

Resilience Perspective on the Construction Strategy Research of Shantou Longmei Village

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Abstract: Shantou city, as a strategic port city along the southern coast of China, is also an important gathering place for overseas Chinese. The culture of Shantou's overseas Chinese ancient villages blends the cultural heritage of returning overseas Chinese with local cultural characteristics, giving birth to a unique cultural form. This cultural form not only contains a profound historical background but also carries an extremely high cultural value, making it an indispensable part of China's cultural treasury. However, with the acceleration of urbanization, many overseas Chinese ancient villages are facing the difficult challenge of protection and the severe challenge of revitalizing and inheriting their culture. This study selects Longmei Village, an overseas Chinese ancient village in Shantou, as a case study. Through on-site field research and in-depth analysis of village resilience construction, it dissects the core elements and effective strategies for enhancing the resilience of Longmei Village. The aim is to provide theoretical reference and practical guidance for the construction of resilience in Shantou and other ancient villages with similar cultural backgrounds.

1. Introduction

The report of the 20th National Congress of the Communist Party of China pointed out that "the most arduous and heavy tasks in building a comprehensively modern socialist country still lie in the rural areas." The overseas Chinese ancient villages, as an important part of traditional Chinese culture, not only bear profound historical and cultural connotations but also showcase distinctive and recognizable architectural styles. Longmei Village in Shantou City is valued for its precious cultural heritage attributes. Located in the northern part of Longdu Town, Changhai District of Shantou, Longmei Village was established during the Chinghua period of the Ming Dynasty (1465-1487) and has continued to this day (as shown in Table 1). The layout of the village reflects the unique cultural style of the Chaoshan area, revealing distinct regional characteristics. The

overall planning and construction of the village have been influenced by various factors, including clan systems, geomancy (feng shui) concepts, living customs, defensive needs, and aesthetic views. In terms of the spatial sequence of traditional streets, buildings, and courtyards, Longmei Village is preserved quite intact. The Dragon Beauty Fort within Longmei Village, with its rich network of waterways, farmland, and ponds, displays a unique environmental layout that combines "water-house-field," which is a direct manifestation of the interaction between natural resources and the human environment.

With the acceleration of urbanization and industrialization, rural areas are facing multiple dilemmas such as but not limited to the loss of labor force, aging community members and an increase in the physically weak, wastage of construction land, and the deterioration of the water and soil environment, all of which severely restrict the sustainable development capacity of rural areas [1-3]. Currently, Longmei Village is facing severe survival and development pressures brought about by accelerated urbanization processes and frequent natural disasters. Resilience science is an important theoretical tool for complex systems to respond to environmental changes [4]. Therefore, this paper aims to take Shantou's overseas Chinese ancient villages as the research subject, focusing on an in-depth exploration of their resilience construction. By studying effective approaches to enhance the resilience of Longmei Village, this paper strives to provide solid theoretical support and practical guidance for the sustainable development of this precious cultural heritage.

Table 1: Evolution of Administrative Affiliation for Longmei Village

Time	Affiliation
Late Ming and early Qing Dynasty	Haiyang County, Chaozhou Prefecture
Late Qing Dynasty to the Republic of China	Under Raoping County
After the establishment of New China	North Society Township of Chenghai County
1957	North Society Township was changed to North Society Village, under the jurisdiction of Longdu Township
After collectivization	Second Brigade of the Chenghai People's Commune 213 Regiment, later under Sulong Commune, Longdu Commune
Beginning in 1963	Shangbei Brigade
Beginning in 1984	Shangbei Township Government
From 1990 onwards	Renamed as Shangbei Administrative Village to the present day, Longmei is a natural village under Shangbei Administrative Village

2. The Practical Value of Resilience Building in Longmei Village

2.1. Historical and Cultural Value

Longmei Village plays a pivotal role in the cultural heritage of Longdu Town, taking on the responsibility of preserving and promoting a legacy that respects the dignity of education and values academic learning. The village has been instrumental in advancing local culture and economic development. Scientific conservation and appropriate development of Longmei Village can not only stimulate the prosperity of the cultural tourism industry in Longdu Town and Chenghai District but also bring flourishing economic benefits to the region, which is particularly crucial.

2.2. Artistic Value

The traditional customs of Longmei Village, such as the worship of deities and the

commemorative activities for ancestors, as well as the inherited Nanjin art and other handicraft skills, reflect the artistic characteristics and unique charm of the village. The area maintains 30 traditional residential houses and 6 ancestral halls, encompassing a wide variety of architectural styles, including the "Huang Family Estate," "Chichang Estate," and "Scholar Estate." These structures, adorned with colorful paintings and relief sculptures, not only incorporate elements from both Chinese and Western cultures but also display the attributes of traditional Teochew architecture, providing valuable examples for the study of Teochew architectural art during the Ming and Qing dynasties, as shown in Table 2.

