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Research on the Activation Pathways of Dormant Resources in the Guangdong-Hong Kong-Macao Greater Bay Area Under the Guidance of the "Project of Promoting High-quality Development in 100 Counties, 1,000 Towns and 10,000 Villages"

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Abstract: Under the background of the "hundred million project" in Guangdong Province, the activation of sleeping resources in the Guangdong-Hong Kong-Macao Bay area has become an important issue to promote regional coordinated development. This paper sorts out the current situation and activation practice of Dawan district's sleeping resources such as culture, human resources, land and industry, and analyzes the current challenges such as talent shortage, weak cultural heritage, and lack of infrastructure, combined with typical cases such as Tangjiawan in Zhuhai, Dongfeng in Zhongshan, and Huidong in Huizhou, and then puts forward the activation paths such as the talent strategy of "combining education with introduction", "intangible cultural heritage+tourism" integration path, infrastructure optimization, and industrial collaborative innovation. The research shows that the value transformation of sleeping resources can be realized through the coordination of multiple subjects and mechanism innovation, which provides a reference for the high-quality development and Rural Revitalization of the Guangdong-Hong Kong-Macao Greater Bay area.

Keywords: Dormant resources; Guangdong-Hong Kong-Macao Greater Bay Area; The "Project of Promoting High-quality Development in 100 Counties, 1,000 Towns and 10,000 Villages"; Ecological products; Value realization

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1. Introduction

As China's economic and social development has entered a new stage, the imbalance between urban and rural

regional development in Guangdong has become increasingly prominent, and the development gap between the Pearl River Delta and Northern and western Guangdong is still large. In order to solve this problem and promote the high-quality development of the province, the Guangdong provincial government comprehensively promoted the implementation of the "million project" in 2023. In this context, revitalizing the "sleeping resources" — that is, the resources such as land, culture, ecology, human resources, industry, and data that have not been fully exploited and utilized — has become an important measure to promote the "million project." The two promote each other and jointly inject power into the coordinated development of the region [1]. At present, around the "hundred million project" and rural revitalization, the academic community has carried out many beneficial explorations, such as Diao and Wu, taking Shaxinlang village, Guangning County, Zhaoqing City as an example to summarize the experience of rural high-quality development [2]; Deng and Chen discussed how rural e-commerce and agricultural automation can help the "million project" [3]; Qiu and others analyzed the role of talents in promoting regional development from the perspective of high-end youth talent exchange [4]. However, most of the existing studies focus on specific regions or single resource types, and there is still a lack of integrated discussion on how to systematically identify and activate multiple sleeping resources in the Guangdong-Hong Kong-Macao Greater Bay area under the guidance of the "million project." Therefore, based on the existing research, this paper aims to focus on Guangdong-Hong Kong-Macao Dawan District, sort out the current situation and activation practice of its sleeping resources such as culture, manpower, land and industry, analyze the challenges, and then put forward the resource activation path with regional characteristics, in order to provide reference for deepening the implementation of the "hundred million project" and promoting the coordinated development and Rural Revitalization of Dawan district.

2. Overview of sleeping resources in the Guangdong-Hong Kong-Macao Great Bay area

2.1. Overview of cultural sleeping resources

The cultural sleeping resources in the Guangdong-Hong Kong-Macao Bay area mainly refer to the physical and intangible cultural heritage that has not been systematically sorted out, effectively protected, and innovatively utilized in the region. Specifically, it includes a large number of historical buildings, traditional villages, agricultural cultural heritage, folk festivals, local skills, and public cultural facilities scattered in villages and towns. These resources are often idle or inefficient due to a lack of overall planning, insufficient capital investment, an imperfect inheritance mechanism, or a poor connection with modern life. Its "sleeping" features are mainly as follows: the physical space is abandoned, or the function is shrinking, the cultural memory and skills are facing the inheritance fault, and the cultural value has not been effectively transformed into social and economic value. At present, although some places have begun to pay attention to the protection and utilization of cultural resources, as shown in Sun Lin's research on Jingmei village in Xinhui, Jiangmen, the village can revitalize the countryside by mining intangible cultural heritage, Dawan district as a whole still faces problems such as unclear cultural resources, single activation mode, and insufficient regional linkage, and its profound cultural heritage has not been fully released [5].

