

Research on Sustainable Planning Oriented by Horticultural Therapy Project ——Take Hong Kong Sai Kung Yim Tin Tsai rehabilitation project design plan as an example

Yile Chen

*Faculty of Humanities and Arts, Macau University of Science and Technology, Avenida Wai Long,
Taipa, Macau, 999078, China*

chenyile@163.com

Keywords: Horticultural therapy, sustainable planning, urban renewal, Yantianzi, Hong Kong

Abstract: Talking about the only problem of village protection under high-density cities, we not only face many practical problems caused by environmental disasters, but also the contradictions between urban renewal design, tourism project development, village preservation, and ecological conservation. However, it is worth thinking and exploring how to revitalize the village and then operate it sustainably. This research takes horticultural therapy as the starting point, analyzes the historical environment, the status quo of the village, and the problems and pressures faced by the city, and puts forward a new design idea for the restoration project of Yim Tin Tsai Village in Sai Kung, Hong Kong Special Administrative Region.

1. Introduction

With the acceleration of urbanization, the restoration and protection of traditional villages and the conservation of the ecological environment have become the primary problems. And in order to avoid the embarrassing phenomenon of urban and rural planning, such as "a thousand cities and one face" and characteristic business districts, "a thousand stores and one face", current planners, architects, and landscape designers should think about how to make the village based on the current needs. The protection and activation of the city is in line with the urban development process.

This design proposal comes from the "Hong Kong, Yunnan, Heilongjiang Sustainability and Ecological Conservation Cloud Research" activity initiated by Weiyuan Lake Culture, Friends of Ancient Villages, and the Chinese University of Hong Kong Alumni Charity Foundation. Taking Yim Tin Tsai Village in Sai Kung District of Hong Kong Special Administrative Region as the design area, focus on its restoration and renewal to form the ecological sustainable development planning path of the village.

At the same time, this design looks at the development of the village from the perspective of cultural conservation. It is important to restore the places and buildings that carry culture, but how

to revitalize the village and then operate in a sustainable way is worth thinking and exploring.

2. Overview of Yim Tin Tsai Village

2.1 Geographical location of Yim Tin Tsai Village

Yim Tin Tsai, also known as Yan Tin Tsai, is about a 20-minute boat ride from Saigon's city centre. The overall area is less than 1 Square kilometers and the distance to Sai Kung Market is about 3 km. The island is located in the inner sea of Sai Kung, north of Kau Sai Chau. A jade belt bridge connects with Jiao Xizhou. On the coast of Yim Tin Tsai Village, there are some mangroves. On the whole, the ecological environment is better, and it is in great contrast to the hustle and bustle of downtown Hong Kong.

