

State and policy interventions – effects on villager perception of responsibility and obligation – a case study from northwest Yunnan, China

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Abstract:

Yunnan Province, China's biodiversity hotspot, has one of the highest amount of forests held by villagers. The area under examination is the subject of a logging ban from 1998, and has been inscribed under a World Heritage Site since 2003. For about twenty years before the logging ban, villagers had been managing a successful (and some argue sustainable) logging enterprise with the state forestry bureau. Since the ban, village forest resources have come under increasing pressure from a neighbouring timber market resulting in much pilfering of forest resources across the border. The case study illustrates the interactions between communities' incentives to log, government arrangements to control the amount harvested, and its resulting demise when the policy environment prohibits the 'internalisation' of 'externalities', such as putting a ban on logging while not coordinating market timber demand. However, the paper does not propose another analysis based on new institutional economics nor does it refute the utility of NIE. Rather, it seeks to illustrate the impacts of these arrangements and state policies on villager motives through the notion of environmental responsibility. By doing so, it captures issues of power, perceptions of inequities, relationships of accountability between villager and state, and within the 'communities'. The paper seeks to answer: how do previous institutional arrangements that may appear to be successful, and long-standing state-peasant relations, mould perceptions of responsibility in governance? How in turn does that affect villager participation in forest management? The paper attempts to (1) link institutional arrangements and their impacts on perceptions of capacity and burden-sharing; (2) critically examine the notion of 'community' through the notion of responsibility and interaction with the state. It also highlights how international processes of inscribing a place under a World Heritage Site place unequal burden of responsibilities on local populations and the local state, with potentially disempowering effects.

Keywords: institutions of forest management, logging, concept of 'responsibilities', communities, community-forest management, state-intervention, state-peasant relations, village-held forests or 'common-pool resources', China, Three Parallel Rivers World Heritage Site.

1.1 Introduction

Shitou township is one of the most isolated townships in Lijiang. Located about 100 km from Lijiang city, it is also the most heavily forested township in the whole county. It has one of the highest forest coverage ratio² in the county at about 70% and one of

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² It is calculated as a ratio of 'forested areas' over total area (including agricultural and other non-forested areas). Although I do not have specifics about what constitutes a 'forested area', a 'forested area' is not based on

the highest in terms of density of trees. It is located in the southwestern corner of Yulong county within Lijiang municipality and adjoins the neighbouring prefecture of Dali to the south. The terrain is extremely rugged, the slopes averaging at around 60 degrees for the most part. It is nestled within the range of mountains called the Laojunshan mountains, inscribed as part of the Three Parallel Rivers World Heritage Site in 2004. Being located on the upper reaches of the Yangtze River or the *Changjiang*, it is also now subject of a logging ban since 1998³, as it is with all areas under the jurisdiction of Lijiang municipality.

Since the 1970s, Shitou township has been a major provider of timber to the state (county and provincial authorities). The supply was effected through a contract of procurement between the villages in the township with the-then Lijiang county forestry bureau and the county-owned timber procurement company by the name of Chongjianghe timber company. Under the agreement, the administrative villages of Taohua, Lanxiang, and Liju were to supply timber through logging of their village- and team/hamlet-owned forests to the county.

1.2 Location and access

Shitou is accessible from Lijiang through the township of Shigu (also located within Yulong county) located on the first bend of the Jinshajiang/Yangtze river. The road from Lijiang to Shigu is about 50km on nicely paved bitumen along the banks of the windy Jinshajiang, but from Shigu onwards, the journey turns westwards and away from the touristy places on a narrow rocky road affectionately termed by the local foresters as the 'local highway'. The highway runs for another 20km from Shigu to the seat of Shitou township, Shitou, and for another 26km to the township's farthest village of Liju. Most of the journey is on a pot-holed gravel and rock-strewn road, which is only wide enough for a car at a time. Because of the poor quality of the road, the journey which would otherwise have taken only 2 hours from Shigu to the farthest corner of Shitou, takes 4 hours in total in a very uncomfortable ride.

Along the way, villager homes and houses are emblazoned with the words "protect the forests", "catch forest criminals", "prevent illegal logging" in big-character words in very much the same way that slogans were propagandized in much of the People's Republic of China's history. Although these words have become ubiquitous in rural China these days (one can also see them in faraway Anhui province), they ring more cogently in Shitou township than other townships in Lijiang. That is because Shitou township had until 1998 relied extensively on logging as their main source of income. It is the site of the most serious cases of illegal logging in Yulong county today because of its abundant timber reserves and its proximity to a thriving timber market in the neighbouring prefecture of Dali. While the main threat of poaching is to the state-owned forests on the border between Shitou and Dali to the south of the township, village-held forests nearby are also at threat. The fact that some villagers still have livelihood problems makes logging (though dangerous and

amount and quality of canopy cover, and in no way indicates the maturity of the forests. It usually means any area with trees on or designated as non-farmlands.

³ It is expected that the logging ban will end after the implementation of the forest tenure reform (which involved dividing forest tenure from the collectives (the villages, teams/hamlets down to the household level) and its accompanying reforms, according to my interviews of officials from State Forestry Administration, academics and staffs at the forestry bureau in 2008. However, this is not announced since the measure is still under consideration.

back-breaking work) an important option. Poverty is also the factor most government officials attribute to the extent of illegal logging in the area. In August 2006, Yulong county and Shitou township, in a show of political commitment towards cracking down on illegal loggers, conducted a parading of 'criminals' including those who committed forest crimes before the people of Shitou township. The parade aimed to demonstrate the consequences of illegal logging and to shame criminals in very much the same way as during the Cultural Revolution. In China, disciplining through shaming, humiliation and denunciation is still very much the political repertoire of the regime. Just a month before the parade of criminals, Shitou township government had conducted a training of civilian soldiers who would fight with local foresters and forest guards in the campaign against timber poaching.

Being located at the foothills of Laojunshan most of Shitou township is nestled within a series of valleys and along a tributary of the *Jinshajiang*. In the lower-elevation villages like Sihua, Shitou, and Taohua, soils are relatively fertile and people have much success with various crops. Main livelihood sources in the lower elevation villages are the planting of tobacco, corn, walnut trees, the sale of wild mushrooms, and off-farm employment. The planting and sale of tobacco is a safe and stable source of income because there is a contract of procurement between the villagers and the township and state-owned tobacco company. The state allocates tobacco quota to the villages which in turn allocates to individual households. In the last 10 years, the development of a new market and distribution network for the priced mushroom (matsutake) allows mushrooms to be transported to Kunming, and air-flown to Japan and Korea the very next day. Sale of matsutake has also alleviated some of the livelihood concerns of the people. In the upland villages, it is a very different story. Per household agricultural land in the upland areas average only 1-2 *mu*, and the poor quality soil allows only corn and potatoes to flourish.

1.3 Summary of chapter

The chapter will examine how the division of labour in the collective logging arrangements in the 70s through to 1998 (time of the logging ban) distributed responsibilities among the people and the cadres. I argue that the benefits from the logging arrangements (dependency on forest resources) did not result in increased ecological awareness. Rather it promoted a sense of wellbeing and a feeling of plentifulness of forest resources rather than a concept of scarcity. The logging arrangements, which I will argue are a form of cadre-state alliance, disassociated people from the actual day-to-day management and protection of forest resources.

The next section in this chapter examines the current system of forest governance after 1998 – who is responsible for what, and how villagers generally perceive the division of responsibilities between the 'state' and the people. I argue that the heavy-handed approach that followed the inception of the national logging ban in 1998 and listing of Laojunshan as a World Heritage Site within the Three Parallel Rivers region has reinforced a passive mentality towards forest governance even while villager ecological responsibility was not exactly high during the collective logging era. The relationship between institutional arrangements and people's sense of responsibility has implications on governance of natural resources – specifically common-pool resources that cannot be well managed by either the state, or individuals, but rather rely to a large extent on the degree of community cooperation and willingness to participate. This obviously has implications on initiatives taken (whether by the state

or development authorities) to instil a greater degree of participation and ownership in the peasants. The purpose of this chapter is to understand how the interaction of various types of measures employed by the state have unintended effects on people's perceptions of responsibilities.

1.4 Methodology and data

The main part of the fieldwork was conducted from August 2006 over a period of 6 weeks. It comprised semi-structured interviews of senior village cadres, current village cadres, village 'notables', current township forestry staffs and township government officials involved in forest protection and development. A second visit was completed in April 2008 during which I spoke again to the township government officials and some old informants from the villages about recent changes. I also conducted household surveys of 15 households in the village of Liju and 10 in the village of Taohua on basic socio-economic conditions, and perceptions of forest management and responsibilities in 2006. The surveys were not done with the intention of doing a quantitative analysis but as a way of getting taciturn villagers to talk, and provided a useful entry point into semi-structured interviews. An excerpt of the relevant parts of the questionnaire is included in Appendix B at the end of this article.

