MAKING SENSE OF 'SEMI CIVIL SOCIETY'
-- A CASE STUDY OF NU RIVER ANTI-DAM MOVEMENT IN CHINA

ZHOU, HANG

Ph.D

The Hong Kong

Polytechnic University

2013

The Hong Kong Polytechnic University

Department of Applied Social Sciences

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Zhou, Hang

A thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy

May 2012

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_____(Signed)

Zhou, Hang

ACKNOWLEDGEMENTS

This dissertation would never have materialized without my adviser Ku Hok-bun's help and encouragements. I wish to express my gratitude to him for being such a supportive and conscientious adviser. I am deeply indebted to Professor Pun Ngai, who provides me with a golden opportunity to pursue Ph.D degree. Professor Ho Kowk-leung also offered me invaluable inspirations and support during my writing.

I would also like to thank Professor Xueliang Ding's guidance for my M.Phil thesis at the HKUST, and Professor Dingxin Zhao's warm-hearted invitation so I could attend an exchange program in the department of sociology at the University of Chicago between 2009 and 2010. I would also like to thank Professor Wu Fengshi at CUHK and Professor Dali Yang at the University of Chicago.

I would like to thank the Hong Kong Polytechnic University for providing funds to complete this project.

Special thanks to Professor Li Qiang, Shen Yuan and Guo Yuhua at Tsinghua University, Professor Zheng Yefu at Peking University and senior researcher Tan Shen at China Academy of Social Science. They provided continuous help and suggestions, which are priceless not only for this project, but also for my entire academic training.

I am heartily grateful to Chinese environmental activists and NGOs whose cooperation and support are indispensable to this dissertation. Mu Guangfeng, Wang Yongchen, Xiao Yuan and Zhang Kejia provided invaluable help.

I am deeply indebited to Tian Fangmeng at Beijing Normal University, who offered tremendous help during my writing. I would also like to thank Zheng Lu at Tsinghua University, who generously offer his help. Jin Jun at Tsinghua University also provided a lot of help.

I would like to acknowledge the support of my friends in HKUST, PolyU and Beijing: Yu Xiaomin, Lin Thung-hong, Han Donglin, Guan Bing, Liu Fang, Li Jingou, Ye Jing and many others. The supports and encouragement from my parents are essential to my work and life.

Making Sense of 'Semi-Civil Society'

--A case study of Nu River anti-dam movement in China

Abstract

Over the past thirty years, China economy has been growing rapidly, which was achieved at the expense of the environment. In the past decade, environmental contentions induced by real or perceived pollution have increased dramatically. Environmental non-governmental organizations (ENGOs) are becoming increasingly responsive to pollution and other environmental degradations. They have played an important role in public education and other related areas.

This single case study focuses on the controversy over dam-building on the Nu River in Southwest China. At the state level, the Nu hydropower development plan was justified by the name of tackling China's energy and electricity shortage in order to maintain a high economic growth rate. Chinese environmental NGOs have taken up collective actions to halt the construction of the cascade Nu hydropower stations over the past nine years.

Chinese ENGOs in the campaign against the hydropower development on the Nu River demonstrate several tendencies of China's civil society. First, considerable autonomy and independence of Chinese ENGOs can be observed in the protection of grass-root interest. Second, Chinese ENGOs have successfully established a large legitimate space of civil society in China. And third, the Chinese authoritarian state has gradually transformed itself and faced dynamic social forces. These new forces represent the inception of a "semi-civil society" in China.

Based on the Nu River case, this study shows that civil society in contemporary China diverges in many aspects from the western discourse.

Chinese civil society has its unique features, and it is better defined as a semi-civil society. As individual Chinese acquiring political, economic and social rights during the reform era, people start to enjoy limited civil rights. When environmental volunteers take actions in the public sphere, they intend to get across the official boundaries to pursue goals with political concerns. However, they still lack full capacity of self-organization and their very existence is occasionally legally questionable. The mechanism of the anti-Nu dam movement is less likely to be copied elsewhere, because the success is contingent on emergent political opportunities and other conditions.

The author finds that some key characteristics of a civil society have emerged in environmental protection movements and are especially prominent in the Nu anti-dam campaign. For example, a group of individuals were willing to take full responsibility of protecting the environment and were endowed with keen interests on environmental protection, indicating individual Chinese as free and responsible citizens and as independent non-state subject. In the process of protecting the Nu River and protesting the hydropower development plan, Chinese ENGOs became more responsive and demonstrated increasingly enhanced capacity of action, high degree of self-governance and strong ability of mobilization.

However, as an organized social force with distinctive value and clear boundary of action, Chinese environmental NGOs did not fully display their strength in several significant polluting events and environmental disputes in recent years. They are also weak in articulating interest of the grass root, maintaining public environmental rights, and influencing the governmental policy.

In sum, Chinese ENGOs have played a functional but limited role in constructing, protecting and expanding the public sphere in China. It resembles the Western conception of civil society, but it is not fully-fledged

yet. Their presence indicates a semi-civil society and a distinctive public sphere with restricted freedom in deploying direct and civil means to influence state and its policies.

Contents

List of Tables

Chapter One Introduction

Environmental issues have become serious national concerns in China in the past years. After the past three decades of rapid economic growth, China is facing significant environmental degradation. The natural resource has become even scarcer and all kinds of pollution have attacked both urban and rural areas. The National Eleventh Five-year Plan for the Economic and Social Development was issued by the State Council in October 2005 (11^{th} Five-year Plan in short) and took into effect in 2005. It stipulated that the emission of carbon dioxide was planned to be reduced by 1.5 billion tons in the five year period between 2005 and 2010. In 2011, Guobao Zhang, Director of the Department of the New and Renewable Energy, Bureau of Energy, NDRC expressed strong intention to reverse the deteriorate situation of hydropower projects in China. According to the "12^{th} Five-year Plan", he pointed out during a conference in Beijing, the installed capacity of hydropower would be raised to 380,000 MW in 2020, accounting for 90 percent of its total economic exploitable capacity of 400,000 MW. As a result, China will reduce 7 billion tons of carbon dioxide by that year.

Chinese government initiated new management on air pollution after establishing the goal of utilizing green energy. According to some governmental plans, such as the "Twelfth Five Year Plan (2011-2015)", hydropower is believed to be a source of clean energy in solving energy shortage problems in China. The plan aims to increase the percentage of hydropower in the composition of energy consumption. Now coal represents two third of the total energy consumption.

The Environmental Impact Assessment Law (China's first EIA law) was officially taken into effect on September 1, 2003. Although there have been many problems related to the implementation of laws and regulations in China, it was still a big progress in environmental protection. In 2006, the

“Provisional Measure on Public Participation in Environmental Impact Assessment” was issued by the central government. Both of the laws confirmed the importance of the public participation in environmental protection in China.

As voluntary organizations, Chinese environmental NGOs (ENGOs) have played important role in tackling the environmental degradation in China over the past fifteen years. Environmental movements targeting pollution, endangered species, and environment-unfriendly hydro projects were bourgeoning in the late 1990s and early 2000s. The increasingly important movements of ENGOs protested the development projects regarded as causing environmental degradation.

