Policy Characteristics, Value Dilemmas, and Planning Responses in Rural Construction in Megacities: A Case Study of Shanghai

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Abstract

Guided by the Rural Revitalization Strategy, Shanghai has introduced a series of policies to promote rural construction, which have improved rural development and spatial quality. Yet as the multiple values of Shanghai's countryside have become increasingly visible, existing rural construction policies remain insufficient to support the higher strategic expectation that rural areas should serve as important carriers of urban core functions and strategic spaces for enhancing urban capacity and core competitiveness. In practice, these policies still encounter operational constraints that affect the efficient delivery of rural construction activities, impede the optimization of rural spatial layouts, and hinder the inflow of development factors into rural areas. From the perspective of value generation, and drawing on practical cases of rural construction in Shanghai, this paper examines policy difficulties across three stages: pre-construction regulatory control, interdepartmental coordination during construction, and post-construction operation and maintenance. It identifies three corresponding value-generation dilemmas: weak local adaptation, insufficient coordination and integration, and inadequate institutional support. Finally, from the dimensions of value cognition, value synergy, and value consensus, the paper proposes planning responses through the construction, formulation, and implementation of the rural planning system.

Keywords

Megacities; rural construction; rural value; rural policy; rural planning; Shanghai

Introduction

The *Shanghai Urban Master Plan (2017-2035)* (hereafter the "Shanghai 2035 Master Plan") explicitly proposes that rural areas should become an important component of the metropolitan spatial system and of the functional system of an international metropolis. In 2018, Shanghai's principal leaders emphasized that the city should understand the significance of implementing the Rural Revitalization Strategy "from the height of building an excellent global city and a socialist modern international metropolis with worldwide influence"①. In 2022, Shanghai further advanced the strategic requirement that rural areas should become important carriers of the city's core functions.

Shanghai has therefore actively promoted rural construction policies. These policies have achieved significant results in optimizing rural spatial patterns, protecting ecological environments, and developing rural industries. However, long-standing structural problems continue to constrain the generation of rural spatial value. The operation of rural construction policies also shows clear limitations. A more systematic, integrated, and supportive policy system is urgently needed, and spatial planning, which is closely linked to this system, should also innovate in a timely manner and play a more active role.

1 Main Characteristics and Key Issues of Rural Construction in Shanghai

1.1 Limited Development Space and Scarce Construction Land in Rural Areas

The Shanghai 2035 Master Plan sets an upper limit for construction land. At present, rural space accounts for about 58% of Shanghai's municipal area [1]. However, according to the Shanghai 2035 Master Plan, construction land outside the urban development boundary accounts for less than 20% of total construction land, and more than 200 km2 of construction land still had to be reduced by 2022 [2]. This indicates that development space in Shanghai's countryside is extremely scarce, especially lawful and compliant construction land, which is usually the most economically potent land type and has the most direct influence on rural development.

At the same time, Shanghai has increased the actual protected area of permanent basic farmland under ministerial management from 1.5 million mu to 2.02 million mu, while the reserve cultivated land available for requisition-compensation balance is less than 300,000 mu [2]. The space that can be adjusted for development is therefore highly limited.

1.2 Improved Spatial Quality but Slow Inflow of Development Factors

After years of environmental improvement and the consolidation of inefficient construction land, the spatial quality of Shanghai's countryside has improved markedly. Nevertheless, spatial construction remains insufficient in attracting development factors and supporting multiple functions.

As an international metropolis, Shanghai has strong rural resource advantages. In 2022, the contribution rate of agricultural science and technology progress in Shanghai reached 80.13%, indicating a clear advantage in technological factors. Shanghai's countryside also has great potential for market-oriented services. As the metropolitan region matures, it can be expected to serve a potential consumer group of more than 70 million people in the Shanghai metropolitan area, with per capita GDP exceeding USD 20,000 [1].

However, despite increased support for new rural industries and new rural business forms since the implementation of the Rural Revitalization Strategy, and despite the emergence of functions such as pastoral offices and rural innovation and entrepreneurship platforms, the inflow of development factors into rural areas still faces major obstacles. The urban-rural income gap remains evident.

1.3 Gradual Optimization of Spatial Patterns but Persistent Difficulty in Systemic Coordination

New rural development creates new spatial demands. Whether for modern agriculture, new industries and business forms, or the introduction of new development factors, timely provision of construction land quotas is needed, but so too are coordinated adjustments and linked optimization of contiguous spatial patterns.

Yet rural space is subject to refined, department-based control. Systematic optimization of spatial patterns requires coordination among various control red lines, compliance with departmental procedural requirements, and avoidance of agricultural seasons during implementation. As a result, land adjustment and layout optimization are time-consuming and procedurally complex. Maintaining existing spatial patterns is common, while fragmented land parcels, suboptimal layouts, and inefficient spatial use remain difficult to address. These conditions further limit the generation of rural spatial value.