The main purpose of the survey was to understand the changes in forest rules and usage the last 30 years, the main factors driving the changes (including whether or not the factors were top-down or bottom-up) and the perception of strictness of forest management by the people through each period. The three periods in question were (1) from the 1970s to beginning of the 1980s; (2) the 1980s to 1998; and (3) post 1998 or after the institution of the logging ban.⁴ The three periods represented firstly a regulated timber sector, a liberalization of timber production and the market, and finally the clampdown on logging in 1998 after disastrous floods in 1996 raised concerns about the relationship about logging in the upper reaches of the Yangtze River. The three periods reflected different government attitudes towards the environment and effects on policy choice. The respondents of the survey were not selected randomly, rather they were selected based on their willingness or ability to communicate⁵, and an effort was made to capture those people who had been 'leaders' or in positions of leadership in one capacity or another, and those who had not. The majority of the respondents were aged 40 and above, in order to capture the part of the population who had gone through the three policy periods and how their awareness of forest use has evolved.

2.1 Current issues: illegal logging, livelihood, low access to markets, and insufficient local state capacity

Logging had been a main staple of the local economy, either through logging of state-owned forests located within the township and also collective-owned forests up till 1998.⁶ The county forestry bureau entered into a collective logging arrangement

⁴ For information on the logging ban, refer to Appendix A: Glossary of Terms.

⁵ According to my guides, villagers in the most remote teams/hamlets are often scared of outsiders, and even if accompanied by a local guide, are often not willing to fully discuss their views. Hence, in general, we sought villagers who were willing to truthfully discuss how they feel and what they understand about forest rules of usage.

⁶ The 'collectives' before 1979 were termed (in descending order from the state's administrative hierarchy) – the commune, the brigade, and the team. The equivalent of these entities after agricultural de-collectivisation in

with Taohua administrative village in 1973 after a concerted effort by Taohua cadres to put logging proposals on the table. The success of the logging arrangement led to the adoption by other villages – Lanxiang and Liju – in most likelihood with the recommendation of the county forestry bureau.⁷ The collective logging arrangements solved a major problem confronting most villages – the problem of access and transport to markets, since the county-designated procurers of timber were made responsible for transport of timber out of the region, thus taking the burden off the villages. Although Shitou township has some areas of rich soils where it is relatively easy to plant tobacco, corn, rapeseed, walnut and fruit trees, and various other crops, the higher and less accessible hamlets have much less farmland and almost all of them are located on marginal lands. As such, even within a single administrative village, there is a great disparity across the teams/hamlets. The three villages that had extensive timber resources have between 13 to 18 hamlets, and the population of each administrative village ranges from 1300 to 2400 people.

With the implementation of the logging ban in 1998 and the loss of its logging income, the township has become one of the poorest in the county. The problem of access to commodity markets and more profitable employment has not been solved, and this is more so for the more isolated hamlets,⁸ which are often poorer and also located in better forested areas. The local people have a saying, “the forests are rich but the people are poor,” in explaining their dilemma. According to the township forestry staff, the most crucial factor explaining the extent of illegal logging is poverty and the existence of a timber market in Dali, the neighbouring prefecture. The rising prices of timber since the late 1990s also made logging much more attractive and allowed the development of a network of black-market dealers. Although the existence of a timber market in a region that is under the logging ban is suspect in itself (since Lijiang and Dali belongs to the Upper Yangtze area which is subject to a complete logging ban – any trade must signal the existence of logging in the area), it has not precluded Dali from operating the timber market to the apparent frustration of forestry staff in Shitou and Lijiang. Apparently, provincial authorities have not seen fit to close down the timber market either.⁹ This seems to be in line with a principle that was maintained from the 1980s – ‘govern and control the forests strictly, and allow the markets to thrive’,¹⁰ essentially strictly control the harvest and supply of timber but allow the markets to respond to timber demand. The Three Parallel Rivers World Heritage Site spans four counties/prefectures in northwest Yunnan but the need for coordination between the counties/prefectures is only superficially reflected in the

1982 were – the township, the administrative village, and the teams. Essentially, ‘collectives’ are extensions of the party-state administration below the county level. However the lowest level – the team or the hamlet – is not considered the party-state proper and hence the remuneration of leaders at these levels are not on the party-state’s payroll. The ‘state’ then is the county levels of government and above. For the purposes of simplification, I will use the post-de-collectivisation terms – the township, the (administrative) village, and the teams for both periods.

⁷ The main policy promotion measure in China is experimentation through a pilot site, and when success is demonstrated, the same model is promoted (often without much modification) in other areas, especially before 1979. The push for promotion is predominantly top-down through ‘education’ and ‘interaction’ meetings between village leaders from across the county and province and even the country.

⁸ Some teams/hamlets are 10-20km from the village administrative centre on mountain paths and would take villagers who are well-adept to walking on steep mountain paths 3-5 hours, not to mention the time/effort required in traversing the 10km or more to the seat of the township government.

⁹ Based on personal communication with the vice township chief.

¹⁰ *Shan shang guan yan, shan xia gao huo* or 山上管严，山下搞活.

creation of an office at the provincial level – called the Three Parallel Rivers Management Office (managed by the Bureau of Construction). The office lacks actual power to implement policies, only to suggest policies of coordination.¹¹ Hence, forestry staff in the township can only hope to protect based on regular patrols and protection of trees within its borders (a rather defensive measure), rather than hoping to influence policies. Moreover, the county and municipal governments have been powerless in terms of requesting Dali to deal the timber market within its own borders.

The loss of logging income and the fiscal reform in the late 1990s that eliminated agricultural taxes meant that the township government is also hard-pressed for funds. In priority work like the crackdown of illegal logging, officials sometimes have to pay for operational expenses (petrol, car maintenance and repairs) out of their own pockets.¹² The current vice-township director in charge of forest management has expressed despondency on a number of occasions, “we get no credit for effective protection but all the blame for a few illegal logging incidents.” Other township forestry staffs expressed their lack of power and resources in protection. “The area to be patrolled is so big and impossible to cover effectively. Moreover, what’s a few of us compared to the big timber dealers from Dali? Where there’s profit concerned, people are willing to do anything, even battle to the death.” The addition of 60 militia guards to the taskforce since August 2006 may have alleviated some of the burdens of protection, but illegal logging continues to be a serious problem in the state-owned and timber-abundant forests to the south.

To address the problem of low township finances, township officials have turned to the promotion of ecotourism as a way of developing their local economy. Following on the heels of the listing of the Three Parallel Rivers region as a World Heritage Site, the township is seeking partners/funds to develop Shitou as the launch-pad for small-size tours into Laojunshan. However, it also needs to find funds to upgrade the road leading from Shigu to Shitou before any serious consideration of tourism can proceed. At the moment, the only kind of ‘tourists’ coming into Laojunshan and Shitou are those wealthy enough to hire their own tour guide, a four-wheel-drive and a driver to handle the pot-holed road, and those hardy enough to brave the scenery without much in the form of modern-day conveniences. Given most Chinese tourists’ penchant for coach tours in big groups, arranged accommodation and meals that usually require a substantial infrastructure for transporting amenities and goods, Shitou has not become a launch-pad for sightseeing into Laojunshan and is unlikely to, unless the road between Shigu and Shitou (and beyond) is widened and improved.¹³

3.1 Collective logging arrangements

The period of 1970s to early 1980s represented the period during which much of rural China was organized into production communes or brigades (commonly referred to as the ‘collectives period’). This period was dominated by a command-

¹¹ The lack of power of this office is not discussed in this essay.

