

Research on Japanese Rural Planning, Construction, and Governance

Feng Xu, Wang Kai, Ma Keni

China Academy of Urban Planning and Design, Beijing 100037, China

Abstract: This paper delves into the rural orientation depicted in the 7th-edition Japanese spatial planning, rural planning guidelines and contents of typical regions, and rural governance in Japan. Under the guidance of local governments and village self-government committees, and by exploring and promoting regional features, Japanese rural planning, construction, and governance focus on the protection of traditional culture, characteristic industry revitalization, planning formulation, and construction behavior governance. Japan's experiences are significant for China in the aspects of future rural orientation and rural planning targets and content, as well as the division of rural grassroots governance.

Keywords: rural development orientation; rural planning; rural construction; rural governance; Japanese rural area

1 Research background and purpose

Ray Northam is an American urban geographer who posited a curve of urbanization. By his reckoning, urbanization in developed countries typically experiences an initial stage of development, followed by an acceleration stage and, finally, a terminal stage. It enters the terminal stage when modern agriculturalization is near completion and rural surplus labor is effectively transformed into an urban population. China is accelerating its urbanization, yet at a slowing rate.

Urban-rural development at the terminal stage is becoming a key subject in rural research. The research group for "Planning, Construction, and Governance of Villages and Towns" at the Chinese Academy of Engineering studied the rural development strategy, as well as rural planning, construction, and governance at the terminal stage in Uji City, Kyoto Prefecture, Japan, where industry and traditional folk customs combine to create a distinctive identity, as well as Kobe City, Hyogo Prefecture, which provides direction and has influence on rural planning and construction across the country, in relation to five particular aspects. These are: (1) rural and agricultural styles and landscapes at the terminal stage and how they are shaped; (2) land use policies, systems, and methods in rural areas; (3) public service facilities and infrastructure construction in rural areas; (4) operation and main tasks of village self-governing organizations; and (5) the roles of local governments and villagers' committees in rural planning and governance. Such valuable experience is summarized to provide reference for potential applicability to development trends in China's rural areas.

2 Japan's National Spatial Strategy (7th National Plan) & rural development strategy

Japan's new National Spatial Strategy (7th National Plan) was enacted in August 2015. It presents spatial strategy based on estimates of future population growth up to the year 2100. Population projections are divided into high-, medium- and low-fertility levels (Fig. 1). Japan is projected to experience an acute drop in population,

Received date: January 10, 2019; **Revised date:** March 28, 2019

Corresponding author: Feng Xu, senior planner of the China Academy of Urban Planning & Design. Major research field is urban planning and urban design. E-mail: fengxu1204@hotmail.com

Funding program: CAE Advisory Project "Planning, Construction, and Governance of Villages and Towns" (2014-ZD-11)

Chinese version: Strategic Study of CAE 2019, 21 (2): 034-039

Cited item: Feng Xu et al. Research on Japanese Rural Planning, Construction, and Governance. *Strategic Study of CAE*, <https://doi.org/10.15302/J-SSCAE-2019.02.016>

and the proportion of cities with population decline is expected to rise from the current 20% to 48%. In particular, three northern prefectures in Honshu Island and two southeastern prefectures in Shikoku are predicted to witness a marked population reduction of more than 60%.