2 Main Characteristics of Shanghai's Rural Construction Policies from the Perspective of Value Generation

Rural construction policy is a broad concept. This paper focuses on policy items that directly intervene in rural spatial development and guide rural construction behavior. In Shanghai, these involve planning and

natural resources departments, agricultural and rural affairs departments, housing and urban-rural construction departments, greening and city appearance departments, water affairs departments, and other line departments. They include the allocation of spatial resources, guidance for different types of construction activities, and financial support.

In recent years, Shanghai's rural construction policies have undergone clear staged evolution in response to national policy orientations, and cognition of rural spatial value has also changed significantly. Around 2012, Shanghai's rural construction entered a new stage of actively responding to the impacts of urbanization and rural industrialization. At that stage, attention focused mainly on ecological restoration, improvement of living environments, and enhancement of basic public services. Rural spatial value was still largely understood in traditional terms, such as serving agricultural production and supplying construction land quotas.

After the 19th National Congress of the Communist Party of China, the Rural Revitalization Strategy promoted a richer set of rural construction policy projects in Shanghai, and the cognition of rural spatial value changed profoundly. Rural areas came to be understood as a "scarce resource of the megacity" and as "carriers of urban core functions", while their economic, ecological, social, and cultural values were increasingly emphasized (Figure 1). From the perspective of value generation, the following characteristics can be identified.

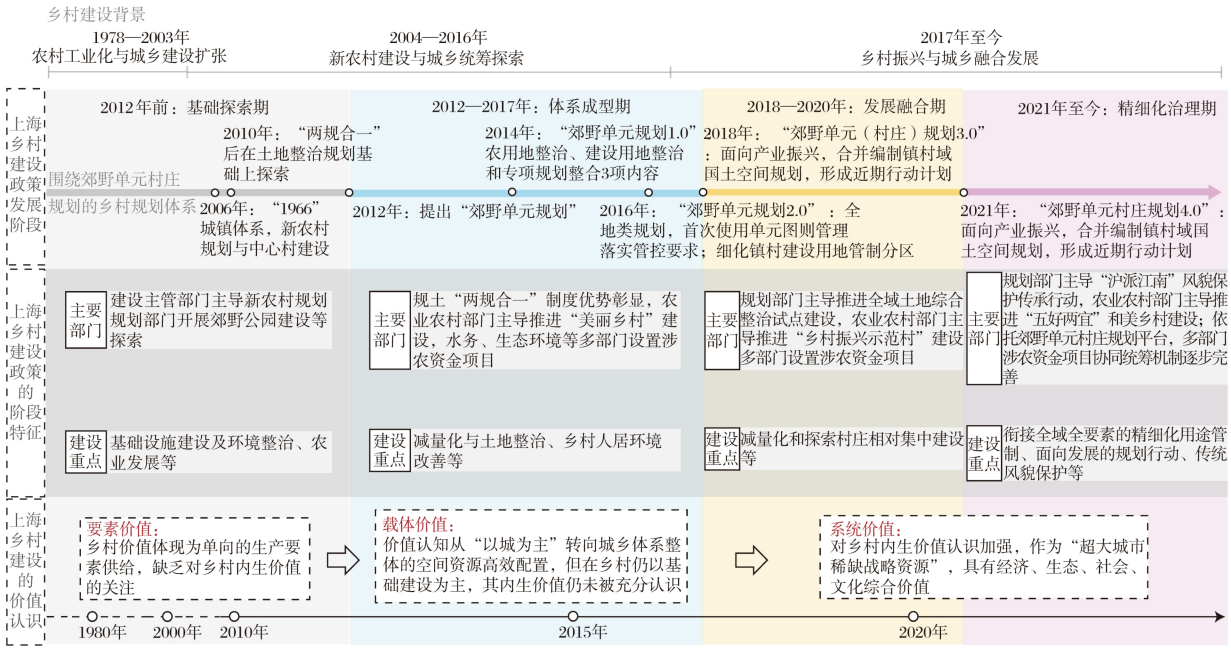

Figure 1. The evolutionary trajectory of rural construction policies in Shanghai

2.1 "Cost Reduction - Efficiency Enhancement": The Value-Generation Orientation of Shanghai's Rural Construction Policies

The ultimate goal of public policy is to create public value [4]. Value, as a universal relationship in human society, expresses the significance of an object to a subject [5-6]. The value of the countryside is embodied in the products and services that rural areas can provide to human society. Under concepts such as urban-rural equivalence, a growing consensus has formed around the multiple values of the countryside [7], covering economic, ecological, social, and cultural dimensions [8-9].