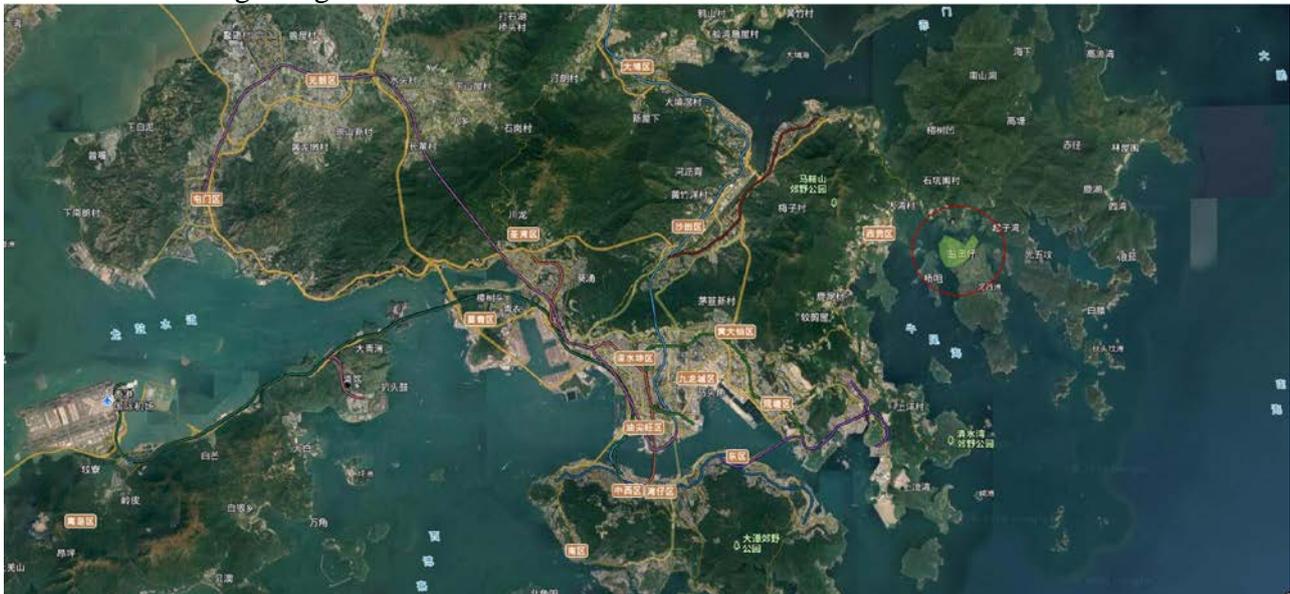


Figure. 1 Satellite map of Yim Tin Tsai Village (Image source: intercepted from the X3 version of the Shuijingzhu satellite map software)

2.2 History of Yim Tin Tsai

The history of Yim Tin Tsai Village starts with the Hakka architecture in the village. Most of these Hakka village houses were built in the 1950s. The earliest residents, Chen Mengde and his wife, were Hakkas. Therefore, "Chen" has naturally become the surname of Yim Tin Tsai Village. At that time, they chose to build the village in Yim Tin Tsai. The most important geographical factor was that the small island where the village was located was far away from the land (that is, the current downtown of Hong Kong), and the nearby islands were also inhabited without being too remote. Therefore, Yim Tin Tsai Village is one of the few places in Hong Kong where the Hakka aboriginal ruins remain. There were more than 1,200 people on the island at its peak. Now most of them have moved out to live in other areas of Hong Kong, or moved to Europe, America, etc.



Figure. 2 Aerial photo of Yim Tin Tsai Village (Image source: Provided by David Ip)



Figure. 3 Nearby sea of Yim Tin Tsai Village (Image source: Provided by David Ip)

2.3 Yim Tin Tsai Village and Salt Industry

The history of the development of the salt industry in Hong Kong can be traced back to the ancient tomb of Li Cheng Uk Village in the Eastern Han Dynasty. However, with the development of history and changes in the city, Hong Kong used to have five large-scale saltworks-Dayi Shan

(Lantau Island), Guanfuchang (Kowloon City), Tsing Shan (Tuen Mun-Xinxu), Tai Po and Yim Tin Tsai Village. At present, almost only Yim Tin Tsai Village is still operating. At that time, Chen Mengde and his wife chose to make salt in Yim Tin Tsai Village. A big factor was the geographical environment. In the south of the island, there is a low area of about six acres. The horizontal position of this low area is between the rise and fall of the tide. It can be used to introduce the sea salt to the sea when the tide rises, eliminating the need for a large amount of water. At the same time, there is a small island where the sea enters, which serves as a barrier to protect the salt.

