Problems and Countermeasures for Planning and Management of Villages and Towns in China

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Abstract: Based on investigations of several provinces, this research group for the Planning, Construction, and Governance of Villages and Towns project summarizes three major problems of village planning and management in China. First, the guiding ideology, methods, and contents of village planning in China do not satisfy the requirements for construction of new urban—rural relationships or rural development. Second, the current planning and management system and management mode are inconsistent with the characteristics of rural grassroots governance systems or the reality of construction management and control. Third, the land supply mode and pattern of land use do not meet the overall goal of rational land use or the actual needs of rural construction and development. Combined with relevant, innovative domestic practices and development trend predictions, this paper proposes the following policy recommendations: refining laws and regulations to promote systematization and legalization of village planning, construction, operation, and management; systematically establishing a rural planning compilation system with the county as the unit; coordinating all village and town construction activities through village planning; innovating a planning compilation and management mode based on effective rural governance; and adopting new technical means to support village planning compilation and management.

Keywords: planning and management system; rural grassroots governance system; land supply mode; innovation in planning compilation and management mode

1 Main problems in the planning and management of villages and towns in China

With their vast territory, China's rural areas are home to a large number of widely varying villages and towns. By the end of 2017, the country had a total of 18 100 designated towns with a registered population of 0.6 billion in the built-up areas; 10 300 townships with a registered population of 25 million in the built-up areas; and 2.249 million villages with a registered population of 756 million. A registered population of 941 million for all villages and towns accounted for 67.7% of the country's total population. This indicates that China's villages and towns are still one of the most important units of space management in urban and rural areas. The Chinese Academy of Engineering conducted thorough investigations in more than ten regions of China through a major consulting project, the Planning, Construction and Governance of Villages and Towns, and consequently identified some concrete problems currently affecting how China manages its village and town planning and construction.

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1.1 The guiding ideology, methods, and content of village and town planning are not suitable to establish new urban-rural relations and rural development

1.1.1 Unreasonable and inadequate planning

Some village and town planning is inconsistent with natural laws and unable to meet the actual needs of rural construction and development. Presently, some villages and towns are still planned and managed according to an urban perspective, which leads to excessive administrative interference and goes against both the will of the villagers and the natural laws for construction and development in rural areas. Additionally, applying urban planning guidelines neglects the complex circumstances of land ownership and neighborhood and social relations in rural areas. Excessive concentration of villages and towns is even conducted through forced demolition and large-scale construction, aiming to achieve more urban built-up land quotas. However, this approach fails to meet the travel needs of farmers in agricultural production and daily life, triggering a series of social conflicts.

1.1.2 Outdated technical means and insufficient basic data

The scientific basis and effectiveness of village and town planning are seriously affected by the overtly insufficient basic data currently available for rural areas. First, the data files created by administrative departments at all levels in rural areas are based solely on their own needs, and thus, are neither comprehensive nor systematic. Second, departments use different statistical methods, making it difficult to integrate various statistical data for rural areas. Because it is extremely difficult to conduct investigations of the vast territory of rural areas, basic data are crucial for macroscopic planning. However, given the current lack of public, complete, systematic, and scientific data, hardly any targeted policy for construction and development of rural areas can be proposed through macroscopic planning.

1.1.3 Lack of macroscopic planning

Recently, state and social capital investments in the "three rural issues" have gradually increased, and effective guidance from village and town planning is required. Nevertheless, the framework of China's current village and town planning system is incomplete, characterized by numerous projects planned for individual villages and towns but a lag in macroscopic planning. Overlaps in the planning of some "small and fully equipped" individual villages have resulted in the waste of considerable investments. Furthermore, some macroscopic planning has been conducted without an in-depth study of the existing rural issues; failure to consider the requirement for bottom-up development of rural areas has resulted in serious conflicts between macroscopic planning and planning for individual villages and towns, as well as disaccord between planning and implementation.

