

LIJIANG COUNTY, YUNNAN, CHINA: FORESTS AND TOURISM DEVELOPMENT

Lijiang County of northwestern Yunnan, China, with its spectacular Jade Dragon Snow Mountains (Yulongxue Shan), was opened to visitors in 1985. Over the past 15 years enormous changes have occurred to the environment and the many ethnic minorities. Two themes are emphasized here: the vicissitudes of a fluctuating forestry policy and the rapid growth in tourism. Over the centuries outside influences have affected life and landscape in Lijiang County. Prior to 1950, however, these were very intermittent, reflecting fluctuating imperial will and Han military presence. After 1950 the impacts of a lowland and distant central authority became pervasive, yet many of the ethnic minority ways of life persisted. With the 1985 opening to the influence of globalization, albeit filtered through the authoritarian screen of central government, change has accelerated to unimaginable proportions. Two sources of economic and social change can be identified. One is due to a distant provincial government based in Kunming; the other is due to actions of the central government and its determination to control development for the benefit of China as a whole. Thus the varying importance of extractive forestry and the recent priority placed on mass tourism as the best force for overall rapid economic success are essentially modern lowland impacts on a highland region that less than two decades ago was still one of the most isolated areas in the world.

The Jade Dragon Snow Mountains, located in Lijiang County in latitude 27° North, are the most southerly mountains of Eurasia that support glaciers and

permanent snowfields. With elevations ranging from 1,800 to 5,600 m asl, the natural and agricultural belts extend from subtropical monsoon forest (uppermost limit of banana plants), through several natural forest belts (overlapped by the upper limits of rice and barley cultivation), to upper timberline, alpine tundra, bare rock, screes, and permanent ice and snow. It is a physically complex area, subject to recurring earthquakes. The two main mountain massifs, the Yulongxue Shan and the Habaxue Shan (the latter in neighbouring Zhongdian County), are cut through by the great gorge of the upper Yangtze (Jinsha Jiang), known as 'Tiger Leap Gorge'. This gigantic feature is nearly 4,000 m deep and is rapidly becoming one of the great tourist attractions of Southeast Asia as well as the potential site for one of the highest hydroelectricity dams in the world.

Lijiang County has a total population of about 325,000 comprising a great variety of cultures, including Naxi, Yi, Tibetan, Bai, Lisu, and Han peoples. About 82 percent of the total are minorities of which by far the largest group are the Naxi. Seventy percent depend directly on agriculture, mostly subsistence farming, and 30 percent are urban dwellers. Dayan (Lijiang Town) is the capital and by far the largest town, population given at about 60,000 in the 1990 Census (similarly, all data in this section are derived from the 1990 Census). The average per capita annual income of the rural population is only 420 Yuan (about US\$70). Many villages have no road access and are without electricity, some have enough power to supply a few light bulbs. Water delivery and sewerage disposal are extremely primitive, or non-existent in the more remote areas. Rural poverty, therefore, is widespread and many

people would be classed as living below the poverty line based on Chinese standards.

Lijiang County has a land area of about 7,000 km²: 3,900 km² is under forest; 1,200 km² is pasture; 1,300 km² is waste land (mainly non-productive ice, snow, rock, and scree) and 400 km² is cultivated. Ninety percent is classed as mountainous, of which the Yulongxue Shan Nature Preserve occupies about 260 km² of the highest and most spectacular.

In 1979-1980 the Central Government introduced a new liberal policy known as the "household responsibility system". It marked the end of the collective farms and the rigorously controlled production systems that characterized Lijiang County during the Mao Zedong era. Land, including forest land, reverted to village control and households were allocated both agricultural land and forest access in proportion to family size. Commercial logging, much of it illegal, had long been the most important enterprise of the region and, given the new market access, both legal and illegal logging mushroomed after 1985, reaching a peak in 1989-1990.

Lijiang County became only partially 'open' to foreigners in 1985, the same year that the Yulongxue Shan Nature Preserve was established. At the same time tourism, both domestic and international, was recognized by the central and provincial governments as potentially the most lucrative form of development. Early realization of the importance of environmental quality to sustainable tourism led to a crackdown on both illegal and legal logging.

In 1982 the first foreign visitors since 1950 travelled through the area (Ives, 1982; Messerli and Ives, 1984) by special permission of the Central Government, the Peoples Liberation Army, and the Naxi Autonomous Government. This facilitated a first-hand assessment of the social conditions of many of the indigenous people. It was followed in 1985 by a ten-week investigation as part of a research programme under the auspices of the Chinese Academy of Sciences and the United Nations University. Subsequent study visits were made by the author in 1991, 1993, 1994, and 1995. Generous assistance was afforded by the local government, and especially by the Governor of Lijiang who took a strong personal interest in environmental conservation and the welfare of the local people.

