

CONCEPTUALIZING A SUSTAINABLE DEVELOPMENT MODEL FOR CULTURAL HERITAGE TOURISM IN ASIA

Xing HUIBIN

*School of Housing Building and Planning, Universiti Sains Malaysia
11800 Pulau Pinang, Malaysia
xinghuibin@gmail.com*

Azizan MARZUKI

*School of Housing Building and Planning, Universiti Sains Malaysia
11800 Pulau Pinang, Malaysia
chik72@usm.my*

Arman Abdul RAZAK

*School of Housing Building and Planning, Universiti Sains Malaysia
11800 Pulau Pinang, Malaysia
arm_raz@usm.my*

Abstract

In the process of tourism development at cultural heritage sites, social pressure and environmental problems seem to be unavoidable, such as the danger of losing inherent local characteristics, tremendous pressure from a huge influx of tourists and the reluctant migration of native residents. It becomes increasingly urgent to find a better way to enable cultural heritage to achieve sustainable development. In a multicultural context, especially in Malaysia and China, people have been paying more attention to these impacts from tourism on the society, culture, tourist destinations and local residents. This research applied a comparative method to study the protection and development of cultural heritage tourism (CHT). First, a basic comparative framework was established based on a summary of the related literature on cultural heritage tourism and sustainable tourism development (STD). Secondly, Lijiang in China and Penang in Malaysia were chosen as cases to be compared according to the comparative framework. Thirdly, a complete model of sustainable development of CHT was established based on the results of the comparison. Besides illustrating more specific details and showing the sub-compositions in a more lucid and clear manner, the model eventually offers a more practical and systematic STD direction and planning following the structure of: four Dimensions, four Goals, four Patterns and four Mechanisms. As two of the famous World Cultural Heritage sites, to a certain degree, Lijiang and Penang have increasingly become the most typical representatives in balancing protection and development of cultural heritage especially in Asia. Therefore, this lends the research a wider applicable value as well as an important practical significance, especially within Asia.

Keywords: cultural heritage tourism; 4DGPM model; Lijiang and Penang.

1. INTRODUCTION

In general terms, cultural heritages are composed of dance, cuisine, architecture, attire, festivals, music, literature, drama, folk stories and other activities that bear lots of traditional values related to aesthetics,

archeology, anthropology, science and sociology. With the increasingly fast development of the society and economy plus rapid urban modernization, people have begun to realize the importance of cultural heritage in enhancing the feeling of national pride, emotions of patriotism and national cohesion. Thus, to extensively seek and utilize the huge potentials of cultural heritage in economic development, social progress, and cultural succession, many industries and organizations have regarded cultural heritages as a new growth point with good prospects as well as a very sustainable source of numerous benefits. However, these parties are facing the common dilemma of how to balance protection with development, as to date, there seems to be no likely or effective way to solve this predicament. Moreover, since every region or country has been becoming more multicultural at an unprecedented rate than before, the problem has become more and more prevalent and serious.

In the field of tourism study, cultural heritage has been regarded as one of the most important attractions. The great charms with irresistible temptations from cultural heritage destinations have been enthralling tourists all over the world. However, akin to a doubled-edged sword, cultural heritage tourism (CHT) inevitability would bring some pressure on cultural protection to a certain extent especially within the multicultural context. As an example, China and Malaysia are ranked as the top two Asian countries in the Top International Destinations List in 2009 according to international tourist arrivals by the United Nations World Tourism Organization (UNWTO), respectively ranked No4 (50.9 million) and No9 (23.6 million) in the world (UNWTO, 2010). Moreover, Lijiang in China and Penang in Malaysia are destinations with the most excellent and representative cultural tourism attractions with multicultural characteristics in Asia, with both of them inscribed as World Cultural Heritage cities by UNESCO respectively in 1997 and 2008 due to their living culture and historic buildings that have remained until now. In 2009, Lijiang city received 7.5814 million tourists with an annual growth rate of 21.21% and achieved a consolidated tourism income of 8.866 billion RMB with an annual growth rate of 27.49% (Yuan, 2010). The tourism output value has accounted for over 50% of the total gross national product of Lijiang. Meanwhile, Penang hosted 5.9603 million hotel guests in 2009 (Tourism Malaysia, 2010). Tourism has now become the second most important source of revenue after manufacturing in Penang.

However, as Hunter (1997) and Van der Borg and Russo (1999) argued, that tourism in heritage cities can prove to be unsustainable, the base of tourism development in the two tourist sites have been imperceptibly destroyed, resulting in the disappearance of many valuable heritage sites due to rapid tourism development, even though massive income has been gained from CHT. Furthermore, some incidental effects of tourism, such as migration of aborigines/locals, loss of authenticity, over-commercial development and moral degeneration, are undoubtedly undermining the sustainable potentials of CHT development and even the local economies and societies.

In order to alleviate the common problems in CHT sites, this research aims to facilitate the sustainable development of CHT. Even more importantly, through comparing Lijiang and Penang, a more sustainable CHT development model can be constructed in terms of the comparative framework based on previous related research. Undoubtedly, the model will in turn make great contributions to the protection and development of general cultural heritage sites.

