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FINAL REPORT: "Great Western Development" for Whom? Dams and Resource Equity in China's Yunnan Province

I had been in the Nu River valley about a week when we decided to head out to the Abiluo dam site. After a quick breakfast of noodles for my research assistant and our local guide, and Nescafe for me, Old "Ma" arrived to show us the way. Though he wasn't all that old, Old Ma, a math teacher at the local high school, had an air of authority that seemed to impress everyone in the village of Gudung. Shopkeepers and vegetable sellers drinking their breakfasts of corn liquor nodded solemnly towards Old Ma as he walked down the village's one street, toward us. Together, we boarded a tiny "bread loaf" minibus, and held on for a bumpy half hour ride to the bridge to Abiluo. Though I had yet to conduct a formal interview with Old Ma, I already knew quite a bit about him. For one, he supported the dams planned for the Nu River, and development of the river valley in general; he believed in what I started to call the "trickle down" theory, that the dams would make the local government rich and this would in turn benefit the people. Old Ma was a member of the Bai minority, and took pride in that fact that the Bai were known to be highly intelligent, very good at careers such as teaching, translation, government work, and science. Old Ma actually looked forward to the dams; it would mean moving back up into the hills where he had grown up, and possibly enjoying an early retirement in the mountain air that he loved. He smoked incessantly, gesticulating with his cigarette towards the walls of the canyon walls as we bumped along, pointing to paths leading to mid-slope villages, paths that might soon be covered with water.

At the Abiluo bridge, we met up with an elderly man in traditional minority clothing making his way back to his village on the other side. He paused to talk with us and I took out a pack of cigarettes to share. Old Ma and the man spoke slowly together in Lisu dialect and our local guide, "Hu," translated nervously. Yes, this was the dam site, right where the bridge was. There was a rock up on the hill on the other side the "company" had marked…how far?...oh about two hours walk, well, maybe longer for you…people from the company had been here not too long ago…yes, he thought the dams would be good, maybe there'd be a new road and he could drive instead of walk back to his village. Who was this foreigner, anyhow?

Everyone smiled and nodded as I rehearsed my line once again: I was a graduate student from America, and I was interested in studying the relationship between people and the river here.

I remember feeling anxious that morning; I doubted whether I'd come away from my summer research trip with any solid data at all. It had been hard to arrange formal interviews; people were uncomfortable with the concept of one-on-one questioning, and I'd had to resort to group discussions or informal, unstructured chats. Plus I'd had little luck getting specific data on the dam project from the prefecture government; all of the

project documents were *neibu* – internal – and furthermore, few officials were able to provide me with formal interviews at the time because the dam issue was "too sensitive." Plus they were busy dealing with the aftermath of a month of severe flooding. Despite such setbacks, I pressed on, hoping that what little information I could gather would somehow coalesce into something meaningful.

Now looking back on the morning I went to the Abiluo dam site, one small chapter of my summer, I am amazed with the richness of meaning it provides. One of the key questions I hoped to explore through the Berkeley Human Rights Center summer fellowship was, what are the potential costs and benefits of the Nu River dam project to the local population? That morning, I learned that I'd need to think more about potential secondary benefits of the project that might "trickle down" to communities that were largely dependant on government subsidies. Another question I had was, how well informed is the local population about the 13-dam cascade planned for the valley? Here were two data points: a well educated, middle-aged Bai man and an elderly, illiterate (I know this because he said he could not read what the rock said about the dam site) Lisu man, both informed about the project, mostly through television and word of mouth. Further, the Abiluo field trip gave me the chance to informally assess what kinds of impacts a dam might have on the immediate environment. A major rapid, named after a local fable, "Tiger Leaping Rock," would be buried by the reservoir; perhaps the road that ran along the river would have to be reconstructed as well, and nearby villages might be inundated. Eroding slopes indicated there might be siltation problems as the reservoir rose.

Mornings like the Abiluo dam site trip also taught me a great deal about doing fieldwork in China. I now recognize the extent to which my experiences were necessarily modified by working as a team with Hu, Old Ma, and my research assistant. For example, I remember I had wanted to stay near the dam site that morning to interview some workers that were testing rock nearby; but it would soon be lunchtime, and everyone else was anxious to get back to town. Reluctantly, I returned with them, knowing I never would have known the old Lisu man's opinion without the help of my companions. I learned how to tap into my own inner sources of patience and perseverance. And I've become much more self conscious about what impact, however large or small, my presence along the river has on those I came in contact with, and how my questions about the dam and local livelihoods and water resource use sound to those I speak with. And I learned that as I research, I change too.

In this report, I begin the process of analyzing the data I collected over the summer, presenting some initial theories regarding the role of anti-dam NGOs in China, local river uses and values, and local government decision making processes. I will also reflect on how the trip has modified some of the methods of data collection that I hope to use in future trips. I conclude with some observations about the future challenge to domestic and international opponents of the Nu River dam project and the implications of my work for human rights in China.