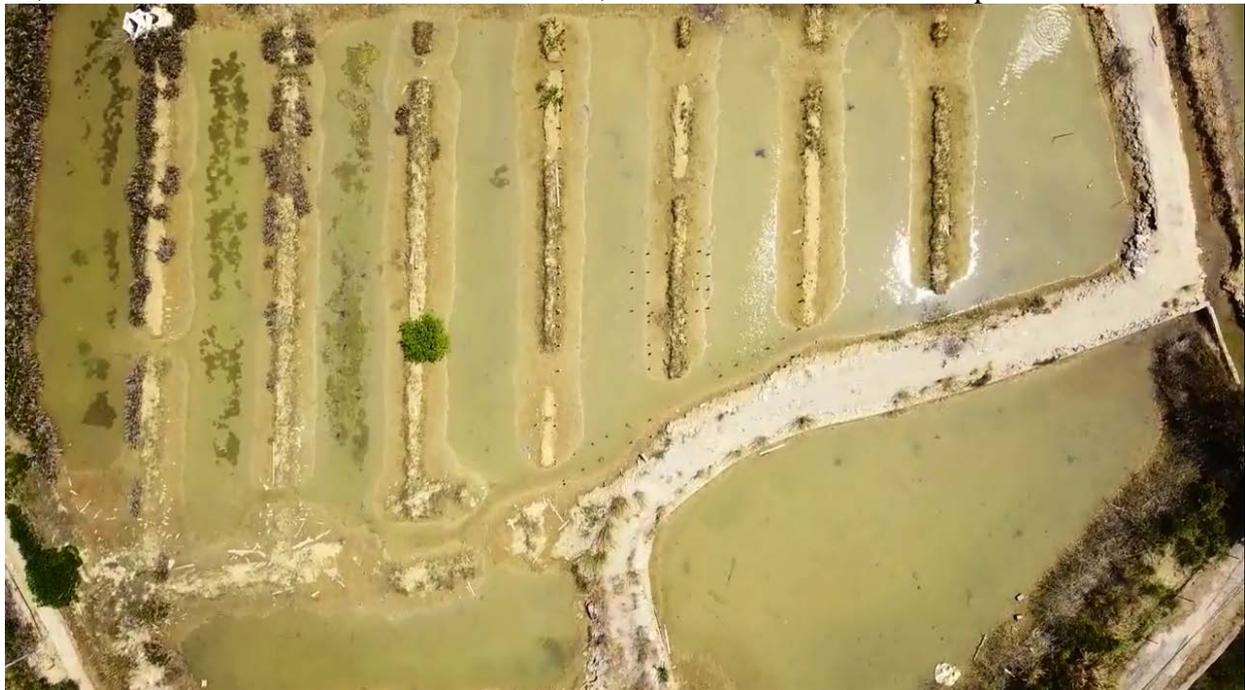


Figure. 4 Salt pan of Yim Tin Tsai Village (Image source: Provided by David Ip)

The origin of the name "Yantian" in Yim Tin Tsai has two theories: one is that there is a salt pan on the island, and the villagers on the island used to live on salt, hence the name; the other is the first residents of the island, Chen Mengde and his wife. In the 1700s, he moved from Guanlan, Shenzhen to "Yantian Village" in Bao'an County, northeast of Shatoujiao, and then moved from Yantian to the small island, where the field was set up to dry salt, so the small island was called "Yim Tin Tsai". "Zi" refers to the hometown, meaning not to forget the hometown. Later, neighboring villagers misunderstood the "zi" in Hakka as "Zai" in Cantonese, so they were also called "Yantianzai".

Therefore, the salt pan of Yim Tin Tsai Village produces sea salt by the water flow method, which is an economic source for the residents in the village and the villagers' initial livelihood. With the modernization of salt production, the traditional salt drying industry declined. In addition, the British government leased the New Territories and began to impose a salt tax. The salt pan of Yim Tin Tsai Village Tsao also ceased production in the 1920s, and villagers gradually moved out. Until 1998, after the last villager moved out, there were no residents in Yim Tin Tsai Village. The so-called "long-term division must be combined, and long-term cooperation must be divided." Later, some villagers returned to the island to repair churches and rebuild salt fields. This effort changed the fate of the island and successively won the UNESCO Asia-Pacific Cultural Heritage Protection Award.



Figure. 5 Salt pan of Yim Tin Tsai Village (Image source: Provided by David Ip)

3. Site Status

3.1 Religious belief: Catholicism

Surprisingly, Yim Tin Tsai Village is located on this small island composed of a single clan—the Hakka. It has neither built a temple nor built a shrine, but believes in Catholicism. As early as the mid-nineteenth century, foreign missionaries had preached in Yim Tin Tsai Village. In 1875, the villagers were baptized and joined the Catholic Church, becoming Hong Kong's first Catholic village. St. Joseph is the patron saint of this village. Yim Tin Tsai Village is full of Catholic characteristics. The tombs are erected with crosses. There are no Chinese temples or the doorkeepers of local faiths such as Di Gong. Only the Conversation of St. Joesph's Chapel is It was built in 1890 when Father Frosser from Austria visited Yim Tin Tsai Village as a missionary. The small hall underwent restoration projects in 1948, 1962 and 2004, and won the 2005 UNESCO Asia-Pacific Cultural Heritage Award of Merit. At present, most of the residents are Catholics and many are clergy, such as Chen Zhiming, the deputy bishop of the Catholic Diocese of Hong Kong.

3.2 Village water source: live spring well

The water from this well was the only source of drinking water for the villagers before the 1960s. In the 1960s, in order to meet the drinking water demand, the villagers built ponds in the deep ring of the neighboring islands, laid water pipes, and introduced mountains and water into the village, which solved the problem of increasing shortage of drinking water. In the 1990s, the government set up sub-reservoirs on the island, and tap water gradually became popular, replacing mountain water and well water. At present, the discount live spring well is still in Yim Tin Tsai Village.