In terms of value generation, rural construction policies can be summarized through two main pathways: "cost reduction" and "efficiency enhancement". By regulating the quantity, mode, and use of factor supply in rural construction, and by adjusting constraints on the actions of rural construction actors, including permits and technical standards, rural construction policies directly influence the direction and process of construction. They either reduce construction and operating costs by lowering uncertainty and negative externalities, or promote construction activities and improve the efficiency and use value of space (Figure 2).

Whether rural construction policies can achieve the goal of value generation depends on coordination among multiple factors. First, the "situational" nature of public policy value generation [4] requires that policy value orientations adapt to their background context and therefore possess local relevance. Second, policy implementation capacity, including the coordinated operation of policy tools and the ability to integrate resources, provides the guarantee for value generation. Third, stable policy support networks and institutional design form the foundation of value generation, including social trust and the support of multiple actors.

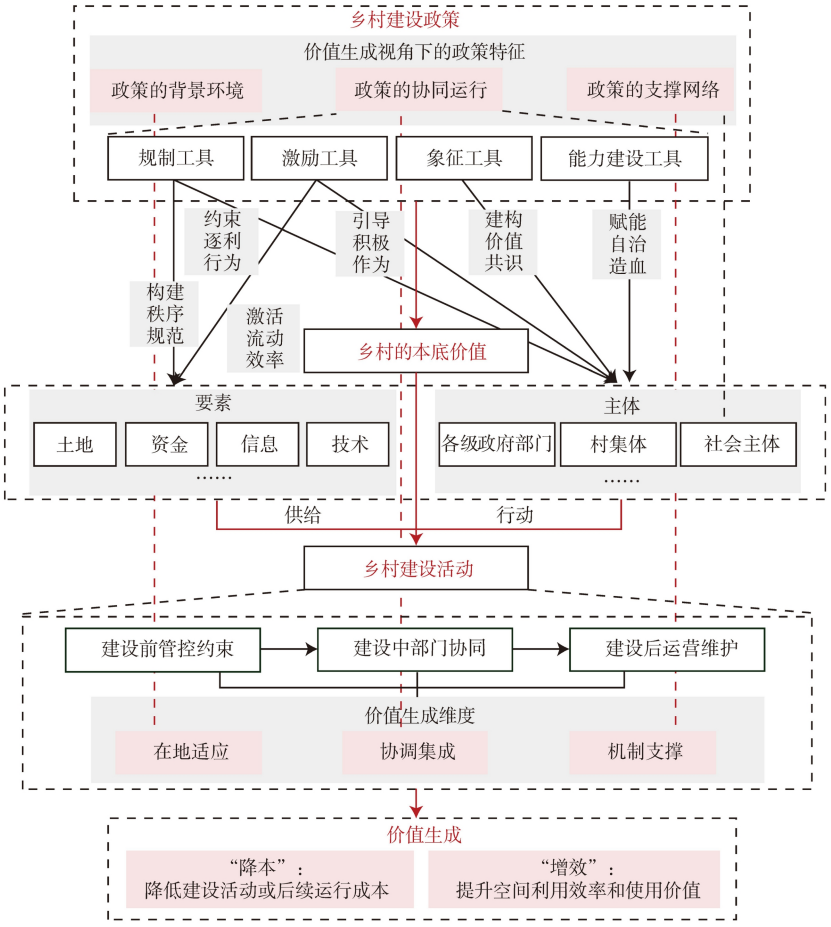

Figure 2. Illustration of value generation in Shanghai's rural construction policies

2.2 Balancing "Baseline" and "Development" Values: The Background Context of Value Generation in Shanghai's Rural Construction Policies

As metropolitan countryside increasingly carries multiple functions, the key values of Shanghai's countryside include not only baseline values such as ecological stability, agricultural production support,

and food security, but also development values as a "strategic space for enhancing metropolitan core competitiveness". These include the economic value generated by increasingly diverse new rural industries and business forms, as well as the aesthetic and cultural value embedded in the traditional "Shanghai-style Jiangnan" landscape pattern.

From a traditional perspective, protecting rural ecological environments, traditional textures, and historical and cultural resources often implies rejecting new forms of change. Yet the generation of rural value urgently requires both external and internal development and transformation. Therefore, the key to sustainable value generation in rural construction is to protect baseline values while overlaying and reasonably optimizing spatial patterns, promoting rural construction and development, and achieving balanced co-prosperity between baseline values and development values. This necessarily creates urgent demands for the coordination of rural construction policies across departments.