Although ENGOs have partial autonomy from the government control, the road of their growth and development is not straight, not to mention their evident constraints and limitations. For example, their role is weak and even absent in confronting with significant and urgent polluting incidents in recent years and responding to large-scale environmental disputes. For example, as a group environmental NGOs were collectively absent in the Songhua River Pollution Incident in 2005. Chinese ENGOs did not get involved in significant natural disasters in a highly organized and coordinated way until the Wenchuan Earthquake in May 2008.

As a case study, this paper focuses on the mechanism of the Nu River anti-dam campaign in the late 2000’s. The Nu River anti-dam campaign has drawn attention from academics and beyond in recent years. The hydropower project in the Nu River triggered strong opposition and the project was finally halted by the government. This project has not been resumed yet by May 2013. Based on my participatory observation in four years and some in-depth interviews, this paper shows how Chinese ENGOs participated in the protection of Nu River, how their role was strengthened in the process, and how their participation helped reshape the current Chinese state-society relation.

As an international river flowing through the vast area of Yunnan province in China, the Nu River is known as the Salween in Myanmar (or Burma). It is one of last two free-flowing rivers in China, which means there is no man-made project on their mainstream. In China, it passes through a mountainous area with more than 7,000 species of plants and 80 rare or endangered animals and fishes.

In the recent decade, China's growing demand of electricity pushes the expansion of its hydropower sector.[1] Chinese government decides to develop hydropower rapidly as a clean energy source in order to replace its heavy reliance on coal. The Southwestern region of China is endowed with affluent hydro resource, which can supply hydroelectric power to drive China's booming economy. China invested huge capital in the Lancang River basin (upstream of the Mekong River), the Nu River (upstream of the Salween River), and the Jinsha River (upstream of Yangtze River). Chinese hydropower installed capacity will reach 380-400 GW, or 600 billion KWh by 2020. However, large-scale hydropower development turned roaring rivers, including both mainstream and tributaries, into stretches of tranquil water being cut off by a series of cascade dams.

With designed capacity of 21,320 megawatts, and investment of 1.25 billion US dollars, the Nu 13-cascade hydropower project was launched in 2003 by China Huadian Cooperation (CHC) in the collaboration with Yunnan provincial government on the middle and downstream of the Nu River. In 2003, some ENGOs played a key role and deployed unique strategies in the negotiation with powerful state institutions in an environmental campaign against the hydropower development on the Nu River. In 2005, Chinese biologists, academics and environmentalists all

[1] The central government also proposed that by 2015, the upstream of the Yangtze River, Wu River, Nanpan River (tributary of upstream of the Pearl River) Hongshui Waterway, the middle and downstream of the Yellow River and the northern mainstream, the west of Hunan province, Fujian, Zhengjiang and Jiangxi province, and northeastern area will build seven hydropower basements.

argued that the government had conducted an environmental review improperly and urged the government to publicize the review report on the Nu -hydropower project.

Over the controversy of Nu hydropower development project, the long interaction between ENGOs and state organizations persisted in the following nine years. Chinese ENGOs demonstrate a key role in mobilizing resource, in defensing the interest of ordinary people by using different strategies in some anti-pollution cases. It underlines that the awareness of Chinese citizens in maintaining their civil rights has been significantly enhanced.

In addition, Chinese hydropower companies' plan has trigger strong opposition from downstream countries. The Southeastern countries in the downstream have expressed serious concerns over negative social and environmental impacts of the large-scale hydropower projects on the Chinese side. In the so-called Sub-Mekong area, Southeastern Asian countries have established a regional cooperative organization—the Mekong River Commission (MRC) in 1995.[2]

1.1 Research Questions

Scholars have always been interested in how the economic transition without political liberalization has changed Chinese state-society relation. The state-civil society relation is important because it is changing the nature of the Chinese state. Although such effect is a result of close interdependence and mutual penetration of the state and social groups, it is still meaningful to ask the process of interaction and how it defines, bounds, or transforms the two sides.

The current mode of development in China generates negative outcome

[2] The Mekong River Commission (MRC) established on April 5th, 1995. The MRC has been built on a foundation of nearly 50 years of knowledge and experience in the region starting from 1957 when it began life as the UN-founded Mekong Committee. The MRC supported the Mekong Programme, a regional cooperation program for the sustainable development of water and related resources in the Mekong River Basin.

by largely consuming resources and severely polluting the environment. In this process, national environmental policies are inadequate and even powerless in tackling related problems and leads to environmental degradation.

The debate over adoption of the Nu River hydropower resource provokes an ultimate question—whether China's future development relies on infrastructure, raw material, energy and heavy chemical industry, which result in large consumption of resource and production of severe pollution, or more comprehensive, coordinated and sustainable development mode.

Led by a Beijing-based ENGOs—the Green Earth Volunteers— a group of Chinese ENGOs initiated a variety of activities, such as media campaign, investigation trip, photo exhibition, salons, email groups, building-up of networks and associations and forums, in order to halt the Nu dam project by deploying moderate and civil actions. Although these Chinese environmentalists and ENGOs successfully exert the power of the society to check the inadequacy and ineffectiveness of national policies, they also encountered a powerful opponent, the China Huadian Group. This hydropower giant owns a large amount of capital, expertise and ample supply of labor.

To what extent do the changes brought about by the Nu anti-dam campaign reshape the current state-society relation? Can we view ENGOs in China as indicators of a mature civil society? Three concrete research questions follow as below:

Question 1: To what extent did ENGOs' participation in the protection of Nu River reveal an emerging civil society in China?

Question 2: How was the relationship between ENGOs and the state evolved over the Nu River case?

Question 3: How did ENGOs' participation in the protection of Nu River connected with local people?

1.2 Theoretical Framework

It is a hallmark of the economic reform initiated by Deng Xiaoping to cede property rights to individuals and legitimize private business by the state. People began to enjoy more freedom and rights given the expansion of private sector and the bourgeoning of private economic activities.

Since the reform and opening-up policy were initiated in 1978, the People's Republic of China has experienced massive social and economic change. Scholars have summarized three key change areas: (a) the de-politicalization of daily life, (b) the decline of ideology, and (c) the withdraw of the state from key functions, all of which have radically changed the way Chinese people live, work, and interact with one another and with state and party authorities (Gallagher, 2004:423). All the above changes have brought more spaces for civil associations in China.

It is widely accepted that the voluntary, autonomous organizations of social life is one building-block of a civil society, which is defined as "the realm of organized social life that is voluntary, self-generating, (largely) self-supporting, [and] autonomous from the state (Diamond 1994:5, Brook, 1997:22)". The realm of civil society and the organizations require that they are viewed in the context of specific circumstances. In western discourse, especially in the classical liberal tradition, there are two pillars for the concept of civil society -- inalienable rights of the individual and non-interference in the market (Brodsgaard and Strand 1998:10). Civil society is fabricated by many different threads, among which, the most shining one is voluntary associations or non-governmental organizations.

However, under undemocratic regimes (late Leninist state), especially those with an expanding transitional economy (dynamic, expanding economy), whether the bloom of civil associations will necessarily trigger

the emergence of civil society still stirs up heated scholar debate(Jin, 2007:30).

In order to understand the role of Chinese ENGOs in the building up of semi-civil society in contemporary China, it is necessary to clarify the concept of civil society. Civil society is a discourse rooted in the historical and cultural context of the Dark Mid Age in Europe. Civil society is defined as ”the realm between the society and the state, where associations of autonomous individuals participating voluntarily, enjoy autonomy to establish themselves, determine their boundaries and membership, administer their own affairs, and engage in relationships with other similar associations (Gold, 1998:164)”.