Figure. 6 Live spring well of Yim Tin Tsai Village (Image source: Provided by David Ip)



Figure. 7 Hakka architecture of Yim Tin Tsai Village (Image source: Hakka online)

3.3 Residential unit: Hakka architecture

Since the first residents of Yim Tin Tsai Village, Chen Mengde and his wife, were of Hakka people, they have developed into the present day, and Hakka residential buildings are the most common unit. The more common Hakka houses are dominated by duplex units, and usually two or three households are arranged side by side, distributed in the southwest of the island. Hakka houses invite and breathe with mountains and rivers, and the environment forms a harmonious ecosystem. They rely on natural lighting and ventilation to maintain a more comfortable living environment.

There are a large number of trees in front of and behind the house. Fengshui forest, ornamental forest and orchard forest have different functions, but they all conceal the building. The village is connected to the green hills.

3.4 Existing tourism and cultural projects

The existing tourism and cultural projects are mainly Hakka tea and fruit snacks and Yim Tin Tsai Village Art Festival activities.

There are many small shops that make Hakka tea fruits in Yim Tin Tsai Village. According to traditional customs, Hakka people will make tea fruits during festivals. The most famous is the Xiangyi Tea House, which is currently located near the Yantian Tse Pier, selling tea kueh and other snacks, with pandan leaf and sago cakes, and four-color tea kueh, including wormwood tea kueh, purple sweet potato red bean tea kueh, and panlan. It is named Cha Kueh and Ji Shi Teng Cha Guo. These different varieties of tea fruit have different effects. For example, one of the oldest tea fruits, Ji Shiteng Tea Fruit, is also called "Ching Ming Tsai". It has a strange name and a shaky appearance. It is black, green and green with spots, but it tastes full of fragrance and sweetness. Pumpkin tea fruit is a tea fruit made from pumpkin. Almond tea fruit is mainly made from almonds, and its effects are mainly to moisten the lungs and relieve cough. From the food culture of tea fruit, it can be seen that Yim Tin Tsai Village pays attention to health preservation and health, and the eating style is relatively casual, which is easy to be accepted.

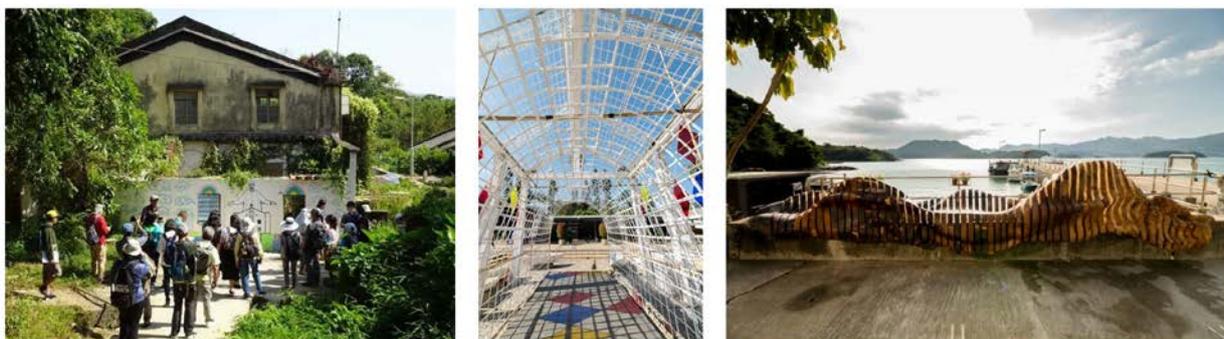


Figure. 8 Art Festival of Yim Tin Tsai Village (Image source: Yim Tin Tsai Village online)

The Yim Tin Tsai Village Art Festival originated in 2019, organized by the Hong Kong Tourism Commission and curated by the Cultural Gourd Company, for a period of 3 years. The core of the art festival is to invite artists and young people to create together with the villagers of Yim Tin Tsai, which will shape Yim Tin Tsai into an open museum. The art festival is positioned as "pursuing spirituality, six senses experience", through the call of the island and the mountains and rivers, people can get away from the hustle and bustle and get close to nature. "God Blessing Yim Tin Tsai Azusa" designed by college students, the mural painted on the outer wall of the old house expresses a legend of Yim Tin Tsai: When pirates were rampant, because priests came to teach on the island, pirates would not dare to commit crimes again, so the villagers believed in it. Started Catholicism. The bamboo church combines traditional Chinese crafting techniques with Western beliefs and culture, showing the integration of Chinese and Western culture on the island. At present, this project is still ongoing, making the cultural atmosphere of Yim Tin Tsai spread farther.

