At the production organization level, Japan's rural e-commerce primarily relies on cooperatives and local small and medium-sized enterprises to form a relatively stable industrial chain system. Unlike China's family-centered or loosely organized structures, Japan's e-commerce participants are mostly built upon contractual and standardized cooperative mechanisms. Through associations, agricultural corporations, and local governments, they jointly advance the specialization of product production, processing, and sales. The function of e-commerce platforms is primarily reflected in digital display and brand promotion, rather than employment absorption. Labor relations are predominantly characterized by long-term employment or fixed partnerships, with a low proportion of non-regular workers and limited labor mobility. This structure ensures production continuity and product quality while reinforcing the standardization and institutionalization of labor-management relations, thereby enhancing the overall professionalism and stability of production organizations.

However, at the labor force level, Japan remains affected by macroeconomic conditions, with labor shortages and population aging still prominent issues. While this problem is not particularly evident among primary producers—most e-commerce farmers operate as family workshops or small-to-medium enterprises with fixed employment relationships—labor shortages are especially pronounced in e-commerce logistics, where labor costs have become a significant operational burden for businesses. Although the government supports regional economic digitalization through policies like “Regional Revitalization” (FN), its impact on entrepreneurship and new job creation remains limited. Overall, Japan's rural e-commerce production and labor systems are characterized by high quality and strong safeguards. However, compared to China, its capacity for entrepreneurial renewal, market diffusion, and innovative dynamism still falls significantly short.

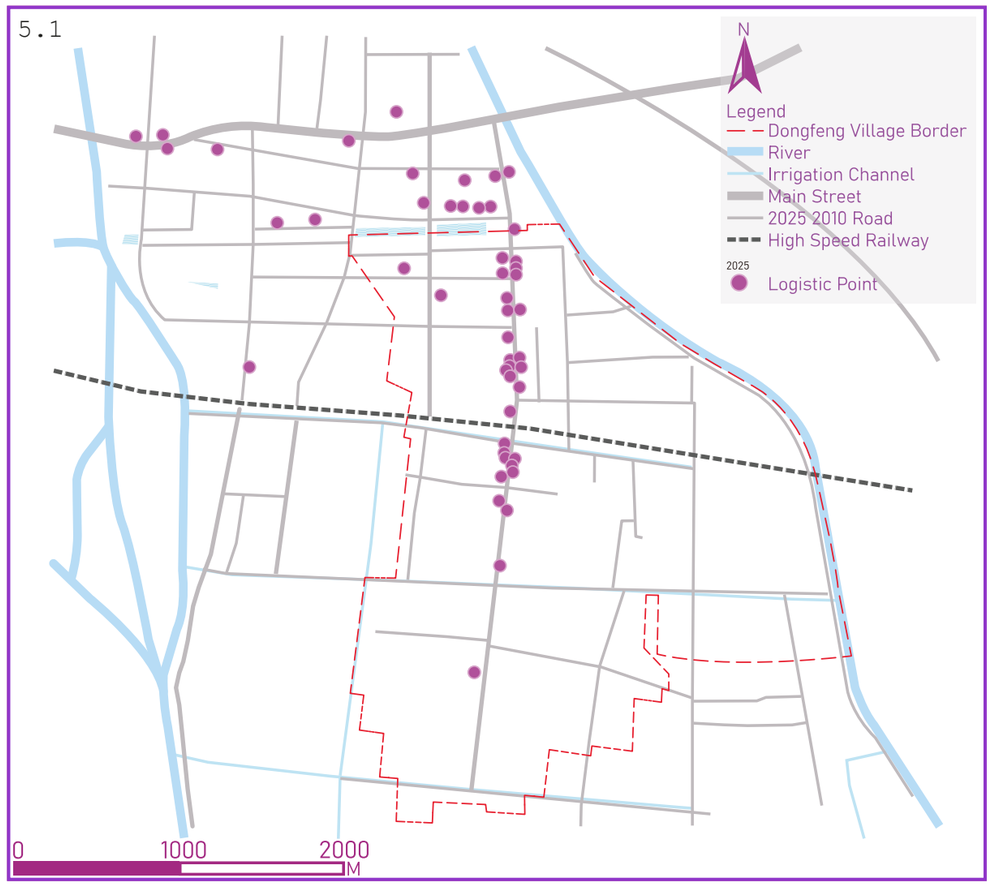
	SHAJI, CHINA	Ayabe, JAPAN	Similarities and Differences	
			Similarities	Differences
E-commerce Participants	Mainly Farmers, Rural Women, and Returning Youth as “Grassroots Entrepreneurs”	Mainly Middle-Aged Farmers, Local SME Members, and New Rural Migrants	○	●
Participation Motivation	Aiming at Poverty Reduction, Income Growth, and Shared Prosperity	Driven by Lifestyle Choice, Local Revitalization, or Interest; E-commerce as Supplementary Income	○	●
Social Identity	E-commerce facilitates the Farmer-to-Merchant Identity Shift; Entrepreneurs Identify as “Businesspersons”	Engaged in E-commerce but Self-Identified as Farmers; Emphasizing Integrated Agricultural Identity from Production to Sales	○	●
Labor–Employment Relations	Both Exhibit Family-Based or Fixed Employment; China Relies on Temporary Labor, Japan Prefers Long-Term Employment		●	○
Worker Age	Labor Force Covers Youth to Elderly; China Has More Young Workers, Japan More Middle-Aged and Elderly		●	○
Educational Background	Mainly Local Farmers or New Entrepreneurs with Limited Education (Primary to University Level)	Mostly College-Educated, Some from Urban Employment, Equipped with Modern Management Awareness	○	●
Work–Life Boundary	Close Integration of Living and Working Spaces; High Overlap Between E-commerce Work and Daily Life, Often Resulting in “24-hour Labor” Phenomenon		●	○
Work Cognition and Values	Emphasis on Market-Oriented Goals such as “Commercial Success” and Sales Volume	Focus on Agricultural Value and Craftsmanship; Emphasis on Process and Quality	○	●
Gender Division of Labor	Men Dominate Overall Operations; Women Increasingly Engage in Entrepreneurship, Design, and Sales		●	○
Labor Stability and Mobility	Labor Mainly from Nearby Villages; Informal Employment Common and High Mobility	Stable but Limited Workforce; Low Mobility	○	●
E-commerce Dependence and Social Innovation	E-commerce as Key Family Income Source and Entrepreneurial Path, Enabling Social Mobility and Innovation	E-commerce as Supplementary or Secondary Platform; Agriculture or Handicraft Remain Primary, Innovation Slower	○	●

Table 5.5
Comparision of E-commerce Production and Labor between China and Japan

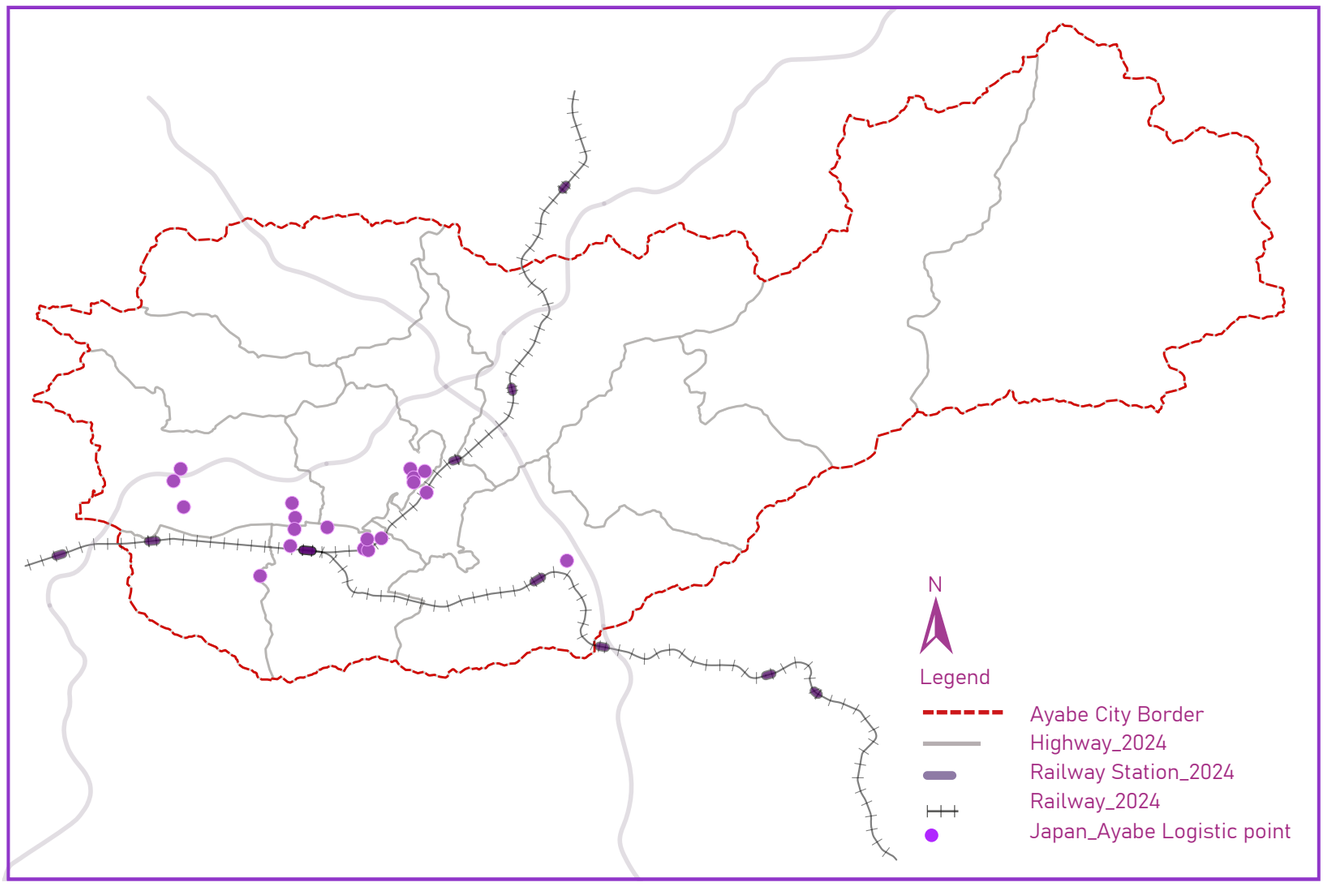
5.2.4 Comparative E-commerce Spaces

Following the preceding discussion on differences in e-commerce production and labor force structures, this section will further focus on logistics spaces, service industry spaces, and production spaces. As a crucial supporting component of the e-commerce system, China and Japan have developed distinctly different patterns in this domain, reflecting their unique spatial organization approaches. The spatial layout and evolution not only demonstrate economic efficiency but also reveal differences in social coordination and regional development models. Based on this, this paper conducts a comparative analysis of the logistics space, service industry space, and production space in both countries.

On one hand, China's logistics spatial layout differs significantly from Japan's, exhibiting two distinct spatial patterns. China's logistics nodes are densely distributed with extensive coverage, achieving a level of ubiquity comparable to Japan's convenience store network. In Shaji Town, China, within Dongfeng Village and its surrounding areas alone, one can observe logistics stations and postal services from various brands and countries *(Map 5.1)*. Numerous private logistics enterprises also cluster here, such as SF Express and Deppon Logistics.This distribution pattern exhibits more natural evolutionary characteristics, gradually forming over time based on the social networks of townships or rural areas. At the same time, pickup distances in this region are typically short, enabling farmers to conveniently access the e-commerce supply chain. Logistics costs are relatively low, saving approximately 0.3–0.5 RMB per kilogram compared to urban or market prices, resulting in a typical “one village, multiple points” logistics structure. In comparison, Japan's logistics system is more centralized and closed, characterized by a structure centered around large-scale logistics hubs *(Map 5.2)*. In both urban and rural areas of Japan, traditional logistics are



Map 5.1 China's Logistic Point



Map 5.2 Japan's Logistic Point

primarily controlled by a few major corporations such as Yamato and Japan Post, whose services cover the entire nation. However, this system lacks the multi-brand coexistence and decentralized structure seen in China. Japanese logistics nodes are typically spaced farther apart, with the network operating through highly standardized and intensive mechanisms. Due to this high degree of system organization, Japan's logistics costs are relatively higher, with shipping fees often accounting for 10% to 20% of product prices—significantly above China's average.

From another perspective, China and Japan not only exhibit significant differences in their logistics landscapes but also display partial similarities and distinct variations in the spatial distribution of production facilities and supporting service infrastructure. Examining the spatial development of supporting service industries reveals divergent developmental trajectories between the two nations.

In China, bolstered by the maturation of the furniture e-commerce sector and logistics systems, diverse product and service support ecosystems have gradually emerged across regions while driving economic growth. Supporting facilities are relatively comprehensive, including specialized accounting firms, design companies, and operational agencies, resulting in a more mature industrial chain support system. Take Dongfeng Village as an example: local furniture e-commerce businesses are predominantly family-run operations lacking systematic marketing and design teams. However, this very circumstance has made outsourcing design and brand promotion an effective pathway to enhance competitiveness. The involvement of external professional teams partially compensates for local resource shortages, forming a collaborative model with distinct regional characteristics.

Compared to this, Japan has not developed a similar supporting service industry ecosystem. This difference stems partly from Japanese local industries typically establishing connections through government cooperation channels. Some businesses rely on policy platforms like “furusato nozei,” where specialized intermediary companies provide design and packaging support.

CHINA'S PRODUCTION SPATIAL ANALYSIS

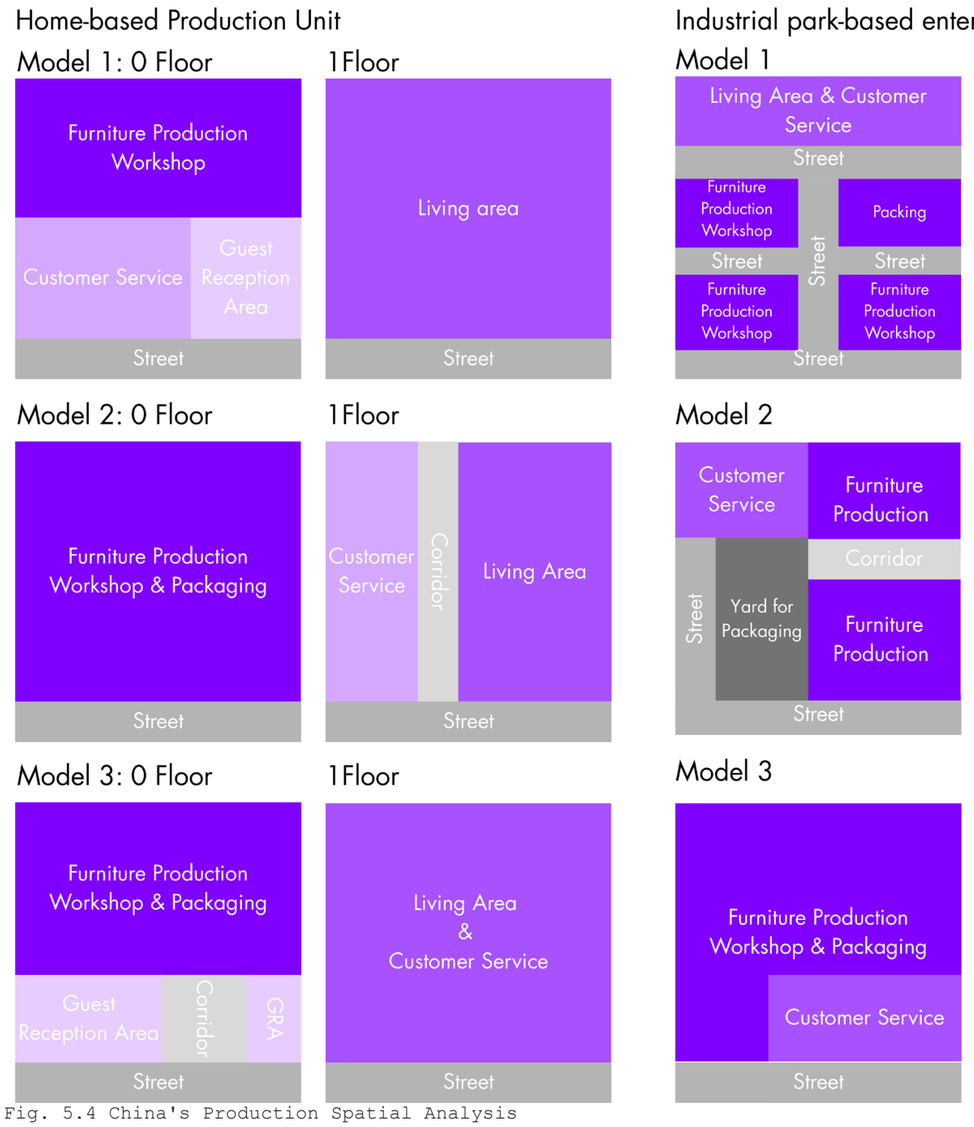


Fig. 5.4 China's Production Spatial Analysis

On the other hand, Japanese society as a whole possesses a high level of design literacy and aesthetic awareness, enabling small and medium-sized businesses to often independently complete product packaging and visual design. For instance, accounting and financial duties in many family-run shops are typically handled by female members (such as wives or mothers), a common household division of labor among Japanese SMEs.