2. LITERATURE REVIEW

Since the late 1980s, sustainable development has become a buzzword in development studies, especially within the tourism research circles (Liu, 2003). Researchers define sustainable development of tourism (STD) from different angles (Butler, 1999b; Page & Dowling, 2002), such as development policies (Cronin, 1990), environment protection (Bramwell & Lane, 1993), function and objective (Cater, 1993; Farrell, 1999), social changes (Prosser, 1994) and economic activity (Hunter, 1995). Garrod and Fyall (1998) point out that environmental balance and social-benefit should be the main purposes of STD, while Liu (2003) argues stakeholders' benefits, such as improving the living standards of the locals, should be included in the assessment of STD as one of the key goals. In all, the most important principles and models of STD put more attention on the balanced interaction between destinations, local residents, tourists in cultural heritage sites, and as such, indispensable components such as conservation and rehabilitation, interpretation as well as local-economic development should be integrated into STD (Al-hagla, 2010). In terms of the specific patterns, Wearing and Neil (1999) regard effective planning and operations management as the main ways towards STD, which are affirmed by Pigram (1990) and Butler (1998) who believe minimum-scale tourism is the best choice in tourism planning to keep tourism sustainable. McCool and Lime (2001) suggest management and supervision of tourism should be based on biophysical or social conditions to enhance sustainability.

Though it is well known that cultural heritage is one of the more important resources for tourism development, tourism literature by large has not yet settled on the basic common definition of cultural heritage tourism (Dolnicar, 2002; Hughes, 2002). In a broad sense, CHT means any kind of tourism related to historic buildings, art works, beautiful scenery as well as other similar aspects (Yale, 1991), which makes it more comprehensive and complex than the other usual tourism sections. McKercher (2004) states that visiting cultural attractions has proven to be merely a secondary travel motivation, following other motivations, such as sightseeing and vacation, which are identified as the main motivation for visiting these destinations.

Furthermore, Theopisti (2011) argues that cultural attractions include museums, galleries, festivals, local architecture, heritage sites, artistic performances and all attractions related to cuisine, attire,

language and religion. In all, there are mainly three kinds of measures that are related to the sustainable development of CHT. Firstly, measures related to protection. Iyer (1988) believes the ineffective protection will lead to the degradation of CHT and subsequently, the decrease of tourism attraction. What is worth mentioning is that Lazrus (1999) specifically classifies the protection measure into three types: strict laws, fines and jail sentences; education; and finally finance support.

Secondly, measures related to management and supervision. Leask and Yeoman (1999) propose that as a kind of heritage visitor attractions, CHT should be regarded as a form of service delivery system (akin to manufacturing) consisting of design, improvement, capacity, operation and selling goods as well as services with cultural heritage components. Thirdly, measures related to innovation. Some researchers think that it is only when CHT is upgraded and enhanced continuously, can it maintain an everlasting sustainable vitality. Letellier (1999) takes the three-dimensional technique as an effective method to maintain the sustainable development of CHT.

In these related literature, it is apparent that at present the research concerned has involved many fields, including local people, resource protection, tourism management, benefit sharing, tourism planning, cultural inheritance, talent training, tourism marketing and other similar elements. Given the general rules of STD, the inner structure of STD in CHT basically consists of four dimensions, four goals, four patterns and four mechanisms as shown in Figure 1.



FIGURE 1 - THE INNER STRUCTURE OF SUSTAINABLE DEVELOPMENT OF CHT

However, because most research just studies one specific case, no general results have been obtained to help build broader and stronger theories regarding cultural heritage tourism. Furthermore, more details of the development model of cultural heritage tourism have yet to be achieved. Although multi-disciplinary views such as the comparative method as an instance are important and necessary in some cases related to cultural heritage tourism, there are few researchers who have utilized mixed perspectives (Wall, 2010). Obviously, it is urgent and necessary to establish a sustainable development of CHT by studying cases in a comparative way.

3. RESEARCH METHODOLOGY

The comparative method is the most basic scientific method when compared with others such as experimental, statistical and case study methods (Lijphart, 1971), as Lasswell (1968) asserts that the scientific approach is unavoidably comparative. The comparative method can be defined as an analysis process in which a research to seek the similarities and differences related to two or more related objects is implemented according to certain criteria in order to probe the universal laws or special rules. Eisenstadt (1968) argues that the comparative method is more like a special social analysis focusing on cross-societal, institutional or macro-societal aspects rather than a specific scientific method.

As an initial stage of general research, comparative method plays a central role in hypotheses formulation and theory building by bringing into focus suggestive similarities and contrasts especially among cases (Collier, 1993), while the successive statistical analysis are used to test these hypotheses in as large a sample as possible. Lijphart (1971) defines the comparative method and points out its inherent problems in comparison with the case study method and the experimental method. He believes if there is an obvious lack of time, energy and financial resources, the comparative method is a more promising and fruitful method than the other superficial statistical analysis of many cases, even if the preferred method is often regarded as one of the "small-N" analysis which can only be applied into small-scale cases.

