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ABSTRACTS

GUANGDONG-HONG KONG-MACAO GREATER BAY AREA

On the Spatial Structure Evolution and Influencing Factors of Urban Agglomerations in the Guangdong-Hong Kong-Macao Greater Bay Area Based on the Spatio-temporal Big Data 4

HE Xiong, YUAN Xiaodie, ZHANG Guojun, ZHOU Chunshan

Abstract: Through obtaining nighttime light data, spatial data from LandScan, and spatio-temporal big data (here POI data) in 2013 and 2022, and applying a variety of spatial methods, the spatial structure evolution and influencing factors of the urban agglomerations in the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) are compared and analyzed. It seems that the major centers of urban agglomerations are more densely distributed than those secondary centers, and there are more urban agglomerations in the western Guangdong province than in the east, presenting an unbalanced development pattern and a multi-node network spatial structure. The spatial structure evolution of the GBA urban agglomerations tends to be affected mostly by the level of economic development while least by natural environmental factors. The study therefore puts forward suggestions for optimizing the spatial structure of GBA urban agglomerations, including constructing a multi-node supported spatial pattern of urban agglomerations, improving the transportation network within the GBA, and strengthening government macro control in resource allocation.

Keywords: the Guangdong-Hong Kong-Macao Greater Bay Area; spatio-temporal big data; spatial structure; evolution characteristics; nighttime light data

On the Evaluation of Social Services in the Guangdong-Hong Kong-Macao Greater Bay Area Based on the Entropy Weight Method and the Analytic Hierarchy Process 14

XU Jinfei, HU Jingjia, PENG Kun, HONG Mingxin

Abstract: Establishing a mechanism evaluating social services in the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) is key to its development process and affects the exercise of cross-border social services. When promoting the industry standard system, problems exist such as obscure assessment standards. On the basis of reviewing the evaluation standards of social services, the study refers to the model framework of the evaluation indicators of the satisfaction of social work objects, comprehensively uses entropy weight method and analytic hierarchy process to analyze the weight of indicators, and establishes a comprehensive index system for the evaluation of social services in the GBA. It is found that service quality, working ability, and working methods and skills are

three of the great contributors, with the service quality weighted the most. Practical suggestions are made for the integrated development of social services in the GBA.

Keywords: the Guangdong-Hong Kong-Macao Greater Bay Area; social service organization; social service evaluation indicator; comprehensive index weight of social services; cross-border social services

CITY TALKS

The Full Revitalization of Northeast China and the Russian Far East Development: From the Regional Development Cooperation Between China and Russia 29

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The Dilemma of Senior Volunteerism and Its Solutions: Based on a Field Investigation in Zhejiang Province 58

ZHI Yuling, YU Xiaohui

Abstract: Senior volunteerism is of great significance for the development of elderly human capital, meeting the diversified needs of senior citizens, integrating home care service resources, and improving the eldercare system. Based on the questionnaire survey data of 799 senior volunteers, and the qualitative interview data of 9 senior volunteers and 2 community social workers in Zhejiang province, the paper adopts the multivariate statistical analysis method to investigate the main factors affecting senior volunteerism quantitatively and qualitatively. Results show that satisfaction on the part of senior volunteers can be significantly boosted by family supports, skill trainings, and institutional rewards, while their marriage and health status also play a significant promoting role. Those who have volunteered in law popularization, or received knowledge or skill trainings before volunteer services tend to recognize the value of such trainings more.

Keywords: senior volunteerism; elderly human capital; home care service resources; eldercare system

URBAN GOVERNANCE

Assessing the Level of Smart Development of Resource-Based Cities: A Case Study of Sichuan Province 69

GUO Yuanyuan, ZHANG Runhao, XIA Zihui

Abstract: The paper sets up an index assessing the level of smart development for resource-based cities in Sichuan province from six indicators, i.e., economic development, public service, land, transportation, resource dependence, and ecological environment. The index is used to describe the temporal and spatial changes in the level of smart development in these resource-based cities. It can also reveal the differences between municipal and county level cities, and the causes behind such differences on the basis of reclassifying those resource-based cities. Results

show that ecological environment is the principal factor affecting the smart development of resource-based cities. From 2010 to 2019, the smart development level of most resource-based cities in Sichuan province increased significantly, with cities in the southern part of the province increasing faster. Municipal resource-based cities were doing better than the county-level ones, especially in three of the indicators, including land, resource dependence, and ecological environment. In terms of different types of resource-based cities, certain amount of development was witnessed in developing, diminishing, as well as declining cities, but was invisible in the potential ones.

Keywords: resource-based city; smart development; resource dependence; economic transformation; Sichuan province

REGION & URBANIZATION

China's Urbanization Process From an Emotional Perspective: A Study Based on the People-place Emotional Bond 81

CHEN Hao, ZHANG Ying

ABSTRACT: How to establish a close emotional connection between the displaced population and the urban location in the process of urbanization belongs to the emotional dimension of China's urbanization process, which is an important part of the practice of the new urbanization strategy and related academic research. Based on the theory of place attachment, the article interprets the evolution of China's urbanization process from the perspective of people-place emotional bond. Generally speaking, it went from the stage of establishment and stabilization centering on the institutional unit since the founding of the People's Republic of China to the early phase of the reform and opening up period, then to a weakening stage from the 1980s to the early 2010s, and finally to a gradual multi-scale reconstructive stage under the new urbanization strategy. In the face of large-scale population flow and urban spatial reorganization in the process of urbanization, it is an arduous task for Chinese people to build a relatively close sense of place attachment with cities and towns and see them as their new hometowns. In this sense, promoting urbanization from the emotional dimension should become an important part of the new urbanization strategy, and systematic actions should be adopted from four dimensions, including enhancing place dependence, promoting identity integration, promoting social connection and nurturing place identity.