At the level of production and living spaces, both countries exhibit certain similarities. In China, small and medium-sized e-commerce processing factories often utilize home courtyards, open areas in front of or behind farmhouses, or privately retained plots to construct simple workshops for production activities. Although the forms vary *(Fig. 5.4)*, the production spaces of most online stores are closely adjacent to residential areas, forming

JAPAN'S PRODUCTION SPATIAL ANALYSIS

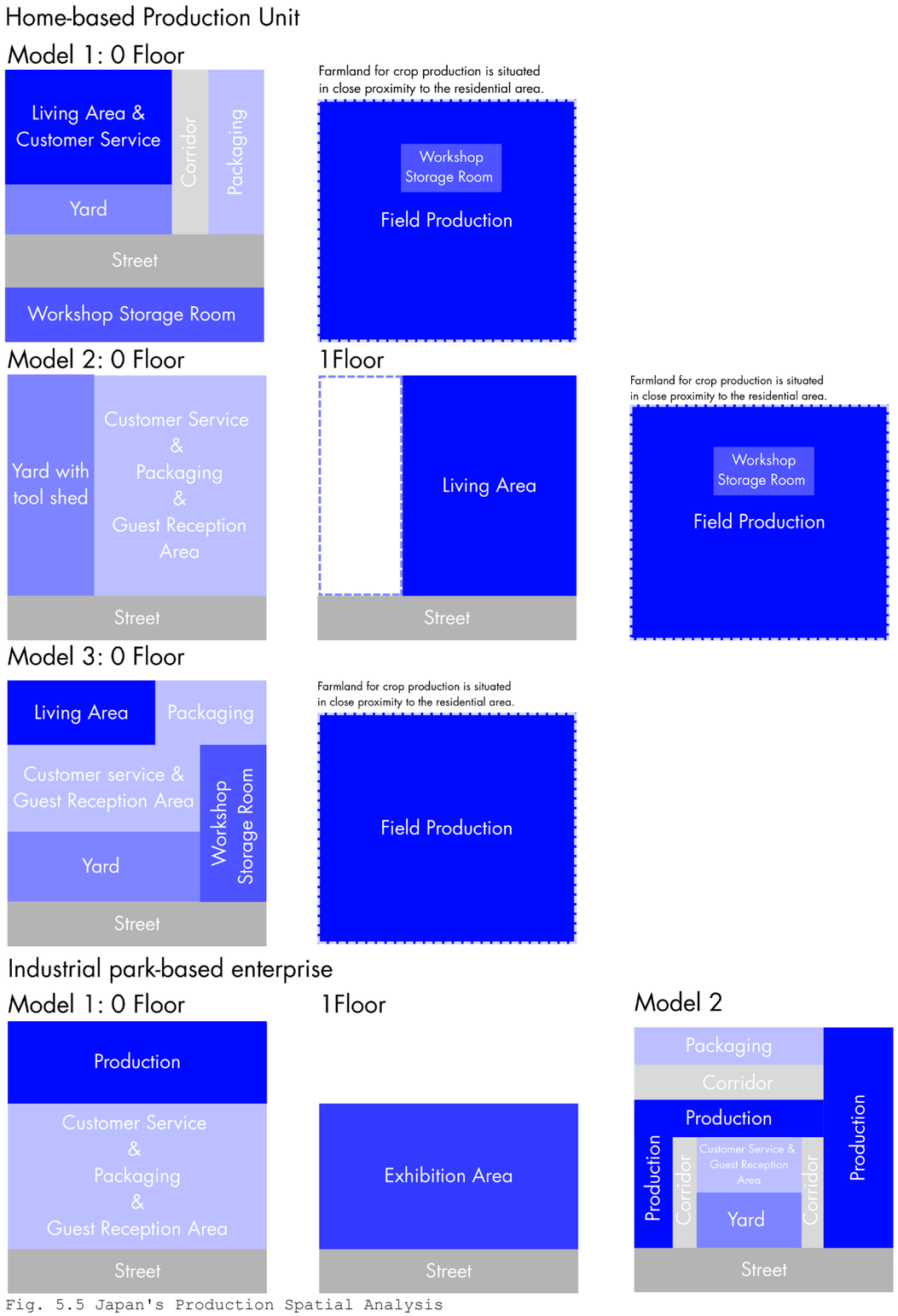


Fig. 5.5 Japan's Production Spatial Analysis

a typical “integrated living and production” pattern. For larger furniture e-commerce enterprises, moving into industrial parks has become a key pathway to expand production and upgrade infrastructure. According to interviews with Dongfeng Village authorities, some local large-scale furniture e-commerce businesses actively applied to relocate to e-commerce industrial parks to enhance production efficiency and access superior supporting facilities. Following relocation, these enterprises generally saw improved productivity.

In Japan, small and medium-sized e-commerce businesses similarly operate as household production units, with spatial arrangements closely resembling those in China *(Fig. 5.5)*. Typically, the front living room serves as a reception and office area, also handling packaging and shipping functions, while the rear section or second floor functions as living quarters. Adjacent to the main house, there is often a separate small tool shed or storage space. Due to limited production scale, these home-based e-commerce businesses have yet to develop significant expansion needs. Only some small and medium-sized enterprises possess independent factory buildings for small-scale production and packaging, equipped with simple logistics packing lines. While this compact spatial structure maintains the flexibility of family-run operations, it also constrains further expansion of their industrial scale.

Overall, the differences in e-commerce spatial patterns between China and Japan stem from variations in market tiers, industrial structures, and development trajectories *(Table 5.5)*. China possesses a massive market scale and robust industrial foundations. Over the past decade, its e-commerce sector has evolved from its inception through pilot projects to systematic development. The refinement of its logistics systems and supporting service industries has enabled efficient organization and restructuring of industrial spaces. The case of furniture e-commerce demonstrates China's remarkable flexibility and innovation in spatial utilization: small and medium-sized enterprises often operate as family-based units, integrating living, production, and customer service spaces into a “residential-industrial integration” model. Meanwhile, large enterprises establish operations within industrial parks, enhancing production efficiency through centralized, standardized management. This bottom-up development path has enabled China's e-commerce spaces to achieve rapid, large-scale expansion and networked deployment within a short timeframe, while also driving the regeneration of local economies and spatial structures.

In comparison, Japan's e-commerce sector, while characterized by a stable system and standardized management, has developed at a relatively slow pace. Due to its limited market size, the traditional industrial system adequately meets domestic consumption needs, with e-commerce primarily viewed as a supplement to existing offline economic models. Its logistics network, anchored by major corporations like Yamato and Japan Post, offers extensive coverage and high service quality, though it shows some shortcomings in last-mile delivery and support for diverse product ranges. Regional industries in Japan demonstrate high professional standards in design and packaging.

SMEs rely on family members to handle accounting, marketing, and customer management, forming a distinctive “family-run business” model. However, while this structure provides stability, it also limits the capacity for reinvention and expansion within the e-commerce space, resulting in overall industry openness and scalability that falls short of China's.

From the perspective of strengths and weaknesses, the primary advantages of China's e-commerce landscape lie in its flexibility, efficiency, and inclusiveness. A well-developed logistics system and outsourcing service mechanisms provide ample room for growth for enterprises of all sizes. However, alongside its rapid development, it faces challenges such as intense competition, fragmented resources, and homogenization. The industry's sustainability and brand differentiation still require further enhancement. In contrast, Japan's e-commerce space excels in high levels of specialization, stable service quality, and distinctive brand development. Yet, its solid market structure and lack of innovation drive limit e-commerce expansion, making it difficult to generate new growth points.

In summarization, the developmental divergence between China and Japan's e-commerce spaces reflects two distinct economic and social logics: the Chinese model drives industrial space restructuring through scale and flexibility, while the Japanese model maintains industrial space continuity through stability and specialization. Each path possesses its own advantages and limitations, reflecting unique developmental trajectories shaped by differing national economic structures, social organizations, and spatial cultural contexts.

	SHAJI, CHINA	Ayabe, JAPAN	Similarities and Differences	
			Similarities	Differences
Market Scale	Large market volume, diverse demand, and intense competition; e-commerce has expanded rapidly, forming a nationwide digital network.	Smaller market with a stable consumption structure; traditional retail channels remain dominant, while e-commerce serves a complementary role.	○	●
Logistics Spatial Layout	Highly dense logistics networks with high operational efficiency.	Logistics centers are concentrated around large corporations (e.g., Yamato, JP Post), forming a centralized and stable system.	○	●
Logistics Efficiency and Cost	Dense delivery networks with lower average cost and faster speed.	Delivery costs account for about 10–20% of product prices; logistics are costlier and slower than in China.	○	●
Service Space	A diversified service ecosystem (design, accounting, operations, etc.) with mature outsourcing mechanisms.	Comprehensive supporting industries and diversified collaboration mechanisms; SMEs act as key nodes.	○	●
Production Space	Family-based workshops are common in both countries; some Chinese firms have scaled up within industrial parks, while only a few Japanese firms own dedicated production facilities.		●	○
Production–Living Spatial Relationship	Production and living functions are increasingly integrated.		●	○
Spatial Development Stage	Transitioning from “0-to-1” rapid growth to spatial and market restructuring.	Stable spatial structure; development focuses on innovation-driven structural transformation.	○	●
Industrial Development and Competitive Intensity	Highly competitive environment with evident homogenization; SMEs upgrade via cross-regional expansion and platform participation.	Clear specialization and strong craftsmanship culture; moderate competition and stable, regulated markets.	○	●

Table 5.5
Comparision of E-commerce Production-Living Spaces between China and Japan

5.3
Bidirectional Insights: A Communication rather than a Competition

The preceding comparison of China and Japan's 4D approaches reveals two distinct paths for digital rural development: China's model, characterized by market-driven forces and government follow-through, embodies a bottom-up logic of social mobilization; Japan's, centered on institutional drivers and local collaboration, demonstrates a top-down model of orderly governance. Rather than viewing these as mutually exclusive “superiority comparisons,” it is more productive to understand them as two ends of the digital rural development spectrum—one emphasizing speed and dynamism, the other prioritizing stability and quality. These approaches are not mutually exclusive but represent two legitimate interpretations of “development” within distinct institutional contexts.

Therefore, this section explores the complementary insights and implications of both nations' experiences across three dimensions—society, institutions, and markets—through a lens of “dialogue” rather than “benchmarking.” Reexamining the inherent logic of these pathways reveals: the flexibility and innovation inherent in the market-driven approach can invigorate the institutionalized path; conversely, the normativity and sustainability of the institutionalized approach provide a solid institutional foundation for market-driven development. Consequently, the development of digital villages should not be understood as a unidimensional institutional choice, but rather as a process of seeking dynamic equilibrium between order and vitality.

Possible Implications of China's Experience for Japan's E-Commerce Development:

Driven by government policies, local e-commerce platforms in Japan primarily serve a supporting role, relying on governmental frameworks to establish relatively standardized institutional systems. However, they still face certain limitations in terms of market flexibility and entrepreneurial dynamism. In contrast, China's “Shaji Model” has stimulated societal innovation and entrepreneurial vitality through a relaxed policy environment and flexible market mechanisms, propelling the widespread development of e-commerce. Specifically, China's bottom-up market mobilization has fueled rapid e-commerce expansion—an experience offering valuable lessons for Japan's e-commerce development. Japan could draw from China's approach to local community mobilization and entrepreneurial support by adopting more flexible market mechanisms to encourage broader participation in e-commerce growth.

Simultaneously, providing necessary support and assistance—such as in logistics—enables individuals seeking to engage in commerce through e-commerce to recognize tangible benefits from improved logistics convenience and reduced costs, thereby motivating them to join e-commerce platforms. This combination of policy support and market participation will foster sustainable local economic development, invigorate private initiatives and market entities, and achieve a more diversified path for digital economic growth.

China's e-commerce platforms have driven local economic transformation through digital technology empowerment and industrial clustering, successfully establishing a comprehensive digital e-commerce system. Throughout this process, local governments have actively guided and provided policy support to foster deep integration between e-commerce platforms and local industries. In contrast, Japan's “Furusato Nozei” (hometown tax) policy has played a significant role in the digital transformation of local e-commerce, but its heavy reliance on government guidance has resulted in a lack of market-driven momentum. Through multi-stakeholder collaboration—particularly synergies among local governments, businesses, and society—China's e-commerce platforms have accelerated regional e-commerce development. For Japan, drawing lessons from China's platform cooperation model, especially in market-policy interaction mechanisms, could further advance local e-commerce platforms. By establishing more open collaborative frameworks and leveraging platform technologies, Japan can elevate the digital transformation of local industries, fostering industrial innovation and economic upgrading.

Possible Implications of Japan's Experience for China's E-commerce Development:

China's e-commerce sector has achieved remarkable success in terms of scale and growth rate, yet it still faces significant shortcomings in product branding, standardization, intellectual property protection, and industrial sustainability. Comparatively, the Japanese model emphasizes institutionalized quality control and brand governance mechanisms, offering valuable insights for China's transition from “rapid expansion” to “high-quality development.” This shift toward “high-quality development” has become a central theme in current Chinese academic and policy discourse. Moving forward, China can draw upon Japan's experience in quality control and brand governance to further refine local regulations and industry standards. This will facilitate the transformation of traditional e-commerce models like “Taobao villages” into “brand villages” and “specialized industrial belts” with inherent brand value and institutional safeguards. Such efforts will enable a breakthrough in industrial development, shifting the focus from quantitative expansion to qualitative enhancement.

In advancing local e-commerce development, Japan has established a tripartite governance structure involving local governments, communities, and enterprises, highlighting the organic integration of institutional

coordination and social participation. In contrast, China's grassroots governments remain overly focused on economic growth metrics and scale expansion in e-commerce governance, with participation mechanisms for communities and enterprises yet to be fully established. Japan's experience demonstrates that e-commerce development requires not only strengthened government guidance but also deep integration with social governance, particularly leveraging community roles in local brand building and industrial planning. Therefore, China can draw lessons from Japan's approach by enhancing local community participation in industrial development and brand building. This would foster a multi-stakeholder governance model involving government guidance, community collaboration, and enterprise leadership, thereby achieving a virtuous cycle where e-commerce economic benefits and social structure optimization reinforce each other.

