Journal of Rural and Community Development

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Citation:

Kimmel, C., Perlstein, A., Mortimer, M., Zhou, D., & Robertson, D. (2015). Sustainability of tourism as development strategy for cultural-landscapes in China: Case study of Ping'an Village. *The Journal of Rural and Community Development*, 10(2), 121-135.



Founded 1890

Publisher: Rural Development Institute, Brandon University.

Editor: Dr. Doug Ramsey



Open Access Policy:

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Sustainability of Tourism as Development Strategy for Cultural-Landscapes in China: Case study of Ping'an Village

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Abstract

This case study explores the challenges associated with tourism development in a village within China's Longji Rice Terrace Scenic Area. We employ Butler's (1980) Tourism Area Life Cycle model as a starting point for understanding the evolution and growth of tourism in this area and suggest that the prospect for sustainable tourism in the region remains uncertain and will depend on how scarce resources such as water and agricultural labor are managed. Drawing upon observations from site visits and interviews with local stakeholders in one village in the Scenic Area (SA), this case study identifies the various social, economic, and environmental variables that will shape tourism's future contribution to the area's economic and community development and landscape and cultural heritage preservation.

Keywords: poverty alleviation; rural development; cultural landscape; China; sustainable development

1.0 Introduction

As one tool for achieving economic development and environmental sustainability, tourism is widely regarded as a tremendous opportunity. In 2014, more than 1 billion tourists traveled internationally, a 4.4 percent increase over the previous year and an impressive growth rate given the challenges faced by the world economy as a whole (United Nations World Tourism Organization 2015, p. 11). Tourism accounts for as much as 9% of global GDP and one in 12 jobs worldwide (UNWTO 2013, p. 130). The outcome document of the United Nations Conference on Sustainable Development acknowledged tourism's importance in its concluding document:

We emphasize that well designed and managed tourism can make a significant contribution to the three dimensions of sustainable development, has close linkages to other sectors, and can create decent jobs and generate trade opportunities. We recognize the need to support sustainable tourism activities and relevant capacity building that promote environmental awareness, conserve and protect the environment, respect wildlife, flora, biodiversity and ecosystems and cultural diversity, and improve the welfare and livelihoods of local communities by supporting their local economies and the human and natural environment as a whole (United Nations, 2012, p. 23).

Given the opportunity that tourism represents for economic development, China presents a fascinating and important country for examining tourism's impacts on local communities, cultures, and natural resources. The growth of tourism worldwide parallels the growth of tourism in China, which in turn, has tracked the impressive economic growth the country has sustained over the past few decades of its reform era. As Sofield and Li write

The year-on-year growth of tourism in China over 30 years has been unparalleled. This extraordinary mobility, coupled with massive investment in supporting infrastructure and superstructure, has generated billions of dollars of revenue, resulted in the direct employment in tourism of about 9% of China's total workforce and many more indirectly through the multiplier effect and elevated tourism to the status of a pillar industry for China (Sofield & Li, 2011, p. 529).

At the same time, China's tremendous growth has resulted in degradation of the environment and severe stress on natural resources. China also faces the persistent social and economic challenges of wide regional disparities and wide urban and rural income inequality.

Tourism in China has emerged as an effective and heavily supported strategy for promoting rural development (Gao, Huang, & Huang, 2009; Su, 2011; Zeng & Ryan, 2012). Provincial, city, and local level government actors play a role in tourism development at the destination level, but their actions reflect policy goals made by the Central Government, reflected in China's Five-Year Plans. The 12th Five-Year Plan approved in March 2011 emphasized equity of development, and sustainable use of the nation's natural resources (Kasey & Koleski, 2011), forcing regional rural tourism development efforts to reconcile these goals.

As tourism continues to play a key role in China's economy as a pillar industry, can it address and mitigate these social and environmental challenges? Or will these challenges undermine tourism's long-term potential as a driver of economic development? This case study looks at the situation in one particular Chinese village in order to better understand the interplay of tourism with environmental and social variables at the local level. We explore the tensions between goals of development and conservation and the prospects for managing towards more sustainable forms of tourism and rural development within the context of Ping'an Village (Ping'an), a rural agricultural ethnic minority village located within the mountanious Longji Rice Terrace Scenic Area. As part of a cultural landscape where livelihoods and the socioecological systems have become symbiotic and many villagers live below the poverty line, Ping'an illustrates the complexities for sustainable tourism management in China.

Based on fieldwork done in Ping'an, we examine the village's development path using Butler's (1980) tourism area life cycle (TALC) and explore its implications on socio-cultural, economic, and natural resource conditions for the village. Reasoning that Ping'an is still in the development phase, there remains opportunity to direct its future in a more sustainable direction.