1.2 The planning management system and management mode are inconsistent with the characteristics of rural grassroots governance and the reality of construction management and control

1.2.1 Incomplete regulations, lack of talent, and illegal construction activities

(1) Incomplete laws and regulations that feature outdated main laws and that lack any standards or norms

The system of laws and regulations that governs urban and rural planning is currently in a stage of transformation. Updates are slowly being made, which leads to problems, including inconsistency of concepts and standards. Specific legal forms and mandatory contents for village and town planning are not explicitly stipulated in the *Urban and Rural Planning Law of the People's Republic of China*, which currently forms the basis for planning management departments. Thus, the legal basis for such departments is insufficient for the identification of requirements for the management and control of various construction activities in rural areas. Additional problems affecting rural planning include the absence of standards and norms, outdated content in some of the major regulations, conflicts between current laws and regulations, and insufficient guidance regarding proper implementation management. The prevailing *Regulations on Planning and Construction Management of Villages and Towns*, in particular, was published 15 years before the *Urban and Rural Planning Law of the People's Republic of China*, and is thus not aligned with current regulations and unable to meet the needs of actual development (Fig. 1).

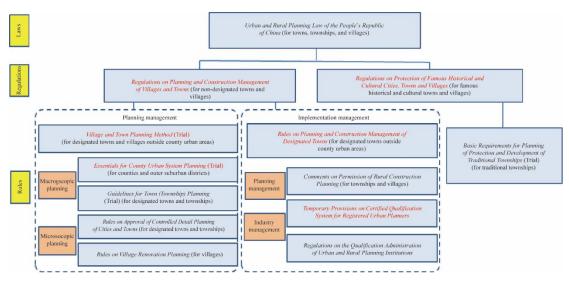


Fig. 1. System of current laws and regulations governing village and town planning in China.

Notes: Parentheses () indicate what objects are governed by the laws and regulations. Laws and regulations shown in red were implemented before the *Urban and Rural Planning Law of the People's Republic of China*.

(2) Difficulty in regulating vast territory and illegal construction activities

China's rural areas cover a vast territory and include a large number of scattered villages. Consequently, numerous villages are subject to planning and construction management, which is a challenging task for management. A total of 15 675 village and town construction and management institutions were located throughout the country in 2013, accounting for 47.6% of the total number of towns and townships. The Fifth Population Census of China indicated that the largest town contained 59 000 people, with the average population of towns and townships ranging from 10 000 to 20 000. Thus, on average, 10 000 to 20 000 people in a town or township were subject to the management of the town/township planning staff. In developed towns and townships in the east, staff are also responsible for managing the construction of a greater number of more complicated public and productive buildings, resulting in difficulties concerning regulations and frequent illegal construction activities.

(3) Lack of talent in village and town planning management

Typically, the planning management department affiliated with a town or township government is the village and town planning management office, which cooperates with the planning bureau, housing construction bureau, transportation bureau, and other county-level management agencies. However, it is often difficult for towns and townships with full-time staff taking responsibility for urban and rural planning, construction, and management to attract professional planning talent, because of the relatively low salary and the harsh working and living conditions. Given the pressing need for management in rural areas, the lack of talent is a serious issue.

1.2.2 Conflict between top-down management and democratic autonomy system

In China, traditional rural societies were subject to a family-based gentry autonomy. The rural social structure was an acquaintance society maintained by blood relationships, and internal affairs were customarily settled through negotiation. Since 1949, the *Constitution of People's Republic of China* has clearly stipulated that village committees are to be autonomous grassroots organizations. However, excessive administration in rural planning management is frequently observed. *The Organic Law of the Villagers Committees of the People's Republic of China* defines the bureaucratic relationship of town/township governments and village committees as that of instructor and instructed, rather than superior and subordinate. In practice, however, county, town, and township governments are accustomed to regard village committees as subordinates and to intervene in their management by giving administrative orders. This conflicts with the rural grassroots system for democratic autonomy and does not encourage the enthusiasm of villagers and grassroots organizations. Such practices are unacceptable and make management and the implementation of planning impossible.