2.3 Coordination among "Regulatory - Incentive - Symbolic - Capacity-Building" Instruments: The Operation of Policy Tools in Shanghai's Rural Construction

The combined operation of multiple types of policy tools is a basic feature of Shanghai's rural construction policies. Effective coordination among policy tools provides the institutional guarantee for policy implementation capacity [10]. Drawing on the Schneider-Ingram model [11], the policy tools used in Shanghai's rural construction can be divided into four categories: regulatory instruments, incentive instruments, symbolic instruments, and capacity-building instruments (Table 1).

Regulatory instruments use mandatory constraints to standardize behavior in rural construction and are concentrated mainly in land-use control and construction management. The other three categories usually operate in combination across different aspects of rural construction, including spatial layout optimization, farmland construction and agricultural development, ecological environmental protection, landscape protection, and cultural inheritance. Incentive instruments are mostly established by different agriculture-related departments and guide rural construction through subsidies, awards, preferential policies, and related measures. Symbolic instruments shape cognition and behavior through guidelines, publicity, and value-oriented guidance. Capacity-building instruments strengthen the professional capacities of relevant personnel through education and training. Overall, policy operation in Shanghai shows a multi-departmental combination in which regulatory instruments protect the baseline, incentive instruments guide development, symbolic instruments build consensus, and capacity-building instruments promote long-term sustainable development.

In addition, the rural planning system plays an important integrative role in the operation of Shanghai's rural construction policies. It integrates planning formulation, planning management, and action mechanisms [12-13]. It is not only the basis for all rural construction activities, but also the carrier through which the value concepts of rural construction policies are transmitted and the core tool through which value orientations are translated into spatial arrangements.

Table 1. Major Policy Tools in Shanghai's Rural Construction Activities

Policy field	Tool type	Policy item	Competent department
Land-use control and construction management	Regulatory	Countryside-unit village planning and other territorial spatial plans at different levels	Planning and natural resources department

Policy field	Tool type	Policy item	Competent department
Land-use control and construction management	Regulatory	Issuance of rural planning and land opinion documents	Planning and natural resources department
Land-use control and construction management	Regulatory	Approval for agricultural land conversion and land supply	Planning and natural resources department
Land-use control and construction management	Regulatory	Issuance of rural construction planning permits	Planning and natural resources department
Land-use control and construction management	Regulatory	Issuance of construction permits	Housing and urban-rural construction department
Land-use control and construction management	Regulatory	Construction staking review or filing	Planning and natural resources department
Land-use control and construction management	Regulatory	Planning and natural resources completion acceptance	Planning and natural resources department
Land-use control and construction management	Regulatory	Completion acceptance	Housing and urban-rural construction department
Land-use control and construction management	Regulatory	Issuance of real estate ownership certificates and registration certificates	Planning and natural resources department
Village-wide construction and development	Incentive	Beautiful Countryside demonstration village, Rural Revitalization demonstration village, and "Five-Good and Two-Suitable" harmonious countryside pilot programs	Agricultural and rural affairs department
Village-wide construction and development	Symbolic	Village design guidance	Planning and natural resources department
Village-wide construction and	Capacity-building	Rural responsible planner system	Planning and natural resources department

Policy field	Tool type	Policy item	Competent department
development			
Spatial layout optimization	Incentive	Integrated territorial consolidation pilot construction	Planning and natural resources department and others
Spatial layout optimization	Incentive	Relatively concentrated farmers' housing projects	Housing and urban-rural construction department; planning and natural resources department
Spatial layout optimization	Incentive	Reduction of inefficient construction land	Planning and natural resources department
Spatial layout optimization	Incentive	District-level consolidation and reclamation projects	Planning and natural resources department
Farmland construction and agricultural development	Incentive	High-standard farmland construction	Agricultural and rural affairs department
Farmland construction and agricultural development	Incentive	Facility vegetable field construction	Agricultural and rural affairs department
Farmland construction and agricultural development	Incentive	Modern agricultural facility area pilot construction	Agricultural and rural affairs department
Farmland construction and agricultural development	Incentive	Special projects for modern agricultural development	Agricultural and rural affairs department
New rural industries and business forms	Incentive	New rural industry and business-form projects	Agricultural and rural affairs department; planning and natural resources department; development and reform

Policy field	Tool type	Policy item	Competent department
			commission
Ecological environmental protection	Incentive	Integrated ecological clean-small-watershed improvement	Water affairs department and others
Ecological environmental protection	Incentive	Water-beautiful countryside pilot construction	Water affairs department
Ecological environmental protection	Incentive	River improvement, including new river channels	Water affairs department
Ecological environmental protection	Incentive	Woodland construction	Greening and city appearance department
Landscape protection and cultural inheritance	Incentive	Pilot construction for the protection and inheritance of Shanghai-style Jiangnan landscape	Planning and natural resources department
Landscape protection and cultural inheritance	Symbolic	Planning, design, and construction guidance for countryside landscape	Planning and natural resources department
Landscape protection and cultural inheritance	Symbolic	Famous historic and cultural towns and villages	Housing and urban-rural construction department
Living environment improvement	Incentive	Rural community life-circle projects	Planning and natural resources department
Living environment improvement	Incentive	Rural road construction projects, including major and medium repairs under the "Four-Good Rural Roads" program	Transport department
Living environment	Incentive	Beautiful courtyard and "small three gardens" construction	Agricultural and rural affairs department