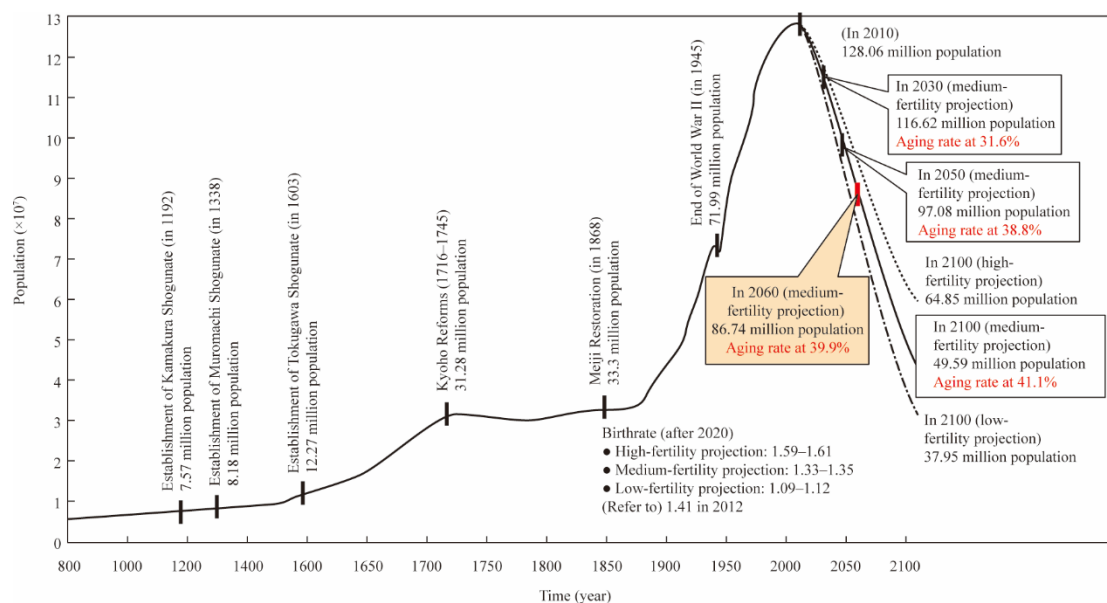


Fig. 1. Long-term population projections for Japan.

Source: *Long-term Land Outlook* (2011) by Ministry of Land, Infrastructure, Transport and Tourism of Japan.

The severe drop in population will inescapably have a significant impact on the landscape, such as an increase in abandoned land and more empty houses in rural areas, as well as the maintenance and management of forest and marine environmental resources. To tackle these problems, the National Plan aims to develop national land space that promotes interaction-led regional revitalization with a limited population. First, interaction refers to the active flow of people, goods, money, and information within each region. Second, it recognizes the flow between urban and rural areas, and between various departments in each region, to maintain regional vigor and create momentum for innovation. Finally, it fosters the flow between regions to support sound development of the land's spatial structure. Under the concept of interaction, the strategy of land space development is designed to create compact (in one region) and networked (between regions) development as well as a structure in line with regional characteristics and interregional collaboration. The concept of interaction will spark dynamism, both within and between regions, and become an engine for nationwide innovation.

Compactness (in one region) covers both urban and rural areas (Fig. 2). A compact city is formed in conjunction with railways and other public transportation systems, with an orderly and proper allocation of urban functions in residential zones. A compact village is situated around a concentration of public service facilities, such as schools, welfare facilities, convenience stores, village activity centers, clinics, post offices, and road stations, and connects to other regions via an outward public transportation system. Networks are formed between various rural settlements, rural settlements and cities, and independent metropolitan areas.

Following the guidance of such a spatial model, the primary task for rural settlements is to design the layout of compact villages with precision and improve public service facilities in order to avoid any extreme negative impacts likely to be caused by a sudden decline in the population or the number of villages. The second task is to facilitate interaction between rural and urban areas, especially areas where educational research and medical facilities are clustered, so as to maintain the necessary conditions for talent cultivation and survival for rural development.

Another focus for rural space strategy is disaster prevention. Since the heavy damage inflicted on northeast rural areas in Japan by the Great East Japan Earthquake in 2011, the National Spatial Strategy requires that any risk of large-scale disaster be avoided at the spatial level from the very outset of improvement or construction. Despite declining rural populations and the difficult management and maintenance of rural environmental resources, it requires multi-layered, substitutable, disaster-proof land space, through the integration of hardware and software countermeasures, and a complete rural disaster prevention and mitigation system.