Project Background

Ever since the 5th century BC, water management has stood as a central philosophical debate in China; Taoists thought that rivers should be left to follow their own course, with levees set low and wide, and Confucianists thought that rivers should be

constrained by high dikes. China's first Emperor, Yu the Great, is famed for having saved his people by diverting the floodwaters of the Yellow River. In the 1950s, Karl Wittfogel explored the idea that imperial China was actually founded on centrally coordinated waterworks projects, leading him to develop his theory of oriental despotism. Indeed, China's leaders, from Sun Yat-Sen, to Mao Zedong, to Li Peng, have all put large dam projects high on their political agendas. Historic and Marxist legacies now contribute to a modern day "water management culture" (*shuili wenhua)* that continues to emphasize strong central control (Boxer, 2001). Add to this culture the practical problems of chronic floods in the South, perpetual water shortages in the North, and an ever increasing need for energy, and it becomes somewhat understandable why China has already built half the world's estimated 45,000 large dams, and plans to build hundreds more in the near future (Fuggle and Smith, 2000).

The eye of China's modern day dam building storm is Yunnan Province, which by some accounts holds 24% of China's hydropower potential (Dore and Yu, 2004). This fact has not escaped the notice of government planners and hydropower companies, who hope to construct at least 30 large dams and hundreds of smaller projects in northwest Yunnan's "Three Parallel Rivers" area, where the Nu (Salween), Mekong, and upper Yangtze Rivers cascade off the Tibetan plateau.

In 2003, the Three Parallel River region's impressive geology, biological diversity, and cultural heritage prompted UNESCO to designate it as a World Natural Heritage Site. Then in the spring of 2004, China's Premier Wen Jiabao made the surprise decision to suspend the Nu River dam project, citing the need for more thorough investigations of the potential environmental and social impacts of the dams. By some accounts, Wen Jiabao's announcement signaled a major shift in the history of China's dams. It represented the first time a national leader in China had acted on the side of precaution, and it demonstrated the strength of a growing coalition of scientists, environmental activists, and journalists critical of China's aggressive dam campaigns. As the dam project may have profound environmental and economic impacts on the downstream country of Burma, the decision also represented, for some, China's acknowledgement of its transboundary environmental responsibilities. While debate over the dam project has indeed been unusually candid, the ultimate fate of the Nu River appears largely to remain in the hands of an elite circle of provincial and central planners working closely with the Huadian hydropower company. Civil society actors and scientists have been marginal to the process, and at the furthest peripheries are local communities who would be most directly affected by the dams.

My research aims to help bring to light the previously unexamined perspective of the local residents and the local government of the Nu River valley. It examines current river uses and values, as well as the local government's motivations and constraints in planning for the future of the region and representing the needs of their constituency. In terms of theoretical contributions, I hope my research will provide insight into the relative importance of historical contexts, central environmental and social policies, state decentralization, and organizational structure and culture on local government decision making and access to power in reform-era China. The research I undertook this summer as a UC Berkeley Human Rights Center fellow represented the first of three phases of field research that I will undertake to complete this project.

Sponsoring Organization

International Rivers Network (IRN) acted as my sponsoring organization for the Human Rights Center summer fellowship. IRN is a Berkeley, CA based organization whose mission is to: "support local communities working to protect their rivers and watersheds…and to halt destructive river development projects, and to encourage equitable and sustainable methods of meeting needs for water, energy and flood management." (www.irn.org) Working with IRN had both positive and negative components. First, IRN does not have an office in China, though their staff frequently travels to China and the organization has many contacts with the anti-dam NGO community, as well as a correspondent in Hong Kong who provides a steady stream of translated media coverage on China's dams. Lack of an on-site organizational affiliation meant that I was on my own for most of the summer, and did not directly work with or through the direction of IRN staff at any point in the project. Cooperating with IRN largely meant having access to their extensive network of contacts and source of information on Chinese dam projects, which were invaluable in helping me prepare myself for my trip. Before I left, we consulted about what I might be able to help them with over the course of my research. I hoped I would be able to contribute to the following:

- Improvement in the level of analysis and argument IRN and local NGOs in China are able to make regarding the needs of potential dam-impacted communities on the upper Nu River;
- A greater understanding of the leverage points that may be effective in slowing, altering, or mitigating the negative impacts of the upper Nu River dams and other dams in the region;
- Stronger connections between international and domestic organizations concerned with the dams planned for Yunnan Province;
- Knowledge of opportunities and constraints activists and scientists may face in gaining access to dam sites, communicating with dam officials and water ministers, and assessing community needs in the region.

Upon returning to the States, I shared my thoughts on these matters with IRN staff. My findings are reported below in my "outcomes."

Proposed Research Plan and What I Actually Did

I stayed fairly close to my research plan for the summer; I spent the first two months in Kunming, the provincial capital of Yunnan. A number of domestic and international environmental non-profit organizations have offices in Kunming and there are a number of academic institutions, and I knew it would be a good home base. I spent quite a bit of time interviewing staff at various organizations, meeting with academics, "hanging out" at events they were having, and pouring through documents in their files.

I realized quickly after arriving in Kunming, however, that one of my biggest obstacles in carrying out my research was not having a *danwei* (work unit). Since the founding of the People's Republic, urban life in China has revolved around the *danwei*, which is not just one's place of work – it is the conduit through which housing and all social services are provided, and it is central to one's identity in China. Having an affiliation with a *danwei* is a critical door-opener in all manners of business; people tend

to view unaffiliated foreign graduate students with particular suspicion, even when they come from well-known foreign institutions such as Berkeley.