1.2.3 Planning conflicts: "overlap" and "vacuum" zones with respect to the planning authority

Subject to vertical management by multiple administrative departments, villages and towns must be guided by land use plans, village and town plans, and other dedicated plans established by multiple departments. However,

because each department has different planning periods and requirements, their plans often conflict. In some cases, such conflicts have led to so-called "planning-based illegal construction" of basic public service facilities and infrastructure. In others cases such as that of pollution control, limited planning content results in "vacuum" zones in village and town planning management. To control pollution in rural areas, comprehensive coordination from industrial integration to infrastructure allocation is required; however, the departments of urban and rural planning management, environmental protection, rural economic management, and others all have separate foci, hindering joint efforts to effectively manage and control construction activities in rural areas.

1.3 The land supply mode and land use pattern do not align with the overall goals of rational land use and the actual needs of rural construction and development

1.3.1 Extensive land use and reduced utilization of production and living space

With the development of rural areas, a problematic pattern of extensive land use has become increasingly prominent in villages and towns, and the area of built-up land area per capita has been increasing. Based on surveys conducted between 1990 and 2013, the registered population of designated towns in China increased by 54.8%, whereas built-up land area increased by 144.3%, far exceeding the increase in registered population. In villages, the registered population decreased by 27.8%, but built-up land area increased by 7.6%. By the end of 2013, the built-up land area per capita in townships and designated towns throughout the country was close to 250 m² per person; in villages, it was close to 200 m² per person (Fig. 2).

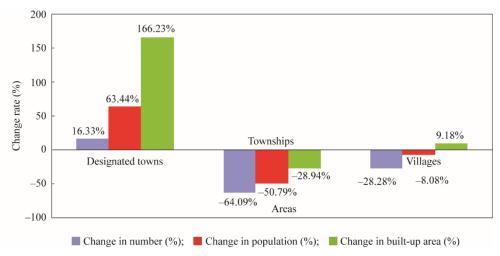


Fig. 2. Changes in the number, population, and built-up area of designated towns, townships, and villages in China from 1990 to 2013

Source: China Urban-Rural Construction Statistical Yearbook (1990-2013).

The frequent mixture of production and living space in traditional rural areas results in a larger built-up land area per capita for villages and market towns, similar to the comparison between villages and cities. In some hilly and mountainous regions, rural settlements are dispersed due to irregular terrain, resulting in a higher quota of built-up land per capita; however, cultivated land and other farmland are not excessively occupied. Nevertheless, some rural areas do indeed face the problem of unreasonable land use patterns, manifested primarily by two aspects.

(1) Lack of guidance

With the rapid development of rural non-agricultural industries, a lack of adequate guidance on the construction land for production and operation has resulted in an extensive rural land use pattern. Since the 1980s, rural areas with relatively developed economies in China's eastern and central regions have been home to a variety of industrial enterprises. A typical example is the Pearl River Delta, which, since the 1980s, has experienced concurrent bottom-top rural industrialization and urbanization dominated by township enterprises and shows clear features of decentralization and extensive management. The township industry mainly involves small-scale, labor-intensive enterprises; the scattered development mode results in land fragmentation and inefficient utilization. Reform of the property rights system for rural collective economy is lagging. Because the operating mechanism is disconnected from the market and operating management is extensive, output efficiency suffers. For example, in 2011 in Guangzhou, industrial land across the city covered an area of 225.7 km². Industrial parks established with formalities

above the township level covered only 70 km²; the remaining 155.7 km² of the industrial area (about two-thirds of the city's total) was scattered near village settlements. Village- and community-level industrial parks are characterized by small-scale, low-output, and fragmented land use; the smallest industrial park covers only one hectare. The average output efficiency of collective built-up land is only one-tenth of that of state land.