Policy field	Tool type	Policy item	Competent department
improvement			
Living environment improvement	Symbolic	Guidance for the management of rural villagers' housing construction	Housing and urban-rural construction department; agricultural and rural affairs department and others

2.4 Participation of Multiple Actors: The Support Network in the Operation of Shanghai's Rural Construction Policies

The operation and value generation of Shanghai's rural construction policies are based on a support network led by government departments and state-owned enterprises, with the joint participation of town and village collectives, social actors, and other stakeholders.

As the value of Shanghai's countryside has gradually become more visible, the number of actors participating in rural construction has increased. This has injected new vitality into rural development and has become an important sign of the inflow of urban development factors and of deeper urban-rural integration. In Shanghai's countryside, innovative practices continue to emerge, including village collectives receiving shares and dividends, social capital and town collectives establishing joint ventures, and third-party operators being introduced for whole-village operation.

The involvement of multiple actors inevitably challenges the long-established management model in which "the village collective makes the decisions". It also urgently requires rural construction policies to improve corresponding mechanisms for benefit distribution and long-term operation and maintenance.

3 Value-Generation Dilemmas in Rural Construction Policies

Although past achievements are evident, Shanghai's rural construction policies still face constraints in practice. This section analyzes the value-generation dilemmas of rural construction policies before, during, and after construction from three aspects: local adaptation, coordination and integration, and institutional support.

3.1 Pre-Construction Regulatory Control: Insufficient Elastic Adaptation and the Obstruction of Factor Inflow into Rural Areas

At the pre-construction factor-supply stage, regulatory instruments in Shanghai's rural construction policies play the main role. Their high degree of standardization and strictness protects the baseline value of rural spatial resources, but phenomena such as "urban control requirements moving down to the countryside" and "adjustments missing the farming season" clearly constrain rural construction activities. High constraint and uncertainty limit the possibility of efficiency enhancement.

First, in terms of control requirements, some regulatory contents lack adaptation to actual rural construction conditions and fail to respond to new trends in rural development. On the one hand, control logics from within the urban development boundary are directly transplanted to rural areas. This has resulted, for example, in the mechanical application of building setbacks and green-space ratios in open fields, rigid requirements for fire pools even for rural buildings adjacent to rivers or ponds, and requirements for building density, floor area ratio, and parking spaces in construction approvals

involving point-based land supply. These requirements raise construction costs unnecessarily. On the other hand, they overlook the more complex and diverse basic conditions of rural areas. Many rural dwellings with traditional landscape characteristics are brick-wood structures. Under current standards, they are classified as dangerous buildings and fire hazards. This makes it difficult for public funds and social capital to support their protection, repair, and reuse. Not only is it difficult to generate economic value through adaptive spatial use, but intervention in the aging and deterioration of traditional buildings is also hindered, resulting in the loss of cultural value.

Second, in the implementation of control, rigid control and insufficient elastic adaptation, together with complex and unclear approval procedures, make it difficult to introduce development factors and create substantial uncertainty. Rural construction projects often involve modest investment, but they are still "small yet complete", touching many line-department controls. Once these requirements are overlaid, they create multiple spatial constraints and make construction difficult. In XH Village (Figure 3), for example, after basic farmland, water bodies under management, afforestation patches, reduction land parcels, and fiscal-investment projects still within their time limits are overlaid, the space that can be adjusted is very limited. Even the few suitable adjustment spaces require complex multi-departmental coordination because of requisition-compensation balance and supplementary designation requirements. A small change can affect the entire system, significantly increasing adjustment difficulty.

At the same time, in the approval and management process, an urban management system characterized by precision, high integration, and complexity has been extended into rural areas. Most related departments are unfamiliar with rural construction projects, which lengthens timeframes and easily misses valuable windows for rural construction. In the implementation of a rural collective construction land project in XH Village, although planning adjustment had followed the relatively fast route of implementation deepening and received full support from all parties, the entire process from planning adjustment to project formalities still took more than one year. Under the tight timetable of Rural Revitalization demonstration village creation, the pressure was substantial. The limited expected returns of rural construction projects, combined with high uncertainty in construction approval, directly weaken the willingness of most social actors to participate and impede the inflow of development factors into rural areas.