¹² Monthly cadre salary (at the township level) is about RMB 1500 – a rough estimate for forest patrol expenses paid out of cadre pocket (specifically the vice-township chief who has been made responsible for forestry and forest protection) is about RMB 200 each month. [per personal communication in September 2006]

¹³ According to a local village-level ecotourism operation, the number of tourists into Laojunshan through Shitou the last year has been nil, because of the poor quality of roads and the remoteness.

economy, during which the majority of production and trade of commodities and industries were controlled by the party-state. There were no individual enterprises, all industries were owned by the various levels of government, and forestlands and agricultural lands were held in the hands of the 'collectives', or the lower levels of the party-state. From the early 1980s, the 'collectives' were de-collectivised in the sense that agricultural lands were returned to the households making the household the unit of production and no longer the 'collectives'. The 1980s were also a period of experimentation of liberalization of the economy. A free timber market was allowed to develop in various town centres to deal with increased timber demand – both from the state sector as well as the private sector including individual households. The gradual liberalisation of the timber industry and market were handled in a reactive way rather than being a well-thought-out process. While the logging quota¹⁴ (introduced in the 1970s) remained to control timber harvest despite liberalization of the timber market, in reality, it was difficult for the state to maintain control. Private timber dealers emerged alongside the state procurement system, making management and control of timber harvests increasingly difficult. This meant that some villages were effectively free of government regulations in timber harvest for a period of time. The forests in Shitou township however were controlled through the collective logging arrangements by virtue of its abundance and hence importance to the state's policy of economic reconstruction.¹⁵ The period of 80s and early 90s represented a period of timber exploitation, and it was only from the mid-90s that increasingly fewer logging quotas were approved.¹⁶

The collective logging arrangement was essentially an arrangement between the administrative village and the teams under it to log a certain amount of timber for sale to the county-owned timber company *Chongjianghe linchang* (Chongjianghe timber company).¹⁷ The arrangement stipulated that all timber logged under the arrangement were to be sold to Chongjianghe or to its stipulated buyers, in most cases state-owned enterprises or state authorities from across Yunnan province. The prices of the timber were determined by Chongjianghe and the county forestry bureau, with little room for negotiation. The amount to be logged each year was determined by the county forestry bureau in consultation with Yunnan provincial forestry bureau, once a logging application by the administrative village had been submitted. Technically, the amount of logging quota granted each year was dependent on the growth rate of trees in that region, as well as the existing inventory. In reality, state timber demand was likely an important if not the determinative factor, rather than the growth rate of the trees itself. After the 1996 Lijiang earthquake, demand for timber soared due to needs for re-construction, and the county forestry bureau granted more logging quotas to Shitou township as a result.¹⁸

The collective logging system was pioneered by a group of village cadres in Taohua village in the early 70s, after one cadre had attended a communist-party workshop

¹⁴ Refer to Glossary of Terms for an explanation of the logging quota.

¹⁵ The party-state embarked upon a program of economic reconstruction with the coming to power of Deng Xiaoping in the late 1970s. Deng emphasized economic rationalism after years of Mao's political radicalism which put economic development on the backburner for 40 years.

¹⁶ Interviews with Taohua villages' senior cadres and a Taohua villager who operated a timber-processing company in the village for 15 years since the early 1980s.

¹⁷ p. 95 of interview notes – LZH.

¹⁸ P. 92 of interview notes – LZH.

(the Dazhai¹⁹ workshop) with the aim of resolving their livelihood problems. The leader LZQ²⁰ came back from the Dazhai training session and together with the village leader SXG and one or two other team leaders, held a meeting with Communist Party members from the village and the teams to discuss the viability of a collective logging system. After holding a series of Party and village meetings during which villagers' approval was obtained, a team of cadres initiated a series of visits and letter-writing to township and county officials with the consent of the township forestry station.²¹ According to SXG, it took them several months to gain access and to convince county officials that they had the capability of carrying through with the logging plans in accordance with county specifications.²² Under the arrangement, Chongjianghe built a timber procurement centre just 200m outside Taohua administrative village (in Taoyuan team) in 1978 for dealing and transporting the timber.²³ All the village and team members had to do was the planning and the daily operations of logging.

The process started with the administrative village applying for a yearly logging quota from the county forestry bureau with the endorsement of the township forestry station.²⁴ The county forestry bureau then instructed the township forestry station to examine their forest inventory to estimate how much timber the applicant has, upon which the county reached a decision as to whether to proceed with the application. They then applied to the provincial forestry bureau which evaluated the amount of quota to be given out each year to each county based on the province's overall needs and logging applications, and based on the assessment of the condition of the forests including the timber growth rate of the various species of trees present in an area.²⁵ Once the logging quota was approved, the village and team cadres then decided which team gets the quota and which patch of forests to log for that year. The village cadres and the timber centre²⁶ then prepare a logging plan for that particular year. The plan sets out how the quantity of timber given under the quota was to be logged – location, area of forestlands to be logged, how many trees that

¹⁹ Refer to Appendix A: Glossary of terms for an explanation of the 'Dazhai movement'.

²⁰ I was not able to speak with him since he had deceased 2 years ago. According to the report by Yunnan Academy of Social Sciences, he was one of the 3-4 people instrumental in initiating this system. However, I was able to speak to SXG (who was brigade chief from 1973 to 1984), and WYK (team leader from 1969 to 1978, vice-brigade chief from 1979 to 1984, and the Party Secretary for Taohua administrative village from 1984-1992.)

²¹ Zheng, Baohua. *Who is Social Forestry's Main Governing Entity?: Social Forestry Rights and Autonomy Research* (谁是社区林业的管理主体: 设区森林资源权属于自主管理研究). Beijing: Minzhu Chubanshe, 2003., p. 280.

²² According to SXG, he was initially laughed out of county offices for having the audacity to address.

²³ P. 86 of interview notes – LZG – brother of LZQ

²⁴ I have reconstructed the process from start to finish based on recollections of concerned cadres. Due to inconsistent or incomplete information, the process is a rough guide indicating the spirit of the process, rather than a step-by-step definitive outline. The process may also have differed among the three villages in question but the rough outline of the process remains the same.

²⁵ Interview with ex-director of Lijiang County Forestry Bureau – GHL on 17 July 2006. GHL worked at the township forestry station levels for around 15 years before he became the director of the forestry bureau in the 1990s (for about 6 years).

²⁶ In Taohua – the entity immediately under the administrative village and above the logging small-group is the *famuchang* 伐木场, in Liju, it was called the *caiyu lin chang* 采育林场, or literally, logging and cultivation forestry centre. Despite the different terms, they performed the same roles. For the sake of simplification – I will refer to both of them as 'timber centres'.

translated into, where to dig roads, etc.²⁷ In the consideration of which team's forests to log, geographical and forest conditions mattered – i.e. the current conditions and extent of the road, the amount of timber resources in the team's forests and the amount of timber required to fulfil the quota.²⁸ This report was then to be submitted to the county forestry bureau. Upon approval of the logging plan, a logging permit was granted²⁹.

The logging was then carried out in accordance with the approved plan, and administered by an entity called the 'timber centre'. The timber centres in both Taohua and Liju villages were directly under the administration of the administrative village. They were managed by a leader, and two to three other people – generally people who already have a role in the administrative village. The timber centres dealt with the accounts – determination and payment of wages, the decision of where to build roads,³⁰ coordination of work between the administrative village and the teams, and performed quality checks on the logged timber.³¹ Under the timber centre were the logging small-groups or *caifa xiaozu*. Members of the logging-small-groups were selected based on their ability and experience in logging and from across the whole administrative village regardless of which team's forests were being logged that particular year.³² They were responsible for organising the daily work, the actual logistics of logging and piling the logs on the side of the road according to county-stipulated requirements on size, length, etc., loading of logs onto the truck, and safety of the logging operations.³³ Once the logs were piled on the side of the road, the timber centre inspected the logs with regards to their length, quality, and thickness of logs, to make sure that specifications were abided by.

Chongjianghe was a subsidiary of a timber company owned by the county. Chongjianghe was responsible for the distribution and sale of logs from the village- or team-held forests³⁴, as well as the logging of the state-owned forests in Shitou township. Villagers were not allowed to sell directly to the buyers; all the buyers were selected by the county or provincial forestry bureau. They go through a set of procurement approval procedures, and approval is evidenced by a purchase ticket that entitled them to buy a stipulated amount of timber from state-regulated sources.³⁵ During the early years of Taohua's logging days (1974 to 1977) the main buyer was the military department of a neighbouring prefecture.³⁶ Thereafter, most of the timber was procured by Chongjianghe and distributed to other buyers determined

²⁷ Called *caifa yulin diaocha sheji* – 采伐育林调查设计 or *linye diaocha sheji* – 林业调查设计 for short. (p. 39 of 94-95 interview notes). The person in charge of the village timber centre was required by the forestry bureau to take lessons to learn how to do the planning and prepare the report.

²⁸ p. 92 of interviews – interviewee LZH (Taohua Administrative Village Party Secretary from the 90s to 2004); and Zheng, 2003, p. 279, Fig. 12-1.

²⁹ Logging permit – *caifa xuke zheng* – 采伐许可证.

³⁰ P. 39 of 99.

³¹ P. 37 of 79, and pp. 38-39 of summarized notes (not original transcripts).

³² P. 38 of 89 of interviews.

³³ P. 94 of interviews – LZH.

³⁴ Refer to diagram on p. 87 of original transcripts.