In this research, the comparative method was applied. First, a sustainable development framework of CHT was constructed by summarizing and comparing the related literature. These previous opinions about STD and CHT were organized and classified in order to peer at the research panorama in a more comprehensive manner. Subsequently, these research findings were reorganized and rearranged systematically to construct a preliminary framework of sustainable development of CHT which is the comparative basis. Next, a comparison is carried out to acquire the general development situation in CHT sites by taking Lijiang and Penang as research cases. Specifically, Lijiang and Penang were contrasted deeply and widely to analyze their similarities and differences from the four aspects in the

comparative framework: development dimension, development goal, development pattern, and development mechanism. On these findings from the comparison, a more specific and systematic sustainable development model of CHT with sub-elements will be finally formed.

Lijiang and Penang was selected as study cases in the research since both destinations represent a lot of cultural heritage tourism elements in Asia. Besides their strong representativeness of cultural heritage tourism respectively in China and Malaysia, the reason why these two ancient cities are selected for comparison is that there are many similarities (in cultural diversity, tourism industry, developing conditions as well as the city views on water based elements, community participation, internet publicity and festival drive) and differences (in cultural features, commercialization, tourist structure, tourist shopping, resource combination, management and tourism information) between them which provide a sound basis and the most possibilities to compare between one and the other. Based on these elements, Lijiang and Penang are the most suitable study cases to undertake this research and ultimately achieve the research objectives especially in Asia.

Lijiang is located in Northwest, Yunnan. The Old Town of Lijiang has been inscribed as a World Cultural Heritage site in 1997 by UNESCO due to its blend of diversified elements from several cultures over many centuries and its retention of many historic townscapes with high quality and authenticity. As forementioned, Lijiang city received 7.5814 million tourists with a consolidated tourism income of 8.866 billion RMB in 2009 (Yuan, 2010). The tourism output value has accounted for over 50% of the total gross national product of Lijiang. In the Lijiang government work report, income from tourism in Lijiang has exceeded 10 billion RMB in 2010. Penang meanwhile is located at the northern entry to the Straits of Malacca, which had made it a historically busy natural harbor especially during the monsoon months for Arabian, Chinese, European and Indian ships. Penang has been inscribed as a World Cultural Heritage site in 2008 by UNESCO (Tourism Malaysia, 2010). At the moment, tourism has become the second most important source of revenue after manufacturing in Penang.

4. DISCUSSION AND FINDINGS

4.1. Dimensions

Since sustainable development can be defined from space-time dimensions (the longitudinal line in Figure 1) and Harmonious dimensions (the transverse line in Figure 1), the model is constructed from a four-dimension perspective after comprehensively considering these angles (see Figure 2).

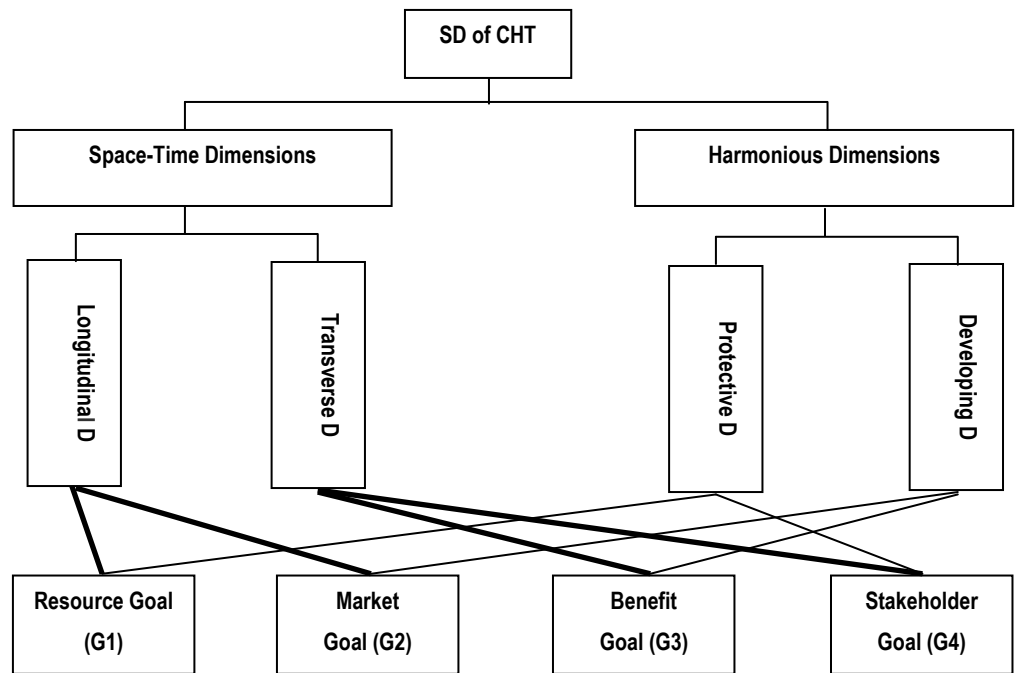


FIGURE 2 - THE INTERRELATIONS OF THE FOUR DIMENSIONS OF SD IN CHT

As world-class cultural heritage sites, during the entire process of developing tourism, there have been some problems present within the development of Lijiang and Penang, even if they have obtained many achievements and positive experiences through sustainable tourism development. According to the Vicious Circle of Tourism Development in Heritage Destinations proposed by Russo (2002), the tourism development in Lijiang is now between stage B and stage C, which means more tourists will visit the central attraction and congestion will be subsequently increased. For Penang on the other hand, the problems relate to ways in keeping its resources sustainable, while market, benefit and stakeholder goals are also the key issue which will determine the degree of development potential. As such, these two cities should focus on not only benefits and values from longitudinal and transverse dimensions but also from protective and developing dimensions.

