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The importance, orientation and key content of township-level comprehensive spatial planning in China

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Abstract

On the basis of fully understanding the key characteristics and problems of China's township master plans, this article clarifies the requirements of the territorial spatial planning system reform for the governance system of townships and towns, urban–rural integration and high-quality development, and points out the necessity of overall planning for township-level territorial spaces in China. Then, based on the study of international experience and the division of administrative powers between county-level government and township-level government, it proposes the positioning features of overall planning for township-level territorial spaces, including the communication and implementation of municipal and county planning, innovating the control methods concerning the use of town seat space, and coordinating and guiding the formulation of detailed plans. It also indicates that the key content of overall planning for township-level territorial spaces must include natural resource management, development and utilization of territorial spaces, spatial pattern of town areas, spatial layout of town seats, management and control of village construction, etc.

Keywords Spatial planning, Overall planning, Townships and towns, Governance, Village planning

The "Opinions of the CPC Central Committee and the State Council on Establishing the System of Territorial and Spatial Planning and Supervising its Implementation" (hereinafter referred to as the "Opinions") issued by the Central Committee of the CPC and the State Council in May 2019 proposes to integrate spatial planning such as major function-oriented zoning, land-use planning, urban and rural planning into a unified, hierarchical and classified territorial spatial planning. Corresponding to the administrative divisions of China, a five-level and three-category spatial planning system is formed, which specifically includes five levels: national, provincial, municipal, county, and township levels, and three categories: overall planning, detailed planning, and special planning (Fig. 1). Among them, there have been many discussions on territorial spatial planning at the provincial, municipal, and county levels, but the discussion on territorial spatial planning at the township level has not yet been conducted (Editorial Department of the journal, 2019; Zhao, 2019; Wang, 2019). In the context of the reform of the spatial planning system, the spatial planning for townships and towns, an important basic unit of the administrative divisions of China, takes on the overall planning for municipal and county-level territorial spaces and leads the detailed planning (including village planning), which is of great importance.

As of the end of 2017, China had 18,085 organic towns and 10,314 townships, adding up to 28,399 townships and towns (Ministry of Housing and Urban-Rural Development of the People's Republic of China, 2018), with a total population of 980 million, accounting for 70.5% of China's total population. It

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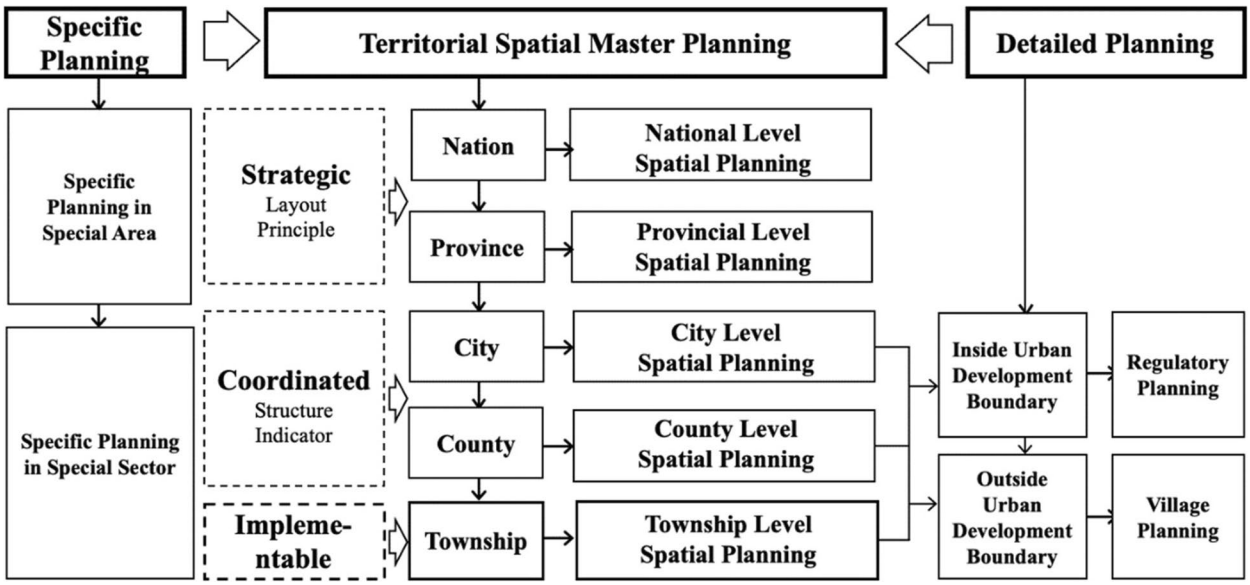