Drawing on the discussion, this study agrees that civil society is in the first place a realm that is independent of the state, located in the interstices among the state, political society, the market, and the society at large, in which a diverse group of actors take collective action in pursuit of public interests, deploy civil means and are not motivated by profit. In the classical liberal notion of civil society, it was regarded as a tool in anti-despotism. More recently, the discussion of civil society has gone beyond the argument to investigate the role of civil - organizations in the political change in many Asian countries.

A civil society has certain important characteristics. First, it refers to a distinctive space for organization by non-state and non-market groups; second, it is viewed as a site for communication and discourse. Third, civil society is composed of voluntary and non-voluntary organizations taking collective action in pursuit of public interests. Finally, it is regarded as a structural basis influencing the political rule, and a realm located in the interstices among the state, political society, and the market by non-state and non-market groups (Alagappa, 2004).

Civil society organizations can play roles in collective actions by constructing, protecting, and expanding the public sphere, as well as

limiting state power, making demands on the state, affecting the political system, restructuring the relations among actors in the different realms. The civil society approach looks for the rise of relatively autonomous groups as state power recedes to leave space for the market. Its major underlying assumption is that the growth of societal associations limits the power of the state. The dichotomy between civil society and the state emphasizes their confrontations.

However, China's reality is different from the above classical narrative. In order to tackle the dire pollution problems and squandered of natural resources the Chinese Party leaders proposed the goal of "comprehensive, coordinated and sustainable development" in the Third Plenary Session of the 16th CCP Central Committee in 2003, and further proposed to construct a "Resources Saving and Environmental-friendly" society in the 11th Five-year Plan of the National Economic and Social Development in 2006.

During the Nu campaign, Chinese ENGOs monitored the impact of dam-building on the local environment, articulated the interests of dam-affected disadvantageous ethnic minority people along the Nu River and challenged the powerful hydropower interest group with intensive government connection. This paper argues that ENGOs in China challenge the ill-functioning or incompleteness of laws and regulations, but did not seek to challenge the legitimacy of the regime. Chinese ENGOs strike to maintain and rebuild the sound operation of the public policy, albeit on a basis different from that of state organs. The bottom-up mechanism influencing the state's policy prove to be of great necessity in checking the recurring failures of the state in providing public goods, and in checking the failures of the market in providing private goods.

Therefore, in the efforts of evaluating the ecological impact of the Nu River hydropower project in China, the role of environmental NGOs questions the liberal notion of civil society. Instead of destabilizing the Chinese Communist Party's regime, when the Chinese state fails to meet

environmental challenges, ENGOs activities increase as a response to the breakdown or compromise of proper state function. Hence this paper suggests the emergence of a "semi civil society" in China.

1.3 Literature Review

Voluntary organizations play crucial roles in enhancing a strong democracy. As the cornerstone of civil society, voluntary associations are not only a significant indicator of a vibrant civil society (Putnam, 2000), but also an important mechanism for building and reproducing civil society (Stepan, 2001).

The sphere of private life, such as family, personal hobbies, and commercial activities can be described as "civil" in the sense of being predominantly urban and market-oriented as well as popular, consumerist, and non-state in orientation. In such a civil society, political relationship between state and society are based on principle of citizenship, right, representation and the rule of law (Gold, 1998:43). Here the question is whether the emergence of civil society organizations limits the state power or not.

The civil society approach and the state corporatist approach give opposing explanations over this issue. The "civil society against state" approach emphasizes the confrontation between the state and the society. In analyzing the non-state sector of the economy today, Gold and Brodsgaard "see a clear line emerging between the state and an emergent civil society", and they analyze this sector and regard the relation between the power of the state and societal forces as "contesting" with each other in different ways (Brodsgaard and Strand 1998:11). This perspective suggests that the flourishing of Chinese NGOs will facilitate the building of a bourgeoning civil society, which will check abusive state power by empowering marginalized social groups and eventually demand political transformation (Jin, 2007).

State corporatism refers to a system in which the state gives social groups deliberate representational monopoly in particular sectors in exchange for certain control of their leadership and interest articulation (Schmitter, 1974).

The state-corporatist framework views the rise of associations not as an indicator of receding state power, but as a transformation from direct state control to indirect state coordination. The assumption behind the state corporatism framework is a change of mode in terms of state control. Therefore, it proposes that the success or failure of social organization in achieving their goals largely depends on whether they have been incorporated into the established institutions or not.

The concept of civil society regained people's attention in the 1970s, primarily in Eastern Europe, an arena for dissents then. Dissidents were able to create alternative structures out of the control of the state, or a polis parallel to the state. The state did not, and could not eliminate these structures of opposition.

The collapse of communism in Eastern Europe and the Soviet Union, as well as the reaffirmation of the Chinese state's power in the aftermath of Tiananmen, brought the civil society discourse to the center of Western political analysis. Civil society is viewed as an entity seizing power on behalf of the people, which is able to "employ nonviolent methods". For the post-communist regimes, "the past understandings and perceptions of a civil society are used as a basis for future democratization/liberalization (Frolic, 1997)".

In Eastern Europe, social organizations have been regarded as a vital force for the realization of democracy. The Havel's Velvet Revolution and Solidarnosc in Poland serves as role models of a civil society strategy, and a space parallel to the state has been created on such an organizational basis. These networks of autonomous organizations did not directly confront the state, but surrounded it with "a wide spectrum of activities (Frolic, 1997: 50)". "Society organizes itself as a democratic movement and becomes

active outside the limits of the institutions of the totalitarian state (Kuron, paraphrased from Kiss 1992:227; Frolic, 1997:50).”

China’s development model can be simplified as economic transition without political liberalization. The power of the state is gradually withdrawing and shrinking while the power of society and the individual is quickly growing, leading to the formation of a Chinese civil society (Brodsgaard, 1998:45).

Civil society has been a keyword in Chinese discussions of economic reform, democracy, and law (Brodsgarrd, 1998). However, not only it is problematic to view a civil society organizing itself as a movement in China, but the concept of civil society itself also is fragmented. The notion of civil society drew scholarly attention in the 1980’s, and the focus of discussion on civil society shifted after the 1989 Tiananmen Pro-democracy Movement. “The insurgency of society against the state has also suggested the possibility of a much broader, constitutional focus to such tensions and relationships (Brodsgaard, 1998: 12).”

Although Chinese state institutions have gradually released control over activities in the private sphere, associational activities remain tightly constrained by the party-state regulations (Brook and Frolic 1997). The term “social organization” was used to designate entities outside the state bureaucracy and economic sector. It indicates neither organizational autonomy nor a non-profit orientation in China. Their major function used to facilitate the enforcement of state policies by bridging the state and the population (Jin, 2007:78). Social organizations apart from these controlled structures were either weeded out or co-opted.

Granting private property rights to individuals is one of the hallmarks of the Deng’s reforms and this purely economic policy resulted in consolidation of the independence and autonomy of entrepreneurs in the sense that they socially and politically challenge a “socialist” China. However, it is less clear whether the economic autonomy would lead to a

civil society. Brodsgaard points out that the right to engage in private business in China is sometimes contingent on state approval or indifference (Brodsgarrd, 1998:9-19).