Expansion of the Global Perspective on China and Japan's E-commerce Development Experience:

The cases of China and Japan collectively demonstrate that building digital villages is not merely a technical endeavor; it is fundamentally a process of social transformation. Moreover, it is closely intertwined with logistics, supply chains, and cross-border e-commerce development within the global economic system. Integration into global logistics provides fresh impetus for the advancement of digital villages, enabling local economies to transcend geographical and cultural constraints and enter the global marketplace. The integration of digital platforms and global logistics networks breaks down the geographical boundaries of traditional rural economies, allowing rural products to enter international markets through global supply chains and enhancing the global influence of local brands.

For instance, China's “Taobao Villages” leverage seamless integration with Amazon's platform and global logistics systems to distribute local goods worldwide, significantly boosting income and employment opportunities for local farmers and merchants. Similarly, Japan's regional e-commerce initiatives utilize the Furusato Nozei policy to collaborate with global networks, promoting exports of local specialties and enhancing the internationalization of regional brands through global logistics platforms. From a global perspective, the synergy between digital villages and global logistics offers crucial insights for local economic development. Globalized supply chains and logistics systems not only enhance the market competitiveness of rural economies but also support the branding, standardization, and quality control of rural products. The development of digital villages has achieved a transformation from “regional markets” to “global markets,” demonstrating how global logistics systems can enable sustained growth in local economies and integrate them into the broader currents of the global economy.

CHAPTER VI: Conclusion

This research examines how e-commerce platforms influence economic transformation and spatial restructuring during revitalization processes in rural areas of China and Japan, using the case studies of Shaji Town in China and Ayabe City in Japan. The core questions are:

→ How does the emergence of e-commerce reshape rural economies and spatial configurations in China and Japan?

→ What are the socio-economic impacts of e-commerce on rural communities in both China and Japan?

The rapid development of e-commerce has played a pivotal role in the transformation of rural areas in both countries: serving as both a crucial tool for digital transformation and a powerful engine driving socio-economic and spatial structural shifts. Through case studies of Dongfeng Village and Ayabe City, this paper reveals how e-commerce reshapes rural economies and spatial layouts while reflecting on the profound socioeconomic and land-use implications of these changes.

6.1
Discussion and Rethinking

Hope for Economic Growth

The development of digital infrastructure is undoubtedly a key driver in transforming rural economies. Digital platforms have injected new vitality into rural economic growth, expanding both the reach of goods distribution and enhancing brand recognition. In China, the widespread adoption of e-commerce has redefined production spaces in many rural areas, moving beyond traditional agricultural methods to integrate into global supply chains. Governments have also enhanced commodity circulation efficiency in rural areas by building logistics hubs and expanding transportation networks. This enables more local products to reach global markets through e-commerce platforms, gaining recognition from consumers worldwide. The successful transformation of cross-border e-commerce signifies new hope for rural economies, particularly for regions reliant on traditional agriculture. Digital development offers them broader markets and fresh income streams.

Although e-commerce development in Japan's rural areas started relatively late, the adoption of digital platforms in these regions has gradually grown, driven by policies such as the “Furusato Nozei” (Hometown Tax). In Japan, particularly in rural areas, e-commerce platforms have opened new sales channels for farmers by facilitating the promotion of local specialty products and the development of regional brands. Many farmers participating in these platforms have not only enhanced the visibility of their products but also expanded their sales networks through government subsidies and incentive policies. Unlike China, Japan's rural e-commerce places greater emphasis on promoting locally distinctive products. Although the market scale remains relatively small, this model has successfully introduced regional goods to broader markets while elevating brand value.

Consequently, the development of digital infrastructure is not only crucial for driving economic transformation but also serves as a vital foundation for rural economies to advance toward globalization. Through e-commerce platforms, rural economies have gained new development opportunities, particularly enhancing their competitiveness in international markets and demonstrating promising prospects for rural economic revitalization.

A Double-Edged Sword

In China, e-commerce platforms have not only driven the globalization of production spaces but also brought products from rural areas to the global market. The widespread development of e-commerce has brought unprecedented economic opportunities to rural areas, particularly through the transformation of production spaces, which has become a key driver of local economic growth. However, this transformation is a double-edged sword. On one hand, it offers local farmers and business owners access to markets and wealth-building opportunities. On the other hand, as the e-commerce industry continues to expand, government-driven initiatives like logistics hub construction and road widening are transforming these areas into urban-rural fringe zones rather than traditional rural landscapes. For instance, this transformation has led to the expansion of residential buildings in original villages, yet occupancy rates fall far short of expectations. Local residents are reluctant to move into these “urbanized” high-rise apartments, preferring instead to preserve their traditional lifestyles and spaces.

Similarly, in Japan, while many farmers participate in e-commerce and the Furusato Nozei policy, significant discontent persists. Particularly within the JA system's agricultural procurement, uniform pricing leaves many farmers feeling unfairly treated, compelling them to seek alternative sales channels. In rural areas, numerous newcomers engage in e-commerce for livelihood, yet they face unequal treatment in local markets. Even when participating in offline markets in surrounding regions, they are often assigned stalls far from the main market areas. This unfair treatment has driven them toward online markets. However, establishing an e-commerce store is no quick endeavor; it often demands significant time and effort, forcing them to reduce their connection with the land and opportunities to enjoy rural life—a development that runs counter to their original reasons for moving there.

Centralized Government Management

In both China and Japan, the development of e-commerce has driven the demand for branding in rural products. However, this has also led to a loss of brand autonomy. In China, the government's initial absence and the lack of platform regulations led to numerous conflicts and disputes over furniture production techniques and product design patents. Later government intervention, in collaboration with the local Shaji E-commerce Association, tended to promote centralized management, requiring farmers to operate according to government-mandated brand and packaging standards. While this centralized approach helped standardize the market and enhance product uniformity, it also deprived farmers of the opportunity to create independent brands and explore the market. Similar management approaches exist in Japan, particularly under the Furusato Nozei policy, where farmers' products face certain government restrictions and regulations. While this centralized management may boost promotional efficiency shortly, many farmers report that it stifles innovation and flexibility, even diminishing their proactive exploration of market opportunities.

The Strong Mobility and Environmental Changes Brought by E-commerce

In China and Japan, the e-commerce revolution has also driven significant population mobility and environmental shifts in rural areas. In China, the rapid expansion of the e-commerce industry has transformed many traditionally agricultural regions into logistics hubs, leading to dramatic changes in land use. Whereas most of this land was once cultivated, increasing areas are now being converted into warehouses, distribution centers, and other facilities to meet the demands of e-commerce platforms and cross-border trade. This transformation has substantially increased the economic value of land and created more local employment opportunities. However, it has also led to a reduction in arable land and environmental degradation. Although the Chinese government has introduced the “National Territorial Space Planning” at the central level, stipulating that cultivated land areas shall not be arbitrarily expanded, reduced, or have their land use designation altered under any circumstances, its implementation remains challenging. Once-fertile farmland has been transformed into logistics hubs or warehouses, while in some areas, issues like declining air quality, traffic congestion, and noise pollution have become increasingly prominent.

Additionally, the rhythms of rural life have been disrupted by the rise of e-commerce. Notably, to meet the demands of cross-border e-commerce, many rural businesses have adopted a “24-hour operation” model. Logistics and live-streaming activities require merchants and staff to work extended hours, often until 4 or 5 a.m. While this model has spurred short-term economic growth, it has also altered the daily rhythms of local residents. The nighttime noise, traffic, and bustle in many villages now rival those of cities. For some villagers, this intense work rhythm disrupts their previously tranquil rural lifestyle. In some households, prolonged business demands have even deprived families of adequate rest and personal space.

Coincidentally, in Japan, farmers involved in local brand promotion or the Furusato Nozei program often find themselves working outside traditional agricultural hours, disrupting conventional farming schedules and lifestyles. Particularly in remote areas, the rise of e-commerce has introduced additional logistics demands, forcing many individual merchants to juggle packaging and product design alongside production—adding invisible pressures to their workload. The development of e-commerce in rural Japan also highlights challenges stemming from an aging society. Many young people have left their hometowns for better career opportunities in major cities, accelerating the hollowing-out of rural communities. While e-commerce offers some entrepreneurial opportunities for the younger generation remaining in the countryside, most older farmers often lack sufficient understanding and skills regarding e-commerce platforms. This makes it difficult for them to find their place within this emerging economic model.

Re-thinking and Reflection

Overall, e-commerce has played a positive role in the rural transformation of China and Japan, driving the upgrading and globalization of the rural economy.

However, the issues arising from this transformation cannot be overlooked, including environmental degradation, social disorder, and the loss of farmers' brand autonomy.

While centralized government management helps regulate markets, it may also restrict innovation and flexibility in certain contexts.

Therefore, future e-commerce policies and development should prioritize balancing economic growth with social order, alongside preserving flexibility and autonomy in local governance. This approach will provide stronger support for sustainable development in rural areas.

6.2 Conclusion

6.2.1 Overall Summary of the research

This research examines how e-commerce drives transformation in rural revitalization efforts across China and Japan. Through case studies of Dongfeng Village in Shaji Town, China, and Ayabe City, Japan, it explores the interplay between e-commerce, digital infrastructure, land space, labor force, and local economic development. Employing field research, interviews, and data analysis, the study delves into how e-commerce reshapes traditional agricultural villages, propelling their transition from conventional farming communities to digitally enabled settlements.

Dongfeng Village, located in Shaji Town, Suining County, Jiangsu Province, stands as a quintessential example of rural e-commerce transformation in China. Initially reliant on agricultural production, the village evolved into China's first “Taobao Village” through e-commerce development, gradually becoming a hub for online furniture sales. The study traces the entire journey from villagers' entrepreneurial beginnings to business expansion, illustrating how e-commerce catalyzed local economic transformation and fostered a dynamic e-commerce industrial cluster. The study indicates that the e-commerce transformation progressed through several key stages: From Home-Based Crafts to Online Sales: Early e-commerce entrepreneurs expanded their markets through online platforms, successfully driving the transformation of local handicraft industries. From Individual Ventures to Cluster Effects: As successful cases emerged, more villagers replicated this model, forming an e-commerce cluster with economies of scale. From “Family Businesses” to Industrialized Production: The e-commerce industry gradually shifted from pure sales to full industrial chain development, including establishing specialized production bases.

Research has also revealed that this transformation has brought about social and environmental challenges. As the e-commerce industry expands, large tracts of land have been “unauthorizedly” converted into warehouses and private factories, leading to emerging environmental and safety concerns. Simultaneously, the high-intensity work pace and logistics activities driven by e-commerce have impacted villagers' traditional lifestyles, with many experiencing a dramatic shift in their daily rhythms amid the rapidly evolving e-commerce landscape.

Compared to China, Japan's rural e-commerce development has progressed more steadily, yet it holds equally significant transformative implications. Taking Ayabe City as an example, research reveals that through e-commerce promotion of local specialties and supportive government policies, the city has revitalized its local economy. By implementing specific “resettlement policies,” it has attracted more newcomers seeking rural lifestyles, thereby achieving partial population return. The study also examined how Japanese farmers leverage e-commerce platforms to market regional specialty products, expand their market reach, and secure stable income streams. Despite Japan's relatively late start in e-commerce development, it has effectively utilized policies like the “hometown tax” to foster the growth of local brands.

However, research also reveals that challenges faced by Japanese rural areas during their e-commerce transformation cannot be overlooked. Particularly against the backdrop of an aging rural population and lagging infrastructure development, e-commerce growth has encountered issues such as labor shortages and insufficient technical support. Simultaneously, some farmers grapple with the tension between “e-commerce adoption” and “traditional agriculture” during this transition. They struggle to adapt to the new economic model, especially due to unfamiliarity with e-commerce platforms and logistics systems, resulting in a relatively slow transformation process.

Both Chinese and Japanese cases demonstrate that digital infrastructure plays a crucial role in driving rural economic transformation. E-commerce has unlocked new development opportunities for rural areas, spurring economic growth. However, this transformation also brings a series of social and environmental challenges, particularly regarding shifts in land use, social structures, and lifestyles. Therefore, the e-commerce transformation process must prioritize social equity and sustainable development alongside economic growth, especially in safeguarding farmers' rights, protecting the environment, and preserving traditional cultural heritage.

This study offers valuable lessons for e-commerce development in other rural areas, demonstrating that successful digital transformation requires not only robust digital infrastructure but also sound policy guidance to ensure balanced and sustainable progress. Moving forward, relevant policies should prioritize harmonizing digitalization with traditional agriculture to foster comprehensive rural economic development.

6.2.2 Innovations

The innovation of this study lies primarily in its comparative analysis of e-commerce development in China and Japan. Although extensive research exists on e-commerce governance, development, and spatial evolution in both countries, comparative studies examining their e-commerce trajectories remain scarce, despite their significance as key economies in Asia's economic landscape. This research thus fills this gap by systematically comparing the similarities and differences between China and Japan in digital village development, e-commerce development pathways, and their respective roles within the global logistics system.

Specifically, the study not only examines the differences in e-commerce policies and development models between the two countries but also explores the impact of their rural digital transformation on the global logistics

system from the perspective of economic globalization, analyzing their respective strengths and challenges. This comparative study offers fresh perspectives on global e-commerce development and provides theoretical foundations for China and Japan to formulate digital rural policies within the globalization context. It deepens understanding of the interplay between the digital economy, local policies, and global logistics, while advancing innovation in transnational and cross-regional e-commerce development research.

6.2.3 Limitations of the Study and Future Avenues

This study examines how e-commerce and global logistics systems drive rural economic transformation by analyzing digital village cases in China and Japan. While providing valuable case studies, the research also has certain limitations.

First, regarding the case studies in China and Japan, during field visits to Shaji Town in Suining County and Ayabe City in Japan, constraints on time and manpower prevented comprehensive coverage in distributing questionnaires and conducting face-to-face interviews. Consequently, only partial quantitative and qualitative data collection and research were feasible. The resulting data and findings inevitably lack comprehensiveness, They cannot fully reflect the entire landscape of e-commerce development in Shaji and Ayabe, resulting in certain limitations to this study. Second, specifically, due to constraints in logistics infrastructure, digital adoption rates, and rural economic data, this study could not conduct a comprehensive spatial analysis. Particularly, the lack of sufficient geographic information system (GIS) data and real-time logistics data for rural areas prevented me from providing more precise and detailed geographic analysis when examining e-commerce digital infrastructure development. Additionally, reliance on official statistical sources from China and Japan for some data may introduce certain biases, limiting the accuracy of spatial and infrastructure assessments for these regions. Finally, the study focuses on corresponding case studies of individuals engaged in e-commerce in Dongfeng Village, Shaji Town, China, and Ayabe City, Japan. While these cases offer valuable perspectives on the digital transformation of rural economies, the findings may not be universally applicable to other rural areas or countries—particularly those in the early stages of digitalization—due to the study's limited scope to these two regions. Consequently, the research results may not fully reflect the global landscape of rural digital transformation, especially the diversity observed across different socio-political contexts.

Future research should further expand the scope of this study, particularly through comparative research across diverse rural communities in different countries. Such comparative studies could encompass developing nations with significant disparities in digital infrastructure and logistics capabilities, exploring the unique challenges and opportunities for rural economies in different regions amid global digital transformation. Additionally, the role of government policies in either promoting or constraining the digital economic development of rural areas warrants further examination, especially regarding regulatory frameworks for digital trade and cross-border e-commerce.