Fig. 1 Territorial spatial planning system. Source: Drawn by the research team based on relevant documents of the Central Government and the Ministry of Natural Resources

is estimated that from 1982 to 2010, the contribution rate of "towns" in China's urbanization development was 44.1% (Zhang, 2019); and from 2010 to 2015, the rate further rose to 55.1% (Liu, et al., 2019). In terms of land use, in 2016, the town seat construction land area of townships and towns reached 40,815 km2, accounting for 43.6% of the total urban construction land in China that year, indicating that townships and towns do play an important role in coordinating the relationship between urban and rural areas and promoting the development of urbanization. Therefore, to promote the formulation of township-level territorial spatial planning to become standardized and effective is important for the healthy development of China's urbanization and economic society, and it is also necessary to carefully study and design township-level territorial spatial planning.

The reconstruction of the national spatial planning system in the new era puts forward new requirements for the connotation of township-level planning, that is, on the basis of effectively integrating the necessary content such as the previous land use master plan and township master plan, to explore a new framework for comprehensive planning and actively correspond to (and reform) the administrative powers and functions of township and town governments, so that the protection, development, utilization and governance of territorial spatial resources in townships and towns will be carried out in an orderly manner. Based on the analysis of the basic characteristics of China's townships and towns and existing planning problems, this article puts forward thoughts on the positioning of the overall planning for township-level territorial spaces in consideration of policy requirements, and proposes a preliminary key content structure in order to provide reference for the formulation of related technical guidelines and regulations.

1 Predicament of township master plans

1.1 The content of the two township master plans deviates from the actual control needs

Townships and towns, as the lowest-level unit for formulating master plans, are the platform that most directly reflects the "multi-plan conflict" (Fig. 2). At present, the core plans at the township level are still the township master plan and the township land-use master plan. However, for a long time, the two master plans have many outstanding contradictions such as separation of planning goals, deviations in technical routes, departures in implementation methods, etc., which have weakened their respective seriousness and authority (Xiao, et al., 2012). The traditional township master plan emphasizes its strategic leading role in local development, but there is a general problem of "emphasizing town seat construction but neglecting comprehensive planning." Besides, its technical methods follow the paradigm framework and indicator system of the city master plan (Chen & Qiu, 2017), and lacks response to specific problems and actual