4.2. Goals

Resource Goal - Lijiang, with a history of 800 years, has been a key transportation junction of the Tibetan-Yi Corridor, the Ancient South Silk Road and as the only way through the Tea-Horse Road. Historically, as mentioned earlier, Penang has always been a busy natural harbor due to its strategic and relatively safe location during the monsoon seasons for Arabian, Chinese, European and Indian ships to ply to and fro the Straits of Malacca. As important crossroads of multi-national migration, the two sites are famous for outstanding indigenous cultures and compatible multi-cultures in the world. The live history, various cultures and traditional townscapes retained so far are the important reasons why

these cities were inscribed as World Cultural Heritage cities by UNESCO. Therefore, these raw elements of CHT should naturally be organized and preserved well (see Table 1).

Stakeholder Goal - There are at least 22 minority groups in Lijiang such as Naxi, Yi, Lisu, Miao, Zang, Hui, Zhuang, Bai, Dai, accounting for 58.1% of the population (excluding the majority Han community) at the end of 2005 (Lijiang Tourism Administration, 2010). Penang is also a multi-racial site with ethnic Chinese (41.8%), Malay (40.5%), ethnic Indian (10.4%), Bumiputera (0.4%), and other races including Jewish and Armenian (0.4%), and non-Malaysian citizens (6.5%) making up its population in 2008 (Wikipedia, 2011). This situation undoubtedly makes the diversified nationalities/ethnic groups as important stakeholders. Besides this, since the rapid developments of tourism in these sites are closely related to the promotion and guidance from the local authorities, positive and wide capital injection from external investors, supervision and consultation from non-government organizations, as well as other factors, the needs and demands of these stakeholder groups cannot be neglected.

TABLE 1 - THE COMPOSITION OF 4 GOALS

Circle-layer	Basic composition	Inner composition
Four Goals	Resource Goal (GR)	Live history continuation (GR1)
		Cultural diversity inheritance (GR2)
		Traditional townscape preservation (GR3)
	Stakeholder Goal (GS)	Multi-nationalities (GS1)
		Multi-stakeholders (GS2)
	Market Goal (GM)	Old market penetration (GM1)
		New market extension (GM2)
	Benefit Goal (GB)	Infrastructure construction (GB1)
		Community participation (GB2)

Market Goal - The number of overseas tourists of Lijiang is 0.5259 million in 2009, only accounting for 6.9367% of the total international tourists (Yuan, 2010), while in 2009 a total of 2.97 million foreign tourists have been recorded as visiting Penang compared to 2.81 million in 2008, which accounts for 49.8297% of the total tourists arrivals (up 5.2793% from 2008) (Tourism Malaysia, 2010). Furthermore, Penang recorded a 40% increase in the number of overseas tourist arrivals in the first half of 2010 (Ng, 2010). It shows that CHT is of great potential to attract both domestic tourists as well as foreign tourists. Therefore, the market goal of sustainable development of CHT should include both penetration into pre-existing old markets and extension of new markets.

Benefit Goal - The two cities have both developed convenient three-dimensional traffic systems, including airport, bus station, railway station and quays. The biggest beneficiaries of an improved infrastructure are the local residents, not tourists, even if infrastructure construction is very important to satisfy tourists. However, the reluctant immigration of many original inhabitants in Lijiang and Penang has reduced the benefits as well as opportunities for these groups. It is therefore pertinent that

community participation should be included within the benefit goal dimension of sustainable development of CHT.

4.3. Patterns

From the classical business management theory proposed by Henri Fayol (1916), the most basic management elements are planning, organizing, commanding, coordinating, and controlling. According to this view, a sustainable and healthy CHT should come from high-quality planning, effective development, correct managing and coordinating, and continuous upgrading, which form the basic framework of the pattern layer in the 4DGPM model (see Figure 1).