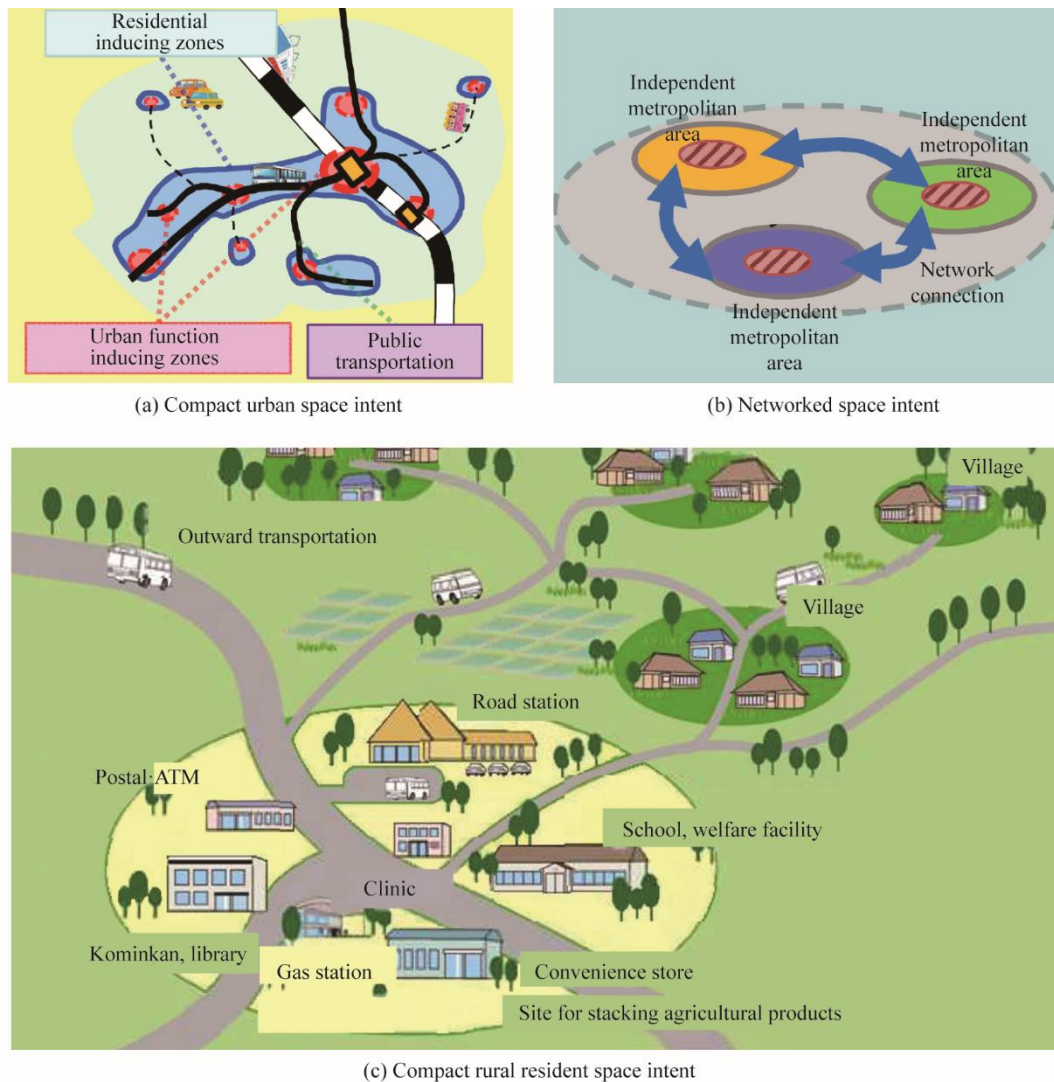


Fig. 2. Compact urban space and compact rural residential space intent.

Source: *Final Report of New National Spatial Strategy (National Plan)* by Ministry of Land, Infrastructure, Transport and Tourism of Japan.

3 Planning and self-governing characteristics of rural areas in Japan

3.1 Role of local governments and self-governing committees

As a consequence of local communities aging and villages being hollowed out, Japanese villages are generally in recession. To encourage more rural drive and activity, local governments and villagers' committees are prioritizing the revivification of villages, seeking to boost income, increase awareness and attention, and attract young people to live locally. A typical case is the Shirakawa area of Uji City, Kyoto Prefecture, which is renowned for its Matcha products and is featured on the World Cultural Heritage List.

The Uji municipal government recently launched a regional revitalization campaign aiming to protect traditional neighborhood landscapes and illustrate the unique charm of Uji. This was in response to a warning from UNESCO about damage to the traditional landscape caused by concrete high-rise buildings, as well as the prominent consequence of depopulation set in motion by the recession of traditional industries. Cultural protection, urban and rural planning, and agricultural development are covered by a series of targeted rules and regulations, such as repair compensation measures for traditional buildings. In terms of the renovation and repair of such buildings, Uji is bound to comply with landscape planning stipulated by a national law, the *Landscape Protection Law*, and relevant state regulations on the selection of important cultural landscapes. This is in addition to the community building plan formulated by self-governing community committees, who are recognized by municipal

governments. The Uji government also values raising awareness of the need to protect regional traditions and seeks to do so through an array of civic activities: organizing regular meetings of citizens, transforming buildings to preserve traditional landscapes, and even hosting stamp collecting events, with the philatelic focus on traditional and cultural stamps [1].