In the early 1980s official opinion held that massive deforestation had occurred throughout Yunnan (including Lijiang County), inducing soil erosion, landsliding and gullying, and downstream flooding and siltation. It was assumed that this massive environmental damage was largely the result of resource mismanagement after 1950, resulting from policies introduced under the leadership of Mao Zedong and the 'Gang of Four'. The essence of this interpretation ran parallel with the views expressed within the Theory of Himalayan Environmental Degradation (pp. 131-144).

Yunnan is one of the most important sources of the country's much needed supply of timber. As mentioned above, in the early 1980s massive deforestation had been ascribed to mismanagement during the period 1950-1979. The course of a two-day jeep ride from Kunming to Lijiang Town in 1982, and again in 1985, revealed extensive damage to forest cover over wide areas. Tens of kilometres of degraded

shrubland, rough pasture, gullied hillslopes, even exposed bedrock with all soil cover washed away, were visible from the road. The impression was so overwhelming that this extensive tract of the Yunnan Plateau that once carried a cover of monsoon rain forest was dubbed Yunnan's 'painted desert'. However, while some of this damage had definitely occurred since 1950, it became apparent that it represented the culmination of a long-continued process extending back in time for centuries, if not for more than a thousand years.

Further north, where it is more mountainous and mature forest stands are less accessible, the condition of the forest cover was much better. This was especially the case in Lijiang County, although even here the road north from the town to Daju was clogged with heavily-laden timber trucks 24 hours a day in 1985. The newly designated nature preserve, where the road provided easy truck access, seemed to be logged as much as other areas.

Nevertheless, replication of high-quality photographs taken by Joseph F. Rock between 1923 and 1949 revealed a complex history of forest cover change. The repeat photography study was augmented in 1985 by investigation of the age of trees in selected areas and over 1,000 increment cores were taken. The preliminary results of the forest study in Lijiang County showed that in some areas, especially those several hours walk from a road, forest cover was more complete and tree stands more mature than in the same localities in the 1920s and 1930s. In other areas, usually closer to roads, tree cover in 1985 was comparable to that of 50 to 60 years ago, and in yet other accessible locations considerable deterioration had occurred and was continuing. Some areas, with dense but immature tree cover as seen on the

Rock photographs, while appearing superficially comparable in 1985, had been cleared of trees after Rock's time but had recovered naturally. Except for scattered mature trees, presumably preserved deliberately as seed sources, the vast majority of individuals in these areas were less than 40-60 years old. Forest fire, either natural, accidental, or intentionally set, was also evident.

At high altitudes, and remote from roads, mature stands of fir (*Abies spectabilis*) contained individuals more than 100 m high and in excess of 700 years in age. Incidental felling was apparent but of negligible proportions. Small pockets of almost clear cutting were often the result of illegal, or even legal, village-level logging. They included high-altitude rhododendron, and patches in the pine forests (*Pinus yunnanensis*) around villages. These clearings were, at least in part, the consequence of the 'household responsibility system'. After the 1979 liberalization many villagers began constructing new houses and the impact on the neighbouring forests was immediate. Forest degradation was the more severe because Naxi houses, in particular, are over-constructed and require a large number of trees; the methods of logging are extremely wasteful; and the transporting of logs, by dragging with cruelly whipped horses, leads to the development of numerous skid trails, many of which become gullies during monsoon rains. Ten years later, however, remarkable forest recovery was observed around several of these villages.

During the early 1990s six minority villages were selected for detailed investigation. Three were predominantly Naxi; three were Yi. The research aimed to study the attitudes of the villagers toward the forests and the position of women in relation to forest access and also the division of labour within the two distinct ethnic

groups. Also to be studied was change in forest cover over time. This was accompanied by assessment of impacts of the rapid growth in tourism both on village culture and on the Lijiang area environment.

Yuhu is a large Naxi village included in the study and is the closest one to Lijiang Town; a one kilometre-long poor dirt road connects with a modern surfaced road 15 km from the town. It is located at 2,710 m asl on the 'Lijiang Plain' at the base of a steep mountain slope that leads to the crest of a long low southerly spur of the Yulongxue Shan. The village has a spectacular site beneath the highest summit at 5,596 m. It is notable as the village used by Dr. Joseph F. Rock for his National Geographic Society expedition headquarters for several years in the 1920s and 1930s. Of a total of 277 households, interviews and questionnaires were obtained from 20 that were randomly selected.

Wenhai village, located at 3,110 m, is the highest village studied in detail. It is also a Naxi village, although the headman is Yi. It has no road access and is reached by trails, four hours walk from Yuhu, or three hours from Baisha, a small town within easy access of Lijiang Town. The village lies on the shore of Wenhai Lake, a beautiful body of water which, however, drains away down a sink hole in the underlying limestone bedrock by late winter; it fills again during the following summer monsoon. Of the 40 Wenhai households 13 were randomly selected for detailed interviews. In addition, Ru Nan Gu, one of the three Yi villages, 1 to 1.5 hours walk away to the north, was studied briefly; the reported richest and poorest households were interviewed.