³⁵ P. 87 of original transcripts.

³⁶ P. 39 of 87. Apparently, Dali had connections to the provincial forestry bureau and thus able to purchase the timber through the state-regulated system. It is not clear from the information I obtained whether Dali had to go through Chongjianghe in those initial years, or whether they had direct access to provincial authorities that allowed them privileged access.

by the county forestry bureau.³⁷ Buyers also required a transport permit before they could transport timber out of the area.³⁸ As such, the system of collective logging in Shitou township was governed on the one side by logging quotas and on the demand side by purchase tickets and transport permits.

In summary, the village administration was responsible for keeping and disclosing the accounts, the decision of where and what roads to build, which team gets the quota that particular year, and coordination of logging operations in conjunction with the timber centre and the team cadres. In most cases, the teams were only involved as far as the team leader and the team accountant were required to liaise with the village timber centre and the village-level cadres in the logging once the quota had been decided.

3.2 Distribution of profits

The logging arrangements involved an agreement between the village and the team as to the distribution of profits between the two levels. In the case of Taohua, the percentage changed over the 30 year period reflecting the needs of the village to engage in public works projects such as construction/maintenance of roads, bridges, power lines, etc. Initially, the percentage retained by the administrative village remained high compared to the team (around 60-40). Later, the percentages reversed reflecting reduced need for village level funds after most of the infrastructure work had been completed. The profits allocated to the team which had its forests logged for that particular year was turn divided down according to population and distributed as cash payments to the people of that team. Interviews with villagers revealed almost unanimously that they were happy about the arrangements. This is not surprising given the lack of other alternative sources of income because of the lack of access to markets. In addition to benefiting through cash distributions, people from across the village benefited in terms of increased traffic throughout the township due to the inflow and outflow of people associated with logging. In other words, the logging enterprises provided more than just income from logging, they provided other forms of employment and trade. In fact, while the collective logging enterprises existed, responses by villagers indicated that there were very few people willing to log outside of the system.³⁹

3.3 The cadre-state alliance in the collective logging arrangements

The distribution of work and responsibilities in the arrangements suggests that most of the work of coordination (including protection) were performed by the village cadres and team leaders. In the course of daily activities (of gathering pine needles and fuelwood from the forests) villagers may have had the opportunity to observe other activities in the forests. However, interviews with villagers suggest that the existence of logging operations itself made it difficult to differentiate from what was acceptable behaviour and what was not. Responses from people include, "Well, the state was logging, and we just followed instructions," or "if the state allowed us to log, who were we to dispute that. We logged while we could and were glad that the state allowed us to do so." A party-secretary (a representative of the Communist Party at the village level) from the 60s indicated that in general, the state was instrumental in

³⁷ P. 39 of 88 of interview notes.

³⁸ *Tongxinzheng* or 通行证.

³⁹ My questions whether that there might be people engaging in 'illegal logging' during the collective logging period until 1998 were in most cases met with incredulity.

changing forest practices in the area, especially slash-and-burn practices in the more remote villages.

The next section examines the history of forest usage in the area, and seeks to understand the level of ecological awareness incorporated in forest usage practices. It also highlights how the state was instrumental in changing and raising the level of environmental awareness.

4.1 The history of forest usage

Data in this section is drawn from Questions 8, 9, and 10 of the questionnaire. The questionnaires were extended into semi-structured interviews where the respondent was willing to interact further. The questions I seek to answer in this section are: What are current protection/conservation ethics? What were the factors pushing the promotion of these ethics? To what extent do forest use rules before 1998 reflect an awareness of villager responsibility towards their forests? What are current views of logging and do people think that logging of the collective logging period could have been continued indefinitely and in a sustainable manner?

4.2 Forest and timber use rules - the concept of boundaries between each team/hamlet-held forest

All forests in Shitou township were held by the hamlets or the teams during the collective era, as they are now. The boundaries (then and now) between the team-held forests are usually based on natural boundaries such as gullies, rivers, ridges, etc. These boundaries came into effect in the collective logging arrangements in that whichever team's forests were logged that year, the team would obtain the stumpage fee from the forestry bureau, as well as the team's share of the profits which were then distributed to each household. They also come into effect with the logging of timber for self-consumption purposes of villagers from the team. Otherwise, these boundaries signify the natural extent of each team's forest usage activities – such as collection of firewood and pine needles but they are not exclusionary; it is acceptable for villagers from other teams/hamlets to collect fallen or dead wood, or pine needles for their pig sties.

In general, villagers have indicated that it is also acceptable for villagers from other teams to chop fuelwood from their forests as long as the amount chopped is not excessive and seen as necessary for subsistence purposes. However, in recent years, due to Taohua's increasing reliance on tobacco-planting which requires substantial amounts of firewood to dry the leaves, live oak has been harvested in greater amounts, mainly because there are also no rules pertaining to the chopping of oak which are known to regenerate themselves quickly.⁴⁰ A villager has expressed concern over the excessive cutting of oak but since it is not protected by the forestry bureau, however, such concerns have remained as private concerns,⁴¹ and have not become more widespread. More recently in discussions about how to divide their forests in the forest tenure reform in April 2008, villagers in Taohua raised the issues of several households' excessive cutting of oak. In one Taohua team which has experienced substantial soil erosion in recent years, cutting of live oak has been banned. The more affluent people from this team buy firewood from Liju. Technically

⁴⁰ Oak is known to grow back quickly; hence repeated cuttings are encouraged.

⁴¹ P. 36 of 95 of interviews.

the sale of firewood is not entirely legal under the forestry laws but is tolerated by township forestry staff because it is seen as necessary for subsistence.⁴²

4.3 Forest usage rules before 1979

In Shitou, teams/hamlets in one particular administrative village can be separated by up to 15 km in distance. The scarcity of people against an abundance of forest resources has implications for the creation of institutions for sustainable and 'equitable' allocation of the common-pool resource. Elinor Ostrom in her study of the creation of community institutions for the management of common-pool resources listed scarcity of resource as a key factor in promoting the emergence of such institutions.⁴³ For obvious reasons, if people are few and resources abundant, there is a lower likelihood for the emergence of tight rules, compared to a situation where the opposite is true. We see this most particularly in Liju village and to a lesser extent in Taohua village.

Firewood and timber use rules in both Liju and Taohua during the collective era reflect this relationship between the number of people against the amount of forest resources. Liju is perhaps particularly outstanding for its seeming lack of rules on where not to cut timber and what not to cut or collect firewood. Life before the arrival of the CCP⁴⁴ and even during most of the 50s and 60s was very simple – people lived in shacks with planks put across the top and weighed down with stones; many people did not have the skills or the money to buy other materials to build proper houses. As such, throughout most of the collective era, houses in Liju were very simple, and the demand for timber was low.⁴⁵ Selling firewood to neighbouring prefecture of Dali and Jianchuan was a common way of earning spare cash – people in Liju used to carry a bundle of firewood on their back and walk across the mountains. The return journey took 3 days. With the money they earned, they used it to buy salt. The work and time involved in trading firewood for salt was so consuming that salt was used sparsely. Today, government rules stipulate that people are only allowed to pick dead/fallen branches or chop oak which is not protected by the forestry bureau. While people also used to chop pine for fuelwood, chopping of pine has been prohibited since the 80s/90s by the county since pine is deemed to be of value to the state.⁴⁶

Forest management and protection in Liju seem non-existent before the establishment of the PRC in Liju and Taohua. After 1949, the first forest protection team was set up whereby a few cadres were made responsible for fire-watch. Shortly after establishment of the first forest protection team, slash and burn practices that were common in Shitou were banned.⁴⁷ Forest protection during the collective era in Liju (and most likely Taohua) focused on precautions against forest fires. Likewise, forest protection in Taohua focused on the snuffling out of fires before they happened and ensuring that people put out fires properly after use etc.

⁴² Confirmed with the township forestry chief in August/Sept. 2006 in an interview.

⁴³ Ostrom, Elinor. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press, 1990.

⁴⁴ The Chinese Communist Party.

⁴⁵ P. 22 of 55 – Zhang Zhiming.

⁴⁶ According to all township forestry staffs I've spoken to. However, I've noted that this rule does not apply in neighbouring counties/prefectures.

⁴⁷ P. 36 of 97 of interview notes.

