Review of Studies on Sustainable Development of Characteristic Towns: Key Word Frequency Analysis Method

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Abstract. During the fast development of China’s urbanization process, the concept of characteristic towns is put forward to advance urban-rural integration development. Several studies have explored the connotation, origin and functional positioning under the background of new urbanization and supply-side structural reform. This paper reviews recent studies centered on characteristic town, and also carries out the analysis of keyword frequency data from the core journals of China National Knowledge Infrastructure (CNKI) with the theme of ‘characteristic town’. Finally, the research concludes the research perspective, methods and contents, and presents suggestions on management efficiency, regional development, county planning, environmental ecology and capital utilization through literature analysis and practice summary.

1. Introduction

The report of the 19th National Congress of the Communist Party of China put forward a comprehensive rural revitalization and urban-rural integration development strategy with Chinese characteristics. The characteristic towns and the beautiful countryside are built together, and they also coincide with the requirements of the agricultural supply-side structural reform[1]. As a carrier of new urbanization and an important platform for attracting investment in new rural construction, the characteristic town is an important strategic measure to optimize the spatial layout of urban agglomerations. By means of gathering the characteristic industrial chain, the characteristic town reduces space transaction costs, improves resource allocation and spatial linkage efficiency[2], and provides multi-level and diversified public service supply. It also undertakes the function of optimizing the living environment, excavating the cultural connotation of the countryside, and building a platform for talent innovation and entrepreneurship[3]. Ultimately, it can optimize the urban-rural spatial structure and exert its poverty alleviation and radiation lead role to help rural revitalization. This shows that we have taken the research of characteristic town as the hot spot under the background of new urbanization, with focuses on connotation, development background, functional orientation, development planning, operation mechanism and precise governance.
2. Connotation and development background

2.1 The connotation of the characteristic town
At present, the domestic academic circles do not form a consistent understanding of the characteristic towns, and their connotations are gradually enriched and perfected in practice, mainly including the ‘Zhejiang model’ and the model of designated towns. ‘Guidelines for the People's Government of Zhejiang Province on Accelerating the Planning and Construction of Characteristic Towns’ (Zhejiang Provincial People's Government issued [2015] No. 8) proposed that the characteristic town is relatively independent of the urban area, with clear industrial orientation, cultural connotation, tourism and certain community functions. The spatial platform for development is different from administrative division unit and the industrial park, not the concept of township in urban and rural areas. And ‘Guiding Opinions of the National Development and Reform Commission on Accelerating the Construction of Beautiful and Small Towns’ (Development and Reform Commission Planning [2016] No. 2125) put forward ‘characteristic towns’ and ‘characteristic small towns’, which are administratively-established towns with a certain population size and nature requirements approved by the people’s governments of provinces, autonomous regions and municipalities directly under the Central Government. Judging from the list of national and provincial characteristic towns that have been released so far, in the future, whether it is a town or a ‘space platform for development’ or even an original industrial park, as long as it meets the participation of government and enterprises, and it has a characteristic industry, a livable beautiful environment, a distinctive culture, a sound infrastructure service, and a flexible construction mechanism, it is possible to become a characteristic town. [4].

2.2 The origin and theoretical background of the development of characteristic towns
Wu Wei (2017) analyzed development process of the characteristic towns from the four stages of the ‘three rural’, township enterprises, extended service industries and the new economy represented by Zhejiang in the 40 years of reform and opening up [3]. Fei Xiaotong proposed in 1983 to use rural industrialization and the development of township enterprises as the driving forces for the development of small towns, which can be regarded as the initial studies of domestic theoretical researches on small towns. Later, some scholars demonstrated the objectivity of development of small towns from the aspects of institutional change (Zhao Yanjing, 2001), economies of scale, growth poles and anti-magnetic force (Meng Xianglin, 2005) and other perspectives of development economics. Zhou Jing (2018) took the typical characteristic towns in foreign countries as examples, and revealed the leading and collateral effects of social forces on characteristic towns according to self-organization theory [5]. Zhao Yanqing (2018) advocated that it is almost the only way that the marginal areas such as Xinjiang, Qinghai and Tibet can get through specialized division of labor to realize urbanization [6]. Inspired by the theory of marginal cities, Ke Min advocated the use of PPP and other comprehensive development models to achieve industrial layout [7]. Foreign theoretical studies on the development of small towns can be traced back to the early economist Marshall's industrial cluster theory and other related economics theories. Baldwin and Okubo (2006) [8] explored the impact of group self-selection heterogeneity on the spatial distribution of industry from the perspective of new economic geography. Bradbury (1996) and Mayer (2010) conducted researches on sustainable development, environment and society on the basis of new urbanism [9, 10].