Recent study on the Nu anti-dam activism has confirmed the above point (Matsuzawa, 2011). Jin (2007) found that Chinese environmental NGOs' alliance within bureaucracy play the most crucial role in determining the timing and outcome of confrontational public campaigns, though dependence on state limited their independence of checking arbitrary state power and abusive market behaviors. In the late 1990's and early 2000's, Chinese environmental activities had been developing dramatically in a unique way. However, due to selective permission from the state, the activism is largely remained fragmented.

Jin further argued that the civil society in China is limited in fulfilling "watchdog" role, which is supposed to check mis-designed state policy and insufficient law enforcement, monitor pollution generated by businesses, and assist marginalized social groups affected by pollution (Jin, 2007:94-95). However, the environmental movements in China did make certain achievements. The environmental collective actions and confrontational campaigns against hydro projects have been emerged in the early 2000s. The protest against the Pubugou dam project in Sichuan province on the Dadu River in 2000, the campaign against the Jing-Mi Water Canal Renovation Project in Beijing in 2001, the "Dujiangyan Campaign" against a hydropower development project on the Dujiangyan Irrigation System in 2003, and the Nu River campaign against Hydropower Dam Project in Yunnan Province in 2003, have showed different outcomes in stopping the construction of proposed projects. The Jing-Mi Canal Renovation project was finished with minor modifications, the Dujiangyan Irrigation System was canceled, while the Nu Cascade Dams Project was suspended (Jin, 2007:191; Mertha, 2008).

Jin asked why some of confrontational campaigns succeeded and some

did not. He argues that while ENGOs developed new organizational form and adopted more aggressive strategies, it was the informal alliance between ENGOs and the State Environmental Protection Administration (SEPA) that made the Nu Campaign successful.

In his study on three environmentally-unfriendly hydro projects, Jin (2007) found different outcomes of the three campaigns. In the Jing-Mi Campaign, Beijing-based ENGOs launched a limited media campaign during a couple of months to question a renovation project, which cemented a water transport canal in Beijing to prevent water leakage. However, the Jing-Mi Campaign failed to press the local Beijing authority to abandon or remedy the proposal of the renovation project.

In the Dujiangyan Campaign, Chinese environmental activists coordinated a national media campaign and established an alliance with local governments, finally they successfully halted the proposed dam project just one kilometer away from the Dujiangyan Irrigation System, a national treasure and World Cultural Heritage Site.

Mertha (2008) extended and deepened the framework of fragmented authoritarianism, which is used to analyze political process in China between the 1980s and early 1990s and updated it to the present day to capture the dynamics within the policy area of hydropower in China. He found that there are three critical dimensions in the sphere of political conflict, the policy entrepreneurs, the issue framing, and broader support for policy change. Policy change is expanded ultimately. Policy entrepreneurs are able to interpret events with existing ideas in a new way, frequently aiming at convincing potential supporters through “articulation” and “amplification”.

Recent literature shows that horizontal dynamics is more important in the global-local relations compared with vertical dynamics in social movements. Local activists should not be automatically viewed as bottom feeders in a vertical topography of activism, who depend on global patronage. Tong

(2007) also argued that the horizontal mobilization structure of Chinese ENGOs matters most in the Nu anti-dam campaign.

Jin pointed out the state-society relation is indispensable in analyzing social movements' impact on public policy change. Compared to a closed state, an open political system is more tolerable to social movements, and the integration of movement requests into public policy is more feasible. However, the relationship between political openness and the outcome of social movements is still ambiguous. Without fully enforcing new policies, the state would jeopardize the activists' effort to achieve substantial gains.

For example, in the Nu Campaign, Beijing and Yunnan-based ENGOs organized several waves of national media campaigns to oppose the hydropower project. Compared with the Jing-Mi renovation project and the hydropower project close the Dujiangyan Irrigation System, the Nu campaign is a major development project and much bigger in terms of investment and relocation[3]. Aided by (1) internal petition, (2) a national media campaign, (3) close cooperation with SEPA, (4) international pressure and (5) grassroots mobilization, the Nu dam project were suspended in the end. By adopting special strategies, Chinese ENGOs successfully spanned the boundary of transgressive actions in the Saving the Nu River movement. In addition, these organizations sought to use "boundary-spanning" strategy to actively and constantly negotiate with the state on environment issue or campaign legalizations (Jin, 2007: 91-92).

Jin reported that Chinese ENGOs restricted their activities within "planting trees, watching birds, and collecting garbage", which generated a dichotomy between the demand of affected peasants and their survival crisis and the post-materialist preferences of selected elite on environmental education programs and ecology conservation activities (Jin, 2007:94-95).

[3] The Nu dam project is sponsored by a provincial government. The Nu cascade dams could have a generation capacity of 21,320 megawatt, even exceeding the Three Gorges Project by at least 20 percent, the cascade dams' static investment would be less than 90 billion RMB (1.25 billion US dollars), far less than 400 billion RMB, the official figure of total investment of the Three Gorges Project (Liu and Cheng, 2004).

Yang (2005) adopted a field perspective in the analysis of Chinese Environmental NGOs. It argued that the emergence of ENGOs as a new institutional field is a response to conditions in the political field as well as opportunities in the field of the mass media, the internet and international NGOs (INGOs). He also elaborated the concept of organizational entrepreneurs, who played a crucial role in mobilizing resources. It is suggested that the conjunction of these conditions can better explain the rise of ENGOs. The field approach is a relational rather than a deterministic approach. It examines how other fields rely on, collaborate with, negotiate and challenge the market or state power in order to achieve their own strategic goals (Yang, 2005:66).

In sum, Chinese indigenous ENGOs are under the control of state corporatism framework with certain degree of autonomy, and they are seeking a greater space of legal self-protection. On one side, the party-state purposefully designed regulation to penetrate, limit, co-opt, control and even repress non-state actors or civil society organization (CSOs), such as 'double -registration' system (*chuangchong guanli tizhi*). On the other side, these Chinese ENGOs are very active as they trigger public participation, attract intensive media coverage, and draw growing official attention. Hence the civil organizations in China are named as "the third realm" (Huang, 1993), "amphibious institutionalism" (Ding, 1994), "state-led civil society" (Frolic, 1997:46), and "semi-civil society" (He, 1997). Scholars believe that a grey area exists which is constituted by both state actors and social actors, but is subsumed into neither the state nor the society. For example, the environmental NGOs constantly negotiate with the state to upgrade, deepen and empower new activities related to environmental issues. They also try to go beyond the boundary between lower-level indigenous people and higher-level government officials, between legal and illegal boundary, and between the minority and the majority.

The ENGOs usually negotiate with state authorities in a grey area due to

lacking of clear action guidance according to the current legal framework. In addition, the law itself is problematic to some extend, and the law is not designed to protect the activity of Chinese ENGOs.

Chapter Two Methodology

This research followed my M.Phil thesis in 2006. After completion, I was informed that those environmental NGOs participating in the Nu River anti-dam movement had invented novel strategies to deal with the stalemate over the case. And they strongly recommended me to continue my study on this topic.

During the past fifteen years, the external environment of ENGOs has changed as thousands of such grassroot organizations emerged. They have different sizes and demonstrate different regional characteristics. The internal structure of the Green Earth Volunteers (GEVs) grew from an organization closely connecting with the media and focusing on "three traditional features" (i.e. bird watching, tree planting and garbage collecting)—to one involving in more politically controversial issues, such as information openness and public participation.