Jiazi, a Naxi village at 2,150 m, was the lowest village studied in detail. It is located 12 km east of the main north-south road that passes through Heishui. It is accessible by a very rough unsurfaced four-wheel drive road passable only during the dry season. Half of the 42 households were randomly selected and interviewed.

The three Yi villages selected for study (Heishui) are situated on, or close to, the main road leading north from Lijiang Town. The road, originally a forest road, was being improved and, in November 1994, was surfaced for a distance of 15 km out of town (this has since been extended to beyond the villages). They lie close together at altitudes of 2,960, 2,840, and 2,830 m asl near the eastern border of the Yulongxue Shan Nature Preserve and are within easy walking distance of the Preserve headquarters and a new tourist hotel complex that was opened in the autumn of 1993. Fifty percent of all households were interviewed and an extensive questionnaire was completed for each. In addition to the six villages selected for detailed study, other villages were investigated on a reconnaissance basis.

One component of the 1993--1995 field programme was an investigation of forest cover around these villages. In addition, an attempt was made to determine the relationship between forest condition and the status of the village women (Swope, 1995; Swope *et al.*, 1997). The central conclusions of this part of Swope's research are presented here, using Wenhai as the example because of the availability of Joseph Rock photograph coverage.

Wenhai Forests: In 1982, the only year for which information is available, the Wenhai administrative village controlled a total area of 25,725 *mu* . The share of the

lower village was 3,880 *mu*; the upper village controlled 5,470 *mu*. The remainder had been allocated to other neighbouring natural villages. However, the actual area recorded as being under forest was 2,370 *mu*. Thus, only about a tenth of the area suitable for trees had significant forest cover. In 1995 the forest of the upper village was in much better condition than that of the lower village, reportedly on account of the attitudes, hard work, and efficiency of the upper village officials. This well-managed forest is dominated by *Pinus yunnanensis*, with *Quercus* spp, *Tsuga* spp and *Picea* spp as secondary species. The understory is dominated by rhododendron, azalea, bamboo, small oak, shrubs, herbs and forbs. Pines, with an average height of 10--12m and bhd 20cm, aged at 35--40 years. Selective logging, with many recently cut stumps of average diameter 25 cm, was apparent (Swope, 1995).

Forest use included charcoal making (oak) both for sale and for home heating, planks and logs, both for sale and for local construction, harvesting of non-wood products, including medicinal herbs, mushrooms, pine needles for bedding and fertilizer compost, and hunting small animals and birds. Approximately 20 percent of the people in the upper villager were engaged in illegal logging but this was fewer than the number in the lower village. However, the illegal logging issue is complicated by the fact that logs, illegally cut in neighbouring villages pass through Wenhai, being sold and resold, and eventually find their way to Baisha for final sale. Policing of the forest laws also is variable and often ineffective; because of the scarcity of forest service staff and familiar relationships between forest police and the villagers, a 'grapevine' system usually allows illegal activities to be concealed before the police arrive. Furthermore,

there is little organized reforestation, partly because the pine and oak quickly regenerate naturally. Nevertheless, between August and October 1993, 26,000 seedlings were planted under a programme of the County Forest Bureau, which includes a small financial incentive for each tree that survives. The seedling species in this instance were mainly Sichuan pepper and juniper, although many were reported to have died due to poor planting techniques and lack of tree-care knowledge.

Comparison of two photographs from 1927 and 1985 reveals an interesting pattern. The 1927 photograph shows areas of old growth on the upper slopes of the far side of Wenhai Lake. Much of this appears to have been cut by 1985. The lower slopes have a more extensive forest cover as agricultural fields have been abandoned and recolonization by trees, mainly pine, has occurred. On the near side of the lake a very healthy forest cover is in place in 1985, with a closed canopy; this is in marked contrast to the poor forest condition apparent in 1927.

The original conclusions, published by Ives and Messerli (1989), however, must be modified. First, the village interviews of 1993 indicated that the near side of the lake had been damaged by forest fire a few years prior to Rock's 1927 visit; this introduces the problem of identifying the impact of fire and its timing. Second, the healthy forest condition of 1985 had significantly deteriorated by 1993. Much of this was likely due to the large programme of village house reconstruction during the period 1985--1990. Now that most households have new, or well repaired, houses this form of impact will likely be much reduced in the future. Nevertheless, there had been a significant reduction in the quality of forest cover between 1985 and 1995.

Furthermore, the dynamics of forest use and management are extremely complicated and preclude broad generalizations, even for a small area.

