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Author: Zackey, Justin

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Justin Zackey

Peasant Perspectives on Deforestation in Southwest China

Social Discontent and Environmental Mismanagement

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The present article examines the causes of deforestation in southwest China on the basis of listening to peasants' own descriptions of their role in illegal timber cutting. It finds that a sense of "relative deprivation"

amongst China's rural poor has encouraged poor environmental management. Peasants justify illegal tree cutting by pointing to China's rapidly increasing inequalities, their lack of economic opportunity, and the absence of economic support from the (corrupt) government. These issues, combined with continuing institutional problems with forest management after decollectivization, convince peasants that ignoring environmental conservation edicts and cashing in on their trees is a good choice. This study identifies relative poverty and social discontent as major factors driving deforestation.

Keywords: Deforestation; environmental management; poverty; social discontent; China.

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Introduction

This study outlines ethnic minority peasants' perspectives on the causes of deforestation in southwest China. It does so through a case study of Wen Hai administrative village in Lijiang County, northwest Yunnan Province (26°58' N, 100°10' E; see Figure 1). Based on interviews with Wen Hai's Naxi and Yi inhabitants over the course of 2000–2002 and again in 2006, the study finds that peasants tend to frame the causes of deforestation in political and economic terms by highlighting issues that have emerged in the reform era—growing inequalities, lack of economic opportunity, corruption, and institutional changes that have hurt forest management. These socioeconomic outcomes of reforms have fostered resentment towards the government (and its environmental programs) and feelings of "relative deprivation" amongst peasants. Peasants then use these feelings to justify illegal tree cutting. Overall, this study argues that peasants' discontent with their diminishing place in society is playing a significant role in promoting poor forest management and has the potential to undermine well-intentioned efforts to promote sustainable forestry in the region.

Theory and method

Humans' understanding of environmental change is limited by the inevitable epistemological problem of our inability to "know" nature outside of our own social and cultural lenses (see Castree and Braun 2001). Humans' perceptions of environmental change usually reflect a combination of their knowledge about the subject, their historically-produced social biases, and their political and economic interests (Roe 1995; Fairhead and Leach 1996; Braun and Wainwright 2001). Consequently, there is usually a "plurality of perceptions" about the causes of and solutions to environmental change amongst different groups and individuals (Blaikie 1996, 2001). Certain perceptions, however, gain dominance in public and policy-making circles not necessarily based on merit, but on power. Often, the perceptions of local people who are intimately connected to the natural environment are overlooked, under-researched, or misunderstood. Therefore, in order to better grasp the causes of environmental change and what to do about it, we not only need to understand the physical processes at work, but also the social processes as perceived by different actors—especially those whose livelihoods are dependent on the natural resources we are concerned with and whose voices tend to be neglected. This opens the boundaries for analysis and creates "spaces for negotiation between different parties" for the purpose of democratically defining and solving environmental problems (Blaikie 1995).

This study attempts to give voice to peasants in southwest China by soliciting their perspectives on the causes of deforestation. It does so by focusing on the stories they told about the causes of deforestation and by situating those stories within the larger political, economic, and social context. The research for this article is based on 18 months of ethnographic field work in 2000–2002 and again in summer 2006. Research techniques included formal and informal interviews as well as participant observation. Alongside this traditional ethnography, 35 mm cameras were distributed to certain peasants who were asked to express their conservation and livelihood concerns through photography (see Wang et al 1996a, 1996b). This participatory, visual anthropological research methodology, done in conjunction with The Nature Conservancy's (TNC) "Photovoice Project," allowed peasants to dictate which issues were important to them and gave them agency to direct the focus of the study.