Through a stroke of luck, during the first week I arrived in China I met the staff of a small NGO based on the Yunnan University campus that needed a part time English speaking volunteer. The American director of the project offered me use of his office on campus in exchange for doing a small amount of work helping to build a biodiversity data base called the "Yunnan Natural Heritage Data Center," modeled after the state-by-state natural heritage database system in the U.S. My job was to gather information on collections of plant and animal specimens in the province, and write a report on the province's system of conservation management. This opportunity not only gave me an official affiliation with a *danwei* - Yunnan University - it also provided me with the chance to gain *entrée* to many of the centers of research in Kunming. In addition, the research itself helped me gain a broader understanding of: the role of science in environmental planning and management in China; the natural resource management structure in the region I would be doing my field work; and, some of the practical issues of scientific collaboration between the U.S. and China. Another outcome of this unexpected opportunity was meeting my future field research assistant, "Danielle," a recent University graduate who also worked as a volunteer on the data base project.

During August Danielle and I conducted field work in the Nu River Valley. It was an interesting choice in terms of timing, as June and July are the height monsoon season, and communities along the river were still reeling from severe flooding just days before we arrived. In one village, several people had been killed when a tributary suddenly swelled. For a while I was not sure if we would be able to make the trip at all, due to road closures in the area. While we had no serious problems with transportation, we did experience several delays due to landslides on the only road that services the river valley. On the other hand, it was useful to observe the prefecture government in a state of crisis, although this also meant that it was harder to get interviews with them. Almost every official I spoke with, particularly in the prefecture seat of Liuku, had been working round the clock for several weeks to deal with the flooding.

I ended up spending three weeks in the Nu River valley, conducting formal and informal interviews with people I met along the way and trying to get meetings with local bureaucrats in the three primary towns along the river – Liuku, Fugong, and Gongshan. In addition I tried to investigate as many of the 13 proposed dam sites as I could, locating them, noting environmental conditions and settlement in the area, and taking pictures. I returned to Kunming in late August and shortly thereafter returned to the U.S.

Outcomes: The Anti-Dam Campaign

A growing number of Chinese environmental non-governmental organizations, in addition to playing an important role increasing environmental awareness in China, are broadening the role played by civil society actors in environmental decision making and enforcement. Debates about the impact of these NGOs abound in the academic literature (Economy, Litzinger, Perry and Seldon, Saich). During my first two months in China, I spent quite a bit of time talking with people working at various non-profit organizations in Kunming, Yunnan. Perhaps because of a combination of its historic roots as a regional trade hub, its culture of independence from Beijing, its proximity to China's Southeast Asian neighbors, and its current popularity as gateway for "ecotourism" in Southwest

China, Kunming is now second only to Beijing in terms of its concentration of environmental, health and poverty alleviation NGOs. The main groups working on the anti-dam campaign include China Green Watershed (CGW), and the Asian International Rivers Center (AIRC). Other NGOs located in Kunming include The Nature Conservancy, the Center for Biodiversity and Indigenous Knowledge, Oxfam, Greenpeace, and Save the Children (UK). Kunming, as the provincial capital of Yunnan, also has a number of universities, colleges, and institutes, many of which conduct research on regional biodiversity, sustainable development, and minority cultures. Notable among these are the Institute for Ecology and Geobotany at Yunnan University, the Kunming Institute of Zoology, the Kunming Institute of Botany, the Southwest Forestry College, and the Xishuangbanna Tropical Botanical Garden, the Institutes of Nationalities and Ethnography of the Yunnan Academy of Social Sciences, and the Center for Resource, Environment, and Development at the Chinese Academy of Sciences Kunming.

I focused on spending as much time as I could with staff of CGW and AIRC, the two groups that have taken the most public anti-dam stance. Attending meetings, hanging out in offices, participating in events, and conducting interviews with staff members gave me a glimpse of life inside a Chinese NGO. From the human rights perspective, I brought two questions: first, how free are these groups to organize and speak out against dams? Second, are human rights issues incorporated into their campaigns, and if so, how?

In regards to the first question, I found that CGW, AIRC, and the numerous activist-reporters covering the issue of the Nu River dams, while aware of many of the social inequities of China's dam building agenda, had chosen to frame their campaigns largely as conserving the region's natural, not human, heritage. This likely has been a conscious decision, for three very sound reasons. First, criticizing a dam project on the grounds that it would spoil China's natural heritage currently has more salience among decision makers such as Wen Jiabao, who has roots in the environmental cause. Further, pointing out the potential impact on minority communities in the region, no matter how egregious, touches on the sensitive issue of minority rights that many leaders in Beijing are loathe to address. Besides, millions of people have been displaced by the Three Gorges Dam on the Yangtze River – why should anyone care if a hundred thousand or so have to move in western Yunnan? Secondly, in choosing a nature-based frame, the campaign echoes and builds on the concern of members of the scientific establishment in China that the dam project would diminish opportunities for discovery. Finally, anti-dam advocates have realized the real hook, the one that may have captured Premier Wen Jiabao's attention, was that China already had so many dammed up rivers; leaving one river undammed had broad, national value.

In practice, however, it became clear to me that CGW, especially, understood and was motivated by concerns for cultural heritage, self-determinacy, and democracy. One of the main leaders in the organization had spent years of his life living among the people of the Nu River valley, and wrote a book describing their use of natural resources, their customs, and their history. The CGW office was decorated in traditional weavings and basketry of Yunnan's minority groups, and photographs of people, not rivers (in contrast with the AIRC offices, which were businesslike and stark and had no photographs at all).