2.0 Regional Context of Tourism Development in Guilin Prefecture

Tourism has been considered a "keystone industry" in China's rural modernization efforts (Sofield & Li, 2011), and has become a critical economic sector for Guilin Prefecture (city-region), an urban center in the Guangxi Zhuang Autonomous Region (see Figure 1). The city-center of Guilin serves as gateway to the region's major tourist destinations including the Longji Rice Terrace Scenic Area (sometimes referred to as the Dragon's Backbone). Tourism began in Guilin in the 1980s, with mostly international tourists arriving to experience the dramatic landscapes and ethnic cultures, and has experienced rapid growth with the expansion of domestic tourism (Wen, 1997; Xu, 1999; York & Zhang, 2010).

The Longji Scenic Area (SA) is located 150 km north of Guilin's city-center. Longji SA is a culturally defined landscape of extensively terraced mountainsides, built and maintained for centuries by villagers living throughout the area. Managing for sustainable development in the Longji SA is complicated by challenges inherent in developing an agricultural heritage area for tourism (Li, Wu, & Cai, 2008; Sun, Jansen-Verbeke, Min, & Cheng 2011), and the limiting characteristics of mountain destinations (Nepal & Chipeniuk 2005).

2.1 Longji Scenic Area

The Longji SA is a government-designated 70 sq. km section of Longsheng County. Four government-recognized ethnic minorities live within the scenic area – the Zhuang, Red Yao, Miao, and Dong.¹ The steep mountainous region and its villages are relatively remote and until the past decade, have been difficult to access. In the late 1990s, a paved road was extended to the vicinity of Ping'an, but most of the villages in Longji SA remain accessible only by footpath and many are a kilometer

¹ The Chinese government's official classification of China's population into 55 ethnic groups is not without controversy. The history of this classification process is described in Thomas Mullaney (2011). *Coming to Terms with the Nation*, Berkeley: University of California Press.

or more from the nearest hardened surface road. The map provided in Figure 2 provides a sense of proximity of villages and available transportation routes (map not to scale). For scale, the house symbol at the base of the map is roughly 17km from Ping'an. Elevation ranges from 400 to 1000 meters above sea level.

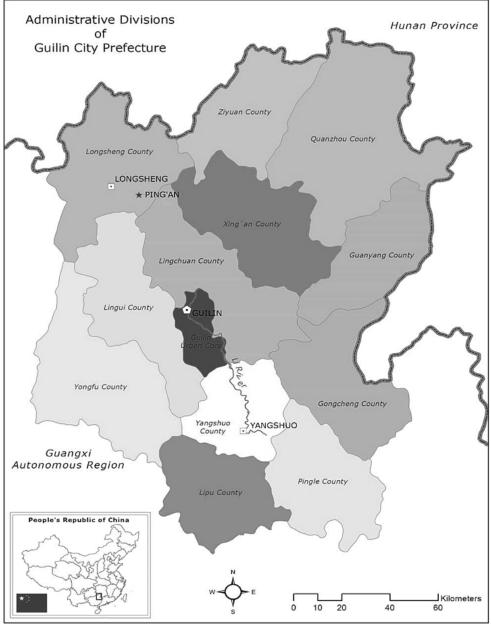


Figure 1: Map of Guilin City Prefecture of Guangxi Zhuang Autonomous Region, China.

Source: Rhianna McCarter

Researchers date the start of terrace construction to 600-700 years ago. Built into arable slopes, the terraces are maintained and cultivated mostly by hand. The terraces are apportioned in "mu" (approximately 666 m^2); linear plots are a meter wide with earthen dikes in front to maintain consistent water levels in the paddy. Storage ponds are built at higher elevations, with drainage conduits to keep terraces

ISSN: 1712-8277 $\ensuremath{\mathbb{O}}$ Journal of Rural and Community Development www.jrcd.ca

irrigated (Shimpei, 2007). Village families have domain over a certain number of mu, which are passed down and divided through generations with knowledge on maintaining, irrigating, and cultivating the paddies. Though individual families maintain the paddies, the terraces are considered collectively owned.

Figure 2: Map of Longji Rice Terraces.



Source: http://www.longjiriceterraces.com/

Terraced agricultural fields, such as those found in the Longji SA, are regarded as globally valuable cultural assets. The Food and Agriculture Organization of the United Nations recognizes these types of terraces as "Globally Important Agricultural Heritage Systems" (Koohafkan, 2007). As Sun et al. (2011, p. 113) assert, the "value of these rural landscapes lies in the expression of a process of changing habitat and society," a dynamic process that contributes to the complexity

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of managing tourism for sustainable development in the region, as these 'heritage' traits and resources are generally considered non-renewable (Butler, 2006).