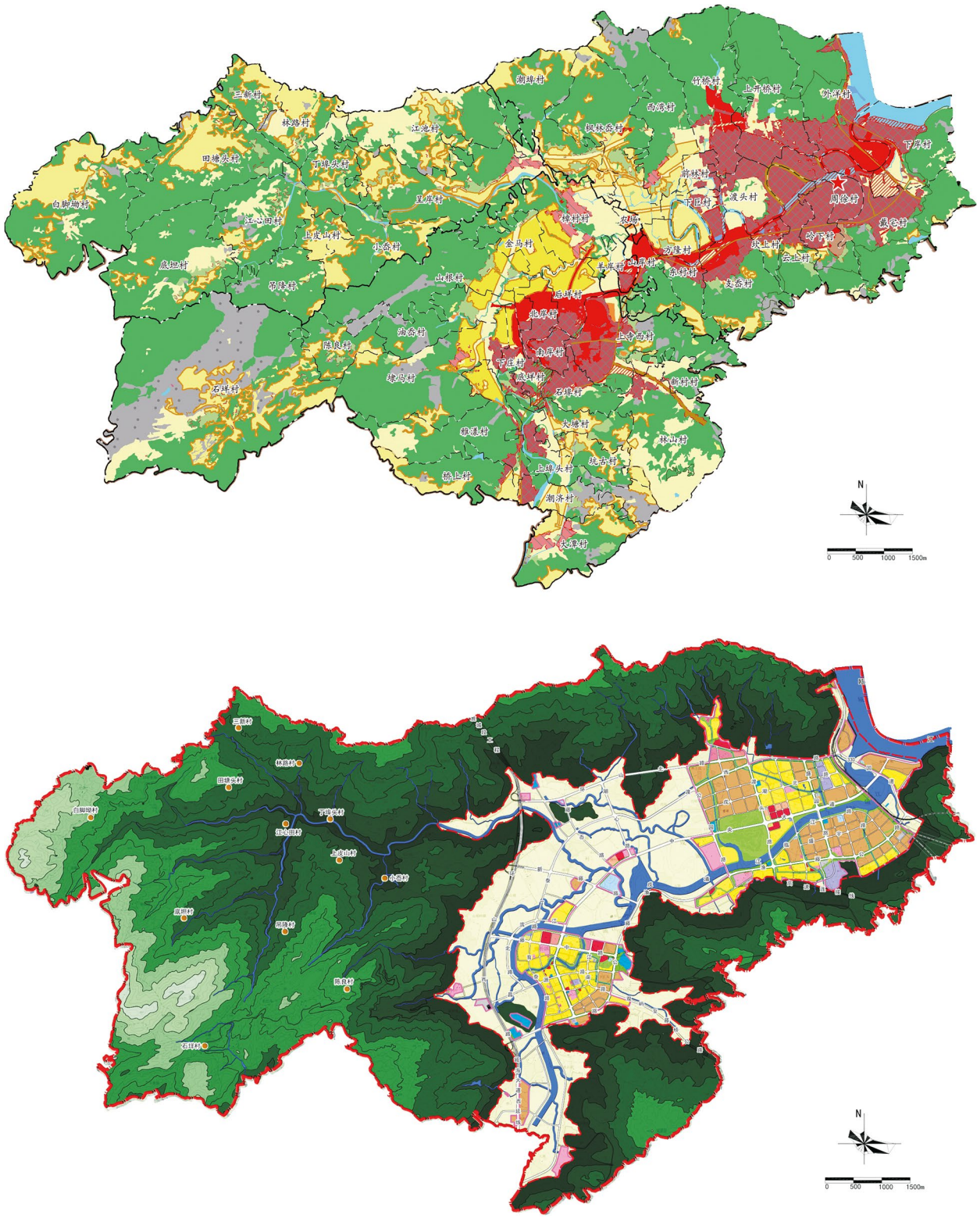

Fig. 2 "Township master plan" and "township land-use master plan" of tq town, Wenzhou City, Zhejiang Province. Source: Wenzhou Design Assembly Company Ltd., tq town Master Plan (2011–2020) and tq town Land-use Master Plan. (2006–2020) Atlas, 2017

needs in townships, towns and rural areas, which brings greater limitations to the plan.

The traditional township land-use master plan is guided by "protecting arable land and basic farmland," emphasizing top-down land allocation and boundary control. However, its vertical decomposition method is often too extensive and homogeneous, neglecting the differences in the current conditions, which makes it difficult to match the actual development demands of the locality. Plus, the previous land-use planning adopted the work method of "simultaneous formulation at the county and township levels," and the control and approval authority was extremely concentrated (requiring provincial or national approval, or approval by an authorized city divided into districts), which often makes it difficult for townships and towns to formulate a complete township land-use master plan after finishing basic tasks such as data collection for counties and cities, and many townships and towns failed to deliver complete and formal results.

As for the management and control, there still lacks clear technical standards and regulations for regional space control methods. Plans for townships and towns (township land-use master plan and township master plan) were originally supposed to have the function of implementable space control at the village and town level, but in fact, its capabilities to manage and control the entire administrative area are quite insufficient, which is mainly reflected in the widespread practice of "maps before bases " in the planning process, the random space control and zoning, and the lack of effective means in planning management, resulting in a serious lag in natural resource protection and supervision at the township level.

1.2 Township master plan is poorly coordinated and implemented with the lower levels

At present, the township level in general has a complete set of township master plan, but at its lower level, in terms of the detailed planning, the regulatory plan, urban (town) design and village planning are less complete, which directly leads to poor implementation of the township master plan. Besides, in the guidance of village planning, the previous township master plans only provided macro and systematic guidance to village units (such as delineating central villages, grassroots villages, etc.) and failed to offer guidance on the specific control and construction of villages. The traditional township land-use master plans only differentiated construction land from non-construction land (three zones and four boundaries) in terms of village management and control, and had weak management and control of village construction; and the village land-use planning that has been discussed for many years basically not started to be formulated. In general, the two master plans of townships and towns both showed inadaptability to townships and villages, and were difficult to comprehensively guide the development of townships and towns, or effectively control space resources.

1.3 Townships adopt an obvious dual system of land ownership, and construction land in urban and rural areas is mixed

Urban–rural dual system of land ownership is obvious at the township level. In 2016, a survey of 121 towns across the country done by the Ministry of Housing and Urban–Rural Development showed that the collective land accounted for as much as 60% of the town seat construction land in townships and towns, and the proportion of towns with administrative villages in the town seats was as high as 64% (Zhao, et al., 2017), which also made the town seats of townships and towns generally present a spatial structure characterized by low density and looseness. At the same time, the per capita construction land area of townships and towns was relatively large.

These characteristics of the land of townships and towns also indirectly lead to the frequent failure of the two traditional master plans. Since the township master plan mainly follows the planning method of urban land, it seems out of place for the town seats with a large number of the collective land. According to the survey done by the Ministry of Housing and Urban–Rural Development of the 121 towns, the per capita urban construction land was as large as 207m2, which reflects not only the extensive land use of townships and towns, but also the huge deviation between the control standards for land use indicators in the township master plan and the local reality. The expression of the township land-use master plan in a town seat is only "red spots," which does not distinguish the difference of land ownership, or implement the use control zoning, and is "too extensive, not meticulous enough" (Table 1).