In July, CGW sponsored a trip to Kunming for about two dozen local leaders and citizens from the Nu River and neighboring Mekong River. The purpose of their trip was

to participate in three days of activist training sessions and a public forum, to which I was invited, along with staff from other NGOs, members of a student environmental groups, and academics. The forum took place in a former warehouse that had been renovated into a gallery/café, in a popular arts complex known as "the loft." After a few introductions, CGW's director showed the group a film made by a prominent TV producer documenting a recent field trip made by CGW and locals from the Nu River to the Mekong River, where the construction of two dams had brought many disappointments and disasters for the local people. The idea of the trip was to show people from the Nu River, some of whom had never left their valley before, what the dams might mean for their community; and CGW had thoughtfully invited a TV film crew along to capture the experience. The media generated from the trip ended up shedding quite a negative light on the failures of the dam relocation efforts for the Mekong Dams. After CGW showed the film, I realized some of the people in the film were also in the audience. A lively discussion followed about campaign tactics, with residents of the Nu and Mekong river areas expressing their concerns, students asking what they could do to help, and CGW staff and others offering suggestions. It was, in short, a remarkable event; an open, public discussion about how to stop dams from being built through rights-based resistance, dams that the provincial government offices just a few kilometers down the street had every intention to build.

In some ways, the amount of freedom CGW and AIRC has had to vocalize criticisms of the Nu River dam project and to promote collective action has been remarkable. It signals a change in atmosphere regarding the role NGOs, and civil society in general, may be able to play in decision making regarding China's development process. But during my time in Kunming, I also had the opportunity of witnessing the limits, both internal and external, to these advances.

First, it became clear to me that there were still external constraints as to how far CGW and AIRC could go in terms of mass organization. In talking with the staff at CGW, I learned that the organization had recently been "inspected" by the Public Security Bureau (the PSB – the police arm of the Chinese government). The CGW staff had willingly showed the guards their office, and explained the legal basis on which they operated. The guards concerns appeared to be alleviated, but they warned the staff that if they ever tried to organize any kind of demonstration, they would immediately be shut down. Later, after I returned from China, I learned that CGW had been further scrutinized by the PSB after word got out about their organizing work with the Nu and Mekong river villagers this summer; they have since been forced to put public organizing on the back burner.

Despite its more neutral, academic stance on the dam issue, AIRC had certainly felt its share of heat as well. AIRC's director, a prominent professor at Yunnan University, recently received a very large and important grant from the central government to carry out a multi-year study of transboundary economic development among Yunnan and its Southeast Asian neighbors. His prominence in Chinese and international academic circles have made his statements against the dams all the more frustrating to the pro-dam Yunnan government. As one consequence, the provincial government forced AIRC to cancel, at the last minute, the transboundary water management conference they had been planning to host this past summer. Not only did the government have little reason to trust AIRC, but they had also had gotten wind that members of the Mekong River Commission, a transnational committee which China has

never deigned to join, had planned to attend. One of the conference organizers told me that the provincial government probably feared mass demonstrations or other forms of public criticism regarding their dam projects on Yunnan's transboundary rivers. The conference has been rescheduled for March of this year, and will take place, instead, in Northern Thailand.

In addition, there are internal limitations on the capacity of these groups to organize stemming from personal differences among movement leaders, battles for turf, organizational capacity, and the particularly top-heavy nature of most Chinese NGOs. This problem became apparent to me in several ways. First, when Premier Wen Jiabao announced the suspension of the Nu River dam project, rather than using the success to bolster the anti-dam campaign, NGO leaders and media activists immediately began to fight over credit for the triumph. Was it AIRC's leader, who had marshaled the scientific community to point out the flaws in the plan? Was the media, who had aired probing stories on TV and run scathing indictments in the press? Was it members of the Chinese Academy of Social Sciences, who had issued a report to Wen Jiabao that apparently had made him aware of the issue in the first place? Or, was it the letter from 76 different civil society groups in 33 different countries sent to China's President Hu Jintao, voicing criticisms of the dams? I don't think anyone knows for sure exactly what prompted the suspension, but all of them wanted to claim as much credit as they could.

I also learned that CGW and AIRC did absolutely no work together, despite their common mission, mainly because the organizations' leadership could not stand each other. Typical of many Chinese NGOs, these groups are very dependant on and built around the personalities and personal connections of their leaders. Perhaps because it is still quite difficult and risky to start an NGO in China, many of those that do take root are headed by charismatic leaders that have become prominent in other fields, and that have a certain personal dynamism and the necessary *guanxi* (personal connections) to do their work. Such individuals may have a particularly difficult time getting along, despite, or perhaps more because of, common goals. Further, they take on an incredible amount of the work conducted by the organization, rather than delegating to staff. As a former organizer myself, I immediately took heed of this lack of ability to form a coalition, and share work and credit, and began to think of it as a potential problem for the campaign. These people can't afford not to work together, I thought. But I also wondered if in some way, keeping a certain amount of separation served as a safety measure as well. If one group received too much heat, the other could pick up the slack. Further, the groups might have been at least attempting to work together more than I recognized; I learned that shortly after the Premier's announcement, a leading international NGO had organized a covert meeting in neighboring Sichuan Province for the top leaders in the anti-dam campaign, where they had attempted to strengthen their collective efforts. I am not, however, aware of any further progress in this regard.