(2) Population outflow, vacant buildings, and low space utilization

Rural areas are currently experiencing high-speed population outflow. A large portion of rural labor forces become migrant workers, leaving only children and elderly people in many rural houses. Some houses are left vacant for long periods. According to the Ministry of Housing and Urban–Rural Development, per capita living space in rural areas was 36.2 m² in 2011. However, it is estimated that excluding migrant workers, actual per capital living space may be as high as 60–90 m², three times that of urban areas. The space utilization of rural houses must be improved. However, reasonable and effective mechanisms for transfer of rural houses and transfer and withdrawal of homesteads have not been established for rural areas due to the restrictions of the current land and rural house management system, making it difficult to realize intensive use of rural land for construction.

1.3.2 Lack of land quota support

The high-speed, years-long development of urbanization in China has resulted in significant hollowing out of some villages. Incomplete homestead withdrawal mechanisms and lax construction management are the core reasons for extensive rural land utilization. Additionally, the top-bottom rationing mode for construction land restricts the construction and development of some small towns. The waste of village and town construction land in some areas coexists with the failure to meet reasonable demand in other areas, leading to a typical dilemma between apathy from over-strict management and disorganization from lax regulations.

(1) Limited land allocation quota

Small towns, the lowest administrative management level in China, are important spatial development resources. Construction land in small towns is allocated level by level. Because of strict national control over the total volume of built-up land and administrative-level constraints, it can be challenging for small towns to secure adequate land allocation quotas. According to this research group's survey, some small towns are forced to occupy land reasonably but illegally in order to construct elementary and secondary schools, garbage collection stations, and other necessary facilities, an embarrassing situation for the planning management of grassroots governments.

(2) Vital small towns suffer from lack of construction land and planning guidance

The relationship between humans and land is strained in most rural areas of China. Significant surplus labor remains to be fully utilized. Many laborers are forced to seek employment in nearby places. Small towns are the best platforms for addressing this issue, and some are home to highly dynamic industries that could play a greater role in promoting the development of local urbanization. However, it is difficult for most small towns to obtain adequate land quotas due to the current level-by-level rationing of urban construction land. They also struggle to obtain effective planning guidance due to their low administrative level and limited funds, which greatly restricts their healthy development. One example is the town of Weiqiao in Shandong Province. Weiqiao is a provincial key town and home to Weiqiao Pioneering Group, a Global 500 enterprise. However, because zones around the town's existing built-up areas are classified as basic farmland, the urban space cannot be expanded. Regular projects cannot be approved, and the construction land quota of 80 mu (approximately 53 333 m²; 1 mu = 666.67 m²) obtained by the provincial key town, which cannot in fact meet the town's actual construction demand, cannot be implemented. Another small town surveyed, Xingfu in Boxing County, is the largest black and galvanized iron trading market and commercial kitchenware production base in China. Township enterprises applied for over 300 hm² of new construction land in 2013 because of the great demand for marketing and industrial land. However, according to current land use planning, Xingfu can only obtain a total of just over 50 hm².

2 Policy suggestions to strengthen planning, construction, and management

Based on observed trends, modes of development and spatial agglomeration in villages and towns are still in a state of continuous change and require systematic study in terms of social economy, laws and regulations, management mechanisms, and rural governance. Multilevel and multidimensional systematic coordination is required to reform and innovate rural planning techniques and systems. Accordingly, this study proposes innovation and exploration of the following aspects of village and town planning and construction management.

2.1 Improve regulations and advance systematic and legal planning, construction, operation, and management

2.1.1 Accelerate the formulation of the Rural Construction Law

Formulation of the *Rural Construction Law* must be accelerated to clarify responsibilities related to rural construction, including the management of house construction for farmers and the management and maintenance of rural public service facilities and infrastructure. Public facilities in rural areas, such as schools, kindergartens, health centers, and nursing homes, must be included in basic construction procedures and subject to supervision and management. Farmers should be responsible for self-built houses, and relevant departments and governments at all levels should focus on providing quality safety guidance and technical services. Furthermore, the qualification system for rural building workers must be recovered; training and management of rural construction workers must be enhanced; famous historical and cultural villages and traditional villages must be protected; protection systems must be improved; and the establishment of technical support systems for rural construction must be strengthened, including traditional building conservation and repair techniques, green building techniques, and environmental renovation techniques.