Longji SA is comprised of 13 villages interspersed among the terraces, each maintaining its own cultural identity and following their own development paths. The map in Figure 2 hints at the development timeline for the villages. The southernmost villages closest to the main travel route were the first to receive outside visitors, and are thus the most developed. Ping'an is among the southern villages and is now the site of a major bus depot for the area. The road running north of the "Confluence of Two Rivers" site was only constructed in 2003, thus delaying development of northern villages (Yuanyuan, 2008). Though our discussion is applicable to the broader region, this case study focuses specifically on Ping'an.

3.0 Methods

A single case design was employed for this study in order to allow for in-depth exploration of the contextual cost-benefit assessment of tourism development for the region, its effect on the community, and the local values that inform development decisions. Semi-structured interviews and field observations were conducted on two separate visits to Guilin and Ping'an in 2010 and 2011, as well as analysis of primary and secondary source documents.

We conducted individual and group interviews during which we collected original data from more than two dozen individuals and organizations representing a broad cross-section of informed stakeholders, including porters, shopkeepers, farmers, hotel owners and staff, tour guides, tourists (international and domestic), academics, government officials, business leaders, and political party representatives. A semi-structured interview guide was designed with language barriers in mind, both to simplify the questions and to encourage straightforward answers. The duration of each interview varied, and typically ranged from thirty minutes to two hours depending on the availability of the informants as well as the venue and format. In interviews that included more than one informant at the same time, the research team was able to immediately cross-check responses for clarity and accuracy.

Informants for interviews were selected using a stratified, purposive sampling approach in order to speak with people involved in the tourism industry that included a range of perspectives based on age, gender, social class, and trade. A professional translator and one member of the research team who is a native Mandarin speaker provided independent translation to increase internal validity. Aware of cultural barriers that might hinder honest and open responses; we conducted interviews in the offices and homes of participants and did not record them. Written notes taken by each members of the research team were compared and corroborated following each interview.

Additional contextual information was provided by fieldwork conducted by a team of graduate students, and through analysis of secondary documentation, such as park and tourism brochures, signage in the scenic region, and tourism data collected at the national and city levels (Tang, 2004; Yuanyuan, 2008; Zhang, 2008.

4.0 Tourism Development and Capacity

Butler's concept of the tourism area life cycle (TALC) (1980) premises that tourism destinations go through phases of growth and change and either become a mature and maintainable destination, or eventually decline, based on management. Butler's

(1980, 2006) model hinges on the notion of managing tourism relative to social and environmental capacity of the location. Whether this capacity is finite has generated much discussion in tourism and environmental literature (Martin & Uysal, 1990; McCool & Lime, 2001; Saarinen, 2006), with the general conclusion that given dynamic interactions of physical and social systems, a set capacity may not exist. While there may be physical limitations to the capacity of individual destinations, there is considerable elasticity in social, ecological, and built infrastructure systems to accommodate changing demand.

Managing capacity for a destination such as Ping'an presents the complexities of a heritage area where socio-cultural, ecological, and economic systems are symbiotic (Jiao & Li, 2011; Sun et al. 2011); and of a mountainous region, where considerations for species and cultural diversity, economic and social marginality, accessability, and unique landscape qualities must be taken into account (Nepal & Chipeniuk, 2005).

5.0 From Exploration to Development: A Tourism Area Life Cycle Perspective of Tourism Development in Ping'an

Using Butler's TALC model (1980) as a guide, this case study examines the progress of Ping'an as a tourism destination through the "exploration" and "involvement" phases, and into the "development" phase. We then explore the impacts of the development thus far on socio-cultural, economic, and environmental conditions of the village.

5.1 Exploration phase

Interviews with some of the residents in Ping'an revealed that tourism in the village was in its infancy in the mid-1980s, several years after China launched its "reform era" policy of opening up to the outside world and introducing elements of a market economy; this timing is also confirmed in the existing literature on the village (Tang, 2004; Zhang, 2008). According to Butler's TALC model, the exploration phase is characterized by small numbers of outside visitors attracted by unique and authentic characteristics of a place. These visits follow an irregular pattern and are relatively non-disruptive to local routines (Butler, 1980 7). During the mid-1980s Ping'an started to attract artists and photographers interested in visiting the isolated village to witness and capture the landscape. These visitors often stayed with local village leaders (Tang, 2004).