At the time, there was indoctrination through government and party pronouncements that forests were to be protected. The reasons for protection were based the idea of forest as a basis for agricultural and other production activities, and also because timber was valuable to the state. Introduction of these principles was coercive and top-down; there was simply no room for argument. One simply followed the principles that were transmitted from above. As one old man in Liju eloquently stated, “we didn’t know the harmful effects of logging, nor did we know the beneficial effects of forest protection. We simply followed what we were told by higher levels.”⁴⁸ There were also exhortations for afforestation; the old village Party Secretary cited a ditty that illustrated some of the efforts to encourage afforestation – “if we plant trees, our descendents stand to benefit” and “hats of pines and cypresses, waists of fruit trees” alluding to beautification of the mountains with rings of pine and cypress and fruit trees. As with much of policy transmission a la CCP style, it was through changing people’s behaviour through sloganeering.⁴⁹ The reliance on sloganeering and campaign-style mobilization continues today in some of the policy implementation. While interviewing about the current forest tenure reform and whether the environment for the reform to be effective exists, a county official responded, “Get the slogan right, get the message out first! Only after that’s done, then we fix the structural environment (the accompanying structural reforms) necessary for the desired change in behaviour. I know it sounds like putting the cart before the horse and could lead to adverse effects initially, but this is the way China has done things for many years.”⁵⁰

Collection of dried/fallen branches for firewood and chopping of live oak and pine for firewood have never been subjected to quota restrictions even now, not before the PRC or during the collective era. However, firewood collection for one’s household needs during the collective era had to be done on the off-days, i.e. when the collective was not busy. Where collections were not sufficient, the brigade/teams in Taohua and Liju allocated 2-3 live oak, mixed shrub trees or pine trees to each household per year which had to be chopped during a specified time before Chinese New Year⁵¹; other times people were to make do with collections of fallen/dead branches on the hillsides, rather than chop live trees. According to most villagers, however, even the rule of only 2-3 live trees per year was probably not followed. People cut trees whenever they needed as long as it was done on their off-days and did not detract from time spent on production activities under the teams.

The one rule that repeatedly appeared in both collective and post-1979 forest rules was the rule not to cut in nearby pine forests, since these forests were reserved for the collection of pine needles⁵². However, it is debatable to what extent this was followed in Taohua and Liju (and most especially Liju) since trees were so numerous and people were scarce; it seemed that some villagers simply cut wherever they

⁴⁸ P. 28 of 73 of interview notes – 不知道采伐的害处也不知道保护的好处，上面怎么办我们就怎么办。

⁴⁹ P. 27 of 62 of interview notes

⁵⁰ Discussion with county officials involved in the forest tenure reform (Wednesday, 22 April 2008). Refer to Glossary of Terms for explanation of the forest tenure reform.

⁵¹ Liju – p. 26 of 61 of interview notes.

⁵² These forests are called *feiyuanlin* – or literally forests that provide organic fertilizer. Refer to Appendix A: Glossary of Terms for an explanation.

liked. Note that villages in Shitou township in general have looser rules because of their abundant forests.⁵³

For construction purposes (of one's own house), there were no requirements for quotas during the 50s. Beginning in the 60s, self-consumption timber quotas were required before logging. However, application required simply a word to the team and brigade leaders, and it is quite conceivable that some of the quotas were given post-hoc, i.e. after the logging had already been done. Follow-up inspections to make sure that the amount logged did not exceed the quota were rare. This is in contrast to another village in Lijiang where timber and forest resources were scarcer and forests were located immediately on the same hillside where the villagers lived. As for the location of logging and size of trees, there were no specifications. People chose to log wherever and whatever size tree was convenient.⁵⁴ Villagers in Liju indicated that they usually chose to log on steep slopes since the logs would roll down more easily. People who were involved in the collective logging ventures generally exhibited higher awareness in terms of the effects of logging on soil erosion, and regeneration – they had to leave a mother tree behind to ensure continued propagation, and not to cut trees of diameter below 15 cm (some say 30cm; information is not clear). However, whether they abided by that in reality is not clear; a few of the people involved in logging for a long time (20 years) displayed awareness of the rules but indicated that they did not care. Some household/personal timber needs were likely accommodated within the logging operations; a number of villagers used timber cast-offs from the timber centre⁵⁵ rather than cut trees themselves. Most likely only those without access to the cast-offs from the timber distribution centre had to apply for self-consumption quotas.

The low level of demand in comparison to the abundance of timber reserves shows up in the laxity of rules and most especially enforcement during the collective era. Questionnaire results show significant discrepancies in the awareness of rules (i.e. the requirement to apply for a quota, to leave a mother tree behind, not to cut trees below 15 cm in diameter etc.) between individuals during the collective era. This is expected since the sample taken of villagers was not sufficient given the time constraints and logistics of the questionnaire. However, the discrepancy could be attributed to various factors.

There is a trend in terms of the awareness of the rules of logging for self-consumption and firewood collection; people who were cadres usually exhibited higher awareness while those who have not been in a cadre position displayed low awareness of rules – and for good reasons. It is not likely that people would exhibit a high degree of awareness unless they were made in charge of enforcement, or made to comply with the rules. And although moral exhortations on forest protection existed to a large degree, they remained exhortations and it is debatable as to how much of them translated into practice. It would seem then that the discrepancy in awareness of rules between cadres and non-cadres might be an indication of inconsistent and uneven enforcement of rules. In fact, quite a number of cadres

⁵³ However, in a visit to another village in a neighbouring prefecture (Lanping prefecture) in April 2008, the village had very strict rules of collection. This is due to a strong tradition and strong village leadership in maintaining these rules.

⁵⁴ P. 36 of 97 of interview notes.

⁵⁵ *Famuchang* or *caiyulinchang*.

indicated that government dissemination *xuanchuan* depended very much on just that – dissemination of information, moral exhortations, and sloganeering. In actual fact, enforcement was slack since there were very few incentives for people to log for commercial purposes.⁵⁶ Given that the little commercial trade that existed before the collective logging arrangements were limited to quantities that could be carried on people's backs, and the preference for legitimate and low-risk employment under the collective logging system, as well as the lack of roads to timber markets or buyers generally, there were very few incentives for logging outside of the collective logging system. Sure enough, there might have been the odd person logging trees on their team off-time for their own household purposes, but even these were easily controlled. One cadre indicated that during the collective era, areas within a 2-3km radius of the villages were indeed regularly patrolled and places beyond were not though in reality the village's forests extended far beyond that scope.⁵⁷

4.4 Tightening of Rules since 1998

In summary, the collective era (before 1979) brought in ideas such as protection of trees because they were worth money and belonged to the state, and the idea that pine and fir trees cannot be cut without quota. Enforcement (as indicated above) may not have been complete or consistent, nor were there any specific pressure to enforce. With the commencement of logging in 1973 in Taohua, concepts such as no clear-cutting, leaving behind a mother tree, and not cutting trees below a certain size to enable regeneration were introduced. Pre-existing ideas that were more social norms were made enforceable laws by the state in the 1980s with the promulgation of the Forest Law. These laws prohibit the cutting of trees in *feiyuanlin* (to enable the gathering of pine needles), in *shuiyuanlin* (where water emerges from the ground) to protect one's water source, in *fangqianwuhou* or the Four Surrounds and in *fengjinlin* (scenery forests) to promote the beautification of immediately accessible areas such as around one's house, along the river and along the road.⁵⁸ However, the status of oak and mixed shrub are ambiguous even in these four areas because of the common perception that they grow back easily, or in the case of oak, that they require constant cutting to grow bigger. The prohibition of cutting along the road and of pine trees in general were being first promoted in the 1960s though enforced inconsistently, and never formalised until the Forestry Law that was adopted in 1984,⁵⁹ and most notably reinforced in the logging ban of 1998.⁶⁰ Logging quotas were applied in the 60s to self-use timber (not firewood), and more recently, since the 1998 logging ban, and more specifically since Shitou was incorporated under the World Heritage Site. Tourism also became important in propelling recent changes towards stricter enforcement.

None of the above-mentioned changes were introduced by the people, or brought about by the perception of scarcity and vulnerability of the environment caused by

⁵⁶ P. 25 of 54 and 59 of interview notes – ZZM and an old team/hamlet leader Chen Zonghua who was slated to promotion to the township level but because of indiscretions during his youth was ostracised for a long time.

⁵⁷ P. 99 of original interview transcripts – source: an old cadre who was in charge of Taohua's timber distribution centre for 11 years.

⁵⁸ Refer to Glossary of Terms for explanation of these terms.