3. Researches on the sustainable development of characteristic towns
For the sustainable construction of characteristic towns, the current researches mainly focus on the main body positioning, regional differentiation development, spatial organization optimization, ecological environment creation, and innovative financing channels.
3.1 Governance Subject Orientation and Innovation of Governance Model

3.1.1 Do good jobs in government positioning and public policy supply. At present, there are three models for the development of small towns with Chinese characteristics: government-led, enterprise-led, and government-enterprise. The promotion of the construction of characteristic towns faces the game of market standard and national policy design standard. Through the analysis of word frequency, 69 Chinese core journals with the theme of characteristic towns are found. There are 46 studies on the status relationship between government and market, while only nine papers emphasize the government's dominant role.

Generally speaking, the construction of characteristic towns should not only be included in the overall strategy and will of the country's urbanization, but also a pioneering attempt to supply local urbanization policies and a process of coordination among different local governments [11]. The opinions of the following scholars are mainly selected to support the discussion of the leading role of the government. Wang Xiaozhang (2016) proposed that the characteristic towns could avoid the spontaneous blindness of the urbanization process through the efforts of multiple governments and long-term conscious, targeted, systematic and scientific planning [12]. Wu Wei (2017) believed that the certainty of policy orientation might greatly mitigate the huge risks brought by market uncertainty [3]. Qiu Jiayu (2017) focused on the policy tracking audit path of the characteristic towns with universal values in the stages of preparation, implementation, and reporting so as to timely understand the problems in the creation [13]. Li Tao (2017) analyzed the local government, as the leading party and promoter of the small town projects from the perspective of financing channels, exactly frames the implementation plan and credit enhancement endorsement. And the local finances need to offer supports from the bottom, especially play a leading part in the PPP mode [14]. Wen Yan (2017) emphasized the importance of government support in building the index system of core competence of characteristic towns [15]. Cheng Haiyan (2018) indicated that industries in underdeveloped regions might adopt a ‘government-led’ development model [16].

3.1.2 Motivation mechanism to stimulate endogenous development. At present, scholars generally advocate that the development of characteristic towns is guided by the government, and the market plays a dominant role in resource allocation. It is necessary to pay attention to the government's macro-control and management, and avoid the blind development with the motivations of performance and administrative power, which would result in insufficient financial resources, and utopian planning that neglects resource differences of humanities, historical traditions, and social and economic foundations [17]. Jiang Qing (2017) put forward we should organically distinguish between administrative resources and market resources. The government needs to deepen the reform of the urban hierarchical administrative management system. It's also important to weaken the government's management functions and strengthen the public service functions [12]. The construction of characteristic towns can draw on the basic experiences of constructing cities in use of private capital in Zhejiang. We must adhere to endogenous development, fully leverage domestic and overseas entrepreneurial talents, industry leaders, and other social capital forces that participate in the constructions of infrastructure, real estate and supporting engineering in various ways, increase the supply of public goods, and stimulate the vitality and cohesion of the town, at last avoid ‘marketization’ to break the way in which strong government and large state-owned enterprises undertake the whole things.

3.1.3 Innovation of collaborative governance model. Summarizing the above viewpoints, in the processes of construction and operation, the characteristic towns make full use of the market to allocate resources with the industrial economy as the core. On the other hand, they also should be given more autonomy in land, finance, taxation, financing, etc., and must have value-oriented governance goals to integrate new resources such as government public services, industrial capital and social and cultural elements to achieve comprehensive regional governance [18]. The government should
play an important role in public services and other comprehensive material supports, and have an obligation to optimize the formulation of government policies and innovate planning management models to create a level playing field. Specifically, innovation can be made in the fiscal system and governance model. For example, a small town can retain a certain percentage of property taxes as a special fund for public supporting services, and will be given a certain degree of resident autonomy in the governance model such as the establishment of the association to govern small town affairs [19].