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Moreover, this study primarily focuses on the impacts of digital transformation on rural economies and logistics, while also examining certain social-level shifts, such as changes in rural labor structures and social organizations. However, policies, legal regulations, and deeper governance and management mechanisms have not been sufficiently explored. Future research could delve deeper into the role of government policies in advancing rural digital transformation, particularly how legal frameworks and governance models can address challenges in rural digital economic development. For instance, it could examine how to balance local governments' policy responsibilities in promoting digital economic growth with safeguarding social equity and environmental sustainability. Simultaneously, issues like sociocultural shifts and labor market changes driven by digitalization warrant further investigation to provide theoretical support for formulating rural development policies adapted to the digital era. Finally, future research could further explore how rural e-commerce platforms can achieve sustainable development, particularly through innovations in environmentally friendly logistics, labor condition safeguards, and community participation. This would support the long-term growth of the rural digital economy and advance its sustainable role within global supply chains.

When furrow meets fiber—Countryside is local's, newcomer's, the new generation's, and we will revitalize together

当沟壑遇到光纤——乡村属于本地人、外来者、以及新一代人，我们将共同振兴。

田畑の水路が光ファイバーと出会うとき——田舎は地元の人々、移住者、そして新しい世代のものです。私たちは共に振興していきます。

Bibliography

1. Ansell, Chris, and Satoshi Miura. 2019. “Can the Power of Platforms Be Harnessed for Governance?” Public Administration. https://doi.org/10.1111/padm.12636.

2. Aoyama, Yuko. 2001. “Structural Foundations for E-commerce Adoption: A Comparative Organization of Retail Trade between Japan and the United States.” Urban Geography 22 (2): 130–153. https://doi.org/10.2747/0272-3638.22.2.130.

3. Ayabe Chamber of Commerce and Industry, Small and Medium Enterprise Consultation Division. 2025. Regional Economic Analysis of Ayabe City. Ayabe: Ayabe Chamber of Commerce and Industry.

4. Bai, Xuemei, Peijun Shi, and Yansui Liu. 2014. “Society: Realizing China’s Urban Dream.” Nature 509: 158–160.

5. Bansal, Rashmi. 2011. “Growth of the Electronic Commerce in China and India: A Comparative Study.” Journal of Asia-Pacific Business 12 (3): 356–374. https://doi.org/10.1080/10599231.2011.611457.

6. Barns, Sarah. 2020. Platform Urbanism: Negotiating Platform Ecosystems in Connected Cities. Singapore: Palgrave Macmillan. https://doi.org/10.1007/978-981-32-9725-8.

7. Bauer, Anahid, and Sofía Fernández Guerrico. 2023. Effects of E-commerce on Local Labor Markets. IZA Discussion Paper No. 16345. Bonn: Institute of Labor Economics (IZA). https://hdl.handle.net/10419/279043.

8. Baumeister, Roy F., and Mark R. Leary. 1997. “Writing Narrative Literature Reviews.” Review of General Psychology 1 (3): 311–320.

9. Black, Richard. 1990. “Regional Political Ecology in Theory and Practice: A Case Study from Northern Portugal.” Transactions of the Institute of British Geographers 15(1): 35–47.

10. Brenner Neil, and Roger Keil. 2014. “From Global Cities to Globalized Urbanization.” Glokaldemics: Journal of Culture, Politics and Innovation 2(1): 12–37.

11. Brenner, Neil. 2009. “What Is Critical Urban Theory?” City 13 (2–3): 198–207. https://doi.org/10.1080/13604810902996466.

12. Brislin, Richard W. 1976. “Comparative Research Methodology: Cross-Cultural Studies.” International Journal of Psychology 11 (3): 215–229.

13. Castells, Manuel. 2020. “Space of Flows, Space of Places: Materials for a Theory of Urbanism in the Information Age.” In The City Reader, 7th ed., edited by Richard T. LeGates and Frederic Stout, 240–52. Abingdon, Oxon; New York, NY: Routledge.

14. Chen, Jengchung V., Duangjai Rungruengsamrit, T. M. Rajkumar, and David C. Yen. 2013. “Success of Electronic Commerce Web Sites: A Comparative Study in Two Countries.” Information & Management 50: 344–355. https://doi.org/10.1016/j.im.2013.02.007

15. Chen, Man, and Yun’an Long. 2024. “Empowering Rural Revitalization: Unleashing the Potential of E-Commerce for Sustainable Industrial Integration.” Journal of the Knowledge Economy 15 (1): 1883–1901. https://doi.org/10.1007/s13132-024-01281-3.

16. Choi, Young Jun. 2013. “Developmentalism and Productivism in East Asian Welfare Regimes.” In Handbook on East Asian Social Policy, edited by Misa Izuhara, 207–24. Cheltenham, UK: Edward Elgar Publishing.

17. Chua Charmaine, Martin Danyluk, Deborah Cowen, and Laleh Khalili. 2018. “Introduction: Turbulent Circulation: Building a Critical Engagement with Logistics.” Environment and Planning D: Society and Space 36(4): 617–629. https://doi.org/10.1177/0263775818783101.

18. Cloke, Paul. 1985. “Counterurbanisation: A Rural Perspective.” Geography 70 (1): 13–23.

19. Coates, Joseph F. 1993. “Rural America: A Future of Decline and Decay Unless….” Technological Forecasting and Social Change 43 (2): 205–208. https://doi.org/10.1016/0040-1625(93)90020-8.

20. Collier, David. 1993. “The Comparative Method.” In Political Science: The State of the Discipline II, edited by Ada W. Finifter, 105–19. Washington, DC: American Political Science Association.

21. Couclelis, Helen. 2004. “Pizza Over the Internet: E-Commerce, the Fragmentation of Activity and the Tyranny of the Region.” Entrepreneurship and Regional Development 16 (1): 41–54. https://doi.org/10.1080/0898562042000205027.

22. Cowen, Deborah. 2014. “Disrupting Distribution: Subversion, the Social Factory, and the ‘State’ of Supply Chains.” Viewpoint Magazine Issue 4.

23. Cowen, Deborah. 2014. The Deadly Life of Logistics: Mapping Violence in Global Trade. Minneapolis: University of Minnesota Press.

24. Cui, Miao, Shan L. Pan, Sue Newell, and Lili Cui. 2017. “Strategy, Resource Orchestration and E-commerce Enabled Social Innovation in Rural China.” The Journal of Strategic Information Systems 26 (1): 3–21. https://doi.org/10.1016/j.jsis.2016.10.001.

25. Cui, Xufeng, Wei Huang, Jing Zhang, and Wei Deng. 2024. “Exploring the Spatiotemporal Evolution Mechanism of Rural E-Commerce: Insights from the Experience of Taobao Towns in China.” Humanities and Social Sciences Communications 11: 1789. https://doi.org/10.1057/s41599-024-03306-9.

26. De Blasio, Guido. 2008. “Urban–Rural Differences in Internet Usage, E-Commerce, and E-Banking: Evidence from Italy.” Growth and Change 39 (2): 341–367.

27. de Kloet, Jeroen, Thomas Poell, Guohua Zeng, and Chow Yiu Fai. 2019. “The Platformization of Chinese Society: Infrastructure, Governance, and Practice.” Chinese Journal of Communication 12 (3): 249–256. https://doi.org/10.1080/17544750.2019.1644008.

28. De Silva, Chathura Kovida, Kazushi Sano, Kiichiro Hatoyama, and Linh Thanh Trinh. 2019. “Geographical Dimension of E-Commerce Logistics Facilities in Tokyo Metropolitan Region, Japan.” Journal of the Eastern Asia Society for Transportation Studies 13: 957–972.

29. Duan, Shichang, Lin Jian, and José van Dijck. 2023. “Producing New Farmers in Chinese Rural Live E-Commerce: Platformization, Labor, and Live E-Commerce Sellers in Huaiyang.” Chinese Journal of Communication. https://doi.org/10.1080/17544750.2023.2203939.

30. Dunleavy, Patrick, Helen Margetts, Simon Bastow, and Jane Tinkler. 2006. “New Public Management Is Dead—Long Live Digital-Era Governance.” Journal of Public Administration Research and Theory 16 (3): 467–494. https://doi.org/10.1093/jopart/mui057.

31. Fan, Jingting, Lixin Tang, Weiming Zhu, and Ben Zou. 2018. The Alibaba Effect: Spatial Consumption Inequality and the Welfare Gains from E-commerce. Working Paper.

32. Fei, Xiaotong. 1947. From the Soil: The Foundations of Chinese Society. Beijing: Beijing University Press.

33. Fu, Jing, and Hideyuki Fujii. 2023. “Sustainable Development of Rural Regions: Metafrontier Data Envelopment Analysis of Hometown Tax in Municipality K.” Asia-Pacific Journal of Regional Science. https://doi.org/10.1007/s41685-023-00281-y.

34. Fukasawa, Eiji, Takeshi Fukasawa, and Hikaru Ogawa. 2020. “Intergovernmental Competition for Donations: The Case of the Furusato Nozei Program in Japan.” Journal of Asian Economics 67: 101178. https://doi.org/10.1016/j.asieco.2020.101178.

35. Ge, Dazhuan, Hualou Long, Yingnan Zhang, and Shuangshuang Tu. 2018. “Analysis of the Coupled Relationship between Grain Yields and Agricultural Labor Changes in China.” Journal of Geographical Sciences 28: 93–108.

36. Ge, Dazhuan, Hualou Long, Yingnan Zhang, and Shuangshuang Tu. 2018.

“Analysis of the Coupled Relationship between Grain Yields and Agricultural Labor Changes in China.” Journal of Geographical Sciences 28(1): 93–108. https://doi.org/10.1007/s11442-018-1455-y.

37. Gibbs, Jennifer, Kenneth L. Kraemer, and Jason Dedrick. 2002. Environment and Policy Factors Shaping E-commerce Diffusion: A Cross-Country Comparison. Research report, Center for Research on Information Technology and Organizations (CRITO), University of California, Irvine.

38. Gladwin, C. H., B. F. Long, E. M. Babb, et al. 1989. “Rural Entrepreneurship: One Key to Rural Revitalization.” In Keys to Rural Revitalization in the 1990s, American Agricultural Economics Association.

39. Greve Carsten. 2015. “Ideas in Public Management Reform for the 2010s: Digitalization, Value Creation and Involvement.” Public Organization Review 15: 49–65. https://doi.org/10.1007/s11115-013-0254-8.

40. Guan, Qingqing, Fang Liu, Yuanyan Chen, Xingwei Ao, and Weiwei Cheng. 2023. “Cultivating Your Agriculture – Branding and E-Commerce Participation in Rural Revitalization.” Academic Journal of Humanities & Social Sciences 6(6): 65–70. https://doi.org/10.25236/AJHSS.2023.060612.

41. Guo, Wenliang, Yu Zhou, Guang Li, Zhancheng Wu, and Linbin Yang. 2020.

“Evolution and Effects of Japan’s Rural Revitalization Policy.” World Regional Studies 29(5): 905–917. https://doi.org/10.3969/j.issn.1004-9479.2020.05.003.

42. Haji, Karine. 2021. “E-Commerce Development in Rural and Remote Areas of BRICS Countries.” Journal of Integrative Agriculture 20 (4): 979–997. https://doi.org/10.1016/S2095-3119(20)63451-7.

43. Hautamäki, A., & Oksanen, K. 2018. Digital Platforms for restructuring the public sector. In A. Smedlund, A. Lindblom, & L. Mitronen (Eds.), Collaborative value co-creation in the platform economy (pp. 91–108). Springer.

44. Hernández Blanca, Julio Jiménez, and M. José Martín. 2010. “Customer Behavior in Electronic Commerce: The Moderating Effect of E-Purchasing Experience.” Journal of Business Research 63 (9–10): 964–971. https://doi.org/10.1016/j.jbusres.2009.01.019

45. Hesse Markus. 2002. “Shipping News: The Implications of Electronic Commerce for Logistics and Freight Transport.” Resources, Conservation and Recycling 36(3): 211–240. https://doi.org/10.1016/S0921-3449(02)00083-6.

46. Hesse Markus. 2020. “Logistics: Situating Flows in a Spatial Context.” Geography Compass 14(2): e12492. https://doi.org/10.1111/gec3.12492.

47. Hoggart, Keith, and Ángel Paniagua. 2001. “What Rural Restructuring?” Journal of Rural Studies 17(1): 41–62. https://doi.org/10.1016/S0743-0167(00)00036-X.

48. Hu, Shuyun, and Hui Huang. 2012. “Research on E-Commerce Models for Agricultural Products.” Northern Economy 9: 37–38.

49. Huang, Xiaohong. 2024. “Local Government Behavior Logic in Rural Industrial Revitalization: A Case Study of Rural E-Commerce in Caoxian County.” Doctoral dissertation, Party School of the Central Committee of the CPC (National Academy of Governance), Beijing.

50. Hudson, Heather E. 2006. From Rural Village to Global Village: Telecommunications for Development in the Information Age. New York: Routledge.

51. Jalali, Ali Akbar, Mohammad Reza Okhovvat, and Morteza Okhovvat. 2011. “A New Applicable Model of Iran Rural E-Commerce Development.” Procedia Computer Science 3: 1157–1163. https://doi.org/10.1016/j.procs.2010.12.187.

52. Jarosz, Lucy. 2012. “Growing Inequality: Agricultural Revolutions and the Political Ecology of Rural Development.” International Journal of Agricultural Sustainability 10(2): 192–199. https://doi.org/10.1080/14735903.2011.600065.

53. Jia, Lei, Zengjin Liu, Lixia Zhang, Zhiquan Fang, and Mengni Qin. 2018. “The Experiences of Japan’s Rural Revitalization and Its Implications to China.” Research of Agricultural Modernization 39 (3): 359–368. https://doi.org/10.13872/j.1000-0275.2018.0032.

54. Kikuchi, Pornprapa. 2016. “The Innovation of Japan Agricultural Cooperatives and Applying Knowledge in Development: A Case Study of Kinosato Agricultural Cooperative.” Master’s thesis, Kasetsart University.

55. Komatsu, Sho. 2024. “Rural E-Commerce and Urban–Rural Consumption Inequality in China: Evidence from Jiangsu Province.” Asian Growth Research Institute Working Paper, June 2024.

56. Kshetri, Nir. 2018. “Rural E-Commerce in Developing Countries.” IEEE IT Professional 20 (2): 91–95. https://doi.org/10.1109/MITP.2018.021921657.

57. Li, Anthony H. F. 2017. “E-commerce and Taobao Villages: A Promise for China’s Rural Development?” China Perspectives 2017 (3): 57–62. https://doi.org/10.4000/chinaperspectives.7423.

58. Li, Lili, Yiwu Zeng, Zi Ye, and Hongdong Guo. 2020. “E-commerce Development and Urban-Rural Income Gap: Evidence from Zhejiang Province, China.” Papers in Regional Science 99 (4): 1–20.

59. Li, Yanbo. 2024. “The Influence Mechanism and Path of Rural E-Commerce Empowering the Revitalization of Rural Industries.” Master’s thesis, Nanchang University.

60. Li, Yuheng, Hans Westlund, Xiaoyu Zheng, and Yansui Liu. 2016. “Bottom-up Initiatives and Revival in the Face of Rural Decline: Case Studies from China and Sweden.” Journal of Rural Studies 47 (Part B): 506–513. https://doi.org/10.1016/j.jrurstud.2016.07.004.

61. Li, Yurui, Hualou Long, and Yansui Liu. 2015. “Spatio-Temporal Pattern of China’s Rural Development: A Rurality Index Perspective.” Journal of Rural Studies 38: 12–26. https://doi.org/10.1016/j.jrurstud.2015.01.004.