TABLE 2: THE COMPOSITION OF FOUR PATTERNS

Circle-layer	Basic composition	Sub-composition
Four Patterns	Plan pattern (PP)	Distinguishing attraction as the core (PP1)
		Tourists as the orientation (PP2)
		Culture as an inexhaustible fountainhead (PP3)
		Resource integration as one of the main aims (PP4)
	Exploitation Pattern (PD)	Virtuous circle construction (PD1)
		Tridimensional promotion (PD2)
	Management pattern (PM)	Standardization of industry (PM1)
		Build and improve tourism brand (PM2)
	Upgrade pattern (PU)	Education for the cultural inheritors (PU1)
		Continuous investment (PU2)
		Upgrade of tourism image (PU3)

Plan pattern – A tourism plan can be regarded as the indispensable bridge between mass tourists and tourism resources. The rich and profound cultural reserves of Lijiang and Penang have been deeply attached to ubiquitous architecture, historical features and cultural heritage. In order to make tourists better understand the meaning of culture, during tourism planning, the elements of local culture of Lijiang and Penang should be widespread and injected into any tourist product in terms of tourist preference and resource features. Meanwhile, besides CHT resources, in the both sites, there are many natural sceneries and social customs which are also important tourism attractions. As such, resource integration should become one of the more important strategies to enhance regional attraction in the planning process (see Table 2).

Exploitation Pattern – The “Lijiang Model”, mainly consisting of both world heritage protection to drive tourism as well as tourism development that reiterates the importance of heritage protection, has been regarded as a brand new way and effective experience in solving the intractable problem of protecting cultural heritage especially in heritage sites of the Asia-Pacific region by UNESCO, which terms it as the world-renowned “China Experience” in the aspect of protection and development of heritage sites. Furthermore, tridimensional promotion is also one of the main reasons for rapid tourism development in

Lijiang and Penang. In Penang, visitors can get free tourism brochures, tourism maps and calendars of big events conveniently from anywhere, including over the internet. For Lijiang, its wide popularity in the world actually began with overwhelming news reports of a sudden natural disaster: a 7.0-magnitude earthquake in 1996, which was also regarded as a successful crisis-marketing.

Management pattern – In Lijiang and Penang, there are many management measures to help fulfill STD, such as restricting new building height, supplying financial aid to local residents and guidelines for building new cities. In 2009, in order to widely promote tourism products and build a world-class tourism brand, the government of the old city zone of Lijiang created tourism symbols which were openly disseminated to the public and subsequently, Lijiang's tourism symbols were then standardized to 13 symbols based on recommendations by experts and citizens. Penang also attaches great importance to uniform tourism symbols and signs, as can be evidently seen at the airport, streets, common signboards, buses as well as other facilities and services all over Penang.

Upgrade pattern – Lijiang and Penang both pay much attention to heritage education especially for the younger generation to inherit and develop a sustainable local traditional culture. All primary and secondary schools in Lijiang offer a series of classes and activities related to local culture for the students and at the same time, print specific materials and texts towards this end, such as the "Colorful Lijiang" brochure. In Penang, many heritage educational projects for youngsters have also been carried out, such as the Art-ED (Arts Education Programs for Young People), which targets children, aged 10-16 from diverse communities and schools within George Town, Penang in order to push them to explore and understand how their identities are rooted in their heritage. Meanwhile, the two cities have enacted some favorable policies to attract tourism investment and have also taken some measures to improve their image of tourism consistently, such as the "Protection and Restoration of Former Residences in Lijiang" programme.

4.4. Mechanisms

Development mechanism is a basic safeguard and necessary element in the sustainable development model. Specifically, 11 mechanisms in four aspects constitute the main body of the development mechanism of CHT (see Table 3). Drive mechanism is the motivation and drive source of the sustainable development. Additionally, the balance mechanism and the supervision mechanism are the respective push power and pull power during the development of CHT. As for the assessment mechanism, it acts like a judge or a mirror where the effects of CHT development can be gauged and examined. Moreover, assessment is the important mechanism to provide the direction to perfect and improve the sustainable development of CHT.

TABLE 3: THE COMPOSITION OF FOUR MECHANISMS

Circle-layer	Basic composition	Sub-composition
Four Mechanisms	Drive mechanism (MD)	Festival drive (MD1)
		Brand drive (MD2)
	Balance mechanism (MB)	Balance in terms of space: building new towns, financing locals for housing repairs, etc. (MB1)
		Balance in terms of time: Control volume of visitors by raising tickets, establishing development funds, etc. (MB2)
	Supervision mechanism (MS)	Official supervision (MS1)
		Non official supervision (MS2)
	Assessment mechanism (MA)	Degree of commercialization (MA1)
		Cultural authenticity (MA2)
		Cultural sustainability (MA3)
		Stakeholder satisfaction (MA4)
Acceptance degree of market growth potential (MA5)		

Drive mechanism – In Lijiang and Penang, there are multifarious festivals of different cultures. In Penang, plenty of festivals originating from countries such as Malaysia, China, India as well as from the various religious cultures of Muslims, Hindus, Buddhists and Christians are held every year (see Table 4), which in turn have become a huge drive engine to CHT in Penang. According to the official statistics issued by the Penang State Tourism Department of Culture, Arts & Heritage, 223 events were held at Penang throughout 2009. In Lijiang, the Dongba Festival, Sanduo Festival, Dragon King Celebration, Galloping Horse Fair and some cultural performances, such as the Lishui Jin Sha, Naxi ancient music and Lijiang Impression, have already become influential cultural brands in the world tourism market as well. As one of the most representative and earliest old towns which have developed tourism in their respective countries, the huge brand value of these two towns is the important reason why tourists flood in from even a thousand miles away.