In sum, I found myself torn between wishing the anti-dam groups would shore up collective efforts and become much more aggressive tactics to bolster their cause, and on the other hand, fearing for their survival. I became concerned that the way the Chinese media had been telling the story of the Nu River controversy – as one of little environmental group "Davids" against big hydropower company "Golliaths" – might result in further backlash against these groups. Media has been an important part of the campaign, but the story has been over-dramatized and may prompt Huadian and the

provincial authorities to scapegoat environmental groups if the project does not happen. There is an important role for these groups beyond the Nu River campaign, and it would be a shame if one controversial project meant several steps back for the role they are able to play in regional environmental planning.

Outcomes: River Values and Uses

A primary purpose of my trip to the Nu River valley was to determine local uses and values associated with the river. I wanted to find out how people used the river's resources, and what they thought of the river – what it represented to them, and to their cultures. I had found nothing on this issue in the material I had read, and it struck me as an important consideration in assessing the potential impact of the 13 dams. Though I did not specifically set out to find out what people thought about the proposed dam project, before I set off for the river my contacts in Kunming NGOs offered various opinions about what they thought local peoples' attitudes about the dams would be. I did not set out to conduct a systematic survey of these attitudes, but the topic came up frequently. I developed the impression that one could find pro-dam and anti-dam attitudes throughout the valley, depending on who you asked. More importantly, peoples' reasons for holding their opinions varied significantly; some people appeared purely self-interested, while others formulated opinions based on much broader philosophical or moral foundations.

The opinion Mr. Ma held of the dam – the "trickle down" point of view - turned out to be fairly common. Many people along the river, not just the poorest, benefited from government subsidies that helped them send their kids to school and buy rice, and many lived in homes the government had built and paid for. Perhaps in part because of the recent flooding and the local governments' valiant relief efforts, a number of people I spoke with were quick to defend their leaders and the support they provided their communities. Others, however, thought the dams would only benefit the hydro company, and perhaps pad the pockets of "corrupt" local and provincial leaders. Many of the older people I met did not want to move; they were attached to their land and hated to be bothered with having to resettle somewhere else. A number of young people expressed concern about the impact of the dams on the environment. Some expressed a sense of connection to the river, saying that it was a part of them, and that they did not want to leave it nor did they want to see it changed. But, even more commonly, I found people somewhat disgusted by the fact that the great, raging Nu flowed freely to the ocean without benefiting anyone. As one interviewee put it, "The Nu only harms us, it never helps us." To many people, the dams were a symbol of development, of controlling the floods, and of future wealth.

The government, as well as the NGOs concerned about the dams, has made assumptions about the people living in the Nu River and what they wanted. Despite their limited access to information, people along the river who had heard about the project were surprisingly candid in sharing with me their views on what it might mean for their future. I look forward to returning and deepening my understanding of these views.

In my interviews, as well as in the process of observing the river as we traveled, I also focused on assessing the current uses of and non-material values associated with the river. I asked about irrigation, drinking water, sanitation, fisheries, small scale agriculture, religious beliefs, stories, dangers, benefits…anything that might get to the heart of the question of how these communities whose history had been intertwined with

the river for centuries had changed and been changed by it. Not surprisingly, no one seemed to see the river the same way I did. Even the old photographer whose gallery I visited in Liuku, who created haunting images of the marvels of the canyon, thought the dams were a fantastic idea. No one looked at the river and marveled at the force of its unchecked flow, the beauty of its Grand Canyon like rapids, and the vigor of its riparian plant communities. I wanted to see the river with their eyes, but I also wanted to see with mine, eyes that had been looking at flowing water in a certain way, ever since the first time I tipped a canoe in a rapid on Utah's Green River. I wanted to see the river for what it was for people living there, but also what it was for me.

One thing I noticed is that most of the suitable rice paddy farmland is found on the banks of the river in the alluvial plains formed by the river's many tributaries. The reservoirs would flood most of these areas. Farming in the region is for subsistence, not export, and imported food products are expensive. Little or no suitable paddy farmland is available in the middle slopes of the mountains, where most people would move were the dams to come. While farmers in the valley have been practicing steep slope, shallow till agriculture for hundreds if not thousands of years, these practices are not suitable for the production of rice, which has become a staple of the regional diet. An associated issue is the fact that many villagers had in the past ten years been moved from the mid slopes downhill to the floodplain areas by the government, in a campaign to improve compliance with anti-logging measures. One person I interviewed said that it would be hard to convince people to move from their new, government-built homes along the river back up to their former villages, very few of which had road access. (Mr. Ma's nostalgia for the old upslope villages, of course, contradicts this sentiment).

In addition, I observed and discussed with interviewees the following uses:

<u>Irrigation/Water Supply:</u> Most of the water used in irrigation, drinking water, and sanitation actually comes from the many tributaries to the river, rather than the river itself. The streams, which flow year round, are diverted into complex mazes of concrete canals and ditches that flow out across the land and through communities by gravity. Some crops are non-irrigated and require seasonal rains and the natural flood cycle of the river.

<u>Driftwood:</u> Local people burn a lot of driftwood for cooking. Piles of it decorated porches in the villages I walked through. On several occasions I observed people collecting driftwood from the large boulders that line the river. I asked a few people if this practice was a result of the logging ban; they responded that no, they'd always used driftwood to cook with. It was easier than cutting trees, and abundant.