Table 2: Cultural Factor Identification

Category	Primary	Secondary	Tertiary	Specific Factors	
Material Culture	Environment	Nature	Topography and Landforms	Primarily consisting of plains, the terrain is high in the northwest and low in the southeast.	
			Landscape Pattern	Water - Houses - Fields.	
		Culture	Transportation Location	The Chaoshan Ring Expressway, the Provincial Ancheng Highway, and the Shenhai Expressway pass through the village.	
			Geographical Culture	Descendants of the Huang family reside here.	
	Layout	Village Morphology	Spatial Layout	Clustered layout.	
			Architectural Form	The Ming Dynasty and earlier, the Qing Dynasty period, the Republic of China period, 1950 to the 1970s, the 1980s to the present.	
		Spatial Types	Alleyway Spaces	Streets and alleys are straight and unobstructed, Fangcuo Alley.	
			Nodal Spaces	Huang family mansion, Shitang Hermitage, Huang family ancestral hall (Chichang Hall), Guihu Ancestral Hall, Huang family temple, Huang family ancestral hall (Zhu Cun Hall), Huang family Baizu clan, Scholar's Mansion, Shuyin Public Ancestral Hall (Chengde Hall), Shuxia Public Ancestral Hall, Sifang Tower.	
			River Spaces	Huzhai River, Big Pond, Beicuo Pond.	
	Architecture	Residential, Commercial, Temples and Ancestral Halls	Plan Layout	Overseas Chinese architecture with two-layered buildings, horse-drawn carriages, three-hall structures, three-room two-entry ancestral halls, Four Points of Gold, Descending Tiger, and others.	
			Architectural Structure	Timber-framed structure.	
			Building Materials	Rammed earth, stone materials.	
			Architectural Color	White of lime ash, ivory yellow, various colored porcelain shards.	
			Roof Style	House corner, chevron pattern, pot-ear shape, wave shape.	
			Detail Decoration	Color painting, sculpture, glazed pottery, inlaid porcelain, wood carving, tile painting, stone carving.	
	Intangible Cultural	Cultural Thought	Clan Characteristics		Huang Family
			Religious Traits		Ancestor Worship, Fude Temple, Shitang Hermitage,
Folk Customs		Recreational Customs		Drum and Gong Performance, Dragon Boat Racing, Teochew Opera Performance	
		Traditional Crafts		Stand Holding Large Coins	
		Festival Celebrations		The 15th day to welcome the divine procession, the 16th day of the tenth month for praying for peace	

2.3. Economic Value

Longmei Village has been designated as a traditional Chinese village, and subsequent improvements and enhancements in infrastructure and public facilities in Longmei Village are expected. These advancements are anticipated to attract more tourists and investments from overseas Chinese, driving continuous economic growth and significantly improving the standard and quality of daily life for local residents.

3. Current State of Resilience Building in Longmei Village

Longmei Village, as an ancient overseas Chinese village with a rich historical and cultural heritage, has played a significant role in areas such as historical and cultural inheritance, art preservation, and economic development. However, with societal advancement and environmental changes, Longmei Village faces a series of challenges.

3.1. Conceptualization of Resilience Building in Longmei Village

In 1973, ecologist Holling first introduced the concept of resilience as an ecological research framework [5], which was later expanded to disciplines such as sociology, economics, urban planning, and geography. Its conceptual implications were further deepened [6]. In the fields of urban planning and sociology, resilience is understood as the ability of urban or social systems to rapidly adapt, recover, and develop when facing challenges and pressures [7]. In 2000, Adger introduced the concept of resilience into the rural social domain for the first time, highlighting the rural area's capacity to resist external disturbances, which marked the beginning of resilient rural research [8]. Resilience is an important capability for rural areas to achieve sustainable development [9], manifesting as a set of abilities that enable rural areas to face challenges and reorganize, integrate, adapt, and renew, which constitute the foundation and process of rural development [10]. In light of this, the resilience building of Longmei Village can be understood as its ability to maintain stability and functional integrity in the face of external shocks such as natural disasters, human interference, and social changes, and to achieve sustainable development through self-regulation and adaptation.

3.2. Challenges in Longmei Village

Firstly, surrounding Longmei Village is a ring of newly built self-constructed houses by villagers, tightly enclosing the village. There are issues such as inharmonious repairs of external walls and unattended ancient buildings within the village (as shown in Figure 1). The urbanization process brings about conflicts between villagers' modern lifestyle requirements and Longmei Village's traditional architecture and cultural ideologies.



Figure 1: Current State of Building Environment in Longmei Village

Secondly, Longmei Village, an ancient overseas Chinese village with a long history, preserves a wealth of historical relics and traditional culture. The village's internal diversity of culture,

architecture, and ecology is gradually fading away due to the intrusion of modern lifestyles, leading to changes in the residents' way of life and values, and the villagers do not realize the value of their vacant houses.