Undoubtedly, the situation in Lijiang County as a whole is changing rapidly. Total commercial harvesting has been reduced, illegal logging is being more strictly controlled, and the Yulongxue Shan Nature Preserve is now being quite vigorously protected. There is a long range plan in effect to increase overall County forest cover to 55 percent of total area by AD 2005. This is to be achieved by a combination of reforestation, reduced commercial harvest, tighter application of the forest laws, and progressive introduction of efficient wood stoves and mini-hydroelectric installations. In some Yi villages the traditional house construction, which relies 100 percent on wood, is being changed with the introduction of bricks and mortar, following more nearly the Naxi style.

There has been an assumption that in developing, and especially in least developed, countries deforestation is particularly serious in terms of its impact on women. This assumption that had widespread support amongst development agencies and social science researchers is based upon the understanding that, amongst poor subsistence and transitional communities, rigorous division of labour identifies fuelwood collection, as well as the fetching of water, cooking, and most other household tasks, as the domain of women and older female children. This unfavourable status of women is reinforced, theoretically, by the eco-feminist view that depicts an inherent linkage between women and nature; the defining metaphor (Jackson, 1993), which is also Eurocentric, is the all-nurturing 'mother earth'. The linkage, of course, is based upon women's biologically-determined reproductive role.

In the development arena, women are seen both as environmental managers, since they are the ones who interact most with nature, and as the victims of environmental degradation, since they are dependent on the products of the natural environment (Swope, 1995: 147-168).

There is a great deal of support for the validity of the eco-feminist beliefs; they seem especially relevant to the Himalayan countries, as shown by research in Nepal, northern India, and northern Pakistan. Thus part of our Lijiang County household questionnaire was designed to determine the degree of equity, or inequity, in workload between men and women in both Naxi and Yi communities. Swope (1995) and Swope *et al.* (1997) provide an overview of the impacts of varying Chinese policy through time as it has affected the position of women in Han society and, indirectly, in Chinese minority societies. A detailed understanding of household, farm, village, and market tasks was derived from the answers to questions concerning workload sharing for 21 different areas of responsibility. This was augmented by elaboration of an agricultural calendar.

Although all the highland villages are affected by the same influences and policies imposed by local authorities, the record is not simple and there is a good deal of variation between villages. In Yuhu and Wenhai, however, while most of the fuelwood collection is done by women, their men folk assist. There is also significant male input to cooking, child care, fetching water, and women are well integrated into agricultural tasks. They also play a large role in marketing. Yet there is a great deal of variation between households. In some instances the women control the way in which cash income is used, as well as having an equal say at village-level meetings.

On average, women have a lower standard of education with fewer years in primary school. Nevertheless, there is no clear-cut division of labour along gender lines. This may be, in part, the influence of a traditional matrilineal society that appears to have been a Naxi characteristic for centuries prior to total Chinese control, although this would not explain the Yi situation.

The Yi natural villages of Heishui present some interesting anomalies. First, practically all the fuelwood collection is done by men, despite the proximity of the supply to the village. This may be a reflection of traditional Lisu/Yi division of labour whereby the forest was considered the men's domain as it is the hunting area, and only men were allowed to use an axe. Another factor is that the Yi villages lie within the Nature Preserve and tree cutting is now strictly regulated. On the reverse side, women assisted with ploughing, yet cooking, child care and water fetching were predominantly, but by no means exclusively, female tasks. A uniquely female task in all villages, both Yi and Naxi, is the gathering of pine needles for use in compost. In Yuhu, which has experienced the most severe deforestation, this has become a significant task.

The inevitable conclusion is that, especially in Naxi, but also in Yi, rural life, there is no clear-cut division of labour, with the exception of the collection of pine needles. While deforestation, or deterioration of forest quality, does have an impact on women, the situation is not the one usually portrayed in the literature about highland people elsewhere. Almost all tasks are shared to some extent, the degree of sharing being dependent upon the circumstances of the individual household rather than on societal tradition. In instances where the woman appears to be doing most

of the housework, for instance, it transpires that the husband has another job, such as school teacher. It is postulated, therefore, that rural women in Lijiang County (and in China?) may be better off than in other developing countries because of the central government's emphasis on maximizing production.

It becomes clear from any detailed investigation that the original (early 1980s) assumptions concerning the timing and causes of forest clearing across Yunnan, and specifically Lijiang County, were greatly over-simplified and over-dramatized. Deforestation has been occurring for centuries. However, it has not been a uni-directional process and there are great contrasts from one area to another. The primary factors leading to forest loss during the 20th century, however, have been the persistent changes in forest policy by the central and provincial governments, that is, by the political forces in the lowlands who enact policies for land management and economic priorities in mountain communities. This affected the period prior to 1950 as well as the period of most autocratic government control between 1950 and 1979; it is also true of the last twenty years. Frequent policy changes, especially those involving total state control, or even the current policy of local control under state ownership with inadequate and ambiguous policing, tempts people to exploit their local forests. Fluctuating forest policy inhibits long-term sustainable management. The accelerating development of tourism, however, has placed a premium on achieving environmental stability, including forest protection, which has been progressively strengthened during the 1990s. It follows that the motivation for forest protection is being driven primarily by market forces relating to tourism and not by recognition of the need to assist the local villagers.