⁵⁹ The Forestry Law of the People's Republic of China was adopted at the Seventh Meeting of the Standing Committee of the Sixth National Congress in September 1984 and amended once since then. For full details of the law, refer to State Environmental Protection Administration website, or

http://english.sepa.gov.cn/zffg/fl/198506/t19850618_49703.htm

⁶⁰ Source: p. 34 of 100 of interview notes – according to the current Taohua village forest administration officer.

logging. In fact, it is the belief of most people and even some of the more dedicated cadres that forests in Shitou could be logged for many more years. Given the common perception by villagers of forests as invulnerable, it therefore comes as no surprise that the stricter changes have been brought about by the central government's concern in erosion in the upper reaches of the Yangtze River since the floods in 1996 and the 2004 inclusion of Shitou in the World Heritage Site. In recent years, the government has stepped up rhetoric on the importance of forest protection, beefed up forest protection by physical measures such as the training of a militia to assist forestry staffs in law enforcement, and continued the trumpeting and dissemination of protection. Questionnaire results show that the majority (if not all) of the interviewees perceive the period after 1998 as the strictest period in terms of government's will to enforce the laws, and the period after de-collectivisation (1982) up till the early to mid-90s as the slackest in enforcement.⁶¹ The latter period is also the period of liberalization of the market and gradual loosening of the command economy in general.

It was only with the commencement of logging in 1973 in Taohua and 1979 in Liju that forest protection as we know it began. Increased involvement in the state in the villages' management of forests resulted from the 1984 promulgation of the Forestry Law, which officialised reporting channels from the villages and hamlets to the township representative of the forestry bureau. Trees previously harvested without the requirement for permits such as Yunnan pine have been regulated since the collective logging arrangements began. The authority to fine offenders for illegal logging has also been taken away from the village forest guard which one forest guard cited as making his work more difficult.⁶² The current system of 14 forest guards in Liju and 16 forest guards in Taohua commenced in the 1980s during the liberalization of the outside timber markets, though in reality these markets had only minimal effects on Taohua's and Liju's forests because of the distance. In the 1960s there was only one security officer⁶³ and a few team leaders in Liju who followed up on forest matters. Many of the stricter forest rules have been driven by the state in response to expansion of markets and increased emphasis on timber as a factor input into other commodities.

Apart from the lack of external and state-controlled markets, why was enforcement not as strict as it should be during the logging period? And was the collective logging from the 70s to 1998 as sustainable as what the villagers claimed? What seems to have happened during the collective logging era was that there was simply so much logging going on, that a little bit of slack was permitted. In other words, there was very little concept of scarcity and what little existed of this concept was often dismissed by the perception that the threat of scarcity was not immediate. Interview results on the perception of strictness of rules and enforcement are contradictory – some villagers insisted that rules were really strict during the logging era, while others said that there was so much logging anyway that a little extra bit of logging on

⁶¹ Questionnaire – based on 4 villagers in Liju and 4 villagers in Taohua (all who have not had cadre experience), 1 old forest guard (p. 60 of original transcripts) in the 80s, Zhang Zhiming who was forest guard of Liju from 1990 to 2001, Liju's old village Party Secretary (p. 61 of original transcript), and Taohua's timber processing company owner/manager (p. 35 of 90).

⁶² Source: current FG of Liju (p. 66 of original interview transcript).

⁶³ 公安员 – p. 26 of 62 interview notes – according to Liju's old village Party Secretary.

the side did not matter. Strictness and leniency⁶⁴ probably existed. According to the manager and owner of Taohua's timber processing company (which was dismantled with the start of the logging ban), logging quotas came in lesser and lesser amounts starting in the 1990s.⁶⁵ Most if not all of the villagers who participated in logging in both Liju and Taohua (and most especially Liju) have very little notion of the concept of scarcity. Many believe that logging can be continued for at least another 20, even 50 years on a yearly basis and the forests would still be as 'dense as they are now'. This may be true, if sufficient time is given for it to regenerate by itself, which seems to be the point of contention. A county forestry technical expert expressed his opinion that the villagers' view is erroneous;⁶⁶ Yunnan pine takes at least 30 years to get to 'logging size', while cypress/firs take at least 50 years. Interviews with villagers indicate that their understanding of the regeneration period for Yunnan pine is 15-20 years, far below what is possible. A cursory tour of their forests reveals that most forest stands (stands that were logged 20 years ago) are far from being 'logging size', measuring around 15cm in diameter in average.

5.1 The forest guard and his position within the village/'community'

This section seeks to understand how the current system of forest protection serves to highlight underlying tensions between the state and the people in the state's increasing role in village forest protection.

There are currently three types of forest guards in Shitou – *linzhengyuan* (forest administrative officer), *hulinyuan* (forest protection officer), and *xunshanyuan* (forest patrol officer). Essentially their job is the same – patrolling the forests, looking out for signs of smoke, fire, harmful activities such as cutting back pines and firs without a permit, etc. - however the *linzhengyuan* is also responsible for organising the other forest protection and forest patrol officers' work, in collaboration with cadres from the administrative village, the hamlet leaders, and township forestry staffs. Because of their heavier reporting and liaising duties, and the ongoing nature of their job, *linzhengyuan* are paid a salary 12 months a year, whereas the forest protection and forest patrol officers are paid a salary only 6 months a year. The villages have always had their own *hulinyuan* and *xunshanyuan* but the position of *linzhengyuan* is new. The position of *linzhengyuan* was created with the promulgation of the Forest Law in Shitou in 1983, which required the *linzhengyuan* to report to the township forestry station. Previously, when there was no *linzhengyuan*, the work of the *hulinyuan* and *xunshanyuan* was organized by the village or the team, with no obligation to report to the township forestry staff. The village chief would direct the forest guards' work, requiring them to patrol or stay in the forests for a period of time. While they received a form of remuneration, the source of the remuneration came from the people as contributions-in-kind or from village finances.

With the institution of the current system that sees a heavier role by the township and the delineation of a township representative in the form of the *linzhengyuan*, the concept of forests as something belonging to the people and hence deserving the

⁶⁴ P. 71 of original interview transcripts – according to a Liju team/hamlet leader of many years. This guy is known for his outspokenness and willingness to tell it as it is.

⁶⁵ P. 35 of 90 of interview notes – more specifically after 1994. There was a general sense among the village cadres that it was harder to get quotas. The trend must have reversed in 1996 after the Lijiang Earthquake before the complete closing of the noose through the logging ban of 1998.

⁶⁶ Interview in April 2008.

participation of the people in its protection has subtly changed. Although the *linzhengyuan* is in all cases a member of the village, the fact that he receives a yearly salary by the township puts him in a somewhat ambivalent position. In many of the villages I visited in China, the person who receives a regular remuneration paid by the state (i.e. the township level and above) is seen as more privileged than the average villager. Villagers, by virtue of their reliance on the weather on agriculture, as well as their vulnerability to market movements, often means that they are standing chin-deep in water.⁶⁷ The slightest fluctuation could put them below the subsistence level. The issue is not the amount of the remuneration itself, but the security of it.

Cadres or *ganbu* receive a monthly salary, as well as teachers and other staffs, including those at the village level. Some of their salaries are paid by village finances, some by township, and some by county finances. Officially, the term *ganbu* refers to people who receive their salary from the county level or above (i.e. from the 'state' rather than the 'collectives'). However, the term is used unofficially in a different sense by villagers, especially those who have never been in a cadre position before. They use the term *ganbu* in a general sense to refer to people who have assurance in the basic necessities of life, in the form of a stable salary - no matter how minute that salary is), and no matter which level of the government pays for their salary. As such, anyone who receives a stable salary is seen as more privileged, more fortunate, possessing a social security blanket and desirous of envy.

5.2 Protection of common-pool resources and a hierarchical view of responsibilities

Protection of forests, especially when there are poachers of timber with high stakes, can be dangerous. Protection of forests or the speaking out against such activities can also incur censure if it is not socially acceptable. My analysis on the sense of responsibility of the average villager is drawn from questions 12, 13, 15, 16, and 17 of the questionnaire (refer to Appendix A). The idea of 'responsibility' here is the willingness to take action when they see people doing damage to the forests by 'cutting without the requisite approval', excessively cutting, or cutting where they are not supposed to. 'Responsibility' is affected by perceptions of individual capacity, authority, as well as the willingness to transcend one's limitations of capacity and authority in deference to a higher law. More plainly, the obligation is called into being where village rules or social norms are strong enough to demand such obedience. While the question of responsibility is often an individual issue, it is also a social or 'community' issue relating to one's obligation to the 'community' (however defined). Where social rules are strong enough or where policy directives are compelling enough, the individual's willingness to take on more responsibility is also likely to increase. Moreover, one's willingness to act may also be affected by perceptions of 'state' capacity and authority, as well as the actions of state officials. This is a political question – relating to the legitimacy firstly of state policies and secondly, of the actions of state officials. Where state officials are perceived as corrupt or simply not fulfilling their duty towards the people, people may not be willing to fulfill obligations towards forest protection.