Figure 3. Planning conflicts revealed through the overlay of planning specifications for XH Village

Source: Project materials of Shanghai Tongji Urban Planning & Design Institute Co., Ltd. Note: the overlay was produced in 2022.

3.2 Departmental Coordination during Construction: Insufficient Integration and Constraints on Coordinating Multiple Values

Shanghai's rural construction policies are characterized by the combined operation of multiple tools and multiple departments. The construction of a village often involves multiple policy projects across different construction fields and different departments. Applications and approvals usually have to be completed separately in each line department, and project implementation, fund allocation, and project acceptance are also handled separately. Fine departmental specialization strengthens professionalism and standardization, but it also objectively produces insufficient spatial coordination and management integration.

In terms of spatial coordination, it is difficult to integrate construction investments across departments and land categories. This limits the maximization of spatial layout optimization and affects the coordination of multiple values, including agricultural production and ecological protection. As a result, spatial efficiency enhancement remains limited.

On the one hand, construction projects led by different departments struggle to break through land-category restrictions, making linked construction difficult and preventing the generation of scale effects and integration benefits. For example, costly integrated ecological clean-small-watershed projects can only clean and dredge existing river channels. Because of restrictions related to blue lines or farmland protection, water-system connection and dead-end creek treatment are difficult to implement, so the fundamental problem of poor hydrological connectivity cannot be solved. High-standard farmland construction projects can promote the concentration of permanent basic farmland within project areas, but they cannot optimize blue-line areas or construction land layouts. The relationship among fields, water, and roads therefore cannot reach the state most suitable for modern agricultural development. At present, many cultivated land parcels designated as permanent basic farmland are small, fragmented, and scattered, and cannot meet the needs of modern agricultural production. Adjustment pathways are relatively limited.

On the other hand, the constraint of "later construction being restricted by earlier construction" is widespread. In one village, because ecological clean-small-watershed improvement was implemented first, subsequent high-standard farmland construction could not reclaim field water systems covered by the earlier watershed project. The degree of contiguous farmland consolidation therefore could not be maximized. Although the original intention of this rule is to prevent repeated fiscal investment, in practice it has negative effects because it does not adapt to the reality of continuous rural development.

In terms of management integration, line-based management increases the human and material costs of construction. Taking high-standard farmland construction and ecological clean-small-watershed construction as examples, both policy projects include specific technical constraints for engineering works, but neither provides normative guidance for coordinating fields, forests, water, and other spatial elements across departments. Without coordination at the level of the whole ecosystem, the original goal of ecological governance is difficult to achieve at a high standard. Current integrated territorial consolidation takes the town as the unit, but the funding model of "unchanged channels and separate responsibilities" leaves towns with very limited room for optimization. The absence of an authoritative leading department makes process coordination among different departmental projects very difficult. Information barriers between departments in practice further increase the difficulty of management integration.

Systematic spatial layout optimization and integrated use across land categories are important pathways to spatial efficiency enhancement and value generation under tight constraints. Although integrated territorial consolidation has actively explored full-territory and all-factor coordination [14], pilot projects remain limited. Villages without such pilots still face considerable difficulty in overcoming land-category restrictions to optimize layouts. If pilot practice is scaled up without corresponding institutional adjustment, the negative effects of poor departmental coordination may even be amplified.

3.3 Post-Construction Operation and Maintenance: Insufficient Institutional Formation and Constraints on Long-Term Value

The operation of Shanghai's rural construction policies requires not only coordination among government departments at different levels, but also the initiative and support of town and village collectives and social actors. Sound institutional formation helps mobilize the enthusiasm of all actors, create a stable policy support network, and lay the foundation for policy value generation. Over many years, Shanghai's rural construction policies have embedded large amounts of resource investment in rural space. However, because long-term operation and maintenance mechanisms and benefit-distribution mechanisms that align rights and responsibilities remain insufficient, construction achievements can gradually fade, a problem also common elsewhere.

Designing long-term operation and maintenance mechanisms after construction is key to realizing long-term spatial efficiency enhancement. On the one hand, Shanghai's current construction policy projects generally lack necessary supervision mechanisms for operational performance after project completion. Some villages therefore tend to focus only on completion rather than performance. During construction, their main task becomes passing acceptance checks. The endogenous development initiative of village collectives is not fully activated, and insufficient planning and operation lead to construction outcomes that cannot truly enter use or generate value.

On the other hand, policy design often pays more attention to physical construction and relatively less attention to mechanisms that guide continuous income growth. The transition from "policy transfusion" to "self-generated capacity" has not yet been achieved. Research on the first to fifth batches of Rural Revitalization demonstration villages found that, although village collective economic income increased substantially and the median rose to more than 2 million yuan, some villages still faced insufficient operating income. Efficiency gains were unable to cover post-creation operation and maintenance expenditures (Table 2).