Impacts of Tourism Development on Mountain Minority Peoples

In July 1985, the State Council and Military Commission of Yunnan Province declared Lijiang Naxi Autonomous County open to foreign tourism; in December 1986, Lijiang Town was designated a province-level historical and cultural attraction. In the following decade, international tourism increased rapidly, presenting substantial opportunities and risks. As Lijiang County includes some of the poorest communities in China, presumably significant benefits could accrue from the economic opportunities afforded by successful tourism. The highland region of Yunnan has significant natural resources, including forests and potential sources of hydropower, as well as unique topographical features and ecosystems. These resources are in danger of being over-exploited by power bases in the lowlands unless they are effectively protected. The development of appropriate tourism could provide a strong stimulus for conservation. Likewise, the trend toward cultural assimilation and obliteration of minority cultures throughout China would be opposed as contradictory to the development of tourism that places an economic value on cultural diversity.

While tourism presents opportunities, it also entails risks; the primary risks are degradation of the natural and cultural environment, particularly those features that are promoted as tourism amenities. There are other risks to the hosts, including economic disruption, as well as risks for investors, and even physical risks for travellers. One area of Lijiang County where the opportunities and risks are greatest is the Yulongxue Shan (Jade Dragon Snow Mountains).

The following account documents the development of tourism in the county between 1985 and 1996 and discusses the apparent conflicts that are occurring

between mass tourism and 'appropriate' tourism. It concludes with a proposal for a specific 'appropriate' tourism development. The proposal emerged from the United Nations University/Ford Foundation funded research (1991-1995). By 1993 it was apparent that mass tourism had become the driving force behind all officially planned development in the County. In interviews with the villagers, it was learned that much of their hope for future prosperity was pinned on tourism development. The 'appropriate' tourism development proposal grew out of extensive consultations with residents of the prospective host communities.

The development of tourism in Lijiang County and the Jade Dragon Snow Mountains is certainly a highland-lowland interaction. The popularity of Yunnan's provincial capital, Kunming, and of its many surrounding attractions, is critical, at least in the early stages, to the viability of tourism in the relatively remote counties of Dali and Lijiang further north. The development of tourism in Lijiang Town, the county seat, would appear to have the strongest influence on development of the Jade Dragon Snow Mountains; the appeal of Lijiang Town derives in part from the other sites throughout the county, as well as in the neighbouring county of Zhongdian to the northwest. The tourist industry in the very recently opened county of Deqen is currently dependent on spill-over from Lijiang, but further development of amenities in Deqen - and the eventual opening of the Yunnan-Tibet Highway - could presumably equalize or reverse this influence. On a larger scale, tourism in Lijiang, and Yunnan as a whole, is closely linked to tourism development throughout China; this relationship is more complicated than local linkages. Any plan for the development of tourism in the Jade Dragon Snow Mountains, therefore, must take

into account the extended geographical context. Tourism in China is benefiting from continuing relaxation of travel restrictions, from improvement in transportation, and from rapid increase in per capita income; improvements in services and accommodations have been less spectacular, but substantial.

Yunnan has many advantages for development of tourism compared with the rest of China. It is known as the 'land of eternal spring'. Xishuangbanna, an extensive tropical rainforest in southwestern Yunnan (beyond the plateau), has unmatched botanical and zoological diversity. Culturally, as well, Yunnan has a greater variety of minority nationalities than any other province and also one of the greatest proportion of minorities to total population.

At the same time, the route from Kunming to Lijiang has become much more accessible. Dali remains an attractive way stop for those using the bus, although overnight sleepers have cut the trip from two long days to twenty hours. Since 1995, the airport at Lijiang has offered a 45-minute alternative, but the impossibility of making air reservations from outside China means that it is viable primarily to business travellers and to some packaged-tour clients.

The Tiger Leap Gorge, named for an instance in Naxi legend, has become a primary tourist attraction. In addition to this world class phenomenon, limestone terrain, with fretted pavements, sink holes, vanishing lakes, and underground caverns, along with sandstone pinnacles and travertine terraces, broaden the appeal still further. The terrain, and its extremely diverse flora once supported a comparably varied fauna, including red panda, leopards, bears, tigers, wolves, foxes,

and many species of birds, amongst which are a striking variety of raptors and gaudy pheasants, some endemic to the region.