<u>Riparian Plants:</u> Despite the valley road and the pockets of development along it, the steepness of the Nu River's slopes have allowed some riparian areas along the river to flourish. Giant hardwood trees grow at crazy angles out of the cliff walls, hung with vines and orchids, ferns, and thousands of other tropical plant species. On a few occasions, I noticed people collecting wild plants, mostly for food, medicine, and animal fodder. One day met I a researcher from the Yunnan College of Traditional medicine launching a study on the rare and endemic medicinal plants of the river valley. He told me no studies of that kind had ever been done, and that so far, his team had collected some one hundred rare medicinal plants in one section alone. Another man I met made a sizeable income working as an orchid hunter. The Nu River valley is so steep that there are several

distinct bioregions extending from subtropical valley floor to alpine mountain peaks. Reservoirs would cover an area of unique biological diversity and utility.

Fisheries: Several people told me, some with anger, that it was useless to fish in the Nu River anymore. The practice of dynamite fishing had become widespread in the eighties, and now one had to fish for a week to catch enough for just one meal. Others told me that the river was too fast, too turbid, and few fish could survive in such an environment. In reality, fairly little is known about the aquatic biological communities of the Nu River – the species it supports, their habitat requirements. I did not expect, however, that the practice of fishing, which had once been widespread in the valley, would now be so uncommon. I only saw one or two anglers during my whole trip.

Sand, Gravel, Rock: In a number of areas, I noticed small scale extraction of river rock, gravel, and sand, as well as more intensive cinder block production (made from river sand) and quarry operations. A mining investor I met during my trip told me that the Nu River had incredible, largely untapped mineral resources. While small in scale, present operations nonetheless would be mostly destroyed by a dam project. In neighboring Sichuan Province, a man had recently used a suicide bomb to kill himself and the operator of a small hydropower plant, who he held responsible for the unfair compensation he had received for land he had used for gravel extraction.

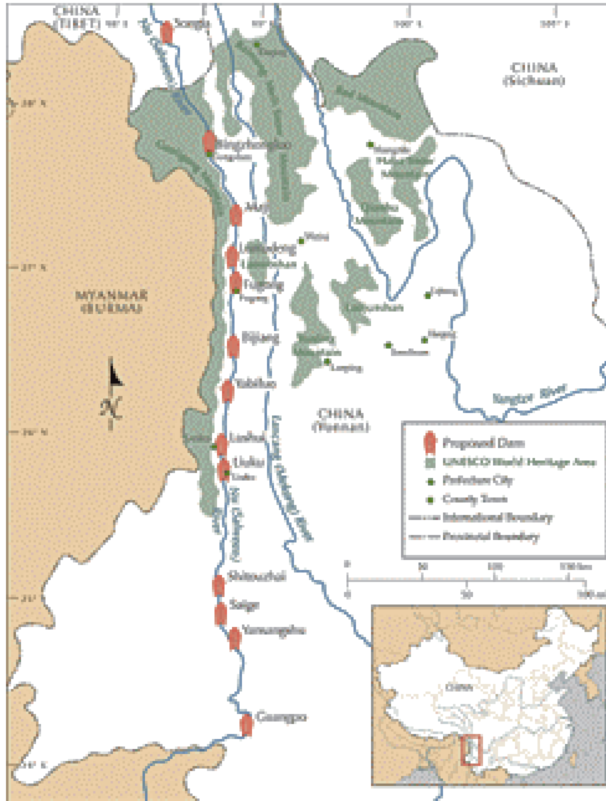
Hydropower: I was surprised at the number of off-channel, small scale hydropower plants in the area – perhaps about eight or so. The operations divert tributary flows to power small generating plants, which produce just enough electricity for nearby homes and businesses. It turned out that practically all of the electricity in the valley is produced this way. Everyone I talked to reported that they had cheap, reliable electricity in their homes. There seemed to be no need for new hydropower in the area; the new main channel dams would instead produce hydropower for export as far away as Guangdong Province in the South and even Thailand.

Religious and Cultural Beliefs: The Nu River valley is inhabited by eight different ethnicities, each with their own distinct cultural and religious composition. 18th century French missionaries certainly left their mark – some villages I visited were 100% Catholic, others were 100% "Christian." Some ethnic groups have animistic beliefs, and almost all are involved in the practice of ancestor worship which is common throughout China. I asked several people about whether or not there were any religious beliefs about the river, if it had any spiritual significance, either as a refuge of the devil (a common belief in Christian traditions) or as a powerful and benevolent spirit, as is common in the Hindu and many other traditions. I was surprised to find there seemed to be no such beliefs, but I suspect I may have been asking the wrong questions. Some of the minority groups did have cultural traditions associated with the river – bathing festivals, for example.

Outcome: Dam Sites

Unlike many other large scale dam projects in China's hopper, a minimal number of people – less than 100,000 – would have to move to make way for the Nu River dams. But with only 500,000 people living in the Nu River Valley, I wondered what resettlement would do to the fabric of the local community. Would the reservoirs flood whole villages, or only affect a few farms and homes directly adjacent to the river? What kind of infrastructure might have to be rebuilt? I also thought it would be interesting to

look at the dam site with the eyes of an amateur hydrologist. In my former career as a river conservationist at the NGO American Rivers, I had once spent about a month coordinating a project to compile a grounded-in-science database of river health indicators and human impacts on those indicators. Plus, I had just taken Matt Kondolf's course on hydrology at Berkeley. What would the physical conditions of the dam sites tell me about the potential future impacts of the dams might on river dynamics?