Under the direction of the “hardware” of the Uji municipal government, the Shirakawa Self-governing Committee has taken on a vital role in the operation of “software.” According to autonomous regulations, its main tasks include achieving the following six goals: (1) to maintain the historical culture, landscape, and traditional folk activities; (2) to promote the Uji tea industry; (3) to help residents lead a better life; (4) to care for the health of the elderly and children and satisfy their living needs; (5) to maintain the growth environment of diverse organisms; and (6) to promote the unique charm of the Shirakawa region [2]. On the advancement of the tea industry and the pursuance of regional revitalization, the committee will strive to apply for World Cultural Heritage status for its tea, aspiring to bring to the tea a prestige equivalent to that of French wine, attracting visitors from across the world and young labors. In addition, it regularly organizes civic events to enhance exchanges between villagers and jointly undertakes their daily management and maintenance, as well as taking responsibility for traditional folk heritage. Through these regular activities, regional cohesion and common values are formed, and self-governance enhanced, while close contact is maintained with the wider community.

3.2 Rural planning and construction measures

Kobe City leads the exploration of rural land use and space management and is located in an economically developed area [3]. It is divided into an urbanized zone, a human-nature symbiotic zone, a green space, and a sacred zone, according to spatial classification. Among these different sections, the human-nature symbiotic zone features rural production and living space.

There are two parts within the regulations which guide the planning and construction of the human-nature symbiotic zone. First, the zone is subdivided into environmental and agricultural protection areas, and a village living area. Second, the regulations require that a rural construction council be established, and agreements to finalize rural construction planning prepared, along with a spatial improvement scheme for advancing rural construction. From the establishment of the council to the introduction of the rural construction plan, the process and participants are as follows: the establishment of the rural construction plan (residents) → government identification of the village construction agreement (mayor) → activities for the Rural Construction Council (villagers, experts, administrative staff) → preparation of the rural construction plan (villages, experts, administrative staff) → identification of the rural construction planning (mayor) → rural space improvement, based on the rural construction plan (the council, residents) [4].

Table 1 shows the core substance of the rural construction plan and land use project construction standards. To date, 159 of the 167 villages in Kobe have established councils, and 93 have prepared rural construction plans. The rural planning intentions are shown in Fig. 3.

4 Japan’s experience as reference for China

This survey of Japan’s villages offers experience that is relevant to China’s rural development orientation and rural planning and governance, considering the actual situation and periodic development characteristics of rural areas in China.

(1) A template has been provided for rural positioning and styles, as well as an agricultural development model during periods of population decline.

Japan is considered to be a highly urbanized country with a stable urbanization rate of around 70%. At present, China’s urbanization rate exceeds 50%. Using population growth data and trend judgment, the research group calculates that China’s urbanization rate will peak at 70%, approaching the stable value of Japan’s urbanization rate. Consequently, for China’s rural development, lessons can be learned from Japan’s nationwide, urban–rural public service facilities and infrastructure construction, as well as its convenient rural production, living conditions, attractive environment, and exquisite landscapes.

Table 1. Land use standards for “human-nature symbiotic zone” in Kobe City.