Min Xueqin (2016) and Li Pengju both advocated the multi-dimensional collaborative governance model of the government, enterprises, community residents and other organizations, and proposed that mechanism could be open and diversified public service supplies should meet collaborative sharing. But how to integrate the governance factors, to weak the influence of community relations and related behaviors on regional development, to narrow difference between the impulsiveness of government performance, the profit goals of enterprises, the resident daily needs and multiple goals for other interested parties, and to construct the awareness of community have yet to be further studied [17].

3.2 Coordinated development according to local conditions
At different stages of development in developed and underdeveloped regions, there inevitably exists differences between regional spatial structure, population size, industrial base, urbanization process, scientific and technical innovation level, integration of cultural elements, public services, institutional environment and other resource endowments in characteristic towns [20]. To solve the many problems of uncoordinated development in urbanization, it is necessary to formulate different development plans for characteristic towns based on regional characteristics: for the eastern regions with better comprehensive conditions and dense designated towns, it is necessary to lift stocks and strictly control scale; the central regions should be market-oriented and driven by innovation, and grasp the direction of industrial development; the western regions cannot be separated from its own resource constraints and should give full play to the resources [21].

3.3 Optimizing the spatial organization system
The characteristic towns are upgrades of small towns and important towns [22]. They are driven by the diffusion effect of the ‘core area’, and its status of ‘sub-core’ is also protected from the polarization effect, which is conducive to realize local urbanization [23]. To realize the healthy and sustainable development of characteristic towns, it is necessary to solve the problem of rational allocation of land elements. Therefore, we need scientifically allocate the proportion of commercial and industrial land. Yu Chiming proposed to promote the establishment of the standard for the increase and decrease of land, use indicators for urban and rural construction, and to redevelop the low hills, gentle slopes, inefficient and stock land. To solve land use problems, we should also improve the right to operate collective construction land and the right to use homestead and perfect leasing system and other policy innovation [23]. Furthermore, we need restructure socioeconomic space measure to solve the contradictions between tourism development and the exploitation of natural resources, and to narrow differences between the resettlement and employment of the original community residents [24]. Ultimately, we can build a characteristic small town into a sustainable space organization system that creates demand and drives development [20].

3.4 Create a good ecological environment
The construction of characteristic towns should be people-oriented and it is significant to deal with the protections of natural ecology and historical and cultural monuments. Also, it is necessary to implement lifelong accountability system proposed by the central government in the plan of ecological civilization reform for people who have broken the natural resources and environment. Li Zhiqiang (2017), through the guidance of ecological governance thinking, took the sustainable development framework of economic development, social governance, cultural revitalization and policy mechanism as the basic explanatory thoughts, and constructed the content system of ecosystem elements, ecological cultivation system, ecological governance dimension, ecological governance principles and
ecological governance policy [25].

3.5 Innovation of multiple financing models
Some scholars have suggested adopting the equity fund model, and platform builders of the characteristic town launched a parent fund to absorb the participation of common developers of small town projects including planning, engineering, construction, operation and other application product derivatives. Furthermore, it is possible to consider issuing bonds in the inter-bank bond market for eligible projects, set up fund for construction project of characteristic town, and adopt lease financing methods for important equipment required during the construction of the project. We can also conduct asset securities based on project income or establish fixed-income trust management schemes. The model of ‘Internet + Finance’ can be used to open up the whole process of planning and design, development and operation, industrial investment, and investment and consumption. In addition, we can innovate the financing channels of "intelligent crowdfunding, ability crowdfunding, credit crowdfunding", etc. At last, the government can set up financing institutions to enrich financing methods [26].

4. Summary
First of all, the researches at present on characteristic towns mainly focus on functional orientation, operational mechanism, the experience used for reference and other aspects. But from the characteristic industrial niche level which breaks through the administrative boundaries, there is a controversial issue: is it a buffer zone for high-load cities or an opportunity for rural urbanization in the development of town groups and urban agglomerations? Secondly, in terms of management, resource allocation and other aspects, the construction of networks with the different levels of units, neighboring economies on interactive, complementary, competitive and cooperative relationship lacks of necessary research. After the economy and population growth to a certain scale, changes in management functions and avoiding becoming a sandwich layer in the urban and rural system are all worth pondering. At last, how to improve the efficiency of construction and operation, to construct a scientific, systematic and flexible performance analysis framework from the perspective of innovation policy design, and to draw on the lessons of experience of the model towns by excavating the innovation elements deeply to achieve sustainable development [2], become the issues as well that cannot be ignored in future research.

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