⁶⁷ This description of peasants was coined by the anthropologist, Eric Wolf.

Responsibility can be defined in various ways – in terms of social obligations towards the family, the village, a greater community such as the ‘nation-state’, or towards future generations. It can also be seen in an esoteric way – an obligation towards the ‘forest’ as an entity deserving of such right in itself; this might be what is called environmental sensibility or environmental citizenship. The latter is likely not called into question since the situation of most villagers (in the absence of a higher belief such as traditional beliefs or superstition – which does not seem to play a role in these villages) is such that in most cases, livelihood needs are more pressing than the need to obey a higher law or even what one believes is right.

What then explains people’s ideas about responsibility about protecting the forests? And is this idea of responsibility sufficient in the governance of what is essentially a common-pool resource but the user and management rights of which have been significantly usurped by the state through regulation and other measures? And to what extent do previous and current institutions of logging, forest management and policies, affect current perceptions of responsibility?

When asked about what they would do in the event they see people doing ‘damage’ to their forests, responses can be divided roughly into three types: (1) report to the cadres (meaning either village cadres or township forestry station staffs); (2) tell them to stop, because it’s village and country law that they should not cut pine trees for instance; and (3) don’t do anything. As for those who choose not to do anything, their reasons are: (1) because I have no authority, even if I tell them not to do it, they won’t listen; (2) it’s not my job, it’s the forest guards’ (both village’s forest guards and township forestry station) job; (3) I don’t want to offend anyone and hence try to stay out of other people’s business. When asked on whose shoulders the main responsibility of forest protection lies, replies are (1) the government – the government should bear the responsibility because they have the most authority or it’s their job; (2) everybody should bear the responsibility including both cadres and the people; i.e. cadres and people should work together, cadres say the word and the people follow. When asked if they would do anything if cadres failed to prevent such behaviour, most reply, “If cadres fail to do so, what can we (peasants) do? Nobody will listen to us, we don’t have the power to do anything, and besides it’s dangerous work and I don’t want to risk my life or offend anyone.”

For those who choose to report to cadres, it is based on the relative lack of personal authority vs. cadre authority, and perhaps the lower level of risk to one’s own person that they choose to report to cadres rather than take direct action of their own. For those who choose to take action by telling the person to stop, they invoke either village or country rules or both for authority. Many villagers respond that because of the fact that the country in recent years has emphasized protection, that it’s easier to take action of their own. However, at the same time, some of the same people have chosen to believe for the very same reason that the state has been the predominant driver behind protection that the primary responsibility of forest protection therefore rests on the state rather than the people in general. This belief is reflected even in people who say that protection is ‘everybody’s responsibility’. When asked to elaborate, they reply that the state leads while the people follow. I ask then, “what would you do if the state doesn’t lead,” the reply is often flustered and confused. Common allusions to cadre corruption or the distortion of ‘originally well-intentioned’ policies through the watering down of ‘benefits’ by each level of bureaucracy reflects

not only lack of credibility of the state and its policies, but a certain sense of disillusionment.

This is especially poignant in Shitou township, long reliant on logging for a living, but now still cut off from further development because of the lack of good roads and its inclusion within several proposed protected status and its location within the Three Parallel Rivers World Heritage Site. The reply that 'cadres lead and the people follow', while harking back to the Maoist days of campaign-style mobilization, reveals the deleterious effects of top-down policy processes and implementation. 'Cadres lead and the people follow' may also be easily interpreted by those wanting to shirk responsibility as 'first the cadres have to lead before the people can follow'. This reflects an idea of responsibility that is conditional, rather than common or equally shared. The condition is that the cadres do their job first (protection and work in the people's interest) before the ordinary 'peasant' can do much given their already circumscribed powers and rights. The fact that ownership rights in China (incl. those of village-held forests) are seriously circumscribed by a series of state injunctions, requirements and policy swings, also mean that in reality, most villagers struggle to feel a true sense of 'ownership'.

Moreover, it is an idea of responsibility that reflects the hierarchical nature of the Chinese political system as well as the predominance of top-down policy processes in China. Only in very rare cases are people willing to take on responsibility towards protection of their forests, and an idea of responsibility that is individual responsibility irrespective of others' actions. One particular cadre who comes from an influential family in the village said, "I'll tell them that they're not allowed to do so, and if they don't listen, I'll confiscate their axes and timber and fine them." When I told him that he has no authority to fine the violators, he responded, "Well, do you expect me to wait for the township people to come down and fine them? By the time they come here, it's too late. Besides, these (township) people don't give a fig; for them it's only a job, at the end of the day, they still get paid for it no matter what, while we villagers suffer the real consequences of destructive behaviour in the forests." He has perhaps expressed the real dilemma of the management of collective- or village-held forests in China today, the role of the state in wanting to protect, but often with deleterious effects on villager and grassroots initiatives. The fact that both Liju and Taohua villages had conducted almost 30 years of logging initiatives that should have alerted people to the importance of forests and the effects of long-term logging on the environment, has done little to raise people's willingness to take action. More importantly, the type of 'controlled and (state)-sanctioned' logging in the area (as opposed to the 'rampant and chaotic nature of (illegal)' logging after 1998) was seen as sustainable and brought real benefits to many villagers. However, the receipt of such benefits was devoid of real responsibility; day-to-day management of forests was handled by the cadres, the control on the amount of harvest (deemed a sign of the sustainable nature of the operation) was handled through a cadre-state alliance. As shown in an above section, while villagers' participation in creation of a collective logging enterprise system may have been enough to allow the creation of an equitable distribution system in the first place, it was thereafter limited to the receipt of yearly dividends from the enterprise, increased employment and trade opportunities in the area, without real responsibility required from the people. The cadres and forest guards bore most of the responsibility, and this idea of

responsibility was reinforced in recent years through the government's heavy role in forest protection.

6.1 Conclusion: is this idea of responsibility a problem?

This hierarchical idea of responsibility is not uncommon in other non-authoritarian aspects; in fact, it is inevitable given the nature of any nation that has seen a rationalization of bureaucracy a la Weber, not to mention the nature of societies that sees an increased specialization of roles in general. While I'm not suggesting that we go back to pre-modern societies where the job of management of common-pool resources may be equally shared and roles are undifferentiated, I am suggesting that it is a problem in the township's current situation. Implementation and enforcement at the local levels are passive, and lack power in influencing policy-processes at the provincial and central government levels. The lack of downward accountability⁶⁸ of most processes in China, not only of officials to the people, but also higher levels of government to lower levels of government, prevents the feedback of local problems of implementation that should inform policy processes. Moreover, the effect of such top-down initiatives are disempowering not just for local people but also for local officials.

Management of common-pool resources like forests, because of the nature of its resource (size) and non-excludability, is something that cannot be governed by a few forest guards. It also requires people who see destructive forest practices to exercise their initiative and their sense of 'civic responsibility', to exert social coercion in the form of reprimands directly to the offenders, or to report to the forest guards. The designation of a forest guard who is seen as more privileged than the people, has made many people reluctant to perform their 'civic responsibility' if they were so inclined in the first place. Therefore, the effect of the state extending its reach into 'communities' (let's for the time being assume that there was a community of governance) through direct measures like designating a 'state representative' and solidifying lines of responsibilities was to disrupt the sense of 'community' that enabled people to feel that all had a role to play in the governance of forest resources. One cadre from a remote hamlet in Liju also indicated the same problem. He said, previously when there were no forest guards designated by the state and receiving state's money, people felt that it was everybody's responsibility. However, now that there are people who are officially responsible for forest protection and are in a privileged position because of their receipt of a regular salary, people no longer feel that it is their responsibility.

That is not to say that the state was mistaken in its promotion of protection policies. In fact, if anything, the surveys also indicate that state emphasis on protection since 1998 enabled previously-existing rules of forest protection to gain extra authority. However, it is the way that these policies are often state-driven, implemented in a top-down manner and lack downward accountability.

⁶⁸ Ribot, Jesse C. *Waiting for Democracy: The Politics of Choice in Natural Resource Decentralization*, WRI Report, Washington, D.C.: World Resources Institute, 2004.

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Appendix A: Glossary of terms

Cadre

A member of the party-state and includes both Communist Party members as well as non-members who works in state administration.

China's administrative system

The various levels from the provincial level down in descending order from the central government are: prefecture, municipality, county, township, village, teams.

Chongjianghe

A tributary of the Jinshajiang. It runs through Shitou township and empties its waters out at the township centre of Shigu.