Table 2. Changes in Annual Operation and Maintenance Costs in Selected Shanghai Villages after Implementation of a Village-Level Policy Project

Village	Change in annual operation and maintenance costs	Main additional expenditures
LM Village	Increased to about 1 million yuan	Greening maintenance works, infrastructure maintenance, long-term cleaning
BG Village	Increased to 1-2 million yuan	Green environment maintenance
HM Village	Increased to about 1.4 million yuan, mainly borne by the	Daily maintenance

Village	Change in annual operation and maintenance costs	Main additional expenditures
	village collective	
HQ Village	Increased to more than 1 million yuan	Mainly greening maintenance, plus road and river cleaning
WZ Village	Increased to about 1 million yuan	Plant maintenance
XY Village	Increased to more than 800,000 yuan	Woodland and greening maintenance
HQ2 Village	Increased to 300,000-400,000 yuan, 100,000-200,000 yuan more than before	Daily maintenance
SY Village	Increased to more than 4 million yuan, from more than 2 million yuan previously	Landscape maintenance

A benefit-distribution mechanism that aligns rights and responsibilities is crucial to mobilizing actors. Through institutional formation, it can play the dual role of protecting rights and constraining responsibilities, which is essential for sustainable value generation in rural construction. At present, joint investment by town collectives, village collectives, enterprises, and social actors is increasingly common. However, mature institutional design clearly lags behind. Behind this lag lie concerns over the possible loss of state-owned or collective assets. Sometimes governments and collectives prefer to avoid responsibility rather than actively pursue development, while social actors hesitate because unclear property-right definitions may bring losses.

In the investigation of the Rural Revitalization demonstration village construction project in TW Village, it was found that project funds came from the town-level government, project property rights belonged to the government, and daily management was also undertaken by the government. The village collective received land and building rents, but had no say in investment attraction or operational management. Later, daily maintenance costs became obviously excessive, while the village collective

lacked incentives to participate in daily maintenance. The resulting efficiency enhancement of construction outcomes was limited.

On the basis of rights protection, strengthening responsibility constraints is also important. In some cases, village collectives or villagers lack value consensus and long-term value awareness. Once project returns increase, some villagers repeatedly demand higher rents and use the threat of taking back land as a bargaining tool, bringing difficulties and uncertainty to project operations.

In recent years, Shanghai's rural construction policies have gradually increased attention to soft values such as village collective income growth and community ethos. It is necessary to quickly change the mindset that emphasizes construction investment but neglects subsequent operation and maintenance, accelerate the construction of evaluation mechanisms for rural construction value generation, and promote diversified participation mechanisms and related rules adapted to different scenarios.

4 Planning Responses for Value Generation in Rural Construction Policies

In the process of value generation through rural construction policies, rural planning must also innovate adaptively and play a role in promoting value generation. From the perspective of the planning profession, the following responses are proposed.

4.1 Deepening Value Cognition and Strengthening the Local Adaptation of Rural Planning

Planning should strengthen its role in recognizing rural value. On the basis of understanding the unique role of the countryside in the construction of Shanghai as an international metropolis, it should further recognize the marked differences between rural space and urban space. These include the two basic functions of safeguarding agricultural production and stabilizing the ecological base, as well as the role of providing differentiated carrier spaces for core functions. The following work should be accelerated.

First, in planning actions, rural areas have complex spatial resource ownership. In light of the powers and responsibilities assigned by the state to planning and natural resources departments, and in connection with the process of planning and construction, property-right clarification should be accelerated. Resource surveys and assessments of biological species, landscapes, history, folk culture, and related elements should also be promoted. These efforts can deepen understanding of the "cultural genes" and connotations behind rural space [15] and extend and enhance them in planning and design.

Second, on the basis of fully recognizing rural spatial value, actions to protect and enhance that value should be actively promoted. In the construction of relevant regulatory systems, the clear differences between rural and urban areas in building density and spatial texture should be fully recognized, and corresponding requirements should be improved. It is necessary to avoid simply extending construction standards designed for high-density built environments to rural areas, while also avoiding the artificial creation of a new urban-rural dualism at the level of standards.

4.2 Promoting Value Synergy and Strengthening the Coordinating Role of Rural Planning

At the level of value synergy, the difficulty of departmental coordination in policy operation reflects the value coordination challenge facing rural construction at the present stage. Each department's emphasis on its own line's baseline control requirements reflects the tension between the administrative inertia of "being responsible for one's own territory" and the complexity of multiple values in rural construction practice. The uniqueness and integration of space make it necessary for planning and natural resources departments to coordinate different departmental control requirements through spatial planning.