Keywords: urbanization; new urbanization strategy; people-place relationships; emotional bond

On the Evolution of Structural Resilience of High-quality Development Networks in Central China From a Complex Networks Perspective 98

ZHANG Xiaojuan, LIU Chengjun

Abstract: With the deepening of inter-regional economic ties, network resilience has become an important factor affecting the high-quality development of Central China. Taking 80 prefecture-level cities in Central China as the objects of study, the paper constructs an evaluation index system for central China pursuing development that is innovation-driven, coordinated, green, oriented toward global progress, and beneficial to all. The index comprehen-

sively evaluates the structural resilience of high-quality development networks in Central China between 2012 and 2020 from the dimensions of hierarchy, matching degree, concentration degree, transmissibility, and diversity, before reaching the following conclusions. In this multi-layered structure where Wuhan and Changsha are the absolute centers of the network, cities like Hefei, Nanchang, Zhengzhou, and Yichang are secondary centers, whereas a majority of the rest is located in the periphery. Inter-regional connections are limited but generally ascending; a slight improvement in the level of high-quality development network has been witnessed, with provincial capital cities high in the hierarchy. The heterogeneous network is increasingly composed of cities at different levels and manifests a certain agglomeration effect. The continuous improvement of a transmissible and diversified network helps to improve the structural resilience of the whole network. Cities in northern Shanxi province as well as some of the prefecture-level cities like Xiaogan and Yingtan impose weak influences on transmissibility. Network failures or interruptions in inter-provincial border areas such as Zhangjiajie and Xuancheng has mild impacts on network diversity.

Keywords: Central China; high-quality development; network structural resilience; hierarchy; transmissibility

URBAN RENEWAL

Revitalizing the Land Assets of Guangzhou's State-owned Enterprises: A Market-based Approach With the Case Study of Guangzhou K Group 112

TAN Ziyi, LI Zhuojun, XIAO Yi, LI Zhe

Abstract: In the post-pandemic era, the efficient market-based allocation of factors of production serves as a key generator for sustainable urban vitality. Starting from the innovations of market-based allocation of factors of production, and focusing on the Guangzhou-based state-owned enterprises, the paper explores a revitalization model for their land assets via the case study of a plan implemented by K Group. The study showcases the pivotal role of market-based factor allocation in enhancing land resource efficiency, securing gains for both the government and the enterprises, and advancing urban industries and functions. Its findings provide reference for other Chinese cities seeking guidance and insights in this realm.

Keywords: market-based allocation of factors of production; land assets revitalization of enterprises; integrated land use

ECO-CITY

Can the Spatial Structure of Urban Agglomerations Contribute to the Win-win Situation Between Economic Development and Carbon Emission Reduction? An Empirical Analysis Based on 19 Urban Agglomerations in China 126

CHEN Wei, LI Zhuohang, XIAO Yingtong, WANG Yanan

Abstract: Urban agglomerations are important units of regional economic development and key to coordinating urban development in China. Discussing the spatial structure of urban agglomerations is of great significance to

the win-win situation between economic development and carbon emission reduction. Taking 19 urban agglomerations in China as research samples, the study empirically analyzes the influence of spatial structure of urban agglomerations on green development index from 2006 to 2019 by using two-way fixed effect model (TWFE), and explores its mechanism of action and the influence on different types of urban agglomerations. Results show that most urban agglomerations in China are multi-centered, but also showing single-centered trends. There is an N-shaped relationship between the spatial structure of urban agglomeration and the green development index. Industrial structure play a negative regulating role in the process of the spatial structure of urban agglomeration affecting the green development index, and the level of science and technology and of division of labor play an indirect intermediary role. The influence of spatial structure of urban agglomerations on green development index is characterized by the heterogeneity of centrality characteristics of urban agglomerations. Both the evolution of low-centrality urban agglomerations to polycentric spatial structure, and of high-centrality urban agglomerations to monocentric spatial structure are more conducive to the reduction of green development index of urban agglomerations.

Keywords: urban agglomeration; spatial structure; carbon reduction; economic development; win-win situation

On the Influence of Urban Industrial Co-agglomeration On Green Total Factor Productivity: An Empirical Analysis Based on the Upper Reaches of the Yangtze River 141

TAN Meirong, TANG Yan, LUO Yinchen

Abstract: The paper measures and studies the changing trend of industrial co-agglomeration level of manufacturing industry and producer services, as well as the green total factor productivity (GTFP) in 30 prefecture-level cities on the upper reaches of the Yangtze River. Based on the panel data from 2010 to 2020, it analyzes the effect of industrial co-agglomeration on GTFP and its impacting mechanism. Results show that the differences of industrial co-agglomeration among cities on the upper reaches of the Yangtze River has been narrowing. During the study period, most cities seen growth in the GTFP. Industrial co-agglomeration has a positive effect on GTFP. The improvement of GTFP is mainly promoted by industrial co-agglomeration through the diffusion of pure technical efficiency, while the positive impacts of green scale efficiency and technological progress are not significant. Therefore, cities should orient their industrial development based on the advantages of their leading industries and setting differentiated development goals according to the degree of urban specialization and agglomeration, in order to promote the optimization and upgrading of the industrial structure and improve the efficiency of the regional green economy.

Keywords: co-agglomeration; GTFP; manufacturing industry; producer services