Balance mechanism – The balance between protection and development is mainly embodied in four aspects: resources, stakeholders, market and benefits from the space-time perspective (see Figure 2). In respect of new town buildings which are regarded as an effective approach to reduce the pressure on heritage sites, Lijiang and Penang took absolutely different paths, namely “New-Old Separation” in Lijiang and “New-Old Integration” in Penang. In Lijiang, in order to relieve the pressure of excessive visitors and alleviate the contradiction between protecting cultural authenticity and developing the tourism industry, about 0.7 billion RMB for old town maintenance has already been received from charging tourists by the local government from 2001 till now, where this revenue is mainly used to establish several funds for environment improvement, administrative operations and national culture inheritance (see Table 3).

Supervision mechanism – The sustainable development of CHT is inseparable from the effective supervision of the whole community. In Penang, two kinds of organizations are directly responsible for CHT, firstly the official agencies (Penang State Tourism Department of Culture, Arts & Heritage; Penang Tourism Action Council; George Town World Heritage Incorporated; The Penang Heritage Trust, Penang Global Tourism Sdn. Bhd. and other similar agencies) and secondly, non-official entities (Penang State Chinese Association; several Kongsis or local community groups, such as the Leong San Tong Khoo Kongsis; Penang Chinese Clan Council; the private corporations of heritage sites in George Town, such as the Teo Chew Association; the Phoenix Press Sdn. Bhd. as well as other related parties). The heritage supervision in Lijiang is mainly dependent on two official missions: the Lijiang Old Town Protection Administration and the Lijiang Old Town Management Limited Liability Company (see Table 3); while some non-official organizations in Lijiang, such as the Lijiang Culture Research Association and the Yunnan Mosuo Culture Research Centre, are mainly responsible for cultural research.

Assessment mechanism –It is necessary for the sustainable potential assessment of CHT to comprehensively consider a number of factors, mainly involving three aspects, namely cultural heritage, stakeholders' benefits and tourist needs, which are regarded as the prerequisites for the sustainable development of CHT. Lijiang and Penang are also no exception. In fact, they can be deemed as merely being two towns that have an abundant charm and attraction that is marketable as CHT and this is a contributing factor towards them being recognized as UNESCO World Cultural Heritage sites. Moreover, the extent and degree of commercialization is also a crucial assessment criterion which cannot be neglected, as over commercialization of tourism development would undoubtedly lead to the extinction and dissimilation of traditional culture in these two cultural heritage sites.

5. CONCLUSIONS

As one of the most representative UNESCO World Cultural Heritage sites in the world, both the Old Town of Lijiang and George Town of Penang can offer valuable experiences and practical lessons for the protection and development of general cultural heritage elements and tourism products, especially within Asia. By comparing the CHT of Lijiang and Penang, the 4DGPM model of sustainable development of CHT based on the general structure of STD in CHT can be established (see Figure 3). Besides illustrating more specific details and showing the sub-compositions in a more lucid and clear manner, the model eventually offers a more practical and systematic STD direction and planning following the structure of: four Dimensions, four Goals, four Patterns and four Mechanisms. In the model, two powers drive the sustainable development of CHT. Meanwhile, since tourism development

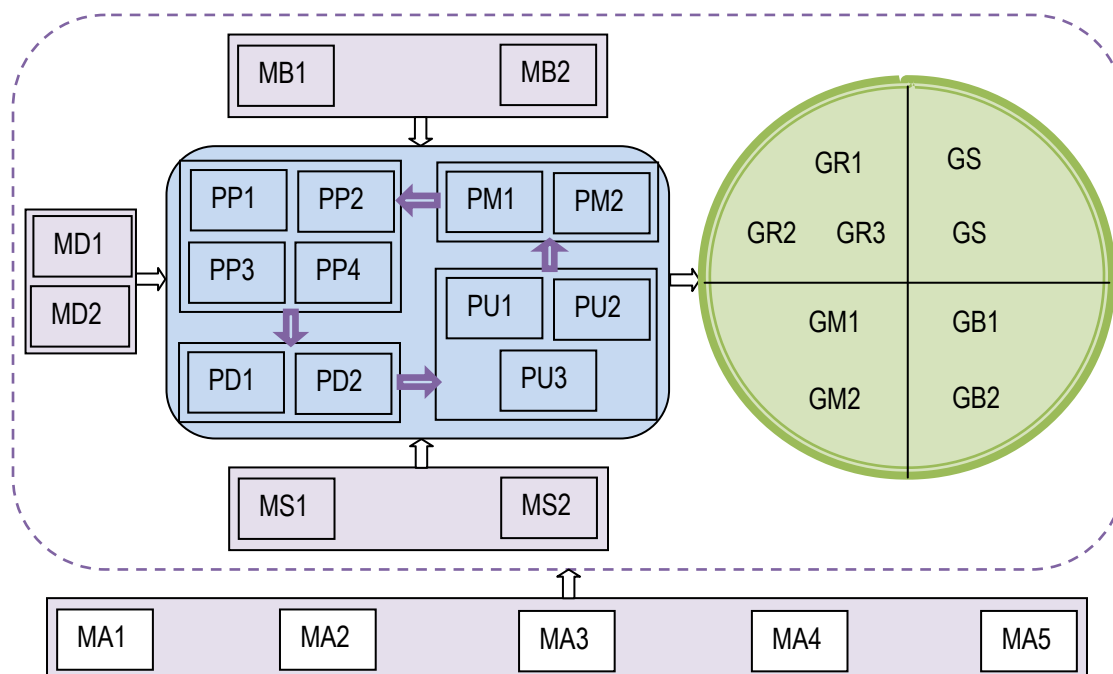
consists of planning, development, management, and continuous upgrading, CHT should also adhere to these intangible norms. In this research, the specific 11 development measures have a close relation with others. Measures within the same processes become the prerequisites of the measures in the subsequent processes. The guarantee mechanisms support and facilitate the development of CHT from development motivation, multiple balances, effective supervision, and reasonable assessment. Only by a systematic design and effective improvement, can CHT realize the sustainable development which is constituted by four aspects: resource, stakeholders, market, and benefits.