Thirdly, according to field research and interviews, Longmei Village's economic development is relatively lagging, lacking sufficient funds and technical support for protection and development, which has limited the village's growth. Field research shows that the village's ecological planting mainly includes rice, sweet potatoes, peanuts, sugarcane, and citrus, and livestock such as pigs, fish, chickens, geese, and ducks; traditional festive foods include oil cakes, rat shell cakes, sweet cakes for welcoming deities, hair cakes, dragon boat festival rice balls, and gardenia cakes.

Fourthly, the interaction and close connection between various elements within Longmei Village and between the village and its external environment are weak. Longmei Village is also experiencing a continuous outflow of its labor force, particularly the migration of young and middle-aged workers to the cities, a phenomenon that has led to an aging population structure in the village, affecting labor supply and the stability of social structures.

3.3. Impact of Natural Disasters on Ancient Villages

Longmei Village, located in the town of Longdu in Chenghai District, Shantou City, near the sea, may be impacted by natural disasters such as typhoons, storm surges, and heavy rain, leading to floods and wind disasters in coastal areas that could damage village houses, farmland, and infrastructure, and even threaten the lives of villagers. During the survey, we visited Longmei Village in Xiashan Street, Chaonan District of Shantou City and found multiple ground subsidence issues in the village, with many cracks appearing on the walls of residential houses. These natural disasters not only cause direct physical damage to the ancient village but may also have a long-term impact on its socio-economic development.

In summary, for Longmei Village, the current state of resilience building is a comprehensive challenge. It must protect its traditional cultural heritage while resolving the contradictions between modern living requirements and traditional values; improve infrastructure and the quality of life for residents while finding a sustainable economic development model; and establish effective protection and rapid response mechanisms when facing threats from natural disasters.

4. Strategies for Building Resilience in Longmei Village

4.1. Strengthen Organizational Construction in Longmei Village and Enhance Villagers' Participation Awareness

Strengthening the internal organizational structure of Longmei Village and igniting the enthusiasm of villagers to participate are crucial for establishing the resilience of the village. By creating a robust internal organizational framework, cultivating villagers' awareness of participation, and promoting the integration of resources and collaboration within the village, Longmei Village can enhance its overall capacity to cope with environmental changes and challenges, moving towards sustainable development. This not only improves the effectiveness of villagers' actions but also significantly enhances the resilience of Longmei Village when facing various challenges, thus accelerating managerial efficiency. Specific content includes: firstly, the maintenance and reinforcement of ancient buildings are essential. Restoring precious cultural sites such as Sifang Tower, Huang's Ancestral Hall "Chichang Hall", and the residences of scholars not only preserves their unique historical charm but also maintains the precious cultural value of the village. Moreover, upgrading the touring facilities of historical and cultural sites is equally important. Investing in improved signage, constructing viewing platforms, and optimizing tour routes can effectively

enhance the visiting experience and safety for tourists. Lastly, establishing an inclusive communication and negotiation platform for all stakeholders is essential. By continuously promoting dialogue and interaction between participating parties, connections between entities can be fostered, forming a resilient social interaction network within Longmei Village. It is particularly worth emphasizing that villagers are the key force in the continuous progress and resilience building of Longmei Village. As important participants in local development, they must be given more opportunities to engage in village activities and effectively integrate into this resilient social action system during the construction of the organizational framework. This will lay a solid foundation for the prosperity and robust development of Longmei Village.

4.2. Strengthen Infrastructure Construction and Enhance Longmei Village's Disaster Resilience

Strengthening infrastructure construction and enhancing Longmei Village's disaster resilience is a precondition for enhancing the village's resilience and promoting its sustainable development. This involves not only the protection of traditional architectural and cultural heritage but also the conservation of the ecological environment and innovation in economic activities. Specific measures include the protection of the ecological agricultural landscape, such as prohibiting disorganized construction and pollution, ensuring sustainable use of farmland; the fine management of water resources by establishing a comprehensive water resource management system, protecting significant water sources like Beicuo Pond and Dachi Pond, ensuring ecological balance and water quality safety; and the improvement of rural tourism environments, such as upgrading facilities, optimizing services, and adding agricultural experience projects to attract more visitors. Furthermore, Longmei Village should improve the facilities and functions of its activity center to offer cultural and sports activities for villagers, strengthening community cohesion; simultaneously, establishing a tourist service center to provide consultation and guidance services, ensuring tourists' satisfaction and safety. Repairing and reinforcing village infrastructure such as roads and drainage systems, as well as establishing disaster response facilities like flood control, wind protection, earthquake resistance facilities, and rescue centers, are effective measures to enhance natural disaster response and improve emergency evacuation and flood control capabilities. The use of intelligent technologies, such as installing smart sensors and surveillance cameras, can strengthen real-time monitoring and management of the village and improve emergency response efficiency.