From 2006 the GEVs initiated an annual river investigation project called "Ten-year River Investigation". By this chance, ENGOs collected more first-hand material and reinforced their position on the anti-dam campaign. For example, Ms. Wang, an employee at GEV told me that in 2007, the village of Xiaoshaba in the Liuku county would probably be submerged, and more research was needed on this issue. Turning back to the incentive of conducting research on the environmental campaign against the hydropower project, I am grateful for having a chance to know pioneers of Chinese environmental NGOs. Over the past fifteen years, in order to follow up the changes of these ENGOs and these actors, I have established good relationship with them and visited them frequently.

2.1 Why Qualitative Research Method?

Before introducing how I conducted the research, it is necessary to

justify my choice of methodology. In social sciences, positivism is still the dominated paradigm and questionnaire survey is commonly adopted by the researchers to collect data. However, positivist approaches are criticized that researchers are detached from the field and view events from the outside. In research process, researchers spend most of time in imposing their interpretation to the subject of investigation by controlling the research design. Survey data are seen as deficient in 'rich' and 'depth' for they provide superficial evidences on the social world, winkling out the causal relationships between arbitrarily chosen variables which have little or no meaning to those individuals whose social worlds they meant to represent (Burawoy, 1998).

Indirect expression is more usual than direct interaction in China, which is predominated in the Western societies. The dichotomy between the public and private discourse has existed in Chinese people's mind for a long time, and the phenomena of "Two Psychological Areas" result in "Two Language Systems" which hinder the trustworthiness of the data collected by questionnaire survey (Li, 2000). Chinese culture also catalyzes the formation of "Two Language Systems", which refers to such phenomena that people speak in one way in public or at conference, while speaking in a distinctively different way in their private space.

An interviewee may switch between the "standard political notion" or "conference language system" and private language system, depending on the very contexts. Hence the researcher will not be able to acquire the true attitude behind superficial answers. For example, under the occasion with the presence of somebody else, the leaders or cadres will usually not fully reveal their personal opinions, particularly when questions to be asked involve with the issues of state policy or are related to sensitive political topics

As the negative aftermath of the "Culture Revolution", when Chinese people speak in public, they used to speak in a way of adopting standard

political notion (*biaozhun zhengzhi shuyu*) especially during the party's political study (*zhengzhi xuexi*) occasions, particularly with leaders' presence. Due to the disparity between what people speak out and what people think of (*shuo yi tao, xiang yi tao*) , this pattern of two language systems increases the difficulty in obtaining true information when conducting questionnaire survey in China. The interviewer is less able to obtain objective and true judgment from the interviewees' words, and less able to discern of the true attitude of interviewers.

Second, the other possible reason is that under the occasions with the presence of somebody else (*taren*), the interviewee will adopt the conference language system (*huiyi huayu xitong*). Nowadays, in urban China, when conducting questionnaire survey, the interviewer is required to enter into a household accompanying by a member of street committee (*juweihui*). With the presence of member of street committee, the interviewee will speak in conference language system (*huiyi huayu xitong*) to answer questions. Besides, when the interviewee answered questions related with political inclination or political color, judgment of the national political tendency (*zhengzhi xingshi*) and policies, he/she will be reminded by family members around him/her that his/her answers were not in accordance with policies.

In addition, the phenomenon of "losing self" is also noticeable. This phenomenon refers that the interviewee expresses his/her viewpoints in an official language or formulation when answering questions. The reason is that the interviewee does not know his/her own true idea. For example, when conducting a questionnaire survey on the decision of migration, the first question is "Are you willing to move?" The interviewer found that the majority of migrants' answers were "Yes." As the dialogue between the interviewer and migrants became deeper, the interviewer found that the majority of migrants actually were not willing to move, and the interviewer tried to know why migrants answered "willing to move" previously. The

interviewees answered that it (*moving*) was the order from the upper-level government (*shangmian*), there is no alternative besides the choice of relocation". When further asked, they would ay straightly that "certainly we are not willing to move, who want to move?"

Finally, some topics are not suitable to be addressed by a survey, such as gift-giving (*songli*), income, and sensitive political and social issues. Generally speaking, questions which will induce or increase mental pressure for the interviewee, are not suitable to be investigated by questionnaire survey.

2.2 Methodology Adopted in This Study

Due to the deficiencies mentioned above related with questionnaire survey, this research adopts multiple qualitative research methods, including in-depth interview and participatory observation, supplemented by documentation including a variety of newspapers, official demographic statistics, and documentary films. As my research topic is the role of Chinese environmental NGOs and the dynamics of the environmental movement, I need to obtain a mutual understanding with those people who are important for my research. Different actors perceive the movement differently because they commit to view the social world from their individual perspectives under certain contexts. Qualitative research approach seeks for a contextual understanding so that human behavior can be understood in the context of meaning systems employed by a particular group or society. It emphasizes discovering unanticipated findings and the possibility of altering research plans in response to unexpected occurrences (Hammersley & Atkinson, 1995). In order to proceed with research into the social world and to see the world from their perspective, intensive interaction (extended period and unconstrained manner) are required for an interviewer to be close with the people of his/her interest. Hence the unstructured interview and life histories, accompanying with participatory

observation, are the most favored techniques for this study.

Participatory observation is the most effective way in studying complex social activities persisting for a relative long time. It imposes dual identities to the researcher at the same time. For a specific researcher, it is always important to be aware that she/he is an observer and meanwhile a participant. Therefore, two sub-groups exist, participant as an observer, and observer as a participant. Distinctive emphasis has been put on two approaches, the former is more subjective, and the latter is more objective. However, there would be conflict between dual identities. How to balance these two tasks is the key issue. Besides, how an investigator enters into the field, and how he/she establishes mutual trust with the subject of investigation, determines the quality of information she/he intends to obtain. It is a cycling process for a researcher to enter into the field at first, then to establish some potential hypothesis, finally to test his/her hypothesis by following-up observation. This process may be repeated until the field finally stabilized.

For the case of anti-dam campaign in the Nu River, I set the end of my observation as the first half year of 2012. In this sense, durable interaction and friendly relationship are of great necessity for conducting in-depth and comprehensive interview. On the contrary, positivist research method (quantitative research method) more or less relies on survey data, therefore it is difficult to understand how a particular case operates and it is also difficult to grasp the dynamics emerging in the process of studying. Interview is another effective technique for researcher to obtain first-hand and intrusive knowledge on the changing subject of human beings. However, the interviewee will give different even opposing answer depending on the topic, the attitude and preference of interviewee on the topic, the time and occasion the interview being conducted, and the effect of interaction between an interviewer and an interviewee. Under some occasions, interviewees will give a story different from what they constructed before

by drawing on their past experience and personal history. Consequentially, an interviewee will find new meanings from his/her past experience when repeating his/her story to the interviewer. In this study, I conducted both structure and semi-structure interview under formal and informal occasions. One of the advantages of conducting interview under informal occasion is that both of interviewee and interviewer are relaxed, and it is more likely to establish a mutual trust. I also joined in the activities of NGOs for several times in my field work, which provided me opportunities to interview these Chinese environmental volunteers.