5.2 Involvement Phase

The involvement phase in Butler's model is characterized by increasing volume, establishment of a pattern to tourist visits, as well as more formal involvement by locals in accommodating visitors (Butler, 1980, p. 7). We identify the year 1993 as the start of Ping'an's involvement phase for two reasons. First, according to our interviewees, this is the year that the first family-owned inns opened to accommodate outside visitors. Second, this was also the year in which tourism was promoted as a tool for poverty alleviation as a county-level policy (Zhang, 2008), signaling a more active role for the Longsheng County Tourism Bureau in maintaining built infrastructure. During this stage, a village-level committee was formed to manage tourism activities, including building a gate and charging nominal entrance fees to enter the village. Proceeds from admission fees were divided among villagers.

In 1994, the terraced mountainsides and villages of Longji SA (specifically, neighboring Dazhai Village) were introduced to the broader public when a television program was filmed on site, triggering an upsurge in visitors (Yuanyuan, 2008). Subsistence agriculture continued to be the primary livelihood for many villagers through these early phases, but the economic development potential of tourism had begun to emerge.

5.3 Development Phase

Butler suggests that the development phase marks the beginning of a transition from local to external control over tourism enterprises, larger efforts to attract visitors, greater need for regional and/or national support in managing infrastructure, and shifting labor demands (met through importing labor or transitioning livelihoods). The physical appearance of the area begins to change, either through resource degradation or through the creation of manmade attractions. Tourists shift from independent and adventure travelers to more institutionalized tourists who prefer structured experiences with amenities and services tailored to tourist consumption.

1998 marks the start of rapid development when the Longji Rice Terrace Scenic Area was formally established under the administration of the Longsheng County Tourism Bureau. In addition to managing hard infrastructure, the tourism bureau assumed responsibility for managing the main entrance gate and collecting entrance fees. With this transition began a series of contractual arrangements between the tourism bureau and the villagers to establish the portion of entrance revenues to be invested into expanding hard infrastructure and the portion to be divided among villagers. These contracts have been contentious and continue to be renegotiated. In 1999, the tourism bureau established the General Tourism Company of Longsheng County as a government-owned enterprise to manage the scenic area.

By the end of the 1990s, an increasing number of villagers were engaged in tourism related activities. Villagers found new opportunities to earn money as bag and sedan chair porters carrying heavy loads up the village's steep narrow trails, craft vendors, restaurant and hotels workers, and performers in entertainment troupes. External investment in private tourism enterprises began around 2001. One local leader indicated that despite village policy that external investors go through local governance channels to establish enterprise, these processes were regularly circumvented, with investors negotiating directly with villagers to gain access to property. The lack of a cooperative arrangement to ensure the benefits of tourism are distributed equitably is a looming concern among local leaders, contributing to governance and equity challenges.

The years between 1998 and 2002 mark a decisive point for transitioning livelihoods in Ping'an. Villagers suggested that until 1998, rice paddies served as the primary economic engine, with terraces being maintained for food and income. By 2002, tourism was superseding agriculture as the primary economic driver. New and more profitable employment opportunities were drawing farmers out of the terraces and into the tourism industry, where a bag porter could make more than 2,000 RMB (314 USD) annually compared to the average 1570 RMB (247 USD) earned through farming alone. As predicted in Butler's model, the seasonal patterns of terrace

preparation and planting were being disrupted by tourism patterns², leading to unprecedented terrace abandonment.

In 2007, a new arrangement between the county government, the government-owned tourism company, and villagers was established in which per capita allocation of entrance fee revenues switched from a flat-rate stipend to a volume-based share. Village leaders anticipated this arrangement would present a conundrum for maintaining the terraces, as greater incentive to increase tourism volume would draw more people away from agriculture, and thus detract from maintenance of the terraces that serve as the basis for tourism. Anticipating this dilemma, village leaders established a reserve fund, in which 200,000 RMB (31,400 USD) of tourism revenue was set aside annually to finance maintenance of the terraces, which created conflict within the village, as many community members did not share the concern.

The prevalence of tourism as a primary economic driver for Ping'an and the broader Longji SA is evident. Longsheng County received 1.7 million visitors in 2013, generating 1.3 billion RMB (209 million USD) (Guilin Daily Newspaper, 2014). According to informants, in 2011 more than 100 externally owned and operated businesses were operating in Ping'an, four or five of which were reportedly generating more than one million RMB (157K USD) in revenue annually; only one had local ties.