62. Li, Zhe. 2022. “Research on Innovation Diffusion of E-commerce in Rural Areas from the Perspective of Rural Revitalization: Based on the Investigation of Taobao Village, Daji Town, Caoxian County.” Master’s thesis, Shandong University of Arts.

63. Liang, Chunxiao. 2010. “The Present Situation of and Prospects for E-Business in China.” Journal of Interactive Advertising 11 (1): 74–81. https://doi.org/10.1080/15252019.2010.10722179.

64. Lin, Yu-Pin, Joy R. Petway, Johnathen Anthony, Hussnain Mukhtar, Shih-Wei Liao, Cheng-Fu Chou, and Yi-Fong Ho. 2017. “Blockchain: The Evolutionary Next Step for ICT E-Agriculture.” Environments 4(3): 50. https://doi.org/10.3390/environments4030050.

65. Liu, Yansui, and Yuheng Li. 2017. “Revitalize the World’s Countryside.” Nature 548: 275–277.

66. Liu, Yansui, Fugang Zhang, and Yingwen Zhang. 2009. “Appraisal of Typical Rural Development Models during Rapid Urbanization in the Eastern Coastal Region of China.” Journal of Geographical Sciences 19(5): 557–567. https://doi.org/10.1007/s11442-009-0557-8.

67. Long, Hualou, and Yansui Liu. 2016. “Rural Restructuring in China.” Journal of Rural Studies 47 (Part B): 387–391. https://doi.org/10.1016/j.jrurstud.2016.07.028.

68. Long, Hualou, and Yansui Liu. 2016. “Rural Restructuring in China.” Journal of Rural Studies 47(B): 387–391. https://doi.org/10.1016/j.jrurstud.2016.07.028.

69. Long, Hualou, and Yi Qu. 2018. “Land Use Transitions and Land Management: A Mutual Feedback Perspective.” Land Use Policy 74: 111–120. https://doi.org/10.1016/j.landusepol.2017.10.021.

70. Long, Hualou, Yingnan Zhang, and Shuangshuang Tu. 2019. “Rural Vitalization in China: A Perspective of Land Consolidation.” Journal of Geographical Sciences 29: 517–530.

71. Long, Hualou, Yurui Li, Yansui Liu, Michael Woods, and Jian Zou. 2012.

“Accelerated Restructuring in Rural China Fueled by ‘Increasing vs. Decreasing Balance’ Land-Use Policy for Dealing with Hollowed Villages.” Land Use Policy 29(1): 11–22. https://doi.org/10.1016/j.landusepol.2011.04.003.

72. Luo, Jianfa. 2013. “The Research on the E-commerce & Furniture Industrial Cluster of Shaji Dongfeng Village Based on Actor-Network Theory: Generation, Structure & Transformation of the ‘Shaji Mode’”. Master’s thesis, Nanjing University.

73. Luo, Xiaoping, Xiaoan Shi, Chunxiu Yuan, Min Ai, Cheng Ge, Min Hu, Xingang Feng, and Xiaoye Yang. 2017. “Genome-Wide SNP Analysis Using 2b-RAD Sequencing Identifies the Candidate Genes Putatively Associated with Resistance to Ivermectin in Haemonchus contortus.” Parasites & Vectors 10(1): 31. https://doi.org/10.1186/s13071-016-1959-6.

74. Luo, Xiaoping, Xiaoan Shi, Chunxiu Yuan, Min Ai, Cheng Ge, Min Hu, Xingang Feng, and Xiaoye Yang. 2017. “Genome-Wide SNP Analysis Using 2b-RAD Sequencing Identifies the Candidate Genes Putatively Associated with Resistance to Ivermectin in Haemonchus contortus.” Parasites & Vectors 10(1): 31. https://doi.org/10.1186/s13071-016-1959-6.

75. Ma, Rong. 2007. “The ‘Differential Mode of Association’: Understanding of Traditional Chinese Social Structure and the Behaviors of the Chinese People.” Journal of Peking University (Philosophy and Social Sciences) 44 (2): 129–41.

76. Marsden, T., P. Lowe, S. Whatmore. 1990. Rural Restructuring: Global Processes and Their Responses. David Fulton Publishers Ltd., London. Retrieved 19.01.2018 from: https://www.cabdirect.org/cabdiret/abstract/19901895012.

77. Marsden, Terry. 2016. “Exploring the Rural Eco-Economy: Beyond Neoliberalism.” Sociologia Ruralis 56 (4): 597–615. https://doi.org/10.1111/soru.12139.

78. Matanle, Peter. 2008.“Shrinking Sado: Education, Employment and the Decline of Japan’s Rural Regions.” In Shrinking Cities – Complete Works 3 Japan, edited by Philipp Oswalt, 42–53. Berlin: Project Office Philipp Oswalt. https://www.schrumpfendestaedte.de/digital0.html?&L=%2F%2F%27.

79. Mergel, Ines, Noella Edelmann, and Nathalie Haug. 2019. Defining digital transformation: Results from expert interviews. Government Information Quarterly 36 (4). https://doi.org/10.1016/j.giq.2019.06.002.

80. Mezzadra, Sandro, and Brett Neilson. 2013. Border as Method, or, the Multiplication of Labor. Durham, NC: Duke University Press.

81. Monte-Mór, Roberto, and Rodrigo Castriota. 2018. “Extended Urbanization: Implications for Urban and Regional Theory.” In Handbook on the Geographies of Regions and Territories, edited by Anssi Paasi, John Harrison, and Martin Jones, 332–345. Cheltenham, UK; Northampton, MA: Edward Elgar.

82. Mueller, Rolf A. E. 2001. “E-Commerce and Agricultural Commodity Markets: E-Commerce and Entrepreneurship in Agricultural Markets.” American Journal of Agricultural Economics 83 (5): 1237–1244. https://doi.org/10.1111/0002-9092.00274.

83. Muniuafu, S. M., Els van de Kar, and Johann van Rensburg. 2005. “An Environment for E-Commerce and ICT Enabled Logistics Services in Rural Areas of Transition Countries: The Case of South Africa.” ICEC ’05: Proceedings of the 7th International Conference on Electronic Commerce, 393–399. https://doi.org/10.1145/1089551.1089624.

84. O’Connor, Sean, Ehiaze Ehimen, Suresh C. Pillai, Niamh Power, Gary A. Lyons, and John Bartlett. 2021. “An Investigation of the Potential Adoption of Anaerobic Digestion for Energy Production in Irish Farms.” Environments 8 (2): 8. https://doi.org/10.3390/environments8020008.

85. Oishi, Naoko. 2019. “A New, Sustainable Form for Farming Villages and the Role of Migrants from the City.” In Depopulation, Deindustrialisation & Disasters: Building Sustainable Communities in Japan, edited by Katsutaka Shiraishi and Nobutaka Matoba, 111. Cham: Palgrave Macmillan.

86. Okamoto, Takashi. 2008. “B to C for Revitalizing Rural Economy.” In Proceedings of the International Symposium on Applications and the Internet, 425–429. IEEE. https://doi.org/10.1109/SAINT.2008.78.

87. Oncescu, Jacquelyn. 2016. “Rural Restructuring: The Impact of a Pulp and Paper Mill Closure on Rural Community Recreation Services and Amenities.” World Leisure Journal 58(3): 207–224. https://doi.org/10.1080/16078055.2016.1161662.

88. Onitsuka, Kenichiro, and Satoshi Hoshino. 2018. “Inter-Community Networks of Rural Leaders and Key People: Case Study on a Rural Revitalization Program in Kyoto Prefecture, Japan.” Journal of Rural Studies 61: 123–136. https://doi.org/10.1016/j.jrurstud.2018.04.008.

89. Plantin Jean-Christophe, and Aswin Punathambekar. 2018. “Digital Media Infrastructures: Pipes, Platforms, and Politics.” Media, Culture & Society. https://eprints.lse.ac.uk/90876.

90. Pu, Jian, Upalat Kowatanasakul, Alexandra Marie Naval Sumaway, Pitchaya Sirivunnabood, and Saroj Chapagain. 2024. “Revitalizing Local Economies: A Case of Japan’s Furusato Nozei Program and Its Digital Transformation Impact on Tax Decentralization, Economic Growth, and Sustainable Development.” Policy brief. https://unu.edu/ias/brief/revitalizing-local-economies.

91. Qin Qiuxia, Hongdong Guo, Xinjie Shi, and Kevin Chen. 2023. “Rural E-Commerce and County Economic Development in China.” China & World Economy 31 (5): 26–60.

92. Qu, Yi, and Hualou Long. 2018. “The Economic and Environmental Effects of Land Use Transitions under Rapid Urbanization and the Implications for Land Use Management.” Habitat International 82: 113–121. https://doi.org/10.1016/j.habitatint.2018.10.009.

93. Rausch, Anthony. 2019. “Japan’s Furusato Nozei Tax Program: Neoliberal Policy or Hometown Sentiment?” East Asian Journal of Cultural Studies 19 (3).

94. Reimer, Bill, and Mami Nagata. 2008. “Building Rural and Urban Common Interests.” In Revitalization: Fate and Choice.

95. Roberts, Elisabeth, Brett Anne Anderson, Sarah Skerratt, and John Farrington. 2017. “A Review of the Rural-Digital Policy Agenda from a Community Resilience Perspective.” Journal of Rural Studies 54: 372–385. https://doi.org/10.1016/j.jrurstud.2016.01.001.

96. Rodríguez-Pose, Andrés, and Daniel Hardy. 2015. “Addressing Poverty and Inequality in the Rural Economy from a Global Perspective.” Applied Geography 63: 11–23. https://doi.org/10.1016/j.apgeog.2015.02.006.

97. Roy, Ananya. 2017. “What Is Urban about Critical Urban Theory?” In The Globalizing Cities Reader, 2nd ed., 8. Routledge.

98. Ruan, Weiqing. 2013. “Discussion on the Connotation of E-Commerce.” E-commerce 7: 40–41. https://doi.org/10.3969/j.issn.1009-6108.2013.07.020.

99. Sadowski Adam, Karolina Lewandowska-Gwarda, Renata Pisarek-Bartoszewska, and Per Engeseth. 2021. “A Longitudinal Study of E-Commerce Diversity in Europe.” Electronic Commerce Research 21: 169–194. https://doi.org/10.1007/s10660-021-09466-z.

100. Seal, Kala Chand, Ryan Chen, Anthony Kartono, Valdo Melton, Paula Sandoval, and Dian Wen. 2001. “Exploratory Study and Comparison of E-Commerce Issues between Asia Pacific Countries and the United States.” Paper presented at The First International Conference on Electronic Business, Hong Kong, December 19–21.

101. Shi, Jianwen, and Xiuyun Yang. 2022. “Sustainable Development Levels and Influence Factors in Rural China Based on Rural Revitalization Strategy.” Sustainability 14: 8908. https://doi.org/10.3390/su14148908.

102. Shucksmith, Mark. 2000. Exclusive Countryside? Social Inclusion and Regeneration in Rural Areas. York: Joseph Rowntree Foundation.

103. Soriano Cheryll Ruth R. 2017. “Exploring the ICT and Rural Poverty Reduction Link: Community Telecenters and Rural Livelihoods in Wu'an, China.” The Electronic Journal of Information Systems in Developing Countries 81 (1): 1–17. https://doi.org/10.1002/j.1681-4835.2007.tb00220.x.

104. Srnicek Nick. 2017. Platform Capitalism. Cambridge: Polity Press.

105. Steinberg, Marc, Rahul Mukherjee, and Aswin Punathambekar. 2022. “Media Power in Digital Asia: Super Apps and Megacorps.” Media, Culture & Society 44(8): 1405–1419. https://doi.org/10.1177/01634437221127805.

106. Steinberg, Marc. 2019. The Platform Economy: How Japan Transformed the Consumer Internet. Minneapolis: University of Minnesota Press.

107. Steinberg, Marc. 2023. “Platformization’s Elsewheres: Japanese Convenience Stores and the Platform Economy.” Social Media + Society 9 (4): 1–14. https://doi.org/10.1177/20563051231213508.

108. Tachiki, Dennis, Satoshi Hamaya, and Koh Yukawa. 2004. Diffusion and Impacts of the Internet and E-Commerce in Japan. Center for Research on Information Technology and Organizations (CRITO), University of California, Irvine.

109. Takeuchi, Kazuhiko, Yutaka Namiki, and Hiroyasu Tanaka. 1998. “Designing Eco-Villages for Revitalizing Japanese Rural Areas.” Ecological Engineering 11: 177–197.

110. Tang, W., & Zhu, J. 2020. “Informality and rural industry: Rethinking the impacts of e-commerce on rural development in China.” Journal of Rural Studies. https://doi.org/10.1016/j.jrurstud.2020.02.010.

111. Tang, Weicheng, and Jin Zhu. 2020. “Informality and Rural Industry: Rethinking the Impacts of E-Commerce on Rural Development in China.” Journal of Rural Studies 75: 20–29. https://doi.org/10.1016/j.jrurstud.2020.02.010.

112. Tang, Yan, Ruochan Ma, Shixian Luo, et al. 2025. “Sustainable Financing of Cultural Landscapes: Insights from Japan’s Furusato Nozei System.” Preprints. https://doi.org/10.20944/preprints202510.0713.v1.

113. Tranfield, David, David Denyer, and Palminder Smart. 2003. “Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review.” British Journal of Management 14 (3): 207–22.

114. Tsukamoto, Takashi, and Kanupriya Dua. 2021. E-Commerce in India and Japan. The International Institute for Trade and Development.

115. Tu, Shuangshuang, and Hualou Long. 2017. “Rural Restructuring in China: Theory, Approaches and Research Prospect.” Journal of Geographical Sciences 27(9): 1169–1184. https://doi.org/10.1007/s11442-017-1422-7.

116. Tu, Shuangshuang, Hualou Long, Yingnan Zhang, Dazhuan Ge, and Yi Qu. 2018.

“Rural Restructuring at Village Level under Rapid Urbanization in Metropolitan Suburbs of China and Its Implications for Innovations in Land Use Policy.” Habitat International 77: 143–152. https://doi.org/10.1016/j.habitatint.2017.12.001.

117. Ullah Maseeh, Najeeb Ullah Khan, and Muhammad Asghar Khan. 2025. “E-Commerce for Sustainable Development: Leveraging WTO and China-FTA Experiences for Global South Integration.” Dialogue Social Science Review 3 (5): 536–548.

118. Umeda, Ryo, Toni Ryynänen, and Torsti Hyyryläinen. 2024. “Rural and Regional Development in the Age of Digital Platforms: Platformization of the Japanese Furusato Nozei Hometown Tax Donation System.” International Review of Public Administration 29 (2): 59–82. https://doi.org/10.1080/12294659.2024.2374095.

119. Umeda, Ryo, Toni Ryynänen, and Torsti Hyyryläinen. 2024. “Rural and Regional Development in the Age of Digital Platforms: Platformization of the Japanese Furusato Nozei Hometown Tax Donation System.” International Review of Public Administration 29 (2): 59–82. https://doi.org/10.1080/12294659.2024.2374095.

120. Umeda, Ryo, Toni Ryynänen, and Torsti Hyyryläinen. 2024. “Rural and Regional Development in the Age of Digital Platforms: Platformization of the Japanese Furusato Nozei Hometown Tax Donation System.” International Review of Public Administration 29 (2): 59–82. https://doi.org/10.1080/12294659.2024.2374095.

121. Van Dijck José. 2021. “Governing Trust in European Platform Societies: Introduction to the Special Issue.” European Journal of Communication 36(4): 323–333. https://doi.org/10.1177/02673231211028378.

122. Van Dijck, José. 2020. “Governing Digital Societies: Private Platforms, Public Values.” Computer Law & Security Review 36: 105377. https://doi.org/10.1016/j.clsr.2019.105377.