First, in the planning system, it is necessary to fully recognize the significant differences in scale and use patterns among rural agricultural land, woodland, water areas, and other land categories, as well as the

institutional characteristics of existing department-based management. On the one hand, the earlier idea that planning is unnecessary in rural areas should not re-emerge. On the other hand, simple issues should not be overcomplicated, for example through overly refined land-category or parcel divisions that make the rural planning system excessively complex and significantly increase the cost from planning formulation to implementation management. While ensuring spatial order and the transmission of key top-down control requirements, planning should leave flexibility for uncertain development demands [16-17].

It is therefore necessary to deepen understanding of the relationship between two important functions of rural planning: control of current land uses and guidance for future development. Guiding content that should be flexible should not be turned into rigid constraints. Starting from the baseline conditions and management characteristics of rural construction, planning should strengthen the baseline requirements of current land-use control, including cultivated land protection and ecological space protection, while adopting flexible measures such as total-scale control and reserved layout elasticity for various types of construction land.

Second, in the implementation of planning, active connection should be made with government departments involved in construction, and their suggestions should be fully heard, so that planning can coordinate and integrate multiple values. At the spatial base-map level, village planning should serve as a platform to integrate a single construction base map and promote the joint use and dynamic updating of one set of baseline data and one set of standards across line departments, thereby improving interdepartmental collaboration. At the level of spatial use, planning should take responsibility for coordinating all types of territorial spatial resources in rural areas. Oriented toward overall goals and long-term value, it should actively engage with line departments, coordinate the standards and requirements of different policy projects, propose ways to integrate projects and coordinate the use of funds, and seek the best possible solution for maximizing value generation in an integrated spatial-temporal perspective.

4.3 Strengthening Value Consensus and Emphasizing the Institutional Linkage of Rural Planning

At the level of value consensus, insufficient attention has previously been paid to cultivating value consensus and designing value-sharing mechanisms in rural construction. This has led to a mismatch between the "hardware" of physical construction and the "software" of institutional formation. Strengthening the linkage between rural planning and institutions requires enhancing the role of rural planning in reaching and maintaining consensus.

First, in the planning formulation process, mobilization and consultation should be highly valued. All parties involved in rural construction should be encouraged to participate actively and jointly plan development. Planners need to enter villages and listen carefully to villagers' development intentions, while also fully respecting the intentions of social actors. In spatial planning, the coordination between planning formulation and implementation and policy operation should be promoted [18], encouraging planners to shift their role from "draftspersons" to "managers".

Second, the long-term, open, and sustainability-oriented nature of the planning process should be strengthened. Planning should help villages develop long-term development pathways and operation and maintenance mechanisms for sustainable income growth. It should consider how spatial carriers can realize value generation and sustainable development, and actively assist village collectives in seeking

corresponding policy pathways. Recent practices such as "rural planners" and "accompanying planning" should demonstrate the value of rural planning work in this process.

5 Conclusion

With the establishment of the territorial spatial planning system, rural areas are entering a new era in which planning comes before construction. The implementation of the Rural Revitalization Strategy has clarified the direction of value generation in rural construction. The unique character of megacities means that Shanghai must stand at the forefront of the times in implementing the Rural Revitalization Strategy and in enabling rural construction policies to generate value.

Planning and natural resources departments, together with rural planning, can make active contributions at multiple levels to the value generation of rural construction policies. For planners and the planning profession, this implies profound transformation.

First, it is necessary to actively promote the adaptive adjustment of planning formulation, implementation management, and related standards that were originally limited mainly to high-density built environments, so that they can better apply to rural areas. More inclusive standards should distinguish between high-density built environments and low-density built environments, thereby achieving urban-rural coordination in relevant standards.

Second, in planning objectives, baseline control must be upheld, but greater emphasis should be placed on promoting value generation. The goal should shift from "restricting development" to seeking "reasonable and long-term development".

Third, in planning methods, more open, inclusive, and consultative mechanisms for planning formulation, implementation, and management should be established. Advocacy, consultation, and communication will become major modes of rural planning work, while flexibility and inclusiveness will become prominent features of rural planning formulation and management.

Finally, rural planners will therefore undergo important changes in role and working methods. Through accompanying support, they should help all parties coordinate actions and jointly pursue the realization of value in the process of development.

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Notes

① From the speech by Li Qiang, then Secretary of the Shanghai Municipal Party Committee, at the on-site meeting held by the Shanghai Municipal Party Committee and Municipal Government in Zhujiajiao Town, Qingpu District, in 2018 to promote the implementation of the Rural Revitalization Strategy. https://www.shanghai.gov.cn/nw44745/20200824/0001-44745_1325774.html.

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