4.3. Strengthen Cultural Heritage Education and Cultivate Cultural Resilience in Longmei Village

Strengthening cultural heritage education and cultivating cultural resilience in Longmei Village is an important link in enhancing the village's resilience. Longmei Village can enhance its cultural heritage and educational capabilities in the following ways: firstly, by establishing an education base centered on the cultural heritage of Longmei Village, this base will become a platform for residents and tourists to learn and understand the village's long history and rich culture. Through museums and cultural education centers, not only can Longmei Village's traditional customs and artistic skills be displayed, but cultural heritage activities can also be regularly carried out. Secondly, a series of cultural education activities that combine tradition and innovation, such as traditional festival celebrations, themed cultural lectures, and handicraft production, should be conducted at the base. These activities aim to enhance residents' and tourists' awareness and appreciation of Longmei Village's culture, pass down unique village traditions, and also strengthen villagers' sense of cultural identity. Lastly, to improve the quality and coverage of educational activities, Longmei Village should integrate educational resources and cooperate with schools, cultural institutions, and

community organizations to advance the protection and inheritance of cultural heritage. Conducting cultural experience activities and training courses can make cultural education a bridge connecting residents of different generations and backgrounds. At the same time, by utilizing modern technologies such as the internet and mobile applications, an online cultural heritage education platform for Longmei Village can be built, expanding the influence of educational activities to a broader audience. This can attract more public attention to Longmei Village and involve them in the practice of cultural heritage.

4.4. Strengthen Economic Diversification and Enhance the Economic Resilience of Longmei Village

Strengthening economic diversification and enhancing the economic resilience of Longmei Village is the core element in enhancing the village's resilience. By igniting the entrepreneurial spirit of the residents of Longmei Village, bringing in external capital, improving education and skill levels, and deeply participating in community governance, Longmei Village is strengthening its economic structure in multiple dimensions, thereby enhancing the economic resilience of the community and promoting comprehensive sustainable development. The main approaches are as follows: firstly, residents of Longmei Village should be encouraged to use the rich local resources for entrepreneurial activities, such as developing countryside-themed homestays and catering businesses, as well as processing and selling local agricultural products, increasing the diversity of economic activities. Secondly, village organizations should actively strive to attract external investments, using policy incentives and tax relief measures to draw domestic and international investors' attention and investment in Longmei Village, bringing more development opportunities and resources to the village. Then, by providing education and professional training, the skills and educational levels of the residents can be enhanced, thereby strengthening their economic participation and entrepreneurial capacity. Improvements in villagers' quality of life will be directly reflected in the economic vitality of the village. Lastly, developing tourism-based industries such as rural tourism is particularly important for enriching Longmei Village's economic model and enhancing economic resilience. It not only improves the income and living standards of local farmers but also promotes the modernization of agriculture and rural areas, enhancing the community's cohesion and sustainable development capabilities.

5. Conclusion and Prospects

This paper addresses the current state and challenges of resilience building in Longmei Village, proposing a series of strategies aimed at enhancing the village's resilience and promoting its sustainable development. By strengthening organizational construction, improving infrastructure, enhancing cultural heritage education, and achieving economic diversification, Longmei Village can effectively cope with challenges from urbanization and natural disasters, protect and inherit its rich historical and cultural heritage, and foster the prosperous development of the regional economy.

In terms of organizational construction, the establishment of a well-defined internal village organization structure, fostering villagers' participation awareness, and promoting resource integration and collaboration can enhance Longmei Village's overall response capacity. Moreover, reinforcing infrastructure construction, including the protection of traditional buildings, maintenance of the ecological environment, and improvement of disaster-resistant facilities, can help improve the village's disaster resilience. In the realm of cultural heritage education, the establishment of education bases centered on cultural inheritance and the conduct of cultural education activities that integrate tradition with innovation can help enhance villagers' awareness and love for traditional culture, and pass down the village's unique culture. Additionally, by

strengthening economic diversification, encouraging entrepreneurship, and improving skill levels, Longmei Village can enhance its economic resilience and drive the sustainable development of the community. At the same time, it is hoped that government departments, social organizations, and relevant stakeholders will work together to provide support and safeguards for the resilience building of Longmei Village, pushing it towards an even brighter future. Through the protection and inheritance of Longmei Village's cultural heritage, it will become an important site for cultural tourism, making a positive contribution to the economic development of the region, and achieving the common prosperity of the economy, society, and culture. In the future, we will also continue to conduct in-depth research to provide more scientific theoretical support and practical guidance for the sustainable development of Shantou's ancient villages.

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