123. Wang, Chenxi, Tao Zhou, and Maohui Ren. 2023. “Driving Spatial Network Connections in Rural Settlements: The Role of E-Commerce.” Applied Geography 159: 103067. https://doi.org/10.1016/j.apgeog.2023.103067.

124. Wang, Dangwei. 2015. “Research on Rural E-Commerce Models and Their Impacts in Shaji Town, Jiangsu Province.” Master’s thesis, Nanjing Agricultural University.

125. Weaver, Russell, Sharmistha Bagchi-Sen, Jason Knight, and Amy E. Frazier. 2016. Shrinking Cities: Understanding Urban Decline in the United States. London: Routledge. https://doi.org/10.4324/9781315757582.

126. Webster, Daniel J. 2002. “Rendering Modern English-Language Drama into Living Japanese: An Interview with Koshi Odashima.” Translation Review 64 (1): 3–10. https://doi.org/10.1080/07374836.2002.10532821.

127. Wei, Ming. 2023. “Platformization of Chinese Society: Capital, Labor and Technology.” Creativity of Young Researchers 12 (2): 333–346. https://doi.org/10.17150/2308-6203.2023.12(2).333-346.

128. Wei, Yehua Dennis, Juan Lin, and Ling Zhang. 2020. “E-Commerce, Taobao Villages and Regional Development in China.” Geographical Review 110 (3): 380–405. https://doi.org/10.1111/gere.12367.

129. Wei, Yehua Dennis, Yangyi Wu, Felix Haifeng Liao, and Ling Zhang. 2020. “Regional Inequality, Spatial Polarization and Place Mobility in Provincial China: A Case Study of Jiangsu Province.” Applied Geography 124: 102296. https://doi.org/10.1016/j.apgeog.2020.102296.

130. Whitacre, Brian E. 2011. “Do Higher Broadband Adoption Rates Mean Lower Tax Collections from Local Retail Sales? Implications of E-Commerce in Rural Areas of the US.” Regional Science Policy & Practice 3 (2): 145–157. https://doi.org/10.1111/j.1757-7802.2011.01030.x.

131. Woods Michael. 2007. “Engaging the Global Countryside: Globalization, Hybridity and the Reconstitution of Rural Place.” Progress in Human Geography 31(4): 485–507. https://doi.org/10.1177/0309132507079503.

132. Woods, Michael. 2009. “Rural Geography: Blurring Boundaries and Making Connections.” Progress in Human Geography 33(6): 849–858. https://doi.org/10.1177/0309132508105001.

133. Woods, Michael. 2012. “Rural Geography III: Rural Futures and the Future of Rural Geography.” Progress in Human Geography 36(1): 125–134.

134. Wu, Qinglie. 2010. “E-Commerce: Concepts, Misconceptions, and Future Prospects.” Journal of Nanjing University of Posts and Telecommunications (Social Sciences) 12 (2): 1–8. https://doi.org/10.14132/j.cnki.nysk.2010.02.015.

135. Xiang, Jun Yong, and Jae Kyeong Kim. 2007. “A Comparative Analysis of International, Korean and Chinese E-commerce Research.” International Journal of Electronic Business 5 (1): 65–106.

136. Yang, J.X.; Liu, M.; Shang, P.; Wu, X.T. 2022. “How to Crack the Weak Internal Participation in Rural Revitalization: Based on the Practical Investigation of Jiangta Village, Pujiang County, Chengdu City.” Issues Agric 6: 13–23.

137. Yao, Ji. 2020. “Remaking the Rural: Alternative Forms of Revitalization in Post-Growth Japan.” APRU Sustainable Cities and Landscapes PhD Symposium.

138. Ye, Xiumin, and Xiangdong Wang. 2016. The Shaji Model of E-commerce in China’s Rural Area: Survey in Dongfeng Village of Jiangsu Province. Beijing: Social Sciences Academic Press.

139. Yu, Na. 2010. “Taobao Online Marketing Strategy Analysis and Enlightenment.” Enterprise Economy 11: 110–112.

140. Zeng, Cheng. 2018. “Japan’s Practice of Rural Revitalization: Background, Measures, and Implications.” Ningxia Social Sciences (8): 117–123. https://doi.org/10.16050/j.cnki.11-1232/d.2018.08.008.

141. Zhang, H.P.; Gao, L.L.; Yan, K. 2018. “Strategic Thinking on Rural Revitalization Strategy: Theoretical Origin, Main Innovation and Realization Path.” China Rural 11: 1–15.

142. Zhang, Lin. 2020. “When Platform Capitalism Meets Petty Capitalism in China: Alibaba and an Integrated Approach to Platformization.” International Journal of Communication 14: 114–134.

143. Zhang, Yingnan, Hualou Long, Li Ma, Dazhuan Ge, Shuangshuang Tu, and Yi Qu. 2018. “Farmland Function Evolution in the Huang-Huai-Hai Plain: Processes, Patterns and Mechanisms.” Journal of Geographical Sciences 28: 759–777.

144. Zhang, Yingnan, Hualou Long, Li Ma, Shuangshuang Tu, Yurui Li, and Dazhuan Ge. 2022. “Analysis of Rural Economic Restructuring Driven by E-Commerce Based on the Space of Flows: The Case of Xiaying Village in Central China.” Journal of Rural Studies 93: 196–209. https://doi.org/10.1016/j.jrurstud.2022.06.010.

145. Zhang, Yu Yvette, Qiujie Zheng, and Huashu Wang. 2021. “Challenges and Opportunities Facing the Chinese Economy in the New Decade: Epidemics, Food, Labor, E-Commerce, and Trade.” The Chinese Economy 54 (6): 373–375. https://doi.org/10.1080/10971475.2021.1890355.

146. Zheng, Shurong, and Qinghua Lü. 2013. “Twenty Years of E-Commerce Development in China.” Journal of Business Economics and Management 11: 5–12.

147. Zhu, Canjiang, and Weiyi Luo. 2024. “An Empirical Study on the Coupling Coordination and Driving Factors of Rural Revitalization and Rural E-Commerce in the Context of the Digital Economy: The Case of Hunan Province, China.” Sustainability 16 (3510): 1–24. https://doi.org/10.3390/su16103510.

Questionnaires

Explanation of the Survey Questionnaires

The survey questionnaires were primarily conducted during the fieldwork period in Japan. Due to language barriers, the researcher prepared thoroughly before each interview, including designing clear and specific questions, providing optional answers, and drafting several deeper follow-up prompts. This preparation helped establish rapport more quickly and allowed both sides to enter meaningful discussion around specific topics and extend the conversation naturally. Providing both English and Japanese versions of the questionnaire also enabled respondents to better understand the research purpose and improved overall communication efficiency.

Based on the partial set of questionnaires collected, both ordinary agricultural e-commerce practitioners and respondents from public sectors—such as government departments—generally expressed positive attitudes toward the introduction of e-commerce. Many agreed that e-commerce has contributed to local economic development, income improvement, and the enhancement of regional visibility. However, uncertainties remain regarding the long-term sustainability of e-commerce and whether individuals are willing to continue investing in the sector. Factors contributing to such hesitation include, but are not limited to: unstable income, low profit margins, rising logistics costs, increasing competition, and limited digital skills among certain groups.

The questionnaires presented here reflect only a portion of the full survey and are intended to illustrate the main perspectives and concerns expressed by local respondents regarding the development of e-commerce.

Regardless, I am deeply grateful for their openness and willingness to share their experiences in detail. Their sincerity was truly moving, and I hope to meet them again in the future.

Part 1: Basic Information on E-Commerce Development (Multiple Choice)

1. **What are the main sales channels currently used by ~~Saisaikan~~? (Multiple choice)**
   (A) Official website
   (B) General e-commerce platforms (e.g., Rakuten, Amazon)
   (C) Social media (e.g., Instagram)
   (D) Furusato Nozei platforms
   (E) Physical stores or direct sales sites
   (F) Others (please specify)
2. **In which year did ~~Saisaikan~~ begin full-scale e-commerce operations?**
   (A) Before 2015
   (B) 2015–2018
   (C) 2019–2021
   (D) After 2022
3. **What percentage of ~~Saisaikan's~~ total sales comes from e-commerce?**
   (A) Less than 20%
   (B) 20–50%
   (C) 50–80%
   (D) More than 80%
4. **Has the e-commerce business contributed to increased income?**
   (A) Significant increase
   (B) Slight increase
   (C) No noticeable change
   (D) Decrease in income
5. **Who is primarily responsible for the e-commerce operations?**
   (A) JA Kyoto's Agricultural Economy Division
   (B) Third-party company contracted by JA Kyoto
   (C) Local producers managing their own shops
   (D) Others (please specify)
6. **Who handles logistics and shipping for Saisaikan?**
   (A) Yamato (Kuroneko)
   (B) Japan Post
   (C) Sagawa Express
   (D) In-house logistics
   (E) Mixed/Other
   (F) Others (please specify)
7. **Which season shows the highest order volume on e-commerce platforms?**
   (A) Spring
   (B) Summer
   (C) Autumn
   (D) Winter
   (E) No clear seasonality
8. **Has e-commerce led to product adjustments or re-packaging?** (e.g., convenient packs, gift sets)
   (A) Yes
   (B) No
9. **Does Saisaikan offer any products specifically designed for Furusato Nozei platforms?**
   (A) Yes, with specially designed sets
   (B) Yes, using regular items
   (C) Not yet available
   (D) Under development
10. **What is the approximate share of Furusato Nozei-related sales in overall e-commerce?**
    (A) Less than 10%
    (B) 10–30%
    (C) 30–50%
    (D) More than 50%
11. **What are the biggest current challenges in e-commerce development? (Multiple choice)**
    (A) High cold-chain logistics costs
    (B) Shortage of digital human resources
    (C) Weak promotional/marketing capacity
    (D) Unclear government support
    (E) Low regional brand recognition
    (F) Others (please specify)

Part 2: Quantitative Questions

1. About Saisaikan & E-commerce Platforms

- What is the approximate annual sales amount of Saisaikan? Has there been any growth trend in the past three years?
- What is the proportion of e-commerce (including self-operated sites and platforms like Rakuten, Furusato Nozei) in total sales?
- Which product categories contribute the most? (e.g., Manganji pepper, matcha, polished rice, etc.)
- Where are your main customer bases located? (Kyoto region, other Kansai areas, nationwide, overseas?)
- What is the average order value on e-commerce platforms? (e.g., under 3,000 yen / 3,000–5,000 yen / 5,000–10,000 yen, etc.)

2. About Manganji Amato

- How many farmers are currently cultivating Manganji Amato? What is the estimated total cultivation area?
- What is the annual production and sales volume? What percentage is sold through Saisaikan?
- Has e-commerce promoted any changes in product design or packaging? (e.g., smaller packs, processed items, fruit sets, etc.)

3. About Furusato Nozei

- What benefits has Furusato Nozei brought? (Multiple choice)
  - (A) Increased order volume
  - (B) Improved brand visibility
  - (C) Expanded customer reach outside local area
  - (D) Stimulated new product development
  - (E) Not very effective
- Which platforms are currently used for Furusato Nozei sales? Please list the top three and their sales shares (e.g., Rakuten, Furusato Choice, etc.)
- What are the main products offered through Furusato Nozei? Is Manganji Amato one of the key items?
- Has the government provided any financial/logistical support for Furusato Nozei operations? What is the subsidy's share in total operational costs?

Part 3: Qualitative & Reflective Questions

1. E-Commerce and Regional Branding

- What role has Saisaikan played in building the "Kyoto brand"? How does e-commerce enhance consumer awareness of regional identity?
- As a representative of "Kyoto vegetables," what branding strategies have been used for Manganji Amato?

2. Operational Challenges

- What are the biggest challenges you have faced during e-commerce expansion? (e.g., logistics costs, labor shortages, digital literacy, etc.)
- Is Saisaikan's e-commerce platform operated in-house or outsourced to a third party? Who is responsible for tasks such as packaging and shipping?
- During the e-commerce transition, has JA Kyoto Ninokuni provided any training or support for farmers? Which support measures have been most effective?

3. Future Vision and Advice

- How do you view the long-term impact of the Furusato Nozei program on agriculture? Is it an opportunity or a burden?
- In addressing the gap between rural and urban populations, what current or future initiatives does JA Kyoto Ninokuni have?
- From your perspective, how will JA Kyoto Ninokuni's e-commerce evolve in the coming years? Is there any plan to expand into international markets?
- Based on your experience, what advice would you give to others looking to develop e-commerce in the agricultural sector?

1. 您主要通过哪些渠道销售大米产品？
(A) 自营网站 (B) 电商平台（如乐天、Amazon） (C) SNS（如Instagram） (D) ふるさと納税平台 (E) 其他
2. 您开始使用电商平台销售大米的年份是？
(A) 2015年之前 (B) 2015-2018年 (C) 2019-2021年 (D) 2022年以后
3. 电商销售占总销售额的比例是多少？
(A) 少于20% (B) 20%-50% (C) 50%-80% (D) 超过80%
4. 电商业务是否增加了您的收入？
(A) 明显增加 (B) 略有增加 (C) 无明显变化 (D) 下降了
5. 电商相关事务主要由谁管理？
(A) 自己 (B) 家庭成员 (C) 专门雇佣人员 (D) 外包给第三方
6. 引入电商后，您的店铺规模或仓储空间是否有变化？
(A) 扩大了 (B) 缩小了 (C) 没有变化
7. 电商是否促使您调整了大米的品种或包装？
(A) 是 (B) 否
8. 物流配送主要依赖哪些渠道？
(A) ヤマト运输 (B) 日本邮政 (C) 佐川急便 (D) 自社配送 (E) 其他
9. 电商订单的高峰期集中在哪些月份？
(A) 春季 (B) 夏季 (C) 秋季 (D) 冬季 (E) 无明显季节性
10. 电商销售是否带动了线下实体店的客流增长？
(A) 是 (B) 否
11. 您所在的乡村基础设施（如道路、网络）是否对电商发展有制约？
(A) 很大制约 (B) 有些制约 (C) 几乎无制约 (D) 完全没有制约
12. 是否接受过政府或地方自治体关于电商的支持？
(A) 是 (B) 否
13. 是否通过ふるさと納税平台销售大米？如果是，主要使用哪个平台？
(A) 乐天ふるさと (B) ふるさとチョイス (C) サトフル (D) 其他平台
14. 您认为ふるさと納税制度对您的业务帮助大吗？
(A) 很大帮助 (B) 有一定帮助 (C) 帮助不大 (D) 没有帮助
15. 引入电商后，劳动力需求是否有变化？
(A) 增加 (B) 减少 (C) 没明显变化
16. 您是否觉得电商让农村和城市的联系更紧密？
(A) 是 (B) 否
17. 您的主要客户来自哪些地区？
(A) 本地 (B) 京都市 (C) 关西其他城市 (D) 全国 (E) 海外
18. 电商运营中最大的挑战是什么？
(A) 物流费用 (B) 人手不足 (C) 数字工具操作难度 (D) 宣传和营销 (E) 其他
19. 您对未来电商发展的信心如何？
(A) 非常有信心 (B) 比较有信心 (C) 不确定 (D) 没有信心
20. 是否愿意进一步投资电商业务？
(A) 是 (B) 否 (C) 视情况而定