I was able to locate four of the 13 proposed dam sites (see map) with certainty: Liuku, Abiluo, Lumadeng, Ma Ji, plus one site on the border with Tibet that was not on the map. I had a fairly haphazard approach to trying to find the dam sites. We'd ask around, and look for drill holes in the side of the mountain. I heard all sorts of rumors about company officials and government agents lurking about certain sites, "inspecting." The Bingzhongluo dam, we heard from people in that village, had been cancelled. No one in Gongshan thought there'd be a Gongshan dam either, but they were pretty certain about Ma Ji - it was a big one and would probably flood their town. Quite possibly, the hydropower company had investigated many more sites than had made the final list. The unnamed site we found about four miles across the border into Tibet might have been one example.

The "official" dam sites we located did seem to match the data we had on the dams. The Liuku site was several kilometers upstream/north of the city, in an area with few inhabitants or farms, due to the steep canyon walls. Only a reported 411 residents would be displaced (Yu and Dore). I had a conversation about the dams with the director of the Liuku office of the Three Parallel Rivers World Natural Heritage Site; she thought of the 13 proposed dams, only the Liuku dam would be approved by the central government in the end – she told me that back room conversations had already taken place about this possibility of a "compromise." She also had heard that Huadian (the hydropower company proposing the dams) had rejected the one-dam offer. It made little sense financially; the amount of hydropower produced from a single dam would not be enough to make an adequate return on their investment.

The Abiluo site, the site we visited with Mr. Ma, is supposed to displace nearly 4,000 people; as I saw very little settlement near the dam site itself, I guessed that basically the entire village of Gudeng, Mr. Ma's home, would be inundated by the reservoir. The Lu Ma Deng dam would displace a village of about 6,000. By far the largest displacement, however, would result from the Ma Ji dam, which would cause almost the entire town of Zhongshan, a county seat, to relocate (likely upstream to the

next town of Bingzhongluo.) To reach the dam site we visited across the Tibetan border we had to walk for 40 kilometers on foot along a non-motorized road into the most remote and scenic part of the canyon we had seen, an epic journey that would require several pages of its own to describe. In this area, the river tightened into a narrow canyon that supported very little farming; the few people we saw were traveling salesmen, road crews, and trains of Tibetan villagers with packhorses going to and from Bingzhongluo.

As I traveled along the river, I started to grow concerned about the actual feasibility of placing high arch dams in canyons undergoing such active erosion processes. As I mentioned, several times during our trip we were stopped by active landslides that had piled onto the roads. We saw evidence of past landslides everywhere; almost all of them were naturally occurring, not caused by logging or road construction. Further, the river itself flowed heavy with silt, much of which appeared to originate from far upstream, where the Nu carves its way through the glacial fields of the Tibetan plateau. The glacial blue color of the river during the non-monsoon months confirms this process. With my amateur hydrologist eye, all of this pointed to a potential siltation problem. The reservoirs were likely to trigger landslides as they filled the canyon, and where would all this silt go, on top of the yearly monsoonal burden, after the dams were built? It would go right into the reservoirs, where it would settle, and gradually diminishes the capacity of the dams to produce hydropower. Chinese engineers have to be aware of this problem – it has meant the failure of hundreds if not thousands of dams throughout the country, and has been one of the most controversial aspects of the Three Gorges Project.

Outcomes: Local Government Decision Making

During my trip I had the opportunity to interview just a handful of local officials. Before I went, actually, I had been warned that the sensitivity of the dam issue would make it nearly impossible to find anyone willing to talk. I pressed ahead anyhow, and fortuitously managed to work my connections with UC Berkeley and Yunnan University to meet with one fairly high-up prefecture cadre, a communications official, some nature reserve staff, and some local Environmental Protection Bureau staff. On a few occasions, I simply walked into government offices unannounced and found someone willing to talk to me. My main purpose in conducting these interviews was to get more information about the dam project and to investigate decision making processes. But from the human rights perspective, I was also interested in the extent to which local peoples' interests were represented by their government. I had asked some of the local people about the recent policy of village elections, and few seemed enthusiastic about the importance of this new process. In short, I found more questions than answers through these interviews:

- How did the fragmented structure of local government, between geographic areas and functions, impact on its ability to fulfill its obligation to "take the mass line"?
- How were demands and incentives from "above" balanced with needs from "below?"
- How did the ethnicity and background of government employees factor into their work in this ethnically diverse area?
- How were village elections changing society-state relations in the region, if at all?

These questions are at the heart of the research that I hope to conduct this Spring and next year when I return to the Nu River.

Outcomes: Thoughts on Doing Further Research in China

One of the most important outcomes of the research I conducted this summer, for me personally, was a greater appreciation for the practical and theoretical issues I will need to consider in continuing to research the social dimensions of the Nu River dam project. Below I illustrate some of the research experiences I had and describe how they influenced my future research plans.