2.2. Overview of human sleeping resources

The "sleeping" of human resources in the Guangdong-Hong Kong-Macao Greater Bay area is mainly manifested by structural imbalance and unexplained potential. On the one hand, rural areas are facing brain drain, the left

behind population is aging, the skills are single, and the potential of a large number of local labor forces has not been tapped; On the other hand, there are also some professional talents in cities whose skills do not match the job demand, or who fail to fully participate in regional innovation cooperation. This "sleeping" state restricts the upgrading of rural industries and the innovation and development of enterprises. Existing studies have focused on the reshaping of human resource management by digital and green transformation. For example, Liyuwei discussed the empowerment of digital and intelligent transformation on enterprise human resources, and Yang Min analyzed the significance of green human resource management on the revitalization of rural culture [6–7]. These studies point to a new direction of human resource development. However, Dawan district still has mechanism barriers in terms of cross-regional talent flow, rural talent training, and skills upgrading, resulting in a large number of human resources failing to give full play to their effectiveness in the "hundred million project."

2.3. Overview of land sleeping resources

Land sleeping resources mainly refer to idle and inefficient construction land and agricultural land in the Greater Bay area of Guangdong, Hong Kong, and Macao, especially in the peripheral rural areas and some urban fringe areas. Specifically, it includes idle rural homesteads, abandoned land for rural enterprises, storage land with a low utilization rate, and development land temporarily shelved due to planning adjustments. These land resources have not been intensively utilized, or their functions have not been improved, which not only causes a waste of space resources, but also limits the development of rural industries and the growth of farmers' property income. At present, the reform of the "separation of three rights" of rural residential land has provided a policy basis for land circulation and revitalization. However, in the actual implementation, there are still many problems, such as the poor transfer of property rights, the imperfect market-oriented allocation mechanism, and the difficulty of planning integration. As a result, a large number of land resources have been in a "sleep" state for a long time, which has failed to effectively support urban-rural integration and regional high-quality development.

2.4. Overview of industrial sleeping resources

Industrial sleeping resources mainly refer to those industrial elements that have fallen into recession or stagnation due to failing to adapt to the development requirements of the new era within the Guangdong-Hong Kong-Macao Greater Bay area, especially in traditional industrial agglomeration areas and rural areas. Including the factory facilities left by the transformed or relocated industries, the traditional processes and products with market potential but backward technology, the local characteristic agricultural resources that fail to integrate into the modern industrial chain, and the industrial links that fail to give full play to their advantages due to the homogenization of regional competition. Although the industrial system of Dawan district is developed as a whole, under the pattern of significant internal differences, the industrial resources of some regions are not effectively connected with the overall innovation chain and value chain of the bay area. Especially under the development concept of "green water and green mountains are golden mountains and silver mountains" and the requirements of green transformation, many traditional industrial resources are facing the pressure of transformation and upgrading. If their potential economic and ecological values cannot be reactivated through the innovation path, they will continue to be in a "sleeping" state, restricting the coordinated development and comprehensive revitalization of the region.

3. Current situation of the practice of activating sleeping resources in the Guangdong-Hong Kong-Macao Great Bay area

3.1. Main ways to activate sleeping resources

The Guangdong-Hong Kong-Macao Great Bay area has formed a diversified practice path in the activation of sleeping resources. Integrated development of culture and tourism is a common way. By excavating local characteristic culture and combining it with the tourism industry, people can achieve win-win economic and cultural benefits. Technology empowerment and digital transformation are increasingly critical. People should use big data, the Internet of things and other technologies to revitalize data resources and promote the upgrading of traditional industries. Policy guidance and market-oriented cooperation also play an important role. The government attracts social capital to participate in the development of idle resources through incentive policies, which improve the efficiency and flexibility of resource allocation. In general, the practice of the Dawan district shows the composite characteristics of "government guidance, market operation, multi-party participation, and technology drive", which provides diversified tools for resource activation.