2.1.2 Promote systematic and legal planning, construction, operation, and management

The legal system should be improved by urban–rural integration. The Construction Law of the People's Republic of China should be modified to: include management of rural housing construction; drive implementation of rural construction planning permission in combination with real estate registration; establish systems managing the quality and safety of rural housing and rural construction workers; improve cultural legacies and the mechanisms for protecting traditional villages; and lower urban construction standards and expand authority at the township level. Decentralized management should be implemented below the county level, and the power to compile and approve village and town planning should be vested in the county-level urban and rural planning management department. Authority to permit planning and approve village and town construction land and construction projects may be delegated to key towns. Authority to supervise village and town construction should be granted to the villages and towns. The experience of village cadres and village construction coordinators should be publicized.

2.1.3 Establish a grassroots, integrated management organization

Some authority for administrative approval and law enforcement must be delegated legally, and an agency of the county-level planning and construction management department should be set up in key towns, with manpower and financial support provided by cities and counties. Integrated construction management organizations established in villages and towns can cover land, planning, construction, garbage and sewage treatment, and other functions. All provinces must hasten implementation of regulations and rules on issuance of permits for the planning and location of villages and towns and construction projects.

2.2 Establish a county-level rural planning system

2.2.1 Strengthen planning guidance at the county level and improve planning implementation

Rural construction planning must be established at the county (meso) level to strengthen comprehensive guidance for village and town planning at the meso level. Meso- and micro-planning systems for villages and towns should be improved and connected to the existing urban and rural planning system through specialized planning. Effective connection of village and town planning must be effectively connected and coordinated with urban planning, territorial planning, and other specialized planning; this will ensure that planning guidance is provided at the meso-level for overall rural construction, county development, and integration of funds for agriculture, farmers, and rural areas.

2.2.2 Plan and establish county-, town-, and village-level planning systems

(1) County

At the county level, particular emphasis should be placed on studying dynamic mechanisms and construction modes, selection of building technologies, and guidance for major project construction in rural areas. Development of rural construction planning should focus on four issues. First, the spatial construction mode and layout features of different districts and villages and towns must be studied, considering: the overall allocation of public service facilities and infrastructure in villages and towns; the differences between villages and towns in demand for public resource allocation; the role of the government and market in public resource allocation; trends in public resource use in rural areas; and an elastic public resource allocation mode. Second, intensive studies must examine the major

issues influencing construction in rural areas and overall technical guidance must be provided for, for example, controlling overall style, cultural protection, disaster prevention and reduction, rural housing safety, selection of green building technologies, protection of important ecological spaces, and selection of major environmental infrastructure technologies in rural areas. Third, the internal dynamic mechanisms of rural development must be studied, including the profit model, management and operation modes of rural tourism, and the type of cultivation of the rural agricultural product processing industry; suggestions should be made to adjust planning and construction issues that influence industrial development in rural areas. Fourth, a list of major facility projects in rural areas must be created and their spatial layout determined so as to provide constructive guidance for important agriculture-related government investments.

(2) Town

At the town level, studies must examine the spatial layout of land and construction projects in villages and towns. An overall plan for villages and towns must be compiled based on county-level rural construction planning. Research emphasis must be placed on the spatial layout of villages and towns, considering: land use layout; the selection, sharing, and layout of important rural public service facilities and infrastructure projects; data on dilapidated buildings and affordable housing construction arrangements; important road traffic planning; and control of major ecological spaces.