1.4 A single existing planning standard is not enough as the scale of townships and towns is very different and their functions are incomplete

The scale of townships and towns in China varies greatly. Although the average area under the administration of a township or a town is 220km2, the largest reaches an area of 52,000 km2 (Lop Nur Town, Ruoqiang County, Xinjiang, whose area is 25 times that of Shenzhen, with a population of 4,300 people in 2017). From the perspective of the permanent population of the town area, 75% of the towns have a population of less than 50,000 people, but there are also more than 300 designed towns

Table 1 General information of townships and towns in China, 2016

	Designated towns	Townships	Townships and towns
Amount[a]	21 116	10 529	31 645
Average population (10,000 people)[a]	4.15	1.88	3.26
Average administrative area (km^2)[a]	188	270	220
Average built-up area (ha)[b]	220	63	158
Per capita construction land area (m^2/person)[b]	204	223	207

Data source: [a]2017 statistical annual report data of townships and towns, Ministry of Housing and Urban–Rural Development

[b] Zhao Hui, et al., 2017

Table 2 Cumulative percentage of permanent residents in built-up areas of townships and towns in 2016

Resident population in built-up area	Number of towns included	Cumulative percentage
Less than 3,000	3,315	18.99%
3,000 ~ 5,000	471	21.69%
5,000 ~ 10,000	7,981	67.42%
10,000 ~ 20,000	3,515	87.56%
20,000 ~ 30,000	1,103	93.88%
30,000 ~ 40,000	479	96.63%
40,000 ~ 50,000	233	97.96%
50,000 ~ 60,000	123	98.66%
60,000 ~ 70,000	78	99.11%
70,000 ~ 80,000	40	99.34%
80,000 ~ 90,000	31	99.52%
90,000 ~ 100,000	18	99.62%
More than 100,000	72	100.00%

Data source: Sorting and analysis base on the 2017 statistical annual report data of townships and towns (excluding county seats) of the Ministry of Housing and Urban–Rural Development

(non-county) with a population of more than 100,000 people in the town areas. From the perspective of the permanent population of town seat, there were 72 super-large towns with a population of more than 100,000 people in the town seats at the end of 2016 (excluding county seats) (Table 2). However, due to the excessively strict standards and approvals for establishing cities in China, there are very few cases where "designated towns are upgraded to cities" in a top–bottom manner through legal procedures.

Currently, the township-level government in China has only incomplete functions, no independent finance and construction approval powers, very limited administrative powers concerning the management and control of construction space and the management of non-construction space, and almost no authority to manage important natural resources. As a result, the township level cannot pay enough attention to the protection and supervision of ecological resources, which is one of the reasons for the serious destruction of natural resources such as mountains, rivers, forests, fields, lakes and grasses in China.

Although there are huge differences between townships and towns, what contradicts this is the existing planning standards, formulation methods, technical regulations, etc. (of a township master plan or a township land-use master plan) lack the targeted content to provide different guidance, and basically have only unified prescriptive clauses, resulting in poor planning adaptability and difficulty in meeting actual construction management demands in accordance with local conditions.

2 Requirements of the reform of the spatial planning system on the township level

2.1 Modernization of national governance requires the coordination of the management and control of township-level planning and the administrative powers

In essence, spatial planning is an important means for a country to carry out spatial governance. The new national spatial planning system, as an important means to promote the modernization of the national governance system and governance capabilities, will also reconstruct the relationship between administrative powers among different levels of government and become an important governance tool for regulating local development. As the basic unit of China's administrative system, town or township governments should actively respond to the goal of modernizing the national governance system under the current conditions that it only has limited administrative powers, to construct a planning management and control system that closely matches the administrative powers of townships and towns, and explore the reconstruction of the administrative power system of townships and towns that meets the requirements of modern governance. As the grassroots local governments, town or township governments should have the overall planning to lead and control the protection,

development, utilization and governance of territorial spaces in the entire administrative area.

2.2 Urban–rural integrated development requires townships and towns to take the responsibility of protecting natural resources and ecology

Since the 18th National Congress of the CPC, ecological civilization has become an important idea guiding China's construction in all aspects. "Opinions" clearly put forward the concept of "prioritizing ecological conservation and boosting green development," which requires the construction of a national spatial planning system to be based on ecological views and ecological values (Yang, et al., 2019). As the government level closest to natural resources, town or township governments play an important role in protecting natural resources and ecology, and are the key to the effective implementation of territorial spatial planning. In addition, the industrial development, layout of infrastructure and public service facilities of townships and towns require overall layout arrangements for urban and rural coordination, which requires consideration of not only the connection with counties and cities, but also the integration with the rural areas.