Name of facilities		Agricultural protection	Village residence	Environmental protection	Specific uses	
					A area	B area
Greenhouse, nursery facilities		○	○	○	○	×
Farmhouses, agricultural products collection and delivery facilities		△*1	○	○	○	×
storage facilities for agricultural product, storage warehouses for agricultural machinery		△*1	○	○	○	○
Barn		○	×	○	×	×
Fertilizer stacking facilities		○	×	○	×	○
Farm house, ☆ separate house, ☆ meeting place		△*1	○	○	○	×
☆ Agricultural processing facilities	Less than 500 m ²	△*1, 2	△*2	△*2	○	○
	More than 500 m ²	△*1, 3, 4	×	△*3, 4	△*4	△*4
☆ Daily life facilities	Retail stores, etc.	△*1, 2, 4	○	○	○	×
	Agricultural machinery repair factories	△*1, 2, 4	△*2, 4	△*2, 4	△*2, 4	○
☆ road service facilities ☆ gas stations ☆ convenience stores along the road		△*1, 2, 4	△*2, 4	△*2, 4	△*4	×
☆ Social welfare facilities ☆ medical facilities ☆ Schools		△*1, 2, 4	△*2, 4	△*2, 4	△*4	×
Solar power generation facilities	Less than 1000 m ²	△*1, 2	△*2	○	○	○
	More than 1000 m ²	△*1, 2	△*2	△*2	△*2	○
☆ Sports and leisure facilities	Less than 3000 m ²	△*1, 2, 4	△*2, 4	△*2, 4	△*4	×
	More than 3000 m ²	△*1, 3, 4	×	△*3, 4	△*4	△*4
Rural construction facilities	Buildings and structures with the village council as the main body	△*1, 3, 4	△*3, 4	△*3, 4	△*3, 4	×
	Structures set up and operated by rural settlement and business planners	△*1, 2, 4, 5	△*2, 4, 5	△*2, 4, 5	△*2, 4, 5	×
Parking lot and material storage places (less than 1000m ²) related to village life, used for village internal affairs, and by corporate personnel		△*1, 2, 4	△*2, 4	△*2, 4	△*2, 4	○
Parking lot, material storage places, car washes		△*1, 3, 4	×	△*3, 4	×	△*4
Material storage places (specifically, the structures meeting the following two conditions) more than 10m in height, processing operation by heavy machinery; used for 1/3 of the whole year, and processing on 1/3 area of base		×	×	△*3, 4	×	△*4
Waste car placement, mining sites and waste treatment plants		×	×	△*3, 4	×	△*4
Assumed facilities related to public utilities		△*1, 2, 4	△*2, 4	△*2, 4	△*2, 4	△*4
Temporary material placement and parking lot						

Source: Kobe municipal government.

Note: Legend ○ Allowed; △ *: Allowed with conditions; ×: Not allowed; ☆: Facilities subject to development permission

(according to the City Planning Law).

Conditions: *1 When the land is farmland, there is no substitute land. *2 Approved by the Rural Construction Council. *3 The land use has been positioned in the rural construction plan. *4 The following items must be confirmed according to the plan: (1) For land use, agricultural operation, life, improvement, protection, utilization of natural environment, and protection and formation of rural landscapes in the surrounding areas must be fully taken into account. (2) For setting up accompanying buildings (including structures), the location, scale, and shape of the buildings shall be suitable for the protection and formation of an appealing rural landscape in the surrounding areas. (3) Green space conditions for land use area: a. Proportion of green area and floor area, as shown below: when the floor space is less than 1 hm², the proportion of green space must be more than 10%; when the green area exceeds 1 hm², the proportion of green space must be more than 20%. b. For plant greening, it is necessary to consider the landscape of public places, such as roads. (4) For temporary land use projects, the plan for land restoration after use should be clarified. In this case, the greening arrangement can be separated from the surrounding environment. *5 Land use should be positioned in the rural settlement business plan.



Fig. 3. Japan's rural planning intention.

Source: *Rural Planning* (2012) by Yutaro Senga.

First, lessons pertaining to rural strategic positioning can be specified. The concept of compact village should be adopted to establish and improve concentrated public service facility areas and enable the development of rural settlements within proximity, so that rural areas are better able to bear periods of hollowing out. This guarantees basic living conditions in hollowed-out villages and preserves conditions for future development. Yet, even more important is searching for ways and means to develop and innovate by utilizing opportunities in other rural and urban areas and adjacent regions, instead of confining exploration of potential within a single village.

Second, China can learn lessons from Japan on rural development models. The boundary between urban and rural areas has become blurred and communication channels have become more convenient, as the urbanization drive shifts from focusing on quantity, propelled by government policy, to a spontaneous increase in quality, after facility improvement. In rural areas, the main development objectives can be considered to be an improvement in ease of production and living, a cultivation of diversified industrial forms, and the development of a beautiful living environment. Not only do rural areas narrow the gap with urban areas, they also offer scenic landscapes, comfortable space, complete facilities, adequate welfare guarantees, and stable income, all of which combine to have a strong reverse appeal compared to a city environment.