Patterns of deforestation in Wen Hai

Wen Hai administrative village abuts the Jade Dragon Snow Mountain Nature Reserve in Lijiang County and consists of several smaller natural villages: 2 in Wen Hai (upper and lower villages) and 4 in Xue Hua (num-

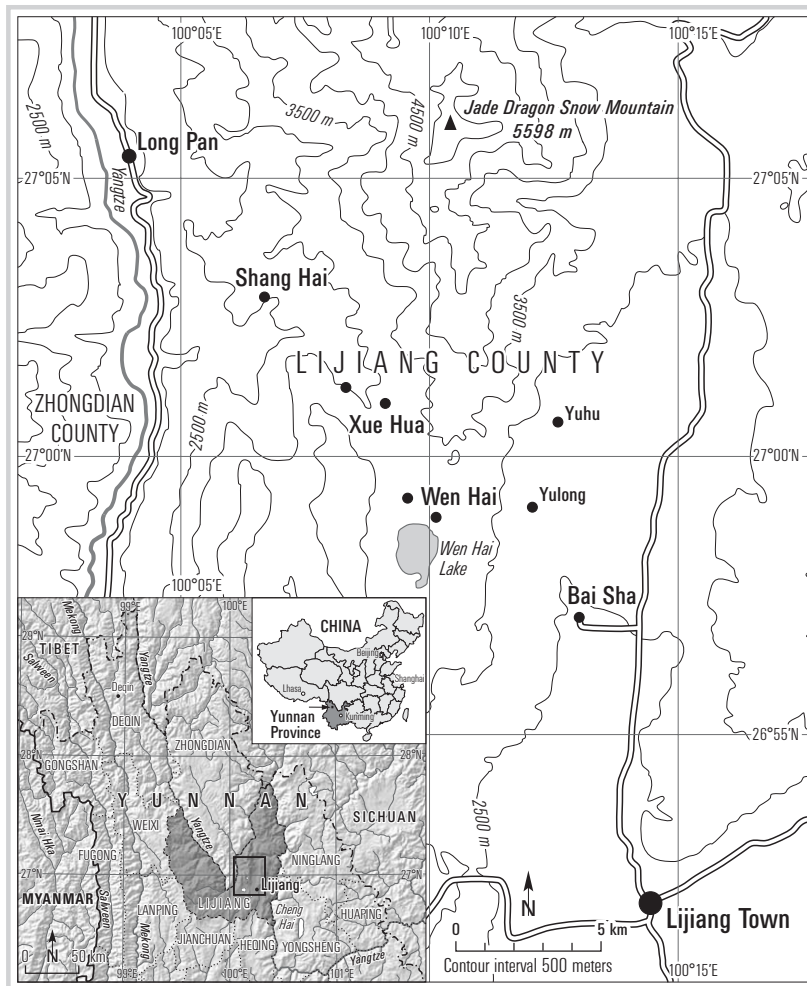


FIGURE 1 Map of the Jade Dragon Snow Mountain region, Yunnan Province, People's Republic of China. (Map by Andreas Brodbeck, based on map by Justin Zackey)

bered 1 through 4). All the natural villages are above 3000 m and are inhabited by ethnic minorities. Upper and lower Wen Hai are predominantly Naxi, and the Xue Hua cluster is exclusively Yi. Around 2004, a (dirt) motor road connecting Wen Hai to Lijiang was constructed (it is largely non-navigable during the rainy monsoon season). Previously, all transportation in and out of Wen Hai took place by horse or on foot. The primary agricultural products grown in Wen Hai and Xue Hua are potatoes, barley, buckwheat, and turnips. Animal husbandry is an important livelihood component for Wen Hai and Xue Hua peasants, with most households breeding pigs, some possessing horses and goats, and fewer owning cattle. Almost all households in Wen Hai and Xue Hua are involved in some sort of charcoal production during agricultural downtimes: this is a significant cash-earning activity for peasants.

These villages have not had any affiliation with the formal logging sector and their forests have been designated primarily for subsistence timber production.

Forests are divided into 2 types: fuelwood and timber forests. Fuelwood forests, where evergreen oak species are abundant, supply firewood and charcoal-making material. Timber forests, dominated by Yunnan pine (*Pinus yunnanensis*), are used for house-building material and supplying non-timber forest products such as pine needles, pine nuts, and mushrooms.