2.3 To have high-quality development and life in townships and towns is an objective requirement of new urbanization

The government work report of the State Council in 2018 put forward the "requirements for high-quality development." The establishment and improvement of the hierarchical and classified national spatial planning system is an important measure to promote high-quality development, and it is also an objective requirement of China's new urbanization. Compared with the traditional township master plan and township land-use master plan, the territorial spatial planning for townships and towns in the new era emphasizes the management of various natural resources in the entire administrative area and the orderly development and utilization of spatial resources. It not only requires the implementation of "multi-plan integration," but also requires full attention to the development quality of the three major spaces of towns, agriculture and ecology, to promote the transformation of development methods, lifestyles and governance methods (Zhuang, 2019; Zhang, 2019). Obviously, to achieve high-quality development in townships and towns, it is difficult to rely solely on territorial spatial planning at the municipal and county levels; instead, it requires in-depth and meticulous territorial spatial planning at the township level to adjust measures to local conditions.

3 Positioning features of township-level territorial spatial planning in China

3.1 International experience: to serve local development requirements, and match administrative powers of townships and towns

We may take the typical administrative units of the UK, France, and Japan that are similar in scale to China's townships and towns as objects, since their spatial planning characteristics, and the relationship between administrative powers, etc. have reference value for us to think about the necessity and positioning of overall planning for township-level territorial spaces in the new era. In the UK, the current spatial planning at the local level includes local plans and neighbourhood planning. The former is planning at the overall level, and the latter is a plan that focuses on implementation and details. Local plans are mainly applied to administrative units at the municipal, county, and district levels, and are formulated and approved by local planning authorities. These administrative units are similar in scale to the townships and towns in China (Tian & Geng, 2019). In France, at the commune level there are communes and intercommunalités, which are roughly equivalent to China's townships and towns in scale. France has formulated the Plan Local d'Urbanisme and the Communes Map at the commune level. The former is for larger communities or intercommunalités, and the latter is suitable for smaller cities and towns, mainly delineating districts, and proposing specific land use and construction indicators, as a basis for carrying out local planning and management (Sun, 2019). In Japan, spatial planning includes three levels: country, prefecture, and city, town and village. Among them, cities, towns and villages are the most basic government. From cities to towns to villages, places are becoming increasingly rural. In terms of scale, the towns and villages in Japan are comparable to the townships and towns in China. Like cities, towns and villages have their own land-use planning, which emphasizes overall outline and development orientation (Tan & Gao, 2018).

It can be seen from international experience that at the township level, countries have overall spatial planning as a guide for local development in general, an spatial planning is mainly formulated to serve the needs of local development under the framework of relevant laws and regulations, and is highly matching with the administrative powers of local governments.[1]

[1] However, it must be noted that the administrative system of Western countries is different from that of China. Local governments have strong autonomy, and a higher-level government has relatively weak control over a lower-level government.

3.2 To clarify the division of administrative powers in counties and townships, and appropriately delegate the authority over county-level planning and construction management to local government

"Opinions" points out that territorial spatial planning should be formulated and supervised in accordance with such principles as "The department organizing the formulation of a plan shall also be responsible for the implementation," "The department approving a plan shall also be responsible for the supervision," and "A department is responsible for approving plans within the scope of its management authority." Taking into account the characteristics of China's administrative system, overall planning for township-level territorial spaces must not only match the current administrative powers of townships and towns, but also clarify and try to reform the division of administrative powers among counties, townships and towns, so as to gradually and appropriately delegate the management authority over county-level planning and construction according to local conditions, and improve the governance capacity of town or township governments. Taking into account the reform trend of "establishing developed towns as cities" (Zhang & Dong, 2019), the management authority over territorial space resources should be further delegated directionally (such as the authority over specific land use control within the urban development boundary), and the role of town or township governments in natural resource management, supervision and inspection should be clarified. Overall planning for township-level territorial spaces should take into account the development demands of the town seats (market towns), and realize the overall planning management and control of all elements in the entire administrative area.

3.3 To coordinate management and control requirements of municipal and county-level territorial spatial plan and strengthen implementation

Overall planning for municipal and county-level territorial spaces is the upper-level planning for townships and towns. Therefore, overall planning for township-level territorial spaces must strictly conform to and implement relevant content in municipal and county planning, which mainly includes indicator conformity (protection indicators such as permanent basic farmland, retention rate of natural coastline, etc.; development indicators such as the scale of urban and rural construction land; restoration and renovation indicators such as high-standard farmland construction area, etc.), zoning conformity (such as the three spaces and three control lines; the red line, yellow line, blue line, purple line and other secondary control lines; and the delimitation of zones for specific uses, etc.), and list conformity (such as lists of various protected areas, cultural relics units, major projects, etc.) and so on.