Lijiang receives an exceptionally large amount of solar radiation: 2,540 hours of sunshine per year. In sum, spring and autumn are extremely attractive, winter is invigorating and essentially snow-free at populated elevations; summer, by comparison with the rest of China, not to mention Southeast Asia, is quite pleasant.

The enormous topographical and biological diversity of northwestern Yunnan Province has provided habitats for a matching diversity of distinct ethnic nationalities, including Naxi, Yi, Tibetan, Bai, and Lisu. Unlike many other peripheral regions of the China, where dominant 'minorities' persist in a homogenized Han landscape, Lijiang County is a backwater of cultural conservatism. Naxi women wear their distinctive costumes; Yi girls in the nearby villages wear their yellow, red and green gowns and mortarboard bonnets. In part, the heterogeneity is due to centuries of resistance to outside domination and isolation emphasized by the mountainous topography.

The Naxi in particular have a long and proud history, and even claim that the pictographs of their ancient Dongba culture predate the development of Han script. Regardless of the accuracy of this claim, the Naxi culture has produced an array of architectural gems that survived the Cultural Revolution or have been repaired or rebuilt since 1980. While these are concentrated in and around the warren of streets and canals that comprise the 'Old Town' of Lijiang (Dayan), which was designated a UNESCO World Heritage site in 1997, there are numerous outlying temples and well-preserved traditional villages with manicured fields and terraces.

The charisma of Naxi Dongpa culture and the splendor of the landscape converge on the Jade Dragon which looms over the town of Lijiang. The sacred mountain of the Yulong has a commanding place in Naxi folklore, comparable to that of the Tibetan Shambala (Shangri La in Conrad Hilton's imagination). The allure of the ideal acquired a tragic overlay after the Qing Emperor, Yongzheng, in 1723, imposed more rigorous Han control on his minority subjects through the military governor in Lijiang. Confucianized political and social institutions were enforced on a previously open and matrilineal society. Hitherto, marriages had been based upon the free choice of teenage love relations. After 1723 pre-arranged Han-style marriage contracts were required and, amongst many other changes, illegitimacy was considered shameful and pre-marital virginity prescribed. Nonetheless, young Naxi were left free to fall in love and consort with each other - until the day they were forced into their respective pre-arranged marriages. The only escape seemed to be that offered by folkloric traditions: lovers who committed suicide with the proper rituals in the proper locales could expect to be transported over the snow peaks to a mountain paradise where they would live in perpetual youth, good health, and comfort. For more than 200 years, this custom cost the Naxi population significant losses in their total number; love suicides involving up to a dozen couples at a time have occurred as recently as the 1950s. The most famous of the 'jumping-off' points is the subalpine meadow, Yunshanping, now known to the burgeoning tourist trade as 'Love-Suicide Meadow' (Swope *et al.*, 1997).

Another significant tourist asset is the now almost legendary life of Dr. Joseph Rock, who lived and worked at the foot of the Yulongxue Shan from 1923 until 1949

(Rock, 1926), with a few absences to return to National Geographic Society headquarters in Washington, DC., to replenish his funding. Joseph Rock was probably the first Western traveller to explore what is arguably the primary natural attraction in Lijiang -- Tiger Leap Gorge. When Rock ventured through it in the 1920s it was a nearly inaccessible sanctuary for bandits; it remained virtually unvisited by tourists until it was opened as a park in 1992. The traverse involves a trek of about 30 km from Qiaotou, a rough-hewn settlement in the south, to Daju, the northern trailhead. The most precipitous section is about 16 km long, more than twice the depth of the Grand Canyon, but much narrower and with snow peaks on either side. There are many possibilities for side trips and the tourist lodges at Walnut Grove have become popular attractions in their own right. The views are breath-taking, and while rockfall and unstable trail sections are sometimes more than inconveniences, during dry weather heat exhaustion is the most serious impediment to safety.

The Tourism Market: In addition to conditions in the host area, tourism development depends on factors relating to the visitors. While the most numerous consumers of Chinese tourism are, and will continue to be, domestic travellers, of international arrivals, by far the greatest proportion have been 'compatriots' from Taiwan, Hong Kong, Singapore, and Macao. Both of these groups tend to focus mainly on the eastern and urban centres of China, either because they are visiting family, doing business, or making the rounds of the famous sites of their homeland. The strictly domestic market is of limited interest to Chinese policy makers since nationals tend to spend relatively little, overall, and contribute minimally to foreign

exchange revenues, the primary goal of national tourism planning. Nevertheless, Han visitors do constitute the overwhelming majority of all tourist arrivals in Lijiang Town. Thus, while not discounting the importance of the domestic and compatriot markets, it is the foreign market that provides the source of 'off-the-beaten-track' tourists together with much of the foreign currency.