Rural reforms in early 1982 decollectivized management responsibilities in Wen Hai's forests. Plots of forest called "responsibility hills" and "private hills" were given to households under a contract system that gave households management responsibilities (but not actual ownership). In the early 1990s, realizing the problems associated with individual forest management, peasants in upper Wen Hai returned forests to collective arrangement (Swope et al 1997). Lower Wen Hai village, after an intense deforestation episode (see below), followed suit in 1995. Xue Hua also returned to collective arrangements in the early 1990s. In 1998, however, all of Wen Hai administrative village's forests

came under the jurisdiction of the logging ban, which made the commercial cutting or selling of timber from “natural forests” (ie any non-plantation forest) illegal in the entire upper Yangtze watershed. Under the logging ban, tree felling in Wen Hai is allowed only for subsistence purposes (ie local house building), and peasants must obtain permits in a lengthy process from village, township, and county-level officials to do so.

Wen Hai’s forests have undergone many changes over the past 70 years. Jack Ives, who was the center of tracking of these changes until the mid-1990s, obtained photographs of Wen Hai taken by Joseph Rock in 1927 and compared them with his own in 1985 (Ives 1985; Ives and Messerli 1989). Rock’s photographs showed Wen Hai’s forests in a poor state, ravaged a few years earlier by fire (Ives and He 1997). Ives’ photographs, however, showed Wen Hai’s forests in good shape. Although not argued by Ives, this photographic evidence suggests that Wen Hai’s forests were managed well during the collective era and that universalizing claims of widespread forest destruction of forests in Yunnan due to Mao’s political movements and the communal forest system may be overstated (eg Richardson 1990; Shapiro 2001).

In 1993, Ives revisited Wen Hai with a team of researchers from the University of California at Davis and the Yunnan Academy of Social Sciences and witnessed especially large amounts of tree cutting in lower Wen Hai village (Swope 1995; Ives and He 1997; Swope et al 1997; He and Yang 1998). They also witnessed timber being transported through Wen Hai from Long Pan Township bound for Lijiang. These observers concluded at the time that this deforestation was driven by a combination of confusion over forest management responsibilities in the late 1980s and the emergence of a black market for wood which gave peasants the opportunity to make cash. These observers also noted that timber cutting did not extend to upper Wen Hai village because several committed village leaders managed to rally collective authority and prevent logging (Swope et al 1997).

My own observations in Wen Hai administrative village and Long Pan Township over the course of 2000–2002 showed that, even under the logging ban, timber cutting continued. The forests in upper Wen Hai village were now being cut (see Figures 2 and 3), and timber still flowed from the forests of Long Pan Township (see Figure 4). Follow-up observations in 2006 confirmed that illegal logging has continued until today. The present study attempts to understand peasants’ contemporary motivations for illegal tree cutting. By critically listening to peasants’ explanations for why they cut trees, it produces a narrative which posits that contemporary deforestation in Wen Hai can be better understood as a response to larger economic and social transformations in China.



FIGURE 2 Taken during the 1993 visit by Jack Ives, this picture shows that upper Wen Hai village’s forests were largely intact despite the logging in lower Wen Hai. (Photo by Yang Fuquan; first published in He and Yang 1998)

FIGURE 3 Taken in 2001, this picture shows how upper Wen Hai’s forests have been severely clear-cut since Ives’ field visit in 1993. (Photo by Justin Zackey)



FIGURE 4 Logs from Long Pan Township passing through Wen Hai on the way to Lijiang, 2001. (Photo by Justin Zackey)