At the same time, in the formulation stage of overall planning for municipal and county-level territorial spaces, it is advisable to realize county and township synergy and simultaneous formulation to ensure that sufficient, effective and accurate information feedback can be obtained at the municipal and county levels, and that the development demands of townships and towns are reflected in overall planning for municipal and county-level territorial spaces.

3.4 To innovate the control methods concerning the use of town built area

At the township level, in addition to the protection, development and utilization of various resources throughout the entire administrative area, the key and difficulty lie in the control methods concerning the use of town built area. It is necessary to innovate the control methods of space use, distinguish state-owned construction land and collective construction land, and explore the use access and use permission system. It is necessary to adopt a planning permission system similar to that of the UK on state-owned construction land, and adopt a construction and development permission system similar to that of Japan and Taiwan of China on collective construction land (Li & Sun, 2005; Jin & Lu, 2013). The former is consistent with the current management, control and license methods of urban construction land, and the latter requires further exploration and practice to achieve an effective balance between protecting land owners and external effects.

In addition, there are two ways to deal with the relationship between overall planning for township-level territorial spaces and detailed planning: (1) Adopt an integrated approach in the formulation of overall planning and detailed planning; (2) Adopt the approach of "major function-oriented zoning + key element control.

For the first approach, in fact, the Article 11[2] of the existing Measures for the Preparation, Examination and Approval of Detailed Control Plans on Cities and Towns has already proposed "integration of the master plan and the regulatory plan," but there have been few related practices over the years, proving indirectly the unsuitability of this approach here. In the face of the new national spatial planning system, although this approach

[2] The article states that "To prepare a regulatory plan for a small designated town, the preparation authority may put forward planning control requirements and indicators by taking into account the town master plan." However, the narrative of this article is rather vague, the definition of small designed towns is not clear, the corresponding technical methods and formulation and approval procedures are not perfect, and the application is relatively rare.

can simplify the levels involved in the planning at one go to a certain extent, its scope of application is limited (less applicable in large towns and developed towns), and the approval and modification procedure will be quite special, which is not conducive to the unification of the content of planning at all levels under the national spatial planning system.

For the second approach, it can be properly precise and detailed in terms of key points and key content. With this approach, the town seat planning will get rid of the technical tradition of the township master plan that is detailed to the land-use type, through the major function-oriented zoning, use each zone to have indicator and element control, and clarify key indicators such as major functions, development intensity, and allocation of and site selection requirements for public service facilities and municipal infrastructure, so as to form a town seat planning method of "major function-oriented zoning + key element control" in the end, taking into account other control elements in major function-oriented zones (such as historical buildings/ecological conservation requirements, etc.), and the guiding and detailed planning will be communicated to the lower level. This approach can avoid the excessive frequency of revision of the master plan caused by the "integration of the master plan and the detailed plan," and at the same time make up for the traditional township master plan's insufficient communication and control of the core indicators of the regulatory plan, and it can also be well integrated with the current overall planning for national territorial spaces system.

3.5 To coordinate and guide village (detailed) planning

In the new national spatial planning system, rural settlement allocation planning must be completed at the municipal and county levels. Overall planning for township-level territorial spaces, as an intermediate level between municipal and county planning and village planning, need to become the main platform for the management and control of village construction, and assume the important responsibilities specified in the Notice on Strengthening Village Planning and Promoting Rural Revitalization, that is, "If there are no conditions for making village planning, the territorial spatial planning for counties, townships and towns should clarify the control rules for village land and space use and construction control requirements, as the basis for the implementation of land and space use control and the issuance rural construction planning permission" (Fig. 3). In fact, as far as the current situation in China is concerned, most villages have no actual construction demands, hence insufficient motivation to formulate a complete village plan. The practice over the past years has also proved that