Collectives

The term refers to the lower levels of state-administration, i.e. township and village levels. They are remnants of the period from 1950s to 1979 during which individual ownership of lands were abolished and nationalised or 'collectivised' (held by the people) by various levels of state administration – the commune, the brigade, and the production team. They are now the 'township', the 'village', and the 'team/hamlet'. The current lowest level of state administration is the township, while the village (or village committees) are in theory 'representatives' of the villagers, elected through village elections introduced in late 1990s.

Collective-held forests

The term refers to forests held by the township, the village or the team/hamlet. I use the term '-held' rather than '-owned' because in practice, the state uses a series of regulations restricting harvest and transfer of lands.

Collective logging arrangement

The term refers to the logging arrangement between village administration and the 'state'.

Dazhai movement

Dazhai was a spiritual, political movement in the mid-1970s that emphasized the importance of human and political will, and party organization to overcome livelihood and production problems. It de-emphasised economic incentives and individual motivation, as with all other Communist Party movements.

Dissemination/*xuanchuan*

The Chinese term *xuanchuan* refers to state-led propagation of policies, initiatives, movements, and is mainly used to disseminate certain ideas. It is reminiscent of Communist Party tactics of indoctrination of the grassroots.

Forest guards

Forest guards are appointed by the village (but in most likelihood) with the consultation of the township forestry bureau. There are three types of forest guards – (1) *linzhengyuan* (forest administrative officer); (2) *hulinyuan* (forest protection officer); and (3) *xunshanyuan* (forest patrolling officer). They are responsible for patrols of village-held forests, with the aim of stopping illegal and destructive

behaviour in the forests such as logging and insufficient snuffing out of fires or cigarette butts. They are also involved in putting out fires in state-owned and collective-held forests, though villagers are encouraged (and it is village rule) that villagers participate in putting out fires in village-held forests.

Forest tenure reform

Promotion of this reform started out in a few pilot provinces in 2002 (Fujian, Jiangxi, Zhejiang, and Liaoning). Nation-wide implementation started last year, and in northwest Yunnan itself late 2007 to 2008. The tenet of the reform is to allow the devolution of economic, management, and user (including transfer and use as collateral) rights of forestlands to the lowest level possible. It applies currently only to collective-held forests, where most of the user and management rights still reside at the village-level. The intention for rights to be devolved to the household level is to encourage more villager investment in afforestation and management as well as protection, thus relieving the burden currently borne by the state.

Forests – types of

Feiyuanlin 肥源林 or fertilizer-source forests

Forests which are designated or used for collection of pine needles, an ingredient in layering of pig sties, which are later used for enriching agricultural fields. They are usually located in nearby areas to the village, to facilitate easy collection of pine needles.

Shuiyuanlin 水源林 or water-conservation forests

Villagers define it as forests where ‘water comes out of the ground’.

Logging/chopping of trees in these areas is forbidden for protection of the water-source. Villagers say that if they chop trees in the area, water will not be retained and the amount of water available for drinking will be affected. They are usually protected (in some villages I’ve visited) though protection in Liju village especially does not seem to be emphasised.

Fengjinglin 水源林 or scenery forests

They are areas along the main thoroughfares/roads that run through the township, or areas along the river. They were introduced by the state in recent years in order to preserve the scenery along the road and river. The term does not seem to connote concerns about erosion or the effects of logging on the river; its main concern is aestheticism promoted by the state’s desire to promote tourism in these areas.

Fangqianwuhou 房前屋后 or the Four Surrounds (around the House)

These are areas around one’s dwelling.

Laojunshan

A range of mountains in northwest Yunnan, straddling the four counties/prefectures of Lijiang, Nujiang, Dali, and Diqing. It is situated within the Three Parallel Rivers World Heritage Site, and is famous for the rare golden-haired monkey. For more details of the monkey and its protection status, refer to The Nature Conservancy China website.

Jinsha jiang

The headwater of Yangtze river, or the Changjiang.

Logging ban

The logging ban was instituted in 1998 after a series of disastrous floods in 1996. It was initiated by the-then Premier of the State Council Zhu Rongji in the belief that logging in the upstream of the Yangtze river (including in the Jinsha jiang area, the Lancangjiang area, and the Nujiang areas) were to blame for the soil erosion that led to those floods. The logging ban applied to state-owned and collective-held forests in northwest Yunnan and had dramatic impact on local economies in areas which had relied on logging.

Logging quota/permit

The logging quota is a quota given and approved by the county forestry bureau. It is an instrument to control the amount of harvest of timber each year. It includes two elements: a commercial quota and a self-consumption quota. The commercial quota is for purposes of commercial logging, and for timber that can be sold. The self-consumption quota is for villager use for construction of villager houses, and for fuelwood.

Natural Forest Protection Program

The program involves several elements (1) a ban in logging in state-owned and collective-owned logging farms, as well as in collective-held forests; (2) afforestation of state-owned forests in order to raise the amount of forests in the country; and (3) conversion of state personnel previously involved in logging into 'protection' staff, in charge of implementation of afforestation and general protection work of state-owned forests.

Three Parallel Rivers World Heritage Site

The site encompasses the area surrounding the headwaters of the Lancangjiang, Nujiang, and the Jinsha jiang. It straddles the four counties/prefectures of Lijiang, Nujiang, Dali, and Diqing. It was declared a World Heritage Site in 2004.

Sloping Land Conversion Program or the 'Green for Grain' program

The program aims to convert villager lands previously used for cultivation of crops into forestlands. The government pays Y220 per year per *mu* to the villager for successful conversion. Choice of trees used in the conversion is usually decided by the township forestry bureau.

State-owned forests

Forests owned by the national, provincial, and the prefectural, municipal, and the county levels.

State Forestry Administration (SFA)

It is the main government body in charge of forest management, protection, and state-logging operations in China. It is immediately governed by the State Council at the national level. Its chain of authority extends through to the provincial level (the provincial forestry bureau), the prefectures, municipalities and the counties, and at the lowest level, the township forestry station.

Appendix B: excerpt of household surveys

Part 2: Fuelwood collection and sourcing of timber habit/informal rules

8 (1) Where do you currently source your firewood?

1. village forests
2. team forests
3. team small-group forests (very rare)
4. Other

8 (2) Is it the same as where you sourced your firewood 10 years ago?

Yes No

If choose 'no', what is the reason?

8 (3) Is it the same as where you sourced your firewood 20 years ago?

Yes No

If choose 'no', what is the reason?

8 (4) How far is the place where you source(d) firewood from your home?

Distance (km)

Currently

10 years ago

20 years ago

During the collective era (before 1980)

Question 9 Based on what criteria do you choose location where you source firewood?

9 (1) Location

Where can you not chop?

Reason?

9 (2) type of tree

What type of tree can you not chop/cut?

What part of the tree do you cut?

Reason?

9 (3) Size of tree

Diameter (cm)

Reason?

E.g. ease of chopping/cutting, for reasons of thinning, for ease of splitting the log, others

9 (4) What type of procedures do you need to complete before chopping?

9 (5) 10-20 years ago, did you follow the same criteria in sourcing your firewood?

Yes No

If choose 'no', reason?

Question 10 Based on what criteria do you source timber for construction (for self-consumption)?

10 (1) Location

Where can you not chop?

Reasons?

10 (2) type of tree

What type of tree can you not chop?

Reasons?

10 (3) Size of tree

What size of tree do you look for? Diameter?

Reasons?

E.g. E.g. ease of chopping, for thinning, for ease of splitting the log, others

10 (4) What procedures/paperwork/approval do you need to obtain before chopping?

10 (5) 10-20 years ago, did you follow the same criteria in sourcing timber for construction (self-consumption) purposes?

Yes No

If choose 'no', reasons:

Part 3: Villagers' awareness of village's system of forest management/protection

Question 11 (not followed through in the end)

Question 12 Respondent's response when faced with somebody doing 'damage' to forests or trees

12 (1) When you see somebody chopping (without approval) trees, what do you do?

- 1 talk to the person, ask them not to chop
- 2 report to village guards
- 3 report to village committee (village cadres)
- 4 report to township forestry station
- 5 do nothing

12 (2) 10 or 20 years ago, would you have done the same?

Yes no

If choose 'no', reasons:

Question 13

13 (1) if you see somebody doing damage to an adjacent team's forests, what would you do?

13 (2) if you see somebody doing damage to a team (in your own village)'s forests that is not adjacent to your team's forests, what would you do?

13 (3) (not followed through in actual survey)

13 (4) would you have done the same 10 or 20 years ago in the above situations?

Question 14 Respondent's views on the current forest policies/management system

14 (1) Do you think that the current forest management is the most comprehensive/complete? Yes no

If choose 'no', reason:

14 (2) Do you think the current system is better than 10 or 20 years ago?