Peasant explanations for deforestation

Absolute poverty and the *wen bao* problem

During the first few months of my research in Wen Hai, I found that the almost universal response to my question of “Why are people cutting the trees?” was the *wen bao* problem—literally the problem of “having enough food and keeping warm.” Peasants explained that they suffered from a *wen bao* problem for a variety of reasons. The most common explanation was that the limitations of high altitude created a short growing season that prevented double-cropping. This environmental problem meant that their crops only provided enough food for 8 to 10 months of the year. Peasants explained that in order to purchase the extra food necessary, they cut and sold trees to obtain cash. Another common explanation for illegally cutting and selling trees was the steadily decreasing price for their agricultural and animal husbandry products. The potatoes, turnips, and buckwheat that they did produce were no longer com-

petitive on the market and not worth selling. Even worse, the value that they could get for their goats, horses, donkeys, and cattle, which have historically been an important component of their livelihoods, has also decreased significantly. A third common justification for illegally cutting trees was that peasants needed to pay for the educational, healthcare, and agricultural services that were previously provided virtually free of charge under the communal system.

While this sounded real and convincing, I had grown increasingly skeptical of the *wen bao* explanation for illegal timber cutting for several reasons. First, although people in Wen Hai were very poor, they were not on the brink of starvation. Second, although poverty has existed in this region for a long time, forests were managed fairly well before decollectivization. Third, I had noticed that many of the most excessive timber cutters were not from the poorest households. Instead, they were the ones with the resources (ie donkeys and labor) to engage in cutting. In fact, it was the poorest

households (eg widows, the disabled, etc) who cut the least. And lastly, illegal timber cutting from village collective forests was taking place not far away in villages in Long Pan Township and western Lijiang County (which are at lower elevations—2100 m and 1500 m respectively) which can subsist on the corn, wheat, and vegetables they grow and therefore do not have a *wen bao* problem.

One winter night several months after I first arrived in Wen Hai, while partying with my informant's extended family I challenged the *wen bao* explanation for illegal timber cutting. Lucky for me that night, one middle-aged woman cleared up the problem for me. She said, "Some cut 2 or 3 trees to pay for tuition. Others cut hundreds of trees to buy a horse. Others cut thousands of trees to move to the city and buy a taxi. People make charcoal in order to eat. Others cut trees to 'strike-it-rich.'"

This woman changed the way I looked at the relationship between poverty and tree cutting. I began to learn that most households in Wen Hai solved the *wen bao* problem by producing charcoal during the winter agricultural downtime. This laborious and dirty task earned peasants enough cash to cover most of their basic, non-emergency needs. Although charcoal cutting constituted consistent, low-intensity pressure on forests, it was far less damaging to the mountain's soils than timber cutting because charcoal is coppiced from various evergreen oak species which quickly re-sprout and continue to protect the soils from erosion. As people in Wen Hai became more trusting of my inquisitiveness, I found that the use of the *wen bao* problem to explain the relationship between poverty and the illegal cutting of timber was, in fact, more complex—perhaps even a ruse to distract outsiders like myself. Subsistence problems alone were not the major force driving timber cutting; it was something more insidious.

Relative deprivation and the fruits of rural unrest

On the surface, efforts by many households to "strike-it-rich" seemed driven primarily by greed. However, my conversations with peasants convinced me that behind the excuse of the *wen bao* problem and the façade of greed were other motivations for cutting illegally. Peasants slowly revealed that although absolute poverty induced all households to cut a few trees to supplement incomes, most households' engagement in illegal timber cutting was connected to their general discontent about their economic and social place in post-reform China.

Discussions about illegal timber cutting began to revolve around peasants' lack of economic opportunity relative to other members of society. They complained that while urban and suburban dwellers in nearby Lijiang have flourished under economic reforms and the thriving tourism industry, their own economic situation has changed little.

Peasants' observations of their diminished relative economic standing are supported by statistics which show that post-reform China has the largest and fastest growing wealth gap in the world as well as the world's most notable urban-rural disparities (Wang et al 2002). While China's economic reforms are often cited as the cause of dramatic rural economic growth and corresponding reduction in rural poverty (Lin 1992; World Bank 1992; Piazza and Liang 1998), there are still significant numbers of people not participating in the rapid rise in living standards. This is especially true in remote rural regions such as mountainous northwest Yunnan. Like many other rural citizens throughout China, peasants in Wen Hai feel they have patiently waited for the benefits of economic reforms to trickle down to them, but increasingly come to believe that they are waiting in vain. For them, economic reforms have only stripped them of their meager collective-era benefits and left them to fend for themselves.