As a poverty alleviation strategy for Longsheng County, tourism seems effective. Data reported as part of the Guangxi Poverty Alleviation Information Network in 2009 indicated that tourism had contributed to bringing a reported 25,000 of the county's 82,000 poor residents above the poverty line, and was providing both direct and indirect employment opportunities to close to 40,000 people.

Butler (1980, p. 8) indicates that during the "development phase," natural and cultural attractions will be marketed and changes in the physical environment will start to become apparent. In the case of the Longji terraces, the introduction of tourism has had physical, social, and environmental impacts on area. New economic opportunities draw farmers away from farming; increased water demands in the village draws water away from terraces; increasing volume of visitors inundate hard infrastructure systems, resulting in paddy contamination; economic opportunity and development has changed community dynamics; and new and foreign values and norms are challenging cultural traditions and values.

Many tourism researchers have expressed concern for the sustainability of China's rural and heritage tourism destinations driven by poverty alleviation goals (Gao et al., 2009; Su, 2011; Xu, 1999). Based on our discussions with officials from the Guilin Tourism Bureau, the Longsheng County Tourism Company, and villagers, these concerns are reflected in reality for Ping'an. Still arguably in the "development" stage, Ping'an has the opportunity to avoid the "decline" phase. In the next section, we examine the sustainability challenges presented by tourism development to date.

5.4. Beyond the Development Phase?

Butler's model provides a useful starting point for understanding the emergence and growth of tourism in Ping'an through the development phase. After the development

² The three Chinese "Golden Weeks" fall in early spring (when terraces need to be prepared for planting), late spring (when terraces should be planted), and in mid-fall (when the rice should be harvested).

phase, the model suggests that tourism destinations may experience phases of "consolidation," "stagnation," and "decline." It is difficult to discern these later phases of Butler's model in the case of Ping'an Village. For example, the consolidation phase is characterized by the emergence of a few key, economic players in the tourism industry. In the case of Longsheng County, the county government and, later, the government-established tourism company, had been key players since the 1990s, with the introduction of revenue-sharing with villagers and later with the establishment of a tourism company. Apart from this government involvement, businesses participating in the tourism industry in Longsheng County and Ping'an Village remain small and diffuse, so consolidation does not seem to be apparent in the area in the way described in Butler's model.

Finally, Butler's model suggests that some tourism destinations will eventually enter a period of decline if they are unable to compete with new destinations emerging on the market. In the absence of current statistics, it would be difficult to conclude that tourism in Ping'an Village has entered or is approaching such a phase, and our interviews suggest that tourism volume is still on the rise. The large demand for travel experiences from China's large, emerging middle class may also offset the pressure from competing destinations and lessen the need to rely on repeat visitors to sustain tourism. For the reasons, we argue that tourism in Ping'an remains in the development phase, but with an uncertain future. The greatest threats to a sustainable future for tourism in Ping'an are likely to be variables related to the social and environmental conditions in the area rather than competition from alternative destinations. The next section discusses these variables.

6.0 The Sustainability Challenge of Tourism Development in Ping'an

Among the most tangible sustainability challenges facing Ping'an is maintenance of the terraces, once an important source of subsistence livelihood, but now the underlying resource for attracting tourists. According to two local informants, 20 of the 620 mu of terrace maintained by the villagers had fallen out of production in 2011, while others were not being as actively maintained or effectively irrigated. While a small fraction, it is apparently unprecedented for the village. Three primary sources of terrace decline and abandonment identified were: 1) a shortage of labor to maintain the terraces, 2) a lack of sufficient water to irrigate the terraces, and 3) contamination, including from sewage.

6.1 A Shortage of Local Labor to Maintain Terrace Agriculture

A traditionally subsistence agricultural practice on difficult terrain with limited accessibility for mechanized tools, maintaining and cultivating the terraces is a labor-intensive process largely for subsistence yield with little comparative economic advantage. Shortage of local labor, especially during the growing season, poses a challenge to conserving the terraces. Higher earning opportunities in the tourism industry are drawing farmers away from agriculture and thus, away from maintaining and cultivating the terraces—the very feature of the landscape for which the village derives its tourism popularity. The integrity of the terraces is dependent on consistent upkeep; dyke walls collapse, terraces dry up, and weedy and woody vegetation proliferate through ecological succession. Some terrace owners were hiring labor from outside the village to work the fields, consistent with concerns expressed by Sun et al., (2011).

As part of the arrangement between households and the village government, families are to maintain the terraces for which they are responsible, or they will be ceded to the commons. However, this revocation of terrace rights has not been acted upon in Ping'an; one informant suggested that local families see their terraces as an important source of economic security, saying, "we don't know if tourism will continue...we need to maintain control of our family terraces and in good, usable condition." In order to keep the terraces in production, families that are heavily involved in the tourism industry are leasing or lending their terraces to other families to maintain and cultivate them. According to more than one key informant, villagers working in the fields as farmers often do so because they have few other options for earning an income.