In total, I have interviewed around ten NGO leaders, most of whom are based in Beijing, participated and played key roles in the Anti-Nu River Dam movement. I also interviewed five journalists affiliated with national and local media, and several experts at universities or government agencies. During my field trip, I visited 20-30 local residents living along the Nu River, who took administrative jobs, run family hotels, or are farmers. With regard to NGOs, I asked their registration status, establishment time, source of funding, amount of funding, use of funding, number of employees, major activities, as well as the background of their leaders. I also solicited information on the government reaction at central and local level, the economic conditions of local residents, and effect of the Dam project on their lives.

In February 2009, I visited Xiaoshaba, a local village along the Nu River. Due to the construction of the Liuku dam project, villagers in the Xiaoshaba have been resettled. By long-distance bus from Kunming to Liuku, the capital of the Nu Autonomous Prefecture (NAP), I visited these planned dam sites along the Nu River, including the Luiku dam site (Lushui county), the Maji dam site (Gongshan county), the Yabiluo dam site (Fugong county), and Bingzhongluo dam site (Fugong county). I also visited Bingzhongluo, a local township. Both the two places were at risk of being submerged in the near future.

In the village of Xiaoshaba, the identity card of visitors was checked and the cars were followed by police, so I had to be very cautious. According to "The Hydropower Development Plan of the Thirteen Cascade Dams Project of the Middle and Downstream of the Nu River" (*nujiang zhongxiayou shuidian kaifa jihua*), the Luiku dam site, the Maji dam site, the Yabiluo dam site, and Bingzhongluo dam site are in the middle of the river, and easy to be visited by car. In three consecutive years of 2006, 2007 and 2008, my investigation had been conducted targeting ten households along the river.

Besides participatory observation and interview, reviewing historical data is needed, including news-paper, leaders' speeches, government statistics, official documents, conference minute, legal documents, documentary films, and internal reports. In my study, I also searched *Nujiangpo*, the most influential local news-paper and try to find out the truth of the dam-building. The majority of local reports focus on the economic interest that local Nu Autonomous Prefecture can benefit from the hydropower development.

Chapter Three

Water Resource, Dam-building and the Emergence of a New Industry

China is a country with affluent potential hydropower. For harnessing water resource, Chinese ancestors have successfully developed water conservancy system to achieve different goals of water projects, such as the Dujiangyan Irrigation System in built in 256 B.C. However, China also has unsuccessful lessons of dam- building, such as the collapse of Banqiao and Shimentan Dam, which was attacked by a radical rain in 1975. For another exmple, the Three Gate Gorges Dam reduced its power generation significantly in the 1950s and 1960s due to silt accumulation.

In 1997, the evaluation process of the Three Gorges Dam triggered a nationwide controversy over the issues on resettlement, geological hazard, and ecological environment related to large-scale dam-building. It was not an almost "close-door" evaluation process, and the Democratic Coalition (*minmeng*), and other democratic parties criticized the dam proposal for several times.[4]

China's energy structure mainly relies on fossil fuel in general, and coal in particular. In order to alleviate heavy pollution caused by coal consumption, the Chinese central government plans to powerfully develop hydropower. During the 12th Five-year Plan (2011-2015), the share of non-fossil fuel (including wind, solar, nuclear, biology, and tidal power) in primary energy consumption will increase from 8 to 11.4 percent according to the plan, and per unit of GDP on energy consumption will be reduced by

[4] Tao, Dayong, former member of China's Democratic Coalition and important participant of the project commented that "The success of the Three Gorges Dam should be firstly attributed to many critiques in the process of evaluation raised by the Democratic Coalition (*minmeng*), and other democratic parties, because these examinations were based on science."

16 percent and carbon dioxide emission per unit of GDP will be reduced by 17 percent[5].

In addition, the installed hydropower capacity will reach 380-400 GW, or 600 billion KWh by 2020[6].Under such situation, China's major southwestern rivers, including both mainstream and tributaries all have large-scale hydropower dams on themselves. Top leaders aim to achieve high economic growth and need to raise energy supply as a necessary condition.

This chapter first introduces China's affluent potential hydropower and then shows the negative impacts of modern hydro projects. Its last part reviews the evaluation of the Three Gorges Dam project and the related disputes briefly.

This chapter also examines the impact of the latest "speeding-up policy" on the development of hydro projects in China. The following important guidelines, including the hydropower proposal of the "The 12th-five-year plan" (2011-2015)", the "No. 1" Document in 2011, and 2011's Conference on Hydro Work, all contributed to the "Great Leap Forward" of China's hydropower industry.

Finally, the concern over the global warming due to the excessive emission of greenhouse gas has becomes a new motivator in a country's domestic policy-making process. The last section demonstrates the role of international pressure on China's reduction of carbon dioxide emission.

3.1 Energy and Development

Large consumption of energy leads to large consumption of resource and

[5] The 12th Five Year Plan (The 12th Five Year Plan of National Economic and Social Development of the People's Republic of China (2011-2015))

[6] On April 26, 2011, the China Huadian Group released first domestic hydropower sustainable development report, it measures and calculates that as of 2020 our country's normal hydropower installed capacity should be reached 330,000 MW above, it will be possible to achieve the goal of saving-energy and carbon dioxide emission reduction and therefore reduce the excessive dependence on coal. See "China Normal Energy Resource: Hydropower is only after the coal", Guangming Daily, April 26, 2011.

severe environmental pollution, which leads to unsustainable development. China still relies on fossil fuel as its main energy source. Huge reserve of natural resources, such as coal, crude oil and liquid natural gas, brings China an affluent supply of energy. It is estimated that the consumption of fossil fuel accounts for more than 80 percent of primary energy consumption.

Table 3.1 China's Energy Structure in 2009

Type of Energy Source	**Total Amount of Consumption in 2009**	**Total Amount of Consumption in next few years**	**Total Amount of Consumption in 2020 (estimated)**
Coal	3,600 million tons of coal equivalent (2.5 tons per capita)	5,200 million tons	7,500 million tons
Crude oil	435 million tons		
Liquid Native Gas (LNG)	100,000 million m^3		

Source: interview with Mu Guangfeng, acting director of SEPA's Supervision and Management Office in May 2011 at Beijing Green Journalists' Salon.

In 2009, China consumed 3.5 billion tons of standard coal with 0.18 billion tons imported from overseas countries. The consumption of coal per capita was equally significant - the annual consumption of coal per capita was estimated to be two and a half tons. In addition, China will consume 7.5 billion tons of standard coal in 2020, while the potential demand of oil and LNG is equally huge. China consumed 0.435 billion tons of crude oil (56 percent imported), and 100 billion tons of liquid natural gas (LNG) (20 percent imported). If the energy consumption is divided into 10 equally sized shares, coal accounts for 5, crude oil accounts for 3 and liquid Native Gas (LNG) accounts for 2.[7]

[7] Interview with an official of SEPA (former MoE), Mu on 2011 March 18th in Beijing

Table 3.2 Installed Capacity of Selected Watersheds in Southwest China

River	Number of Cascade projects proposed	Total exploitable hydropower capacity (MW)
Min	18	2624.8
Dadu	21	22,110
Yalong	22	26,280
Jinsha (upper Yangtze)	20	74,720
Jialing (upper reaches)	8	802
Pei (upper reaches)	31	1,200
Lancang (upper Mekong)	15	22,000
Nu (upper Salween)	13/12	21,320

Source: Zhang Ke, "Southwestern Hydropower Trouble: 'Insane' Development", July 8th, 2011, the First Financial Daily.