4. Design project: Horticultural therapy-oriented activities

In summary of the current situation of Yim Tin Tsai Village, in order to achieve breakthrough utilization, we must first think about how to "inherit", "awaken" and "repair". "Inheritance" mainly refers to the continuation and inheritance of cultural relics and constructions and craftsmanship; "Awakening" mainly refers to the history, culture and art of Yim Tin Tsai Village, and its connotation is also a crucial part of contemporary urban development; It is the ecological conservation and continuous operation strategy of Yim Tin Tsai Village. But the question that follows is: buildings and cultural relics can be repaired and restored very easily through engineering and modern technology; what about the human heart? What about the rural complex of the villagers in Yim Tin Tsai Village? How to fix it? Therefore, it is better to understand "repair the human heart" from another angle, that is, to introduce horticultural therapy activities.

In a nutshell, Horticultural therapy is an auxiliary treatment profession, which aims to use the healing power of plants through gardening activities to bring physical and mental benefits to all kinds of people in need. Under the guidance of the horticultural therapist, the service target maintains beautification plants or potted plants and gardens through actual contact and use of horticultural materials, so as to achieve predetermined therapeutic goals, such as relieving stress, rejuvenating the mind, promoting social, emotional, Small muscle training, cognitive training, concentration recovery, mental health and other benefits.

In Europe, America, Japan and other countries, horticultural therapy energy efficiency has been maturely used in the greening of hospitals, schools, nursing homes, prisons and other places. Landscape healing places are used as special spaces for horticultural recuperation activities. The design is also based on the needs of different users. The construction was focused on demand. For example, "healing landscape design", "implementation design of gardening therapy activities", etc. In recent years, the construction of aromatic gardens, leisure farms, and the sea of flowers has also been carried out in China. Studies have shown that outdoor flower viewing, fruit picking and other activities can relieve tension to a certain extent.

In our Asia, we also have a very long theoretical research foundation of horticultural therapy, such as "Wisdom and Energy of Plants" and "Plantary Therapy Research and Rehabilitation Landscape Design" written by Li Shuhua, a professor in the Department of Landscape at the School of Architecture of Tsinghua University and a doctoral tutor; Japan Hiroshi Iwasaki, Associate Professor in the Field of Environmental Health, Graduate School of Horticulture, Chiba University, "Practice, Issues and Prospects of Japanese Horticultural Therapy"; "Evidence-Based Research on Health-Based Horticultural Therapy" by Professor Park Shin-ae of Konkuk University ; Director of the Department of Horticulture, National Taiwan University Zhang Yusen "Horticultural Therapy and Healthy Gardening"; and Jiang Bin, Assistant Professor and Doctoral Supervisor of the Department of Landscape Architecture, School of Architecture, The University of Hong Kong, "On the Benefits of Urban Nature to Mental Health", Taiwan's Horticultural Adjuvant Therapy The chairman of the association and senior horticultural therapist of the Asia-Pacific Horticultural Therapy Association HTM Huang Shenglin "Into the World of Horticultural Therapy", Professor Wu Shaohua, Director of the Institute of Horticultural Plant Natural Products, and Professor Wu Shaohua, "Horticultural Therapy Topics", etc. Academic conference sharing, focus forums, etc., have also played a certain role in promoting the development of Asian modern horticultural therapy theory.

At present, the "factions" of Chinese horticultural therapy are divided into north and south: the horticultural therapy headed by Professor Li Shuhua in the north, focusing on theoretical exploration; and the Hong Kong Horticultural Therapy Association, headed by President Feng Wanyi in the south, focusing on the collaboration of practical activities.

In our increasingly urbanized, high-density, high-stress, and increasingly isolated world, there is increasing evidence that horticultural therapy is a way to relieve stress, stress, and trauma.