3.2. Typical cases of activation of sleeping resources

3.2.1. Activation case of industrial resources in Tangjiawan Town, Zhuhai City, Guangdong Province

Tangjiawan town has transformed the Tangjia second industrial zone with scattered rights and interests and disorderly forms into "Gangwan No. 1" science and technology park through government-led and state-owned enterprise operation. The project integrates resources through collective land transfer, debt restructuring, and other ways, successfully introduces more than 50 high-tech enterprises, and actively participates in the Hong Kong-Macao talent cooperation plan, realizing the leap from inefficient industrial zones to innovative industrial parks, and becoming an example of industrial resource activation under the "million project" [8].

3.2.2. Activation case of cultural resources in Dongfeng Town, Zhongshan, Guangdong

Dongxing community in Dongfeng Town, relying on the Shakou ferry with a history of more than 70 years, is activated through the collaborative mode of "party building+social forces." The community Party committee mobilized the local people and attracted the love enterprise Zhongjing company to invest in the construction of Gudu cultural Pavilion and other facilities. The idle space was built into a riverside landscape belt rich in historical memory, realizing the organic combination of cultural memory preservation, community environment improvement, and local cultural and tourism development.

3.2.3. Activation cases of ecological resources in the Huidong area, Huizhou, Guangdong

Huidong County systematically activates mangrove ecological resources through the three-step path of "protection and restoration — innovation and exploration — ecological realization." Since 2013, mangrove planting and restoration have been carried out continuously, and the "mangrove planting aquaculture coupling" mode has been explored. After 2021, through the transfer of mangrove carbon sequestration development rights, the value of ecological products has been realized successfully, forming a compound development mode of "mangrove restoration+biodiversity protection+ecotourism+carbon sequestration trading", which provides the first experience for the marketization of ecological resources.

4. Challenges faced by the activation of sleeping resources in the Guangdong-Hong Kong-Macao Great Bay area

4.1. Talent shortage challenge

Talent shortage is the key bottleneck restricting the activation of sleeping resources in the Dawan district. Rural areas are generally faced with a shortage of professional and technical personnel, operation management talents, and high-quality digital talents, which directly affects the planning, implementation, and innovation efficiency of resource revitalization. Although it has become a consensus to cultivate and introduce talents, in the specific implementation, there are still difficulties, such as the talent sinking mechanism is not smooth, the localization training system is not perfect, and the incentive guarantee is insufficient, resulting in a gap between the talent supply and the actual demand for Rural Revitalization [9].

4.2. Cultural inheritance challenges

The activation of cultural resources faces the dual pressure of inheritance and development. On the one hand, the unbalanced development of urban and rural areas and the outflow of population lead to many intangible cultural heritage skills and rural cultural memory facing the inheritance fault crisis; On the other hand, part of the traditional culture has a single form of expression, which is not effectively combined with contemporary aesthetics, market demand and technical means, resulting in its Limited dissemination and influence, and it is difficult to achieve sustainable activation and utilization, so the economic and social value of cultural resources cannot be fully released.

4.3. Infrastructure challenges

The imbalance of infrastructure is the physical constraint of resource activation. Especially in the peripheral rural areas of the bay area, there are still shortcomings in the transportation network, logistics system, information network, environmental protection facilities, etc., which affect the smooth circulation of resource elements, the extension and connection of the industrial chain, and the application of digital activation means. The lag of infrastructure not only reduces the efficiency of resource allocation, but also restricts the linkage development between urban and rural areas, which has become a problem that needs to be solved continuously in the promotion of "millions of projects."

5. Innovation path for activating sleeping resources in the Guangdong-Hong Kong-Macao Greater Bay area

5.1. Dual wheel drive to alleviate talent shortage

In view of the talent shortage, it is necessary to build a long-term mechanism combining "internal cultivation" with "external introduction." In terms of internal cultivation, people should optimize the vocational education and skill training system, deepen the cooperation between schools and enterprises, and integrate production and education, and pay attention to the cultivation of high-quality application-oriented talents with localization and digitization. In terms of external introduction, it is necessary to improve the talent evaluation and incentive mechanism, build a talent cooperation platform between Guangdong, Hong Kong, and Macao, attract high-end professionals and management teams to participate in rural construction, and form a benign ecology of talent convergence and growth.