Figure 3 indicates that the sustainable development of CHT cannot be realized unless nine specific goals are reached, namely protecting live history, inheriting cultural diversity, preserving traditional townscape, keeping cultural authenticity, systematic management, developing new marketing, penetrating old marketing, constructing infrastructure, and advocating community participation. In order to realize these goals, some prerequisites should be met. From the perspective of the exploitation pattern, distinguishing attractions should be the core of planning, while using tourists as the orientation, culture as the fountainhead, and resource integration as the aim. Meanwhile, in the process of development, CHT destinations should establish a virtuous circle of CHT and strengthen tridimensional promotion. Additionally, what cannot be ignored is that the continuous upgrading and innovation that should be undertaken through heritage education, continuous investment and image improvement. The effectiveness of the exploitation pattern is determined by the drive and guarantee from a series of development mechanisms. Specifically, these mechanisms include mainly multi-festivals, valuable branding, balance of tourist volume, placating locals, effective supervision, reasonable assessment, and other similar aspects. As such, the sustainable development of CHT is and should be considered as a systematic project.

Lijiang and Penang have achieved many valuable experiences in CHT development, but there are still some issues in terms of an established model. In the mean time, these issues make up the central and focused tasks for the two sites in the future. For Lijiang, more attention should be paid on attracting international tourists, while for Penang, domestic tourists is of a more concern. Furthermore, the two towns should strengthen cultural heritage protection by adopting various measures. Additionally, the way in which to balance the benefits among the stakeholders, especially between multi-nationalities, is one of the centric tasks. As it is one of the more practical foundations of CHT, Lijiang and Penang should put more authentic cultures into the tourist products by integrating the related tourism resources.

Moreover, improving standard management, enhancing brand value of festivals, and periodical assessment are the necessary parts for Lijiang and Penang to realize a more sustainable development of tourism. Besides, for general cultural heritage sites, the 4DGPM model can also provide an important

and effective direction in the terms of sustainable development. For the tourism industry as a whole, the model not only assists CHT to realize sustainable development but also contribute towards a consistently coordinated development of the entire tourism sector. In addition to this, as an analysis method, this model can also be used to assess the sustainable development degree of CHT in certain and specific tourism destinations, especially within Asia.



ACKNOWLEDGEMENT

A special mention of thanks is accorded for the support provided by the USM Fellowship Grant, Universiti Sains Malaysia, Pulau Pinang, Malaysia.

REFERENCES

- Al-hagla, K. S. (2011). Sustainable urban development in historical areas using the tourist trail approach: a case study of the Cultural Heritage and Urban Development (CHUD) project in Saida, Lebanon. *Cities*, 27(4), 234-248.
- Bramwell, B., & Lane, B. (1993). Interpretation and sustainable tourism: the potential and the pitfalls. *Journal of Sustainable Tourism*, 1(2), 71-80.
- Butler, H. G. (1999). Seasonal dynamics of the planktonic microbial community in a maritime Antarctic lake undergoing eutrophication. *Journal of Plankton Research*, 21(12), 2393-2419.
- Butler, R. (1998). *Sustainable tourism: Looking backwards in order to progress*. In C. M. Hall & A. A. Lew (Eds.), *Sustainable Tourism: A geographical perspective* (pp. 25-34). London, United Kingdom: Longman.