From the government's perspective, there is a sense that it would be contradictory to punish farmers for pursuing higher income earning options when tourism is being promoted as a rural development strategy. Instead, the government and tourism company provide stipends to families to maintain their terraces, and are investing to connect terraces by footpath to increase efficiency. Another government strategy to keep the terraces in operation is the formation of a subsidiary company that imports agricultural labor.

6.2 Economic and Social Impacts of Tourism Development

The economic and social impacts of tourism's growth in Ping'an are complex and reach farther than the immediate effect of drawing local labor away from terrace farming. Villagers we interviewed shared several perspectives on how tourism's impact has been felt in the local community. Parents said that tourism has had the effect of changing people's views of their own life choices, causing their children to become less interested in farming and more motivated to move to more urban areas, rather than remain in Ping'an in spite of the new of economic opportunities that tourism presents. As Yuanyuan (2008) discusses, the influence of outside cultures and notions on the breadth of ideas and opportunities for villagers has consequences for traditional culture. For some of the village parents we spoke with, exposure to new people from outside the region has increased the importance of educating their children and providing them opportunities beyond farming and the village. In this sense, modernity is seen as a positive influence on the community, despite what implications it might present for preserving cultural traditions. Other parents and younger people we spoke with pointed to tourism as an immediate means of improving the standard of living that does not require investment in formal education.

At present, many villagers in Ping'an are still actively engaged in both agriculture and tourism-related work, and many people we interviewed said that, so far, the community's informal systems and norms of sharing and redistribution have remained strong, constraining the likelihood of tensions arising from unequal benefits from tourism's development. Some interviewees also said that tourism's development has helped maintain or revive certain ethnic cultural traditions. But in various ways—drawing local labor away from farming and young people away from the village—tourism is changing community and cultural dynamics.

6.3 A Challenge for Water Resource Allocation

Just as tourism and terrace cultivation are competing for scarce labor, these two economic activities may be at odds in the allocation of water resources. Water is critical for both the terraces and the tourism industry in Ping'an. Water for both is

gravity fed from the forested mountaintops using a series of pipes and reservoirs. At the time we were conducting our fieldwork, there was a sophisticated water allocation system in place that combined traditional practices, including "water masters" with automated modern metering technology. However, we also observed that dry terraces were at the bottom of slopes, suggesting an insufficient amount of water flowing down. In conversations with village leaders and farmers, we sensed that the former group had a better sense of the water demand for tourism than for irrigation, and farmers seemed to rely primarily on intuition in determining water requirements. When asked how much water was required to irrigate his terraces, one farmer simply described the wooden divider (see Shimpei, 2007) that regulates water levels in the terraces. While this system of relying on inherited knowledge and tools for regulating water has worked in the past, increasing demand is challenging the allocation process. Our research did not reveal to what extent new water consumption from the growing tourism industry may be having an impact on irrigation, but it does raise the question of whether the institutions for water resource allocation that are in place in Ping'an are up to the task of addressing what will likely become a more pronounced problem in future years.

6.4 Need for Physical Infrastructure

Maintaining the physical infrastructure of the village was a widely acknowledged challenge among informants; the problem of wastewater contamination of the terraces was identified by several people we interviewed. One community leader estimated that in 2011, Ping'an had lodging capacity for ~2700 overnight guests, indicating that upgrading capacity for waste removal systems (both solid and human waste), water infrastructure, roads, fire suppression, and lighting in the village to support this capacity were high priorities. The current orientation of the village towards mass tourism places tremendous pressure on a tenuous infrastructure system built into a fragile landscape. One solution is to reduce volume; another is to increase capacity, which is the current plan. One challenge, as anywhere, is financing the upgrades. However, as income from tourism increases and local governance of tourism infrastructure and investment becomes more sophisticated, the resources to invest may be more readily available. For example, a major water reservoir and several new roads are currently under development to serve the area.

Accountability for upgrading the infrastructure systems is a contentious issue in the village. Local leadership points to the county, city, and national governments, and to the tourism company as the main drivers of tourism for the village, though government resources are already financing infrastructure upgrades.