There was a dramatic increase in foreign arrivals in Lijiang annually from 1985 to 1996 (the most recent available data); the average annual growth rate was more than 70%, culminating in 1996 in excess of 100,000 persons. The top eleven nationalities represented in a Lijiang tourist survey are as follows:

1. Netherlands	(16.2 %)
2. United Kingdom	(14.9 %)
3. United States	(10.8 %)
4. Denmark	(9.5 %)
5. France	(8.3 %)
6-7. Israel and Australia	(each 6.6 %)
8. Canada	(5.0 %)
9-11. Belgium, Germany and Sweden	(each 2.9 %)

In targeting the high-priority 'foreign' tourist market in the country at large, Chinese planners have encouraged the proliferation of 'luxury' hotels and attractions such as conveniently located clusters of 'minority villages' (essentially human zoos). Western tourists, however, are less tolerant than Asians of urban congestion, over-exposed and contrived attractions, poor service in ostensibly upscale accommodations, not to mention bureaucratic incompetence, noise pollution, and public spitting. Many prefer remote destinations for exotic experiences, and even 'roughing it'. For all these reasons, the outlook for foreign tourism in Lijiang is particularly auspicious. But what emerges from the demographic analysis, and what

planners seem to have ignored, is that Lijiang is in the process of acquiring a reputation as a 'mecca' for low budget travellers: young, educated, often travelling in couples, and generally 'on vacation'. They are not visiting family, they are not on business, and they are not fleeing the heat back home. They have their choice of exotic destinations around the world and this is a competitive and fragile market. The 1996 edition of Lonely Planet's guidebook to China highlighted only two locales as having the potential to become 'legendary backpacker destinations'; one was Xishuangbanna, in southern Yunnan, and the other Lijiang (Taylor, 1996: 129-130).

Costs and benefits of tourism development: The risks and opportunities of future tourism development in Lijiang can best be assessed in terms of costs and benefits that are already accruing. Of course, costs and benefits are interpreted subjectively. Since the opening of the Lijiang region to foreign visitors in 1985, the tourism scene has developed from an extremely primitive level, at the end of a torturous two-day bus or jeep drive from Kunming, to one of rapidly extending surfaced roads, four-star hotels, attractive restaurants, air conditioned luxury tour buses, and the modern airport with 45-minute access from Kunming. Additionally, the conditions tied to granting World Heritage status have drastically reduced the pressure on the Old Town for new and ugly development, although it is surrounded by unappealing modern architecture that is spreading out across the Lijiang Plain. Despite the catastrophic earthquake of February 1996 that destroyed a third of the buildings in the old town and damaged most of the others, the destruction itself was courageously and effectively used by the county and provincial officials to eliminate non-traditional structures that did survive, to halt pre-earthquake encroachment of

motorized traffic, and to reestablish much of the traditional beauty. The town is now a very comfortable and culturally interesting destination. On the other hand, the rise in property values is forcing out original residents to make room for boutiques and restaurants; they have sold out to outsiders, newcomers from distant parts of China who now manage the facilities that cater to the tourists. Overall, however, the current situation is a vast improvement on the hitherto uncontrolled development that would have eliminated consideration for World Heritage status.

Concurrently with the development of Lijiang Town and the Old Town, much of the Jade Dragon Snow Mountains is increasingly protected as a nature preserve. Nevertheless, the small tectonic basins that run along the eastern foot of the mountains have become sites for elitist hotels and amusement facilities. One of the saddest sequence of events has occurred around Yunshangping, the so-called Love-Suicide Meadow. The extremely poor Yi villages nearby seized the initial benefits from the tourist potential. They acquired horses, decorated them, and set their traditionally gaily costumed womenfolk to lead the gaudily caparisoned beasts bearing their well-heeled clients up the 600-metre ascent to the beautiful meadow. Within two years, as business boomed, the three small Yi villages had assembled over a hundred horses. The first down-turn was the spread of ugly competition between rival families; this was accompanied by the casual scattering of refuse by tourists from horseback, including plastic bags on which Yi livestock choked to death. Next, a chair-lift was constructed with foreign investment, undermining the ideals of the Nature Preserve and undercutting the Yi business. A temporary shift to horse riding and racing in the meadow had to be terminated by the authorities

because of the excessive environmental damage, and the villagers were left with dozens of horses they could not afford to feed and with neglected subsistence crops. The chair-lift was amortized within two years; a surfaced road, car park, restaurants, and guest houses sprung up overnight. As the local Yi witnessed the eclipse of their tourist entrepreneurship, two troupes of young Yi village dancers were 'imported' from further afield. The girls were paid a pittance to satisfy the curious tourists; the curiosity degenerated into prostitution. In any event, these developments involved the importation of modified Yi culture into a primary location of Naxi legend. The attraction of the Love-Suicide Meadow has continued to grow apace; by year 2000 traffic jams involving tour buses had become common occurrences.