A rampant wave of hydropower development had swept southwestern China since the early 2000s, which was driven by China's gigantic appetite for energy. Major watersheds on Nu River (upper Salween), the Jinsha River (upper Yangtze), Lancang River (upper Mekong), Dadu River, Yalong River, and Min River have been targeted by state-owned hydropower development enterprises, particularly the so-called "five big brothers", the Huaneng, the Guodian, the Huadian, the Datang and the Sanxia Cooperations.

For example, 18 cascades hydro power dams with the total installed capacity of 262.28 million KW have been planned to be built on the mainstream of Min River. There are 14 large-scale planned dams across the Jinsha River, with the potential capacity of 88,910 MW, and the installed capacity of the Jinsha River will reach 22,000 MW by 2020.

The downstream of the Jinsha River has been planned to build four world-class hydropower dams, with the total installed capacity doubling that of the Three Gorges Project. The scale of the dam to be built in the middle of the Jinsha River also exceeds that of the Three Gorges Project. Twenty five dams will be built alone the whole watershed of the Jinsha River, with the installed capacity surpassing four Three Gorges Projects according to a report on the Beijing News in 2012.

3.2 The New Hydro Industry

Begining from 2007, the installed capacity of hydropower approved by the national government declined to only 2,340 MW, This figure increased to 7,240 MW and further reached 7,370 MW in 2009. The number of approved dam was 11 with the total installed capacity of 20,030 MW by the end of 2009. The installed capacity of hydropower only reached 207,000 MW by the end of 2010. Only one third of the total capacity of electric generation has been utilized. The Ministry of Water Resource in China ordered to install an additional 163,000 MW capacity of electricity to fill the gap. Therefore, the hydropower plan of "Positively Explore Hydropower Resource in the Precondition of Ecological Protection" in the 12th Five-year Plan actually opened up new opportunity for the expansion of the hydropower industry from 2011. According to the national hydro plan, the installed capacity of hydropower should reach 200,000MW by 2020 and the generated power should reach 600 billion kwh (or 0.6Twh).

China is endowed with rich energy resources in general, and with coal and hydropower in particular. China also has a large oil reserve, but no exact statistic data are available. The government relies on coal as the predominant energy source of the nation and lay more stress on the development of hydropower with all available means at present, as well as in the foreseeable future, in order to limit the use of oil and gas for power generation (Table 3.2). The use of nuclear power will be launched in the near future, but it may take considerable time before it can occupy a significant share of China's energy supply.

Table 3.3 Hydropower Potential in China by Region

Region	**Theoretical Potential (millions of kw)**	**Exploitable Potential (millions of kw)**	**Billions of kwh**	**Share (%)**
North China	12.30	6.92	23.225	1.2

North East	12.12	11.99	38.391	2.0
East China	30.05	17.90	68.197	3.6
Central South	64.08	67.43	297.365	15.5
South West	473.31	232.34	1,305.036	67.8
North West	84.18	41.94	190.493	3.9
Total	676.05	378.53	1,923.304	100.0

Source: Cheng, Xuemin, 1982, "Hydropower Development in the People's Republic of China: Economic and Social Impacts", the Technology Assessment and Development"

Therefore, hydropower becomes the major solution for China's energy and environmental problems. After 1949, the most large-scale national hydropower survey was conducted between 1977 and 1980. According to the 5th National Hydropower Survey, the theoretical cross-national hydropower potential is 676,000 MW, the exploitable hydropower potential is 378,000MW and the annual power generation capacity is 1923.304 billion kwh. The exploiting rate is less than 20 percent by far.

Over the past thirty years, the national installed capacity of hydropower has increased dramatically. The installed capacity of hydropower was only 20,000MW in 1980, and this figure grew to be 200,000 MW in 2010, ten times bigger than that of the 1980. According to the lasted national survey, the exploitable hydro potential is 542,000 MW. In the past 30 years, the annual growth rate for hydropower is 15.3 percent, and the average annual increasing rate for hydropower installed capacity was 16.8 percent. The total exploitable hydropower potential in China is equal to 67.3 billion tons of coal. Compared with the total economically recoverable reserve of thermal coal, the ratio between hydro potential (67.3 billion tons of coal equivalent) and coal reserve (138 billion tons of coal equivalent) is approximately 1 to 2. This explains the important role of hydropower potential in China's energy resources structure.

China is the biggest country in the world in terms of carbon dioxide emission. During the Eleventh Five Year Plan, China has reduced the emission of carbon dioxide by 1.5 billion tons. From 2005 to 2010, the

energy consumption per unit of GDP has been reduced by 19.1 percent, equivalent to save 0.63 billion tons of standard coal.

In the 2009's UN Copenhagen conference, China committed to reduce the carbon dioxide emissions per unit of GDP by 40 to 45 percent of the 2005 levels by 2020. Therefore, China will reduce 7 billion tons of carbon dioxide before 2020 according to 7 percent of the economic growth rate suggested by the national Eleventh Five Year Plan.

China's government's goal of developing green energy, the so-called "energy saving and carbon dioxide reduction" policy orders new management on air pollution. According to the governmental plan in national social and economic development such as the "Twelfth-five year plan (2011-2015)", hydropower is believed to be a source of clean energy in meeting the carbon reduction goal and in solving the issue of energy shortage in China. The plan aims to raise the share of hydropower in the structure of energy consumption.

3.3 History of Dam-building in China

Most of the large rivers in the PRC have been notorious for their hazardous effects. Since the founding of the People's Republic of China, one of the national objectives has been the harnessing of domestic rivers. Comprehensive planning for an entire river basin has been formulated for many large rivers in China, in order to achieve multiple-purpose developments for flood control, irrigation, power, and navigation. A number of key projects have been constructed and viewed as effective power sources. Many of the river schemes are, however, still in the process of implementation (Cheng, 1995:113).

The total exploitable potential in China's South West region is 232.34 million KW, with 37.68 million KW in China's Southwestern Rivers. The total power generation in China's South West region is 1305.036 billion kwh, which accounts for 67.8% of national total power generation. Hence the

China's southwestern rivers are known as China's Water Tower.

Table 3.4 Dams in China

Capacity	**Number of dams**
Above 100 million m^3	366
10-100 million m^3	2,499
Below 10 million m^3	80,000

Source: China Water Conservancy Yearbook (*zhongguo shuili nianjia*)

All of China's major rivers have been dammed, and more than 80,000 dams and reservoirs built over the last forty years by 1990. With 83,387 dams and reservoirs, the total number of dams in China ranked first in the world. This fact reflected that China's water conservancy policy downgraded the role of scientists and technicians and expanded the power of local Party officials over decisions involving dam and reservoir construction. Dams on rivers have four main functions - irrigation, flood control, power generation and transportation, which have been widely accepted by the majority of Chinese hydrologists. However, modern large dams also have many technical deficiencies, which sometimes are interwoven politically from politics.

During the Maoist era, the academic dispute over merits of different approaches of dam-building was transformed into political struggle. For example, it was debatable question whether primacy should be given to the accumulation of water for irrigation purpose or flood control. China abolished a moderate policy in 1957, which emphasized repairing existing facilities, gave priority to drainage and soil conservation, and granted authority to technicians. In addition, the top leader denied the fact that during the Mao's era of 1950s and 1960s China still lacked resources and technical expertise to build large-scale reservoirs and deal with large

number of relocated people[8].