- Cater, E. (1993). Ecotourism in the Third World: problems for sustainable tourism development. *Tourism Management*, 14(2), 85-90.
- Collier, D. (1993). *The comparative method*. In A. W. Finifter (Ed.), *Political science: The state of the discipline II* (pp. 105-119). Washington, United states: The American Political Science Association.
- Cronin, L. (1990). *A strategy for tourism and sustainable developments*. *World Leisure & Recreation*, 32(3), 12-18.
- Dolnicar, S. (2002). *Activity-based market sub-segmentation of cultural tourists*. Paper presented at the 12th International Research Conference for the Council of Australian University Tourism and Hospitality Education: Tourism and Hospitality on the Edge, Fremantle, Australia.
- Eisenstadt, S. N. (1968). *Social institutions: comparative study*. In D. L. Sills (Ed.), *International Encyclopedia of the Social Sciences* (Vol. 14, pp. 423). New York, United states: Macmillan & Free Press.
- Farrell, B. (1999). Conventional or sustainable tourism? No room for choice. *Tourism management*, 20, 189-192.
- Fayol, H. (1916). *General and industrial management*. London, United Kingdom: Pitman.
- Garrod, B., & Fyall, A. (1998). Beyond the rhetoric of sustainable tourism. *Tourism Management*, 19(3), 199-212.
- Hughes, H. L. (2002). Culture and tourism: a framework for further analysis. *Managing Leisure*, 7(3), 164-175.
- Hunter, C., Green, H., & Lankford, S. V. (1995). *Tourism and the environment: a sustainable relationship?* London, United Kingdom: Routledge.
- Iyer, P., & Siegel, N. (1988). *Video night in Kathmandu: and other reports from the not-so-far East*. New York, United States: Vintage Books.
- Lasswell, H. D. (1968). The future of the comparative method. *Comparative Politics*, 3-18.
- Lazrus, P. K. (1999). *Taking action: local initiatives for global understanding and protection of cultural resources*. In W. Nuryanti (Ed.), *Heritage, tourism and local communities* (pp. 83-90). Yogyakarta, Indonesia: Gadjah Mada University Press.
- Leask, A., & Yeoman, I. (1999). *Heritage visitor attractions: an operations management perspective..* London, United Kingdom: Cassell, plc.
- Letellier, R. (1999). *Virtual tourism: a new tool for creative conservation of heritage sites and for sustainable development*. In W. Nuryanti (Ed.), *Heritage, tourism and local communities* (pp. 124-131). Yogyakarta, Indonesia: Gadjah Mada University Press.
- Lijiang Tourism Administration. (2010). *Introduction*. Available from Lijiang Tourism Administration: <http://www.lijiang.gov.cn>.
- Lijphart, A. (1971). Comparative politics and the comparative method. *The American Political Science Review*, 65(3), 682-693.
- Lim, G. E. (2010). *Speech on the 1st Penang International MICE Conference*. Penang: Penang State Government.
- Liu, Z. (2003). Sustainable tourism development: a critique. *Journal of Sustainable Tourism*, 11(6), 459-475.

- Tourism Malaysia. (2010). *Malaysia Hotel Guests by State 2009 / 2008*. Available from Tourism Malaysia Corporate: http://corporate.tourism.gov.my/tourismmalaysia_corpx/rpt4_hotelguest.cfm?rpt=4.
- McCool, S. F., & Lime, D. W. (2001). Tourism carrying capacity: tempting fantasy or useful reality? *Journal of Sustainable Tourism*, 9(5), 372-388.
- McKercher, B. (2004). A comparative study of international cultural tourists. *Journal of Hospitality and Tourism Management*, 11(2), 95-107.
- Ng, Y. (2010). *Penang Records Increase In International Tourist Arrivals from Bernama*: Available at http://web.me.com/bjmay/Penang/Penang_my_passion/Entries/2010/9/10_Entry_1.html.
- Page, S., & Dowling, R. (2002). *Ecotourism*. Harlow: Prentice Hall.
- Pigram, J. J. (1990). Sustainable tourism: policy considerations. *Journal of Tourism Studies*, 1(2), 2-9.
- Prosser, R. (1994). *Societal Change and the Growth in Alternative Tourism*. In E. Cater & G. Lowman (Eds.), *Ecotourism: A sustainable Option* (pp. 19-37). New Jersey, United States: John Wiley & Sons Inc.
- Russo, A. P. (2002). The vicious circle of tourism development in heritage cities. *Annals of Tourism Research*, 29(1), 165-182.
- Shelton, C. D., & Darling, J. R. (2003). From theory to practice: using new science concepts to create learning organizations. *The Learning Organization*, 10(6), 353-360.
- Stylianou-Lambert, T. (2010). Gazing from home: Cultural tourism and art museums. *Annals of Tourism Research*, 38(2), 403-421.
- UNWTO. (2010). *UNWTO World Tourism Barometer*. Madrid: UNWTO.
- Wall, G. (2010). Consequences of tourism: Retrospect and prospect. *Journal of Tourism and Development*, 13/14(1), 13-25.
- Weaver, D., Faulkner, B., & Lawton, L. (1999). *Nature-based tourism in Australia and beyond: a preliminary investigation*. Gold Coast, Australia: CRC for Sustainable Tourism.
- Wikipedia. (2011). *Penang*. Available from Wikipedia: <http://en.wikipedia.org/wiki/Penang>.
- Yale, P. (1991). *From Tourist Attractions to Heritage Tourism*. Huntingdon, United Kingdom: ELM Publications.
- Yuan, H. (2010). Lijiang is sprinting for 10 billion of tourism revenue issued by the acting mayor of Lijiang city. *Yunnan Information News*, 2/24.