Following the initial financial success of the chair-lift, a swath was cut through the mountain forest belts to well above timberline at 4,500 m and a large gondola system installed, providing instant access to snow fields, glaciers, and delicate alpine meadows. A second gondola was constructed during 2000. Busloads of wealthy tourists from the lowlands of Southeast Asia can now be whisked up to have their first snowball fight at hypoxic elevations.

Another area that is being negatively impacted by tourism development is Tiger Leap Gorge, a potential World Heritage site in its own right, where a road is being blasted through the length of the gorge. The number of visitors had increased from about 8,000 in 1992 to 25,000 or more in 1995. The drop to about 13,500 in 1996 was probably due to the February 1996 earthquake, the epicentre of which was directly beneath the gorge and resulted in rockfalls and increased slope instability. More recently the dust from taxis and the danger from continuous blasting have

forced trekkers away from the traditional lower trails. Uncertain conditions have deterred many altogether, and the future of the gorge as a trekkers' paradise has been severely compromised.

Trekking the Jade Dragon: an appropriate tourism development proposal:

Despite the pessimistic prognosis cited above, the Jade Dragon Snow Mountains and the Tiger Leap Gorge seem to offer an opportunity for trekking tourism that would be mutually beneficial to trekker and host alike. We first completed most of the circumambulation of the mountain core in 1993. From the beginning, we were convinced that extremely poor mountain villages (Naxi, Yi, and Tibetan), that were also beautiful and sanctuaries of traditional life and costumes set in a spectacular landscape, could be assisted to evolve their own managed trekking lodges and supporting infrastructure. This, at the same time, would increase the prospects for cultural and environmental enhancement.

For our plan, the keystone community is Yuhu (2,700 m), the Naxi village within an hour's jeep drive of Lijiang Town. Here there is the prospect of acquiring the 'Joseph Rock farm' for conversion to a museum piece with strong cultural and environmental themes, and an adjacent trekking lodge, to be operated jointly by the village cooperative.

From Yuhu, a gentle day's walk, replete with splendid views, leads over the wooded ridge (3,300 m) to the lakeside village of Wenhai, beautiful despite extreme poverty. The lake itself is an important potential tourist asset. Although it drains away down a limestone sinkhole by early spring each year, it could be stabilized and turned it into a fish farm thus doubling its function as a tourist water attraction.

There are also impressive views of the Jade Dragon and an easy approach to several of the summits.

From Wenhai the trekking route would proceed northwestward through a series of tiny Yi communities, continuing into the mouth of the Tiger Leap Gorge and so avoiding the dusty main road from Lijiang. Once the gorge had been traversed and Daju attained, the eastern limb southward would offer several variations via Yi and Tibetan villages. Side excursions are available, including a long but easy ascent of the northern summits to about 5,400 metres (accomplished by Rock in 1929).

The establishment of village cooperatives in Yuhu and Wenhai was initiated following village meetings in 1995. A farm house in each village was acquired and presented to the cooperatives. The support of the Governor and Party Secretary of Lijiang County was offered enthusiastically. Links were established between the tentative village cooperatives and the Lijiang Cooperative Research and Training Centre that was being assisted by a research group from Simon Fraser University, Canada, funded by the Canadian International Development Research Council. This was intended to facilitate training in cooperative management skills among Yuhu and Wenhai villagers.

Much more would be required before the scheme was on sound footing. But already the growing impingement of the mass tourism development is being felt. The February 1996 earthquake desolated almost the entire area. The two farms obtained as the core of the trekking lodge strategy collapsed from earthquake shocks. The Old Town of Lijiang was devastated and loss of life and injury was most serious.

Overall, tourism development has clearly benefited the people of Lijiang. There are signs of prosperity in many places and especially in Lijiang Town: new businesses, more consumer goods, even beepers and cellular telephones. The recovery from a devastating earthquake was rapid and the momentum carried into further efforts at conservation and preservation.

On the other hand, there are potential hazards: economic growth tends to promote migration into urban centres from outlying agricultural areas, leading to unemployment, crime, inflation, homelessness, begging, prostitution, and other phenomena. And when development is tied to large-scale projects, including a glut of expensive hotels, any tremor (economic, political, or seismic) can have significant repercussions. Mass tourism is a risky business.

Appropriate tourism, however, is not an either/or proposition. Domestic, compatriot, and foreign mass tourism will continue. But a little of the alternative type of tourism would go a long way toward spreading the prosperity into the remote villages, stabilizing them economically, providing hope for the future and also motivation to protect the environment and to resist the negative impacts of the rapidly developing mass tourism. Unlike Nepal, where the narrow valleys channel trekkers along a self-evident course, the Jade Dragon has no ready-made trail. The mountain villages are not going to collaborate to spontaneously generate one; they need assistance.