Last, in terms of the development of an agricultural industry, Japan's agricultural production not only pursues high output, made possible by modern means of production, it also places importance on the organic and green

agricultural products created by traditional agricultural cultivation [5]. Going forward, China's agricultural development should also strive to achieve the integration of agricultural modernization and traditional agricultural cultivation. This would ensure a degree of food self-sufficiency and aspire to meet people's new dietary and food quality needs that accompany improved living standards. It also helps to cultivate outstanding local agricultural brands.

(2) With the identification of objectives and contents of rural planning, and the clarification of rural orientation at different stages of national development, rural planning is goal-oriented and facilitated by villagers, experts, and governments.

From the "Rural Space Museum" in the 1990s to the "National Land Space with Multi-functional Attributes" at the beginning of the 21st century, the Japanese government has shown clear positioning for rural areas in all of its previous national plans. Based on such positioning, the rural plan's core elements are identified from the points of view of space environment and multi-field collaboration (social, economic, cultural, land). In the process of preparation, attention has been paid to the opinions and resolutions of villagers' self-governing organizations, expert guidance, and government assistance to accomplish targeted and feasible rural planning in the form of tripartite cooperation.

In contrast, although China's urban-rural integration has become more consensual by involving villagers in the preparation of rural planning, the lack of clear and specific direction makes it difficult to effectively guide rural planning. While planning programs and proposals seem to be comprehensive, they deliver no focus for actual implementation. In addition, due to a lack of fundamental change in macroeconomic development and grassroots governance models, deep-rooted thinking still prevails, placing more emphasis on commerce than agriculture. A practicable rural plan can only be made from the perspective of villagers, and implemented through coordinated efforts by villagers, experts, and governments, in order to achieve the original goal of improving production and fulfilling the needs of villagers for a decent living environment.

(3) Efforts should be made to establish self-governing organizations for the rural grassroots community, with common values and improved self-governance, and with channels and effective mechanisms for their participation in local development.

Japan did not introduce its rural self-governing organizations at the commencement of its rural plans. Instead, these organizations emerged during the process of safeguarding the common interests of villagers and solving problems in the villages. As common values were formed in long-term exchanges, and cooperation nurtured between villagers, fledgling rural alliances gradually matured into unified organizations. In civil organizations, special emphasis is placed on instilling responsibility into, and providing compulsory education for, the younger generation. Cleaning up garbage, dredging river channels, maintaining a village environment, and rehabilitating farmland water conservancy make up the largest proportion of civil society activities, with a high participation from villagers. In these collective enterprises, villagers' deep understanding of their villages' main problems and development direction help them to have clear and common goals for rural planning and construction projects. This comes alongside an appreciation of their personal responsibilities and obligations. They can, additionally, actively contribute to the implementation of construction projects.

In China, villagers are also invited to rural planning discussions, yet such groups, temporarily convened by the grassroots government, scarcely form common values or realize their own responsibilities while focusing on immediate interests. As a result, it is difficult for them to reach unified goals or consensus or incorporate their efforts into final planning results. As planners lament the low education level of villagers in China, they should realize that the participation mechanism for villagers is twinned with the promotion of the "wisdom of the people," and both are part of a long-term process which, as in Japan, might see a transition from villagers' casual congress to an organized framework for their engagement. It is the formation and stability of this internal cooperation mechanism that underlies the most important social foundation for rural planning and governance.

References

- [1] Uji City Town Hall. Uji City historic landscape maintenance and promotion plan [R]. Uji: Uji City Town Hall, 2012.
- [2] Uji City Shilakawa Self-governing Organization. Shilakawa selfgoverning ordinance [R]. Uji: Uji City Shilakawa Self-governing Organization, 2016.
- [3] Senga Y. Rural planning [M]. Tokyo: Asakura Syoten Press, 2012.
- [4] Kami Kitakosatodokuri Agreement. Kami Kitakosatodokuri planning book [R]. Kobe: Kami Kitakosatodokuri Agreement,

2015.

[5] Teruoka S. 150 years of Japanese agriculture (1850—2000) [M]. Beijing: China Agricultural University Press, 2012. Chinese.