6.5 Capacity of Tourism Service Provision

In terms of the economic sustainability of the tourism industry itself, the majority of tourism trades operating in Ping'an are geared towards a mass tourism model for a primarily domestic day-tripping market. Thus, most of the industry is focused on quick sales and volume. Tourists arrive at the main gate to the village in large tour buses on a regular schedule. Craft vendors line the streets inside the gates and throughout the village, selling predominantly the same merchandise available from other vendors in the village, as well as other tourism destinations in Guilin City or elsewhere in China. The few restaurants are basic, offer similar menus, and are designed for fast turnover. Hotels in the village range in quality, but are generally of higher quality because they are catering to a minority of visitors that stay overnight.

There are hiking trails along the terraced hillsides, but they are poorly marked with little in the way of interpretive signage or guidance. From our observations, the majority of visitors arrive as part of a large group that stays together as they file through marked paths of the village, eat, and then return to the gate within a few hours where their bus is waiting. There are numerous opportunities to manage and improve the quality the experience and thus the future of the destination.

7.0 Conclusions

This case study has described the impact of tourism development in Ping'an Village and the current challenges tourism presents for management and governance. The development of tourism in Ping'an Village has been an effective rural poverty alleviation strategy as indicated by increased household and village incomes. It has noticeably improved the standard of living for villagers, even if the specific distribution of opportunities and revenues from tourism remain a point of contention among various stakeholders. All of our informants in this case study, even those who readily acknowledged the challenges that tourism has created, maintained that tourism has improved the standard of living, if not the quality of life, for the whole village. Income levels in the village have reportedly more than quadrupled in the last 15 years—some much greater (official income figures at the village scale were not available).

With the tremendous economic opportunity provided by tourism, however, a variety of interrelated sustainability challenges have emerged. One key question is whether the income from tourism can be successfully allocated to ensure the sustainable management of the terrace landscape, even as it draws local villagers away from traditional agricultural work. Discussing the challenges to managing tourism, Butler (1999, p. 17) reflected that "despite the many agencies and private sector elements involved in the promotion and development of tourism, there are few bodies whose function is to control tourism once it has been developed". The direct involvement of the government in tourism businesses and tourism's designation by government policy as a key sector certainly present opportunities to implement policies promoting sustainability in Ping'an, but it is clear from our observations that developing the infrastructure and mechanisms to allocate sufficient water to irrigation while also handling the wastewater generated by large numbers of tourists remain challenges for governance.

A related question is the extent to which local culture and certain, traditional characteristics of the community can continue to thrive in conjunction with mass tourism, and what role culture needs to play in supporting Ping'an as a thriving tourist destination in the long-term. While, as noted above, some of our interviewees saw tourism as an opportunity to maintain traditional culture, there is also the known risk of becoming a veneer or distortion of history, which brings a range of accompanying concerns for authenticity and cultural sustainability (Xie & Wall, 2002; Yang & Wall, 2009; Yuanyuan, 2008).

One potential future for Ping'an is that tourism continues to thrive and that the income generated helps the local government and community to solve the problem of terrace maintenance. A consequence of tourism's success, however, is a profound change in the social and cultural character of the place, as a result of young people leaving for cities, the work of terrace maintenance largely taken up by non-local labor, and aspects of ethnic culture commodified as a tourism attraction that, together with the terrace landscapes, create the appeal of Ping'an. In this scenario,

although the character of the place undergoes a fundamental change in response to tourism, it continues to thrive as a destination, rather than entering the phase of decline as described in Butler's model, because of the size and demand from China's tourism market and its awareness of the Longji Scenic Area as a place of remarkable landscapes and culture. Our point here is not necessarily to advocate for this future, but simply to suggest that the complex challenges created by tourism may result in tradeoffs and some combination of successes and losses.

Finally, in searching for a more favorable role for tourism's contribution to Ping'an's economic development, cultural preservation, and environmental sustainability, government leaders should establish a goal of increasing the capacity of local tourism services by providing support to local entrepreneurs and community leaders to improve their ability to coordinate with each other and their business management practices and, as a result, improve the range and quality of tourism services.