(3) Village

At the village level, various public service facilities and infrastructure must be reasonably arranged and positioned, and requirements for village reconstruction must be refined. Village planning must ensure that various public service facilities and infrastructure are reasonably arranged and positioned based on county-level rural construction planning and the overall plan for villages and towns. Corresponding adjustments must be made according to the will of villagers and the reality of landforms and village construction. A scheme for renovation of important environmental spaces in villages must be proposed, and various renovation requirements should be refined concerning architectural style, cultural landscape, green buildings, and disaster prevention and reduction.

2.3 Delineate construction areas and adopt different planning management modes in rural areas

2.3.1 Urbanized areas: comprehensive control of regions

Urbanized and non-urbanized areas must be delineated based on the boundaries of urban space growth specified in the overall urban plan. Master planning of villages and towns in urbanized areas should be included in the overall urban and zoning plans. Various supporting service facilities and infrastructure in village and town planning must be linked to urban public service facilities and infrastructure systems, and the layout of all construction land for villages and towns and all construction activities in urbanized areas must conform to the construction and control requirements of the urban planning management department.

2.3.2 Non-urbanized areas: guidance by zone and category

Areas outside the urban space growth boundaries specified in the overall urban plan are designated as non-urbanized areas. A township planning system should be established, focusing on guidance for the differentiated development of villages and towns by zone and category. In non-urbanized areas, the planning management department must focus on combining policy guidance and consultative management for various construction activities in villages and towns. A consensus should be reached among villagers on the content of village and town planning, which will take the form of village regulations.

2.4 Coordinate various construction activities through planning

To solve the problem of conflict between multiple forms of planning in rural areas, rural construction planning and village and town planning at the county level must serve as the basis for overall planning of investments in agriculture, farmers, and rural areas. Other forms of departmental planning must also be connected as specialized planning. The local authority over urban and rural planning must take responsibility for planning and management of villages and towns, issuing permits for and keeping records of the various construction activities that occur in rural areas. This authority may also suggest modifications and adjustments to departmental construction projects according to rural construction planning and village and town planning at the county level and take part in approving various rural construction works.

2.5 Innovate planning and management modes based on effective rural governance

2.5.1 Promote collaborative rural planning management

It is necessary to promote a collaborative rural planning management mode [2], specifying villagers as the executive subjects of village planning and defining an equal consultative relationship between the government, planners, and village collectives. A mechanism for village planning must be established that is decided upon by parties interested in village construction, guided by planning professionals, and organized, supported, and approved by the government. The main content of village planning must be included in village regulations for implementation.

2.5.2 Innovate new entrusting forms of planning

New entrusting forms of planning, such as "assistant planner" positions, must be created to strengthen professional guidance for farmers' independently designed and self-built rural housing and to encourage designers to relocate to rural areas. Rural design content must be highlighted in rural planning. New rural architectural designs should be explored for rural housing and traditional building technologies inherited and innovated. Local materials must be promoted and their physical and structural properties improved. Technologies must also be developed to support new rural architecture and rural green buildings suitable for modern life.

2.6 Support planning and management by new technological means

2.6.1 Establish a public platform for geographic information planning management

The national information system regarding human settlements in villages must be improved. A complete and comprehensive electronic database of villages and towns, shared by multiple departments, should be established in counties and cities as soon as possible. Gradually, a public platform for geographic information planning management with urban–rural integration can be established. This will allow for the comprehensive coordination of village construction management involving multiple departments.

2.6.2 Increase the efficiency of planning management by technological means

New technological means should be adopted to supervise construction activities in villages and towns, such as aerial photography, remote sensing, and the Internet, to relieve the demand for allocation of human resources. Joint monitoring and law enforcement by multiple departments should be employed to increase the efficiency of planning management for villages and towns.

References

- [1] Lv W J, Yin Y. Discussion on relationship between land use planning management and implementation and urban-rural planning [J]. Urban Planning, 2013, 37(10): 34 38. Chinese.
- [2] Feng X X. Exploration on the institutionalization of public participation: Construction of the consultant planner system in Longgang District, Shenzhen [J]. Urban Planning, 2003, 27(2): 68 71. Chinese.