1. **Ecommerce Operations Data**
   - What is the current average monthly order volume on your ecommerce platform?
   (A) Less than 50 orders (B) 50-200 orders (C) 200-500 orders (D) 500 orders or more
   - What is the approximate customer unit price (average amount per order) for the e-commerce channel?
   (A) Less than 3,000 yen (B) 3,000-5,000 yen (C) 5,000-10,000 yen (D) 10,000 yen or more
   - What is the annual growth rate of e-commerce sales? (compared to last year)
   (A) Declining (B) Flat (C) 0-30% growth (D) More than 30% growth
   - What is the approximate return rate of e-commerce orders?
   (A) Less than 5% (B) 5%-10% (C) 10%-20% (D) More than 20%
   - Marketing expenses (advertising, promotion, etc.) of e-commerce platforms as a percentage of total sales?
   (A) Less than 5% (B) 5%-10% (C) 10%-20% (D) 20% or more
2. **Logistics and cost data**
   - What is the average logistics cost per order?
   (A) Less than 500 yen (B) 500-1,000 yen (C) 1,000-1,500 yen (D) 1,500 yen or more
   - What is the average timeframe for logistics and distribution (from order to delivery)?
   (A) Within 1 day (B) 2-3 days (C) 4-7 days (D) More than 7 days
   - Percentage of customer complaints due to logistics problems?
   (A) Almost none (B) Occasionally (<5%) (C) More frequently (5%-10%) (D) A lot (>10%)
   - Do you use cold chain logistics for rice delivery?
   (A) Yes (B) No
3. **Customer and Market Data**
   - Of the e-commerce customers, what is the approximate repurchase rate (percentage of regular customers)?
   (A) Less than 20% (B) 20%-40% (C) 40%-60% (D) More than 60%
   - What is the main age group of e-commerce customers?
   (A) 20-30 years of age (B) 30-40 years of age (C) 40-50 years of age (D) Above 50 years of age
   - From which regions are the customers who buy rice through e-commerce mainly from? (Multiple choices possible)
   (A) Local (B) Kyoto City (C) Other Kansai cities (D) National (E) Overseas
   - What are the main channels through which customers learn about your e-commerce shop?
   (A) Search engines (B) SNS (Instagram/Facebook, etc.) (C) Recommendations from e-commerce platforms (D) Word-of-mouth referrals (E) Other
4. **Policy and support data**
   - Have you applied for e-commerce subsidies from the government or local governments?
   (A) Yes (B) No
   - ~~If subsidized~~, what percentage of your e-commerce operating costs does the subsidy amount represent?
   (A) Less than 10% (B) 10%-20% (C) 20%-30% (D) 30% or more
   - Percentage of total e-commerce sales brought in by furoshiki tax payments?
   (A) Less than 10% (B) 10%-30% (C) 30%-50% (D) More than 50%
   - Have there been any changes in e-commerce strategies due to policy adjustments (e.g., logistics subsidies, tax incentives)?
   (A) Yes (B) No

Questionaires for Rural e-commerce practitioners

1. What are the main channels through which you sell your products?
主な販売チャネルは？
(A) Self-operated website (B) E-commerce platforms (e.g. Rakuten, Amazon)
(C) SNS (e.g. Instagram) (D) Furusato Tax platform (E) Other
(A)自社サイト（**B**）**EC**プラットフォーム（楽天、**Amazon**など）（**C**）**SNS**（**Instagram**など）（**D**）ふるさと納税プラットフォーム（**E**）その他

2. What year did you start using e-commerce platforms?
Eコマースプラットフォームを利用し始めたのは何年ですか？
(A) Before 2015 (B) 2015-2018 (C) 2019-2021 (D) After 2022
(A)2015年以前（**B**）2015年～2018年（**C**）2019年～2021年（**D**）2022年以降

3. E-commerce sales as a percentage of total sales?
総売上高に占めるEコマース売上高の割合は？
(A) Less than 20 per cent (B) 20-50 per cent (C) 50-80 per cent (D) More than 80 per cent
(A)20%未満（**B**）20～50%（**C**）50～80%（**D**）80%以上

4. Has the e-commerce business increased your income?
eコマース事業によって収入は増えましたか？
(A) Significantly increased (B) Slightly increased (C) No significant change (D) Declined
(A)大幅に増加した **(B)**わずかに増加した **(C)**大きな変化はない **(D)**減少した

5. Through whom do you mainly manage e-commerce related matters?
あなたは主に誰を通じて電子商取引に関する事柄を管理していますか？
(A) Self (B) Family members (C) Specialised staff (D) Outsourced to a third party
(A)自分 **(B)**家族 **(C)**専門スタッフ **(D)**第三者への委託

6. Has the land size of your farm/shop changed since the introduction of e-commerce?
電子商取引導入後、あなたの農場・店舗の土地面積に変化はありましたか？

7. Has e-commerce prompted you to adjust your product range?
電子商取引によって、商品の品揃えを調整しましたか？
(A) Yes (B) No
(A)はい **(B)**いいえ

8. What channels do you mainly rely on for logistics and distribution?
物流・流通で主に利用しているチャネルは？
(A) Yamato (B) JP Post (C) Sagawa (D) Self-delivery (E) Others
(A)ヤマト **(B)**JPポスト **(C)**佐川 **(D)**自社配送 **(E)**その他

9. What are the peak months for e-commerce orders?
Eコマース注文のピーク月は？
(A) Spring (B) Summer (C) Autumn (D) Winter (E) No significant seasonality
(A)春 **(B)**夏 **(C)**秋 **(D)**冬 **(E)**大きな季節性はない

10. Do e-commerce sales drive offline (physical) visitor growth?
eコマースの売上はオフライン（実店舗）の来客数の増加を促進するか？
(A) Yes (B) No
(A)はい **(B)**いいえ

11. Does rural infrastructure (e.g., roads, internet) constrain your e-commerce growth?
地方のインフラ（例：道路、インターネット）は電子商取引の成長を制約しますか？
(A) A lot of constraints (B) Some constraints (C) Almost no constraints (D) No constraints at all
(A)多くの制約がある **(B)**いくつかの制約がある **(C)**ほとんど制約がない **(D)**まったく制約がない

12. Have you received any support from the government or local self-governance on e-commerce?
電子商取引に関して、政府または地方自治体から何らかの支援を受けたことがありますか？
(A) Yes (B) No **(A)**はい **(B)**いいえ

13. What platforms are mainly used for furusato tax donation product distribution?
ふるさと納税の商品流通で主に利用しているプラットフォームは？
(A) Rakuten Furusato (B) Furusato Choice (C) Satofull (D) Other platforms
(A)楽天ふるさと **(B)**ふるさとチョイス **(C)**サトフル **(D)**その他のプラットフォーム

14. Do you think the furusato tax system has helped you in your business?
ふるさと納税はあなたのビジネスに役立っていると思いますか？
(A) Very helpful (B) Somewhat helpful (C) Not very helpful (D) Not at all helpful
(A)非常に役立っている **(B)**やや役立っている **(C)**あまり役立っていない **(D)**全く役立っていない

15. How has labour demand changed with the introduction of e-commerce?
電子商取引の導入により、労働需要はどのように変化しましたか？
(A) 増えた **(B)** 減った **(C)**あまり変わらなかった

16. Do you feel that e-commerce has brought rural and urban areas closer together?
電子商取引によって農村部と都市部の距離が縮まったと感じますか？
(A) Yes (B) No
(A)はい **(B)**いいえ

17. Where are the main customers from?
主な顧客はどこの国の人ですか？
(A) Local (B) Kyoto City (C) Other cities in the Kansai region (D) National (E) Overseas
(A)地元 **(B)**京都市 **(C)**関西の他都市 **(D)**全国 **(E)**海外

18. What is the biggest challenge in e-commerce operations?
(A) Logistics costs (B) Lack of manpower (C) Difficulty in operating digital tools (D) Promotion and marketing (E) Other
Eコマース事業における最大の課題は？
(A)物流コスト **(B)**人手不足 **(C)**デジタルツール運用の難しさ **(D)**プロモーション・マーケティング **(E)**その他

19. Your confidence in the future development of e-commerce?
(A) Very confident (B) Somewhat confident (C) Unsure (D) Not confident
電子商取引の今後の発展に対する自信は？
(A) 非常に自信がある **(B)** やや自信がある **(C)**わからない **(D)** 自信がない

20. Are you willing to invest further in e-commerce?
(A) Yes (B) No (C) Depends on the situation
電子商取引にさらに投資する意欲はありますか？
(A)はい **(B)**いいえ **(C)**状況による

I: Multiple Choice Questions/Questionnaire (Type A/B/C/D)

A. Policy Implementation and Support Measures

1. What is the level of support provided by the municipality of Ayabe in the promotion of agricultural e-commerce?
A. Very high (with special budget and staff) B. High (implemented through partner organisations) C. Fair D. Hardly any
2. What are the priority groups that the municipality is currently supporting in the promotion of e-commerce?
A. senior farmers B. young entrepreneurial farmers C. SMEs D. all applicants
3. Are there specific grants or tax breaks to encourage farmers to participate in e-commerce?
A. There are explicit subsidies and exemptions B. There is some guidance C. Still under planning D. There is no relevant policy
4. To what extent do you think government-led e-commerce platforms collaborate with private market platforms?
A. closely co-operating B. collaborating but limited C. basically independent of each other D. no co-operation
5. In practice, what are the main difficulties in implementing e-commerce policies?
A. farmers' technical adaptability B. market expansion resources C. platform management capacity D. financial constraints

B. Spatial Development and Infrastructure

6. Has Ayabe City planned new e-commerce related spatial facilities (warehouses, logistics points) in recent years?
A. Clearly planned and implemented B. Under study C. Planned D. Not considered
7. Ayabe City relies mainly on storage and delivery of agricultural products?
A. Agricultural associations or cooperatives for their own warehousing B. City government to coordinate logistics C. Outsourced logistics companies D. Farmers to make their own arrangements
8. Do you think that the development of e-commerce has changed the distribution of agricultural land or farms in Ayabe City?
A. Significantly changed B. Partially adjusted C. Not much changed D. No change
9. What has been the main source of funding for e-commerce related infrastructure investment in recent years?
A. national projects B. local finances C. private enterprises D. mixed
10. Do you think more space should be reserved to support rural e-commerce in the future?
A. Very necessary B. Considerable C. Just keep the status quo D. Unnecessary

C. Platform Usage and Promotion Methods

11. What is the most common e-commerce platform used by the municipal government to assist farmers?
A. LUMINE® B. Amazon C. Local speciality platforms D. Farmers' own webpages
12. Does the government standardise the production of promotional materials (pictures, videos, branding)?
A. Yes, by the official B. Partially supported C. Dependent on co-operatives D. Mainly produced by farmers themselves
13. What is the main form of e-commerce content promotion?
A. Market exhibition + website promotion B. SNS community operation C. Cooperation with business organisations D. No promotion
14. What is the most advantageous category in the current e-commerce sales of agricultural products?
A. Organic vegetables B. Livestock products C. Speciality processed products D. Traditional handicrafts
15. Which type of farmers do you think are most likely to successfully enter the e-commerce market?
A. Young brand-conscious farmers B. Experienced family business owners C. Co-operative members with technical support D. Scattered smallholders

II: Medium-Sized Structured Questions (Focus on Data and Spatial Analysis)

1. Land Use Changes: What data is available on the proportional changes between agricultural land and other land uses in Ayabe City in recent years? Are there spatial distribution maps (e.g., Land Use Atlas) available for reference?
2. E-Commerce Growth in Agriculture: Over the past decade, what has been the approximate average annual growth rate of e-commerce-related agricultural income (e.g., through the "Furusato Nozei" system) in Ayabe City?
3. Farm Classification Data: Does Ayabe City have specialized statistical data on farm classifications and land use (e.g., rice paddies, orchards, forested land)? Have these classifications changed during the shift toward e-commerce?
4. Crop Suitability for E-Commerce: Among various crops (e.g., rice, tea, vegetables), which type is most suitable for e-commerce sales? Has this preference influenced production layouts?
5. Farmer Participation in E-Commerce: Does the municipal government track the percentage of farmers engaged in e-commerce? Are these farmers concentrated in specific areas?
6. E-Commerce Logistics & Warehousing: Is there annual data or planning documentation on the expansion of e-commerce-related storage and logistics land?
7. Impact on Remote Farmers: Has e-commerce development significantly increased income for farmers in remote areas? Are there any relevant data or case studies?
8. Sales via "Furusato Nozei": How has the annual total sales revenue from agricultural products through the "Furusato Nozei" system changed over time?
9. Profitability Comparison: Are there statistics on changes in profit margins for farmers using e-commerce platforms (compared to traditional sales channels)?
10. Land Use Efficiency & Revenue Differences: Are there significant differences in land use efficiency or revenue between e-commerce and non-e-commerce farmers in the city?

Yoshihito san in-depth interview

1. Looking back, how did you first start thinking about selling products through e-commerce? What made you make this decision at that time? 振り返ってみて、最初に商品をEC（電子商取引）で販売しようと思ったきっかけは何でし たか？ その時、どんな背景や理由がありましたか？

The main trigger for starting to sell products through an e-commerce website was attending a lecture about online sales. Before that, I had never even considered the possibility of selling my own products online. It was a seminar about an online sales platform called "STORES," and that inspired me to try creating my own online shop.
eコマースサイトで商品を販売し始めた主なきっかけは、ネット販売に関する講演会に参加したことです。実はそれ以前は、自分がインターネットで商品を販売できるなんて全く考えたことがありませんでした。「STORES（ストアーズ）」というネット販売プラットフォームに関する講演会で、その後、自分のネットショップを開設してみることにしました。

2. In the process of introducing e-commerce, Was there any moment that you found particularly difficult or exhilarating? Can you tell a specific short story? ECを導入する過程で、特に困難だったこと、あるいは嬉しかった瞬間はありましたか？ 具体的な エピソードを教えてください。

To be honest, even now I still find it quite difficult—especially figuring out how to convey the unique charm of our products to customers on the other side of the screen.
Of course, we know that it would be better to hire someone to help design the website or think about how to promote our products. But those things cost money. Even between me and my spouse, we sometimes have different opinions on how we should promote ourselves.
After creating some promotional materials myself, I still have no idea how customers actually feel about them. So right now, I'm continuing to struggle while trying out different things in online sales.
What makes me happy is that we can now introduce our tea farms and products through the website.
In the future, I would like to create English versions of our homepage, web shop site, brochures, and packaging.
正直なところ、今でもとても難しいと感じています。特に、ネットの向こう側のお客様に、自分たちが販売している商品の魅力をどう伝えるかという点が一番難しいです。
もちろん、誰かにウェブサイトのデザインをお願いしたり、宣伝方法を考えてもらったりすれば、もっと良くなるのは分かっています。でも、そういうことにはお金がかかりますし、夫婦間でもどうやって自分たちをアピールするかについて意見が分かれることがあります。
自分でいくつか宣伝用の資料を作ってみたのですが、お客様がそれをどう感じているのか、実際のところは分からないままです。今は悩みながらも、試行錯誤を重ねてネット販売に取り組んでいるところです。
嬉しかったところは、ウェブサイトを通じて茶園や商品について紹介できるようになったことです。
今後はホームページやウェブショップサイト、パンフレットやパッケージについても、英語表記に対応したものを製作してみたいです。

以前は農業や農村ビジネスでは「土地そのもの」が中心だったと思いますが、ECを通じ て土地や商品、自然に対する考え方は変わりましたか？

Right now, I can only change the things immediately around me.
But with the development of the internet, information can reach anywhere in the world, and we want to take this opportunity to share the charm of our tea with more people.
That's probably the biggest change for us.
今のところ、自分の身の回りのことしか変えることはできません。
ですが、インターネットの発展によって、情報は世界中のどこへでも届くようになりました。私たちもこの機会を活かして、自分たちのお茶の魅力をもっと多くの人に伝えていきたいと思っています。
それが、私たちにとって一番大きな変化かもしれません。

6. Through e-commerce, you have been able to sell your products in places you could not reach before. In these new networks, do you feel more like a farmer or a businessman? A businessman? Or something else?
ECを通じて、これまで届けられなかった場所にも商品を販売できるようになりましたが、新しいネットワークの中で、自分は「農家」だと感じますか？「ビジネスマン」でしょうか？ それとも別の何かでしょうか？

I still consider myself a farmer.
After all, before selling tea, everything starts with growing tea.
From taking care of the tea plants to harvesting and processing the tea—these are all part of agriculture in my opinion.
So I see myself as someone working in agriculture.
Even if we sell our tea online, as soon as we forget that our tea is an agricultural product that we have grown and produced ourselves and turn it into a business, I feel that the appeal of the tea will be lost.
私は今でも、自分のことを農業従事者だと思っています。
やはり、お茶を販売する前に、まずは茶葉を育てるところから始まります。
茶畑の管理から、茶摘み、製茶に至るまで、これらすべてが農業の一部だと感じています。
ですので、自分はやはり農業に携わる者だと思っています。
ECでの販売を通じても、私達のお茶が私達自身が栽培・製造した農産物であるところを忘れてビジネスになった途端に、お茶の魅力が無くなってしまうように感じます。

7. Have there been any subtle but real changes in the rural environment and community atmosphere in the Aya region as a result of e-commerce? For example: neighbourhood relations, inflow of outsiders, return of young people to their hometowns?
綾部地域において、ECによって農村環境や地域の雰囲気に細かいけれども確かな変化 はありましたか？例えば、近所付き合い、外部からの人の流入、若者のUターンなど。

It's not just us—other farmers around us have also started trying their hand at running guesthouses.
There are several people around us who are running farm stays.We started collaborating with them around 2023, bringing their foreign guests to our tea farm to tour the farm and have tea experiences.
I have named this activity "Ayabe Green Tea Tourism," and it made me realize that the tea plantation, which had previously only been our workplace, could become a place for interaction and provide people with unforgettable experiences in Japan through tea.