5.2. Integration path of "intangible cultural heritage" and tourism

Promoting the deep integration of "intangible cultural heritage+" and tourism is an effective way to activate cultural resources. Under the principle of protection priority, cultural and tourism enterprises can be supported to develop intangible cultural heritage experiences, cultural and creative products, and other formats by setting up special support funds and encouraging social capital participation. At the same time, people should actively use new media technologies such as short videos and digital exhibitions to broaden communication channels, and learn from Macao's "intangible cultural heritage zero distance workshop" and other modes to enhance the sense of public participation and realize the benign interaction between cultural protection and inheritance and tourism economic development [10].

5.3. Improve the innovation path of infrastructure

Infrastructure improvement should focus on systematic improvement and intelligent transformation. In terms of transportation, people need to accelerate the integration of regional transportation, optimize the connection of urban and rural road networks, and improve logistics efficiency. In terms of digital infrastructure, people should expand high-speed network coverage and build a smart rural platform. In addition, it is possible to explore the establishment of a "major scientific and technological infrastructure research and development project in Dawan district" to attract multiple inputs, break through capital and technological constraints, and provide solid hardware support and technological empowerment for resource activation.

5.4. Innovation path of industrial resource activation

Industrial resource activation focuses on promoting the transformation and upgrading of traditional industries and the cultivation of emerging formats. On the one hand, the added value of traditional industries can be improved through green technology transformation and design empowerment; On the other hand, people should actively build a cross-regional industrial coordination mechanism and guide social capital to invest in scientific and technological innovation and achievement transformation. For example, in the field of characteristic industries such as medical devices, people can increase policy support and service quality, strengthen quality supervision and brand building, so as to activate the industrial potential and enhance the overall competitiveness.

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Disclosure statement

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References

[1] Luo MZ, Zhang YF, 2025, Dormant Resources, Identification, Integration, and the Development of New Rural

Collective Economy. Journal of Jiangsu University (Social Science Edition), preprint, 1–14.

[2] Diao XY, Wu WX, 2025, Construction Experience and Enlightenment of High-Quality Rural Development under Guangdong's "Project of Promoting High-quality Development in 100 Counties, 1,000 Towns and 10,000 Villages"—Taking Shaxinlang Village in Guangning County as an Example. Southern Rural Area, 41(3): 41–48.

[3] Deng QW, Chen JQ, 2024, Analysis on Rural E-commerce and Agricultural Automation Jointly Assisting the "Project of Promoting High-quality Development in 100 Counties, 1,000 Towns and 10,000 Villages"—Taking Liudu Town in Yunfu City as an Example. Rural Economy and Science-Technology, 35(12): 257–259 + 274.

[4] Qiu ST, Lin LJ, He TL, et al., 2024, Hong Kong Youth Gathering Wisdom to Discuss Development, Talents Gathering in Lilin to Create the Future. Huizhou Daily, April 17, 2024, 4.

[5] Sun L, 2025, Path Selection for Intangible Cultural Heritage Empowering the Revitalization of Overseas Chinese Villages under the Background of the "Project of Promoting High-quality Development in 100 Counties, 1,000 Towns and 10,000 Villages"—Based on Investigation of Jingmei Village in Xinhui District, Jiangmen City, Guangdong Province. Southern Review, 2025(4): 85–88.

[6] Li YW, 2025, The Path of Digital-Intelligent Transformation of Enterprise Human Resource Management from the Perspective of New Quality Productive Forces. Business 2.0, 2025(22): 133–135.

[7] Yang M, 2025, Analysis on the Path of Digital Empowerment for Rural Cultural Revitalization from the Perspective of Green Human Resource Management. Agricultural Development & Equipments, 2025(8): 4–6.

[8] Jin L, 2024, Not Afraid of "Shortcomings" in Competition, Clarifying New Development Paths. Zhuhai Special Zone Daily, April 30, 2024, 3.

[9] Liu XJ, 2025, Research on Countermeasures for Flexible Talent Introduction from Beijing and Tianjin in Hebei Province under the Background of Rural Revitalization. Modern Rural Science and Technology, 2025(9): 137–138 + 80.

[10] Li J, 2025, Research on the Integrated Development Path of "Intangible Cultural Heritage + Tourism" in the Guangdong-Hong Kong-Macao Greater Bay Area. Comparative Study of Cultural Innovation, 9(19): 69–72 + 97.

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