References

- Butler, R. W. (1980). The concept of a tourist area cycle of evolution: Implications for management of resources. *Canadian Geographer* 24(1), 5–12.
- Butler, R. W. (1999). Sustainable tourism: A state-of-the-art review. *Tourism Geographies*, 1(1), 7–25.
- Butler, R. (Ed.). (2006). The tourism area life cycle: Applications and modifications (Vol. 1). Bristol, United Kingdom: Channel View Publications.
- Gao, S., Huang, S., & Huang, Y. (2009). Rural tourism development in China. *International Journal of Tourism Research*, 11(5), 439–450.
- Guilin Daily Newspaper (2014, February 20). *Beautiful Longsheng's promotion of a 'county of a hundred festivals' drives tourism*. Retrieved July 2, 2015, from <u>http://gov.city.sina.com.cn/zgjqdh/140220/1643_3512.html</u>
- Jiao, Y., & Li, X. (2011). Ethnic culture and nature: Interactions in the Hani Terrace Landscape. *Landscape Ecology in Asian Cultures*, 29–40.
- Kasey, J., & Koleski, K. (2011). *Backgrounder: China's 12th five-year plan*. Report. US-China Economic & Security Review Commission.
- Koohafkan, P. (2007). Conservation and adaptive management of globally important agricultural heritage systems. In Endogenous Development and Bio-Cultural Diversity (Vol. 6, pp. 366–378).
- Li, M., Wu, B., & Cai, L. (2008). Tourism development of world heritage sites in China: A geographic perspective. *Tourism Management*, 29(2), 308–319. doi:10.1016/j.tourman.2007.03.013
- Martin, B. S., & Uysal, M. (1990). An examination of the relationship between carrying capacity and the tourism lifecycle: Management and policy implications. *Journal of Environmental Management*, *31*(4), 327–333.
- McCool, S. F., & Lime, D. W. (2001). Tourism carrying capacity: Tempting fantasy or useful reality? *Journal of Sustainable Tourism*, 9(5), 372–388.
- Mullaney, T. (2011). Coming to terms with the nation: Ethnic classification in modern China. Berkeley, USA: University of California Press.

- Nepal, S. K., & Chipeniuk, R. (2005). Mountain tourism: Toward a conceptual framework. *Tourism Geographies*, 7(3), 313–333.
- Saarinen, J. (2006). Traditions of sustainability in tourism studies. Annals of Tourism Research, 33(4), 1121–1140.
- Shimpei, A. (2007). Agricultural technologies of terraced rice cultivation in the Ailao Mountains, Yunnan, China. *Asian and African Area Studies*, 6(2), 173–196.
- Sofield, T., & Li, S. (2011). Tourism governance and sustainable national development in China: A macro-level synthesis. *Journal of Sustainable Tourism*, 19(4-5), 501–534.
- Su, B. (2011). Rural tourism in China. Tourism Management, 32(6), 1438-1441.
- Sun, Y., Jansen-Verbeke, M., Min, Q., & Cheng, S. (2011). Tourism potential of agricultural heritage systems. *Tourism Geographies*, 13(1), 112–128.
- Tang, X. Y. (2004). Participatory community tourism development in ethnic area a case study of Ping'an village, Longji, Longsheng County, Guangxi, China. Master's Thesis, Guilin Polytechnic University, Guilin, China.
- United Nations. (2012). The future we want. Retrieved on June 9, 2015, from http://www.un.org/disabilities/documents/rio20_outcome_document_complete.pdf
- U.N. World Tourism Organization. (2013). Sustainable tourism for development. Retrieved on June 9, 2015, from <u>http://www.unwto.org/ebook/sustainable-tourism-for-development</u>
- U.N. World Tourism Organization. (2015). UN world tourism organization annual report 2014. Retrieved on June 9, 2015, from http://dtxtq4w60xqpw.cloudfront.net/sites/all/files/pdf/unwto_annual_report_2014.pdf
- Wen, Z. (1997). China's domestic tourism: Impetus, development and trends. *Tourism Management*, 18(8), 565–571.
- Xie, P. F., & Wall, G. (2002). Visitors' perceptions of authenticity at cultural attractions in Hainan, China. *International Journal of Tourism Research*, 4(5), 353–366.
- Xu, G. (1999). Socio economic impacts of domestic tourism in China: Case studies in Guilin, Suzhou and Beidaihe. *Tourism Geographies*, 1(2), 204–218.
- Yang, L., & Wall, G. (2009). Authenticity in ethnic tourism: Domestic tourists' perspectives. *Current Issues in Tourism*, 12(3), 235–254.
- York, Q. Y., & Zhang, H. Q. (2010). The determinants of the 1999 and 2007 Chinese Golden Holiday System: A content analysis of official documentation. Tourism *Management*, 31(6), 881–890.
- Yuanyuan, L. (2008). Nationality tourism and community education: The Red Yao of Dazhai Village, Guangxi Province. *Chinese Sociology & Anthropology*, 40(3), 72–87.
- Zeng, B., & Ryan, C. (2012). Assisting the poor in China through tourism development: A review of research. *Tourism Management*, 33(2), 239–248. doi:10.1016/j.tourman.2011.08.014
- Zhang, J. (2008). The market orientation and 4P strategies of ailing river drifting scenic spot. *International Business Research*, 1(4), P100.