3. Have the changes brought about by e-commerce altered your daily pace of work, your relationship with your family/employees? e.g. level of busyness, communication style?
ECによる変化で、日々の仕事のリズムや家族・従業員との関係性に変化はありました か？例えば、忙しさやコミュニケーションの取り方など。

Right now, the online store is mainly managed by my wife. To be honest, our income from it is still quite limited. Fortunately, we have some long-term customers who regularly purchase the same items and continue to support our business.
Although I'm the one in charge of updating the main page, we're also busy with our farming work, so our schedule is very tight. Farm labor takes up a lot of time and energy, and often we simply don't have enough time to update the sales page.
Overall, this has made our lives even busier—there are always so many things we just can't get around to doing.
現在、このネットショップの運営は主に妻が担当しています。ただ、正直に言うと、そこからの収入はまだそれほど多くはありません。ですが、長くご利用いただいているお客様がいて、定期的に同じ商品を購入してくださっており、とても助かっています。
メインページの更新は私が担当していますが、私たちは農業の作業もしているため、時間的にはとても厳しい状況です。農作業は体力も時間も必要で、販売ページの更新まで手が回らないことも多いです。
全体的に言えば、ネット販売を始めたことで生活はさらに忙しくなったと感じています。常に何かしら手が回らないことがあって、やるべきことがたくさんあります。

4. How is the work of logistics, shipping, and platform operation specifically distributed and arranged in your daily life? Is there anyone who is quietly supporting behind the scenes?
物流、発送、プラットフォーム運営などの作業は、日常生活の中で具体的にどのように分 担・運営されていますか？裏方で支えている人はいますか？

The online orders we receive are handled by my wife, but if the orders come from people we know or through offline channels, I usually take care of them.
Overall, the agricultural business is something the two of us are supporting together. For shipping, we mostly use Japan Post (JP Post).
Items related to hometown tax donations will be shipped by Yamato Transport, and items related to the web shop will be shipped by Japan Post.
ネットからの注文対応は妻が担当していますが、知り合いや対面での注文については、私が対応することが多いです。
全体としては、私たち夫婦二人でこの農業の仕事を支え合っています。
配送には主に日本郵便（JP郵便）を利用しています。
発送は、ふるさと納税関連は「ヤマト運輸」で、ウェブショップ関連は日本郵便です。

5. In the past, many people in the agricultural/rural business focused on the land itself. Do you think e-commerce has changed the way you think about land, products, or nature?

This kind of activity has helped us build more connections with visitors from outside the region.
Especially when guests stay at the guesthouse we operate, they can enjoy tea made from leaves grown in our own tea fields and even visit the tea garden themselves.
My wife also manages our social media accounts to promote our tea farm and the guesthouse. This shift became especially noticeable around 2023—we could really feel the change taking place.
私たちだけでなく、周りの農業従事者たちも民宿の経営に取り組み始めています。
私たちの周りでも、農家民泊の経営をしている方がいくつかあります。そして彼らの外国人のお客様を私達の茶園に連れてきて、茶園を見学したりお茶の体験をしたり、そのような連携も2023年頃より始まりました。私はこの活動を「綾部グリーンティーツーリズム」と名付けていますが、私達の仕事場でしかなかった茶園が交流の場所となり、お茶を通じて日本での忘れられない体験を提供できるといったことに気づくことができました。
こうした取り組みを通して、外から来たお客様とのつながりが以前よりも深くなったと感じています。特に、私たちが運営している民宿に宿泊されたお客様には、自分たちの茶園で作ったお茶を味わっていただき、茶園の見学もしていただくことができます。
また、妻がSNSを通じて、茶園や民宿の情報発信も行っています。
このような変化は、2023年頃から特にはっきりと実感するようになりました。

8. For furusato tax, do you think it is more of an opportunity or a new competition? Are there any typical examples you can share?
ふるさと納税制度について、チャンスだと感じますか？それとも新たな競争だと思います か？典型的な事例があれば教えてください。

The Furusato Nozei (hometown tax donation system) started to show some problems around two or three years ago.
There were some problems with the hometown tax system shortly after it was launched.
Both the product prices and the donation amounts were raised significantly, which created what I think was an unhealthy competitive environment.
There was a time when the luxury and price of the return gifts was emphasized in order to gain popularity, and this deviated from the original purpose of hometown tax donations.
Although things have calmed down a bit since then, I still feel that the Furusato Nozei system needs to enter a new phase. It should allow people to propose how their tax money is used—to really think about where their contributions go.That's something I believe the system should seriously consider.

Also, I hope to see a reduction in the overall tax burden—not saying that Kyoto City or Ayabe should stop collecting taxes—but more consideration should be given to how those taxes are used to benefit taxpayers.If we could choose where our tax money goes, or even propose new ways to use it, I think Furusato Nozei would better align with the needs of this new era.

In today's Japan, the tax burden on citizens is quite large, and many people are worried about their current lifestyle and their savings for retirement.In such a situation, I think it is a good system for citizens to be more interested in how their tax money is used, and to be able to decide to some extent where and how it will be spent through the hometown tax donation program.Spending money, including taxes, is also an investment in creating a better society. I believe this system will help change the public's way of thinking.

Regarding hometown tax, several companies are running portal sites and competing with each other. As tea producers, even if it does not lead to customers purchasing our tea, we believe that the

advantage of using the hometown tax system to promote Ayabe green tea throughout Japan for free is great and is an opportunity.

ふるさと納税は、2〜3年前から少し問題が出てきたと感じています。
ふるさと納税は制度が始まって間もない頃、いくつか問題がありました。
返礼品の価格と納税額の両方がかなり高く設定されるようになり、健全とは言えない競争状態が生まれてしまいました。
人気を集めるために返礼品の豪華さや高さが重視され、ふるさと納税本来の趣旨から逸脱していた時期がありました。
今では少し落ち着いたように見えますが、それでもふるさと納税は次の段階に進むべきだと思っています。
自分の納めた税金がどこに使われるのかを提案できるような仕組み −そういう視点がこれからのふるさと納税には必要ではないかと考えています。

それから、税金の負担も少し減らせたらと願っています。もちろん、京都市や綾部市が税金を取らなくていいという意味ではありませんが、納税者にとってどう役立つのかをもっと考えてもらいたいです。
自分が納めた税金の使い道を選べたり、新しい使い方を提案できたりするようになれば、ふるさと 納税も今の時代に合ったものになるのではないかと思います。
今日の日本では、国民の税負担は非常に大きく、多くの人が現在の生活と老後の貯蓄について不安を抱いています。そのような状況においては、国民が税金の使い道にもっと関心を持ち、ふるさと納税を通じて納税先や使途ある程度決められることは良い仕組みだと考えます。税金も含めて、お金を使うということは良い社会を作っていくために投資することでもあります。国民の意識改革に役立つ仕組みだと考えます。
ふるさと納税については、いくつかの会社がポータルサイトを運営し、競争しています。茶生産者としては、たとえお客様の購入につながらなかったとしても、ふるさと納税制度を活用して無料で日本全国に綾部の緑茶を宣伝できることによる利点は大きく、チャンスだと考えています。

9. Have you encountered any new problems due to digitisation? For example, digital divide, information anxiety, technology dependency? How were these issues tackled or discussed in the villages?
デジタル化によって新たに生じた課題はありましたか？例えば、デジタル格差、情報不 安、技術依存など。これらの問題について村内ではどのように対応・議論されましたか？

I think the biggest issue right now is the inequality of information—especially when it comes to how people can use their disposable income.
I believe people fall into two categories: those who are aware that they have the ability to manage their money, and those who aren't even aware of that possibility.
In today's Japanese society, many people don't earn a lot of money, and yet their work consumes all their energy.
They simply don't have the time or mental space to think about how to effectively make use of what little money they have.
Only a small portion of people can actually take the time to think seriously about how to manage their finances.

Agriculture is about producing agricultural products, and we have believed that for a long time, but by encountering things through e-commerce and digital media, we can create a completely different kind of value.
In the world of tea, there is a saying that goes, "A once-in-a-lifetime encounter," and in this age where we can meet and communicate through e-commerce and digital information, we may be creating a new form of agriculture.
If I could give one piece of advice, I would say that meeting someone is the seed of the greatest happiness.
どれだけインターネットで発信しても、実際にお茶畑に来て、茶畑の様子を見て、自分の手で茶葉に触れてもらう体験には、やはり敵わないと感じています。
でも、現実的には、多くの人が遠く離れた場所に住んでいて、私たちの茶園について知る手段はホームページや紹介文しかありません。
正直なところ、世界に向けてどう発信するか、ウェブサイトを通じてどうやって多くの人に知ってもらうかという点では、まだまだ上手くできていないと思っています。
今、私たちが本当にやりたいのは、お茶にまつわる物語や、私たちの仕事、そして綾部という地域について、もっと多くの人に伝えていくことです。
さっき見てもらったように、子どもたちが茶の木を植えている姿もそうです。 今はその経験が子どもたちにとってあまり意味を持たないかもしれませんが、将来、都市で暮らし ているときに、ふと綾部での出来事やお茶のことを思い出してくれるかもしれません。綾部には仕事の選択肢があまりなく、多くの若者が高校進学や就職のために都市へ出て行きま す。
そんな中で、ふとしたときにここでの体験や、お茶にまつわる思い出を思い出してくれたら、とても嬉しいです。
いつか、「綾部にはこんな場所があったな」「あの時飲んだ抹茶、美味しかったな」と思い出してくれるだけで、私たちにとっては十分なんです。
農業は農産物を作るのが仕事であり、私達も長らくそう信じてきましたが、ECやデジタルを通しての出会いによって、もっと違った価値を創出できます。
お茶の世界には「一期一会」という言葉がありますが、私達はECやデジタルの情報を介して出会い、コミュニケーションできる時代に、新しいかたちの農業を創っていくのかもしれません。
アドバイスを1つできるなら、出会いこそ最高の幸せの種子だとお伝えしたいです。

Most can only go as far as using Furusato Nozei as a way to reduce their tax burden, and beyond that, they don't have the capacity to consider more options.
I think this points to a structural issue in national policy.
Unless something is fundamentally reformed, it will be difficult to change the situation under the current system.
We live in an age where we are overwhelmed with information, making it difficult to distinguish between information we need and information we don't need.
It has become much easier to obtain the information we want, but we are still working through trial and error without knowing what is correct information.
今の日本で一番の問題は、情報の不平等だと思います。
特に、自分が持っているお金 −余裕資金 −をどう使うかということに関して、それを意識できる人と、まったく意識していない人の2種類がいると感じています。
現代の日本社会では、収入がそれほど多くなくても、仕事だけで全てのエネルギーを使い果たしてしまっている人がたくさんいます。
そうなると、自分が持っているお金をどう有効に活用するかを考える余裕がないんです。そういうことをしっかり考えられる人は、実際にはごくわずかだと思います。 多くの人は、「ふるさと納税」を利用して少しでも税金を節約する、というところまでしか思い至らず、それ以上を考える時間も気力もないのが現状です。
これは、国の政策に根本的な問題があるからだと思います。
その根本を変えない限り、今の仕組みの中で状況を改善するのは難しいのではないでしょうか。
情報があふれる時代に生きていますので、本当に必要な情報なのか不要な情報なのか、見極めるのも難しくなっています。
欲しい情報は飛躍的に簡単に手に入るようになりましたが、何が正しい情報なのか、わからないまま試行錯誤しています。

10. If you were asked to give one piece of advice to young people or other farmers who want to operate through e-commerce in the future, what would you most like to say? Why?
将来、ECを活用して事業を行いたい若者や農家に対して、アドバイスを一つするとしたら 何を伝えたいですか？その理由も教えてください。

No matter how much we promote ourselves online, I feel like it can never truly compare to someone actually visiting our tea farm, seeing the fields with their own eyes, or touching the tea leaves with their own hands.But in reality, many people live far away and can only learn about our tea farm through our website and online descriptions.
To be honest, we're still not doing a great job when it comes to sharing our message with the world or helping people understand us better through the website.
What we really want to do now is share the stories of our tea, of the work we do, and even of life in Ayabe.Like you just saw—the children planting tea trees—even if those experiences don't mean much to them now, maybe one day, when they're living in a city, they'll remember what they did here.
Because in Ayabe, there aren't many job opportunities, so most kids go off to high school or work in the city after finishing school.
But if they remember the experiences they had here, and the stories connected to tea, I think that would be wonderful.
If one day they recall that Ayabe is a place like this, and remember drinking a delicious cup of matcha—that alone would be enough for us.

Author Photos CHINA

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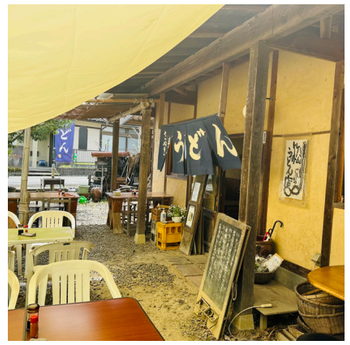







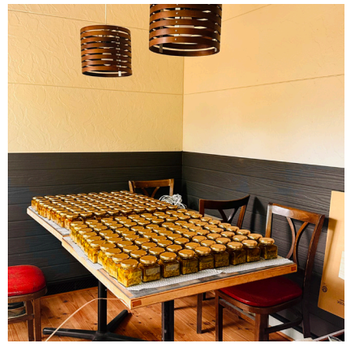


This may be the last assignment of my student life — or perhaps not. Either way, I know I have poured all my effort into making it as perfect as I can. I am truly grateful to everyone I met during this fieldwork, and to all those who offered help along the way.

My deepest thanks go especially to my advisors again — Giancarlo, Sofia, and Naoko — for meeting with me across time zones from all over the world, for their revisions, encouragement, and countless thoughtful suggestions. I sincerely hope that we will meet again, in the near future, in places that are even better, farther, and more peaceful than where we stand today.