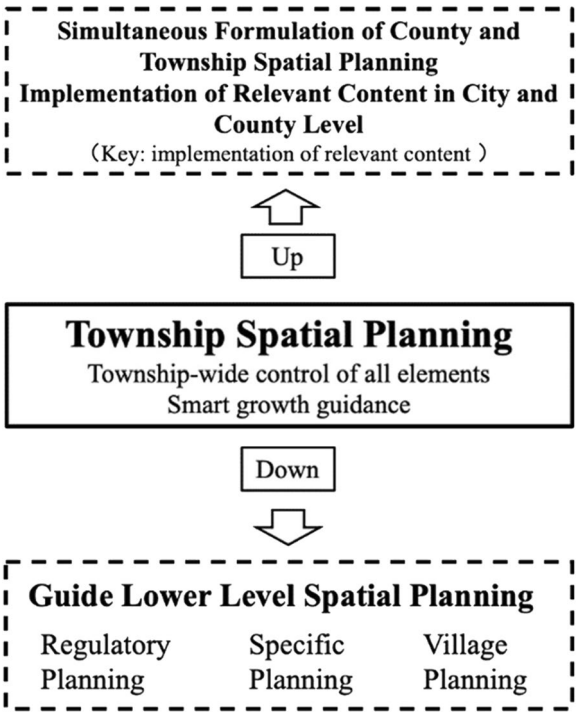

Fig. 3 Positioning and function of overall planning for township-level territorial spaces. Source: Drawn by the authors

the formulation of the so-called complete coverage village planning is basically only for the "statistics" purpose of competent department, and is virtually inoperable in reality.

Therefore, in the current territorial spatial planning reform, it is necessary to firmly grasp the management advantages of town or township governments as the grassroots local government, promote the combined formulation of town and village space (overall) planning and the complete coverage of the entire administrative areas at the township level, so as to realize the management and control of the planning and construction of the village. The baseline control of the planning and construction of the village can be promoted through the form of drawings, supplemented by the positive and negative list indexes, through the method of "element + indicator + icon + list," as a basis for general village construction. At the same time, it is necessary to realize the boundary of the township-level management and control of village construction, and make it clear that village planning is a detailed plan. The overall planning for township-level territorial spaces should clarify the construction boundary (scale) of the village, and effectively guide the formulation of detailed planning outside the urban development boundary.

For villages with large populations, villages with strong economic power, famous historical and cultural villages,

traditional villages and other special villages, special comprehensive village (detailed) plans can be formulated on the basis of township-level baseline management and control, while the basic control requirements should still be covered at the township level.

4 Key content of township-level territorial spatial planning

The overall planning for township-level territorial spaces in the context of the territorial spatial planning reform is not only an integration of the original multiple plans of townships and towns, but also a new exploration of the entire process from formulation and approval to implementation and supervision. It is the overall plan for the development, protection, utilization and governance of township-level territorial spaces under the guidance of "prioritizing ecological conservation," which plays a role in baseline control and development guidance. Corresponding to the characteristics and reform trends of administrative powers in China's townships and towns, the key content of overall planning for township-level territorial spaces should include the protection of various natural resources, the comprehensive management and control of land use, the overall planning for the spatial pattern of township and town areas, flexible planning for town seat space and baseline control of village construction, etc.

4.1 Strict protection of the natural resources in the entire administrative area of townships and towns

In the formulation of overall planning for township-level territorial spaces, it is necessary to make precise control of various elements of natural resources, delineate the red line for the protection of various resources, and the scope of protected areas (county and township planning should be formulated simultaneously, and feed back to municipal and county planning), deepen and detail the specific control content, and put all elements on "One Map." It should be pointed out that at the township level, due to its limited administrative powers, the management and control of natural resources is more about the detailing and implementation of various boundaries in overall planning for municipal and county-level territorial spaces (such as ecological conservation red line, permanent basic farmland protection red line, urban development boundary, etc.), the execution of the management, monitoring and inspection functions of natural resources authorized by the municipal and county governments, and the implementation of control measures and indicator requirements. In townships and towns with proper conditions, it is possible to explore the establishment of a township-level natural resource protection system, delineate the spatial boundaries of the township-level natural resource protection elements, and formulate rules and change procedures for the protection and development of natural resource elements.

4.2 Rigid control over the development and utilization of township-level territorial spaces

The core content of overall planning for township-level territorial spaces is the overall planning for the protection and development of the territorial spaces in the entire administrative area of townships and towns, which involves zoning and the formulation of control measures. In actual practice, the principles of protecting natural ecology, developing according to local conditions, intensive use of space, and overall planning of multi-dimensional areas should be followed, to detail various types of zoning such as cities and towns, agriculture and ecology, set comprehensive goals, define the scope of zoning, and clarify control measures, so as to carry out more targeted overall management and control of the protection and development pattern. For urban space, the experience of optimizing traditional land planning can be leant from to continue subdivide the urban space into concentrated urban construction areas, conditional urban construction areas, areas for special use purposes, mining and energy development areas, etc. Then, targeted requirements such as encouraging development, restricting development, and prohibiting development can be put forward for each district.