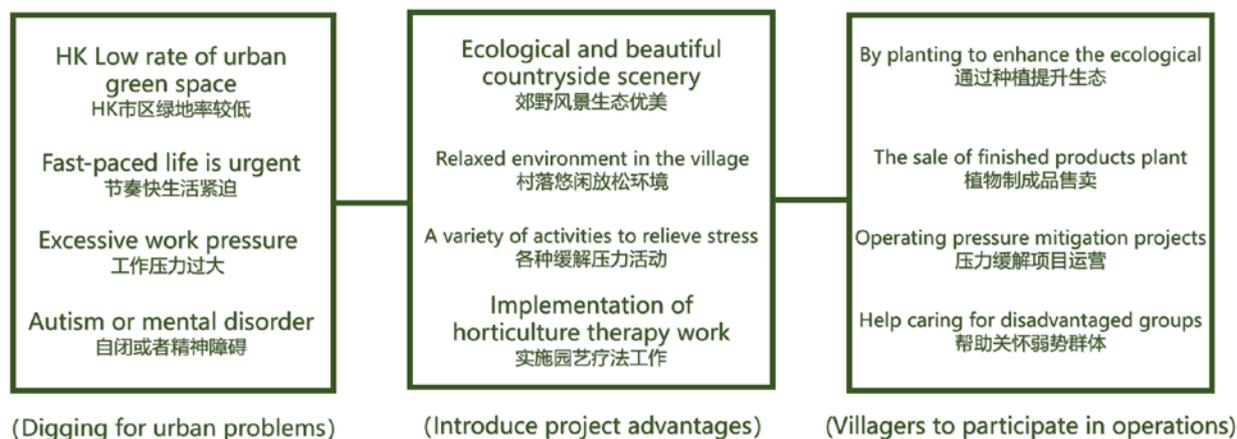


Figure. 9 Building a path to horticultural therapy (Image source: Author plotted)

Yim Tin Tsai Village is a rare and tranquil island in the downtown area of Hong Kong, an international city. The plants on the island, the coastal mangroves and the coastal ecological environment provide certain supporting conditions for the development of horticultural therapy. First, the urban area of Hong Kong is full of high-density residential buildings, and the urban built-up area is relatively large, resulting in a low rate of urban green space. Hong Kong's international status as a financial center has always been well-known at home and abroad. The dense central business district makes work pressures and the pace of life becomes urgent. In this high-pressure state, it is easy to produce autism or mental disorders. Yim Tin Tsai Village is located on a rural island, with beautiful scenery and a certain ecological environment. The leisurely village provides a relaxing environment, making it easier to carry out various stress-relieving activities, so as to tap pain points and implement horticultural therapy. More importantly, villagers can participate in the operation of horticultural therapy projects. For example, people who want to experience and need horticultural therapy to assist themselves can relax themselves and improve the environment of the village through planting activities with the villagers of Yim Tin Tsai Village. Related plant products can be sold, which adds a certain amount of income to the villagers. The help of horticultural therapy also embodies a kind of social care and assistance to disadvantaged groups by helping people with excessive stress, autistic people or people with mental disorders who need relief, making social interpersonal relationships more friendly and harmonious(As shown in the Figure 9).

It is worth mentioning that the Catholic Church in Yim Tin Tsai Village is not as exquisite as the European Gothic architecture. Although the appearance is simple, the color is single, and the internal space is minimal, it can be bathed in the solemn church and the gospel of God under feel very sacred, spiritual purpose by washing and decontamination. This space plays a supporting role with the implementation of horticultural therapy.

Gorgeous plant colors can make people feel psychologically happy at different levels, and can consider native tree species that are compatible with the climate of Hong Kong and southern China, and consider that there are alternating flowering periods throughout the year. (As shown in the flowering time table in Figure 10 below)