Resentment at the lack of economic opportunity ran highest amongst Wen Hai's middle-aged men. Within Wen Hai, there was definitely a lack of work that would provide cash income for these men. Strangely, there was also a lack of economic opportunity for them in the booming tourism and construction industries in the valley below. These men claimed to have trouble penetrating these industries in nearby Lijiang for several reasons. First, they asserted that the tourism industry rejects them because its bosses want mostly young, submissive women to run its shops, restaurants, hotels, or bus-guided tours. Second, they maintained that the construction industry hires laborers via networks that tend to reject local workers. This lack of off-farm work has left many of Wen Hai's men idle and frustrated by their inability to participate in China's growing economy.

The combination of having to "fend for themselves" and a lack of economic opportunity motivated many of Wen Hai's peasants, and especially these middle-aged males, to earn money any way they could—legally or illegally. Ironically, the 1998 logging ban gave these peasants a further incentive to engage in illegal timber cutting and selling. Although the logging ban restricted the supply of timber from state and collective commercial logging enterprises, local demand for wood in northwest Yunnan remained unaffected, as the growing tourism industry and associated urban expansion fueled a construction boom. The Lijiang old town has been especially hungry for wood because, as a UNESCO World Cultural Heritage Site, its buildings must be constructed in a "traditional" fashion which requires thick trunks of Yunnan pine (Figure 5). While timber imports from Siberia, Myanmar, and other Southeast Asian countries have counteracted the supply problems caused by the logging ban to a certain extent (Yamane 2001), this timber is destined for bigger cities and industries located in

FIGURE 5 House building using the traditional fashion in Lijiang Old Town, 2002. (Photo by Justin Zackey)



eastern China, not the smaller urban areas of northwestern Yunnan, like Lijiang. This growing local demand translated into a doubling and tripling of the price that Wen Hai's peasants could get for their wood.

This rise in price, combined with the continuing demand for wood by northwest Yunnan's urban centers, has led to the emergence of underground networks that buy, transport, and illegally sell cut wood all over the countryside. Timber from villages like Wen Hai, which is fairly close to Lijiang in market terms (a day by horse), but remote from government oversight, was particularly attractive on the wood market. With the price of wood high and demand so great, the only thing standing in the way of selling the wood was illegality. This illegality, however, was overshadowed by peasants' resentment about the growing wealth gap and lack of other economic avenues.

Peasants in Wen Hai also justified illegal tree cutting by pointing to the corruption and incompetence of government officials. Often expressing disgust as they watched local officials stealing public resources, flagrantly ignoring laws, and abusing power for their own personal benefit, peasants in Wen Hai felt "why shouldn't we?" In a sense, the disrespect for the law by government officials has set a model for Wen Hai's citizens. The boundaries between legal and illegal have been blurred and a culture of "get away with what you can" has proliferated.

The general frustration with China's growing economic inequalities, lack of economic opportunity and government corruption encouraged some peasants to frame illegal logging within the context of protest. These peasants noted that their participation in illegal tree-cutting was, in essence, a message to the government about their economic situation.

Poverty, therefore, was indeed a factor driving deforestation. However, absolute poverty was not the primary cause. Instead, peasants blamed illegal timber cutting on their lack of economic opportunity and justified it by pointing to their relative economic and social place in society. For them, their efforts to “strike-it-rich” were no different than what their urban counterparts throughout China were doing. Earning cash through illegal timbering was a way for them to take matters into their own hands because their (relative) economic needs were being neglected by an unresponsive and corrupt government.