4.3 Coordination of the spatial pattern of township and town areas

The management and control of the spatial pattern of township and town areas should include the spatial structure of township and town areas, town and village systems, urban and rural construction land, industrial layout, integrated transportation, public services, public safety, public works, etc. Compared with the traditional township master plan, overall planning for township-level territorial spaces should be more rigid yet more flexible in the management and control of the township and town areas. For example, for important development nodes, traffic corridors, and major facilities that can affect the development of the entire administrative area of townships and towns, overall layout needs to be formulated at the level of the entire administrative area of townships and towns, but more flexibility should be given to the allocation of facilities at the same time. Different from the detailed management and control methods that even determine the site selection, this planning puts forward requirements for the allocation of public facilities, and clarifies the allocation standards, types and site selection requirements. The actual selection of construction site or precise control measures can be

included in detailed planning or special planning for further implementation.

4.4 Flexible planning for town built area

The innovation of town planning method is a key content of overall planning for township-level territorial spaces. It is recommended to adopt a relatively flexible town seat planning method of "major function-oriented zoning + key element control." With this method, the key formulation content for the town seat mainly includes major function-oriented zoning, the formulation of zoning indicators, and definition of management and control elements. Taking into account the spatial characteristics of townships and towns, the major function-oriented zones can be divided into residential and living areas, central activity areas, industrial logistics areas, strategic reserve areas, and other function-oriented areas. Each major function-oriented zone must have a "table of construction control indicators," which can include: zone number, major function, development intensity, infrastructure allocation, allocation of public service facilities, other requirements, etc., to achieve intensity and element control. For smaller townships and towns, there can be only one comprehensive function-oriented zone.

At the same time, town seat planning still needs a general planning map that reaches the depth of secondary land use classification. The general map is used to feed back the management and control indicators of each function-oriented zone, and to communicate the formulation of the regulatory plan, but it is not statutory, and mainly plays a guiding and indicative role.

4.5 Baseline management and control of village construction

For village construction, overall planning for township-level territorial spaces should implement rigid control over the baseline elements, of which the content can include the total scale of village construction land, delineating the expansion boundary of construction land, the protection red line for permanent basic farmland, the ecological conservation red line, the control line of protected buildings, etc., and putting forward relevant requirements for the allocation of primary schools and teaching sites, village-level administrative facilities, sewage treatment plants, substations and other public facilities. In the actual practice and implementation process, a "list of elements" can be used for management and control, and relevant laws and regulations should be gradually improved to put effective constraints on village construction. Correspondingly, the so-called "village planning" should maintain its essence as detailed planning, and it should not be formulated into a comprehensive plan except for a few special villages (traditional villages, etc.).

5 Conclusion

The traditional township master plan and township land-use master plan of townships and towns have many conflicts and predicaments: their content deviates from the actual management and control needs, and is poorly communicated to and implemented at the lower levels; the dual system of land ownership is especially obvious in the town seats; the townships and towns vary greatly in scale, and have incomplete functions. Contrary to this situation, modernization of national governance puts forward higher requirements for the coordination of the management and control of township-level planning and the administrative powers; urban–rural integrated development requires townships and towns to assume the responsibility of protecting natural resources and ecology; new urbanization also requires to have high-quality development and life in townships and towns. Under the above-mentioned background, the importance of territorial spatial planning for townships and towns becomes self-evident. In particular, the township level requires overall planning for national territorial spaces to undertake the implementation of city and county planning and guide the formulation and implementation of detailed planning. The key content of overall planning for township-level territorial spaces should must include the protection of natural resources in the entire region, the development and utilization of territorial space, the spatial pattern of the entire administrative area, the spatial layout of town seat, and the management and control of village construction.

In fact, the establishment of the national spatial planning system is both administratively and technically logical (Zhao, 2019). On the basis of fully understanding the current problems and contradictions in reality, overall planning for township-level territorial spaces must comprehensively consider to respond to the calls for ecological civilization and the modernization of governance systems, as well as the requirements for leading high-quality development through planning to innovatively explore the positioning of planning that meets the development demands of the era. It must pay full attention to the dialectical relationship between the division of administrative powers among counties, townships and towns, and serving local needs. It must not only straighten out the logic of the national spatial planning system, but also simultaneously promote changes in related fields, including administrative divisions (establishing large towns as cities) and fiscal and taxation systems (regaining the fiscal and taxation independence of

townships and towns, and improving the transfer payment system), so that all aspects can function work together to promote the healthy development of townships and towns. Overall planning for township-level territorial spaces, as the overall planning for areas at the lowest administrative level, has its particularity. Townships and towns, which are large in quantity, wide in scope, and extremely diverse, are at various development stages and face differentiated development demands. To explore how to formulate effective and useful overall planning for township-level territorial spaces is a key task for the further reform of territorial spatial planning.

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Declarations

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