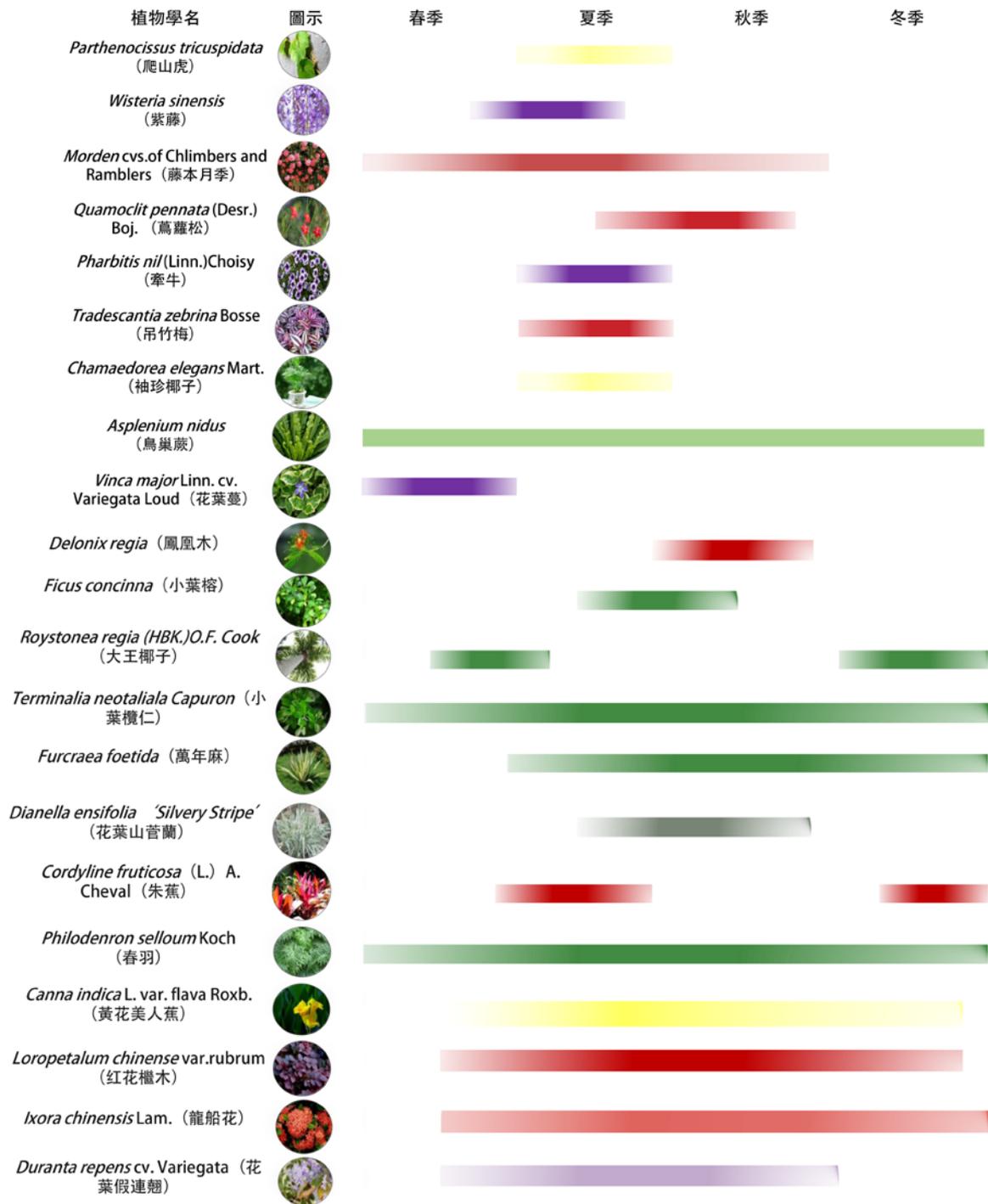


Figure. 10 Flowering schedule for planning horticultural therapy (Image source: Author plotted)



Figure. 11 Outdoor activities for horticultural therapy (Image source: Author collation)

5. Conclusions

This research analyzes the current situation of Yim Tin Tsai Village and thinks about the restoration problems it faces. On the basis of not destroying the existing environment, tapping the advantages of the site itself, combining the needs of the city, and determining the design of horticultural therapy activities. The sustainable ecological planning of China has a certain reference.

References

- [1] Zhao Yajie, et al. "Effectiveness of horticultural therapy in people with dementia: A quantitative systematic review." *Journal of clinical nursing*. (2020).
- [2] Matinatsa Mugore, et al. "Horticultural Therapy in Singapore." *American Journal of Public Health* 110.2(2020).
- [3] Siu Andrew M H, et al. "Horticultural Therapy Program for People with Mental Illness: A Mixed-Method Evaluation." *International journal of environmental research and public health* 17.3 (2020).
- [4] Andrea Scartazza, et al. "Caring local biodiversity in a healing garden: Therapeutic benefits in young subjects with autism." *Urban Forestry & Urban Greening* 47. (2020).
- [5] Mohamed Elsadek, et al. "Green façades: Their contribution to stress recovery and well-being in high-density cities." *Urban Forestry & Urban Greening* 46. (2019)