The lingering externalities of forest decollectivization on management

While both absolute and relative poverty, coupled with high prices for wood, were driving many peasants to cut timber illegally, there was another incentive that induced even the most reluctant to join in. These reluctant individuals—mostly comprised of village leaders and older peasants—initially watched as their fellow villagers cut down their allotted plots of collective forest. As poaching began, and efforts to prevent it were unsuccessful, these peasants became both angry at and jealous of those who were enriching themselves on the village’s collective resources. While many of the most aggressive cutters in the village were using their newfound wealth to construct new homes, buy cattle or move to the city, these reluctant peasants increasingly felt that they were being left behind. To them, their neighbor’s climb up the economic ladder at the expense of others was a local example of what was going on throughout the country.

Initially, senior members of this group petitioned local authorities for help. They visited the local township forest bureau several times pleading for assistance in managing their forests but each time were ignored. Peasants’ complaints about the township forest bureau’s lack of interest in their plight were not unfounded. I later met the head of the bureau and he proved to be much more interested in taking his new “foreign friend” drinking and carousing than talking about forest management or hiking in the woods. In the 18 months of my research, I encountered only a few instances of attempts by county and provincial-level authorities to punish illegal logging. Their regulation consisted of fining a few people and scolding the local forest guards for not doing their job. As soon as they left, however, the sound of axe on wood and the sight of horses lugging wood always sprang up again.

Overall, forest guards noted that while the pressure on the village’s forests had increased in the post-reform period, they had received no sustained help from upper levels of government in their efforts to prevent poaching and illegal lumbering. Their cries for help unheeded,

this group of peasants saw two stark choices—join in the cutting or stand idly by as their timber was poached and they descended to the bottom of Wen Hai’s economic ladder. Almost all decided to follow suit before it was too late.

These findings, which identify peasants’ resentment towards upper levels of government for their inaction in stemming deforestation, mirror earlier findings by Swope et al (1997) in 1993. However, this research shows that many peasants also placed blame for these management problems directly on China’s economic and forestry reforms. For instance, forest guards claimed that decollectivization dismantled the local-level institutions that had governed forests in Wen Hai so well during the communal era (as can be seen from the previous photographs), so when disputes did erupt villagers were left without the institutional avenues to resolve them. They also noted that the decollectivization process blurred ownership and management rights, did a poor job at delineating the boundaries between family plots, and led to an increase in disputes unseen during the collective era. Perhaps the most interesting argument, however, was that they felt that reforms had undermined the community fabric by promoting individualistic behavior and melting the social glue of the commune. As a former village forest guard said:

“Reforms have caused a lot of the (forest) management problems. Reforms have many good points, but they have also given people the freedom to do as they please. We cannot stop the wood cutting. People care about their individual lives. They say, ‘I am just making a living.’ What authority do I have to stop them?”

Economic reforms have created difficulty for authorities in implementing and enforcing regulations (Cannon 2000). The 1998 logging ban was implemented, in part, to quell these problems regarding forestry by increasing the power of the central and provincial governments to regulate all forests. However, it left management and oversight responsibilities of village-collective forests to locals. And, in reality, central and provincial authorities have been focused on protecting state forests, while leaving collectively-owned (both commercial and subsistence) forests to fend for themselves. This is problematic because, in both Lijiang and Zhongdian counties, much forested land is owned by collectives (77% and 40% respectively; ZCG 1997; LPFB 1998).

Overall, this group of peasants participated in illegal logging after making efforts to stop it. Lamenting that illegal logging in Wen Hai could have been prevented with the help of township and county-level authorities, these peasants focused their anger on a government that was unresponsive to their cries for help.