<u>Interviewing:</u> About halfway through my trip I realized I was having a really hard time talking to women. For one, they were always busy cooking one of the three daily meals, threshing rice, grinding barley, tending children, and everything else. The men seemed to have much more time to sit around and smoke a cigarette and shoot the breeze. Often if I tried to approach a woman for an interview, she would tell me she was too busy, or refer me to one of the men in her family. I realized not only was the barrier one of time; it was also one of culture and education. Fewer women in these parts of China attend school, and therefore there is a high illiteracy rate among women. I got the impression that some of them did not feel qualified to answer my questions, basic though they were. I tried one day to interview a woman selling vegetables at the public market during a slow hour of the day. But what followed was fairly typical of how many of my "interviews" proceeded in the Nu valley, especially when I tried to conduct them in a public place. A crowd formed, and soon other voices started joining in, asking questions, providing answers. My chosen "interviewee" shrunk back into the crowd and became silent. These situations were terrifically informative, but not at all the controlled, one-o-one interview experience I had imagined. I began to think that if I really wanted to get intimate details about peoples' lives and opinions, particularly women, I would need to spend more time in their communities, gain their trust, and hopefully be brought into their homes. On the other hand, I could abandon the idea of focusing on controlled interviews as my primary research method, and settle more into participant observation methods.

<u>Working with a Research Team:</u> A story: we were returning from our long trek to the dam site across the Tibetan border. We had been walking, practically non-stop, since seven in the morning, and now, the light was fading in the sky and we were still 10 kilometers from Bingzhongluo, our destination. We had been walking in silence for quite some time. Danielle, my research assistant from the University, chose this moment to discuss with me the issue of paying the two local guides. The first guide, the former orchid collector, had been invaluable. The second "guide" was actually a friend of another guide we'd had earlier in the trip, and he had never actually been to this area, and had agreed to come for free - I thought, for the fun of it. It had been a long, hard trip, harder than any of us imagined. We were all exhausted. Danielle caught up to me and informed me she thought we should pay the first guide twice what we had originally agreed to. I immediately became annoyed – perhaps she was right, but it was my money, and if negotiations were to occur on the topic, he and I would discuss it directly. A bit later, Danielle told me we should pay the second "guide" the same amount. I got even more annoyed. He'd agreed to come for free and hadn't been of any real help. I had the feeling that part of the problem was that people assumed that two women could not handle themselves, and his help had been offered out of some gesture of chivalry. I told

Danielle that I did not understand why it was now important to pay the second guide, and she explained that though she too at first thought he was coming along "just for fun," she realized he actually had come out of a sense of obligation, so that his friend, our former guide, would not "lose face." Further, she explained, neither of the two guides felt comfortable talking with me directly about the issue; it was easier to talk with Danielle, who was also my "employee." The Chinese, Danielle explained, are not direct people. There are some things that can't be talked about directly, and money is one of them.

In the heat of the afternoon, the whole discussion irked me endlessly. But by the time we got back to town, I had calmed down a bit. I paid the guides the amount Danielle suggested, without regrets – it had been an epic journey and we had gotten through it together. Danielle and discussed what had happened over a very large dinner that night. I complained that it was difficult for me to know when people were helping me out because they really wanted to, or because they felt a sense of obligation to, and that as someone who prides herself on being independent, it was hard to accept assistance at all, particularly when not freely given. Danielle assured me that this was not a cultural issue at all; plenty of Chinese, she herself, felt the same way. The tension between "face" and genuine hospitality, between surface and subsurface, was simply a part of the Chinese cultural that everyone, not just foreigners, had to negotiate.

Danielle turned out to be an excellent companion for me. She not only served as a second set of ears during our interviews, she helped me negotiate the many "rapids" of doing field work in China. She was incredibly patient with my quirks, like the fact that I never wanted breakfast at the right time, or that I liked to run off on my own and disappear on occasion, or that I sometimes preferred walking to taking the bus. I am exceedingly grateful for the help she provided. I will be lucky to find someone as capable in the future.

<u>Research Design and Theory Building:</u> One of the greatest pieces of advice I have received on how to do research in China is to be prepared to toss out useless theories and take on new unexpected ones. In the short time that I spent in the Nu River valley, I began to see how some of the questions I had brought with me were irrelevant. I expected fisheries would be a big deal, and they weren't at all. I expected there would be some spiritual connection with the river that inspired a moral disdain for the dams, and I didn't find this to be the case either. But what I did find was a much more complex picture, one that has inspired me to return to the valley to pursue my dissertation work, to probe questions about the reasons why people seemed to be turning their back on the river, why it was so common to hear people talk about how the Nu wasted its water on the ocean, what it meant to live in a community so dependant on government handouts and at the same time, so infused with a variety of senses of place, culture, and identity. How, I began to wonder, would reform era human rights policies and environmental policies ever take hold in such a physically and culturally remote part of China, where ethnic communities had grown for thousands of years, trading among the Tibetans and hill tribes of Northern Burma, and where the local government was bent on developing the region into a concrete lined power generation plant, decorated up for tourism? Would "civil society" have a chance here? Or did that even matter - was the government right about the need for the dams, the need to harness the valley's greatest natural asset, its water? Was this what people here really wanted, and needed, to progress? These, and many other questions, now breathe life into my research.

Conclusion

I could never have conducted this research without the assistance, financial and otherwise, provided by the Berkeley Human Rights Center. I am grateful for the opportunity the Center provided me to begin the long journey of my dissertation work, and I am particularly appreciative that I had the chance to start this process using a human rights framework. I have known for some time that what interested me about China's dam building agenda had less to do with empirical projections or historic analysis, and more to do with the human side of policy making and environmental change. This fellowship gave me the impetus for pushing my thinking one step further, to explore the questions of how dam controversies have lead to a strengthening of China's civil society, and how dams challenge efforts to improve interest representation and self-determination for the Chinese people. Further, I have grown to recognize that at the heart of the problem I seek to address is tension between bureaucratic politics and democracy, a question that is fundamental to what it means to be human.

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