Discussion

Social discontent towards economic reforms and deforestation

In Wen Hai, all peasants, in one form or other, justified their decision to cut trees illegally by pointing to their languishing social and economic position in reform-era China. Many peasants, frustrated with the country's growing economic disparities and their relative lack of economic opportunity, cut their trees as a way to "strike-it-rich" just as others were doing in China. Others, acting on the basis of these same frustrations, engaged in illegal cutting as a protest to attract the attention of government officials to their economic plight. Some, angry at government refusals to help them manage their forests, engaged in cutting out of fear of falling behind their neighbors socially and out of spite towards government officials who seemed not to care about them. Finally, all peasants justified cutting by pointing to growing corruption and their unhappiness about the retraction of agricultural subsidies and basic social services previously provided under the communal system.

These findings, however, need to be viewed in the larger context of protest and resistance that is developing in China today. The negative externalities of economic reforms have caused rising discontent amongst ordinary Chinese. Throughout China the number of officially-recorded protests has skyrocketed from around 10,000 in 1994 to 74,000 in 2004 to 97,000 in 2005. In general, local issues such as corruption or environmental pollution have been driving these protests, and there has yet to be a cohesive ideological or organizational bond between them (Perry and Selden 2000). Yet all these protests can be seen as responses to problems that have developed in the reform era. Peasants around Jade Dragon Snow Mountain seem to have expressed their discontent about reform-era problems in another way. Instead of marching on local government offices, blockading roads or refusing to pay taxes, they actively decided to ignore environmental edicts and cut down their timber.

This response by Wen Hai's peasants confirms some scholars' worries about the ramifications of the growing sense of "relative deprivation" amongst China's poor (Perry and Selden 2000). In Wen Hai, peasants' frustration with their continued poverty while their urban comrades prosper increased their disdain for environmental programs that didn't give them any benefits. Part of the Communist Party's legitimacy is based on its ability to control income disparities, and the growing wealth gap combined with the lack of government economic attention to remote rural areas is undermining both the Party and the environmental programs that they create. Undoubtedly, Wen Hai's frustrated inhabitants represent large scores of China's population that

have been disappointed by the unrealized expectations of economic reforms. If the overuse of natural resources is justified as an effort to participate in China's economic boom, or an act of protest, or a display of spite for government inattention, as it was in Wen Hai, efforts to promote sustainable resource use in China's forests by government agencies and international organizations will be adversely impacted.

Implications for environmental management

These findings show that China's current societal trends do not bode well for environmental management in the poor mountainous areas of northwest Yunnan. So, what can we say about supporting environmental policy given this information? First, environmental policies in China need to reconsider the relationship between poverty and environmental degradation. While environmental awareness amongst policy-makers in China has grown at tremendous rates, they have tended to focus only on the impact of absolute poverty on environmental management. This shallow focus on the subsistence aspects of poverty tends to ignore the implications of China's rapidly changing class structures on environmental management. As this study has shown, the psychological impacts of relative poverty have damaging impacts on environmental management. Conservation and equality are interlinked. China's rural poor will have little incentive to manage resources in a sustainable manner for the "greater" concerns of biodiversity protection, watershed health, or tourism scenery if they are continually marginalized by society.

Second, we should not reify peasants as noble actors whose mystical indigenous knowledge can solve all problems; nor should we demonize them as self-interested, myopic, and in need of environmental education. Depending on these oversimplified caricatures of peasants to explain deforestation will only lead to poor understanding of their motivations, and consequently poor environmental policy. Peasants should be seen as complex actors—with concerns, anxieties, and hopes—making self-interested choices within a larger socioeconomic context (Popkin 1979). They should also be seen as a very diverse group with motivations that vary from individual to individual. Most of Wen Hai's peasants, first and foremost, like most other humans on the face of the Earth, concentrate on their own livelihood concerns and relative socioeconomic standing in society. In order for conservation policy to be effective, it should be focused on providing peasants with avenues to close the gap between their moneyed urban counterparts and themselves. Placing peasants' interests at the center of the deforestation debate and satisfying their needs should be a priority if we want them to help conserve the resources amongst which they live.

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AUTHOR

Justin Zackey

Center for Chinese Studies, University of California, 2223 Fulton Street, Room 506, Berkeley, CA 94720-2328, USA.

jzackey@berkeley.edu

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