The Three Gate Gorges Dam (Sanmenxia) on the Yellow River in 1962 is a typical example. Experts who opposed this project were publicly attacked and isolated. Wanli Huang opposed building large-scale dams on the mainstream of major rivers, including the Three Gate Gorge project, and he was prosecuted later for his outright criticism.

Due to excessive silting during the initial filling of the reservoir, the project is now operating at a lowered reservoir level with a reduced generating capacity of 250 megawatts and has retained it capability to sustain catastrophic floods. The sedimentation was not effectively controlled in the upper belts of the Yellow River by the soil conservation plan made by the Soviet experts in 1954, resulting in a large-scale reconstruction work between 1964 and 1970. This made the Three Gate Gorge Dam economically inefficient.[9]

Moreover, modern large dam also caused disastrous consequences like dam collapse. In China, the number of formally recognized dam collapse can only be roughly estimated and it is difficult to gauge the scale of disasters incurred by collapse of dams, but the failure of dam building has led to massive casualty and significant financial loss.[10]

3.4 Disputes over the Hydro Industry in China

[8] Shang Wei, 1998: 143-159 "A Lamentation for the Yellow River——The Three Gate Gorge Dam (Sanmenxia)" in Dai Qing's The River Dragon has Come! The Three Gorges Dam and the Fate of China's Yangtze River ad Its People

[9] Cheng, 1982, "Hydropower Development in the People's Republic of China: Economic and Social Impacts", *the Techonology Assessment and Development* in Selected Paper on Hydropower Development in China—by Cheng Xuemin, China Hydrological Energeering Association, 1995, Beijing

[10] By 1973, 40 percent or 4,501 of the 10,000 Chinese reservoirs with capacities between 10,000 and one million cubic meters were found to have been built below project specifications and were unable to control floods effectively. More serious, however, were the numerous dam collapses. By 1980, 2,976 dams had collapsed, including two large-scale dams [the Shimentan and Banqiao dams]. One hundred and seventeen medium-sized, and 2,857 small dams had also collapsed. On average, China witnessed 110 collapse per year, with the worst year being 1973, when 554 dams collapsed. The official death toll resulting from dam failures came to 9,937. By 1981, the number of formally recongnized dam collapses had risen to 3,200 or roughly 3.7 percent of all dams. See Shui Fu, 1998, "A Profile of Dams in China", in The River Dragon Has Come!The Three Gorges Dam and the Fate of China's Yangtze River and Its People, Dai, Qing, John G. Thibodeau &Philip B. Williams eds., Probe International, International Rivers Network, New York: M.E. Sharpe. Pp.18-24.

On May 17th, 2012, the China Hydropower Engineering Society held a news conference to criticize the misleading media report on the uncontrolled hydropower development in the Jinsha River. Boting Zhang, the deputy general secretary of the China Society for Hydropower Engineering, argued that the negative impact of dam has been overestimated by opponents, which induced inadequate completion of the planned installed capacity during the 11th Five-Year Plan (2005-2010).

Regarding the controversy over the hydropower development and its negative impact to ecology and resettlement, experts of hydraulic and hydropower engineering contended that Chinese hydropower development is indeed backward and hydropower resource is natural treasure to be utilized. The UN's Sustainable Development Report also pointed out that resource usually resulted from "inadequate development". He agreed with the point of "inadequate development", and strengthened that hydropower dams actually protect fishery resource.

In the "2005 China Electricity Forum" in Beijing, Guobao Zhang, the Vice Director of the Department of New and Renewable Energy, Bureau of Energy, argued that "China faces a shortage of electricity supply nowadays. Given the hydropower as a source of clean energy, we should powerfully develop it." He expressed strategic determination of China's central government on hydropower.

However, the official attitude is not consistent. Large-scale utilization of hydro resource triggers anxious concerns of experts of the Ministry of Environment. They worry that uncontrolled large-scale hydro development will destroy local ecology and environment, and view the devastating destruction similar to the large-scale forest logging in the 1960s and 1970s.

In 2004, Kai Ma, Director of the National Development and Reform Commission expressed that the disordered hydropower construction intensified resources and environmental pressure, destroyed the strategic arrangement of the energy construction, and it would be likely to trigger a

new cycle of excessive power supply.

Similar comments have been given by Guobao Zhang, Director of the Department of the New and Renewable Energy, Bureau of Energy -- "It was estimated that the provision of power will be larger than that of the demand in around next five years. What I am concerned is not the small number of hydropower stations being built but too many have been built due to the shortage of energy supply, it is likely that the power will become more than affluent in next several years[11]."

The opponents refuted that the hydropower development of the Jinsha River has extended the planning, and would bring negative impacts to flood control and water resources utilization, as well as inducing geological hazards. For example, Yong Yang, a Chinese non-official expert worried about dams in the Jinsha River would cut off the dynamic flow of the water into stretches of steady water, bringing negative effect to the water resource utilization in the Yangtze River as well as migration of many kinds of fishes.

He also stated that the current mode of hydropower development had been backed up by heterogeneous capital, such as Chinese central government-owned enterprises, private enterprises, foreign investment, and local government, all of whom attempted to seize aboudant water resource in Southwest China. It is necessary to take more investigation in order to push orderly development.

The investment and production scale of the hydro power in the "Three Parallel River" will reach 51,700 MW, with the 62.5 percent development and utilization rate. Environmentalists worried about the environmental and social impact of such large-scale development to the living and growth of inhabitants in these watersheds and asked for more attention[12].

The environmentalists warned people that the negative impacts of the hydro industry to the environment are also considerable and must be given

[11] Beijing Youth Daily, December 10th, 2004; China Economic Daily, November, 2004
[12] Zhang, Ke, First Financial Daily, February 2011

serious concern. As a rough estimate, no less than 10 million people had been relocated and 20 million mu (1.3 million ha.) of farmland were inundated because of the construction of some 86,000 reservoirs in China in the past 40 years. With regard to small-sized reservoir with the main purpose for irrigation, 140 major hydropower projects caused an aggregate reservoir relocation of around 2.8 million people.

Since most of the river valleys are densely populated, the scale of population relocation is usually large. In a major hydropower project in China, a relocation of 10,000 persons would be considered "small". The average scale of reservoir relocation of the small irrigation reservoirs is 100 persons per project. The major hydro projects with individual capacities of 500 MW to 1500 MW have to relocate 30,000 to 80,000 persons per project.

Table 3.5 Average Compensation Cost

Compensation cost in	Compensation per person (yuan)
1950s	500
1960s	600-700
1970s	800-1000
early 1980s	Lower than 3000
late 1980s	4000-6000
early 1990s	Over 10,000

Source: Cheng, Xuemin, 1992, "Environmental Impact at China's Hydropower Projects"

About 60 percent of the compensation cost goes to the land, 25 percent goes to the building of dwellings and 15% goes to the public facilities. Generally speaking, 1/5 to 1/4 of the construction cost of a hydropower project in China would be spent on reservoir compensation, and could be as high as 1/3 in some storage projects. The scale of reservoir relocation in

hydro constructions has been reduced in the 1970s and 1980s. In a survey conducted in 1987, the reservoir inundation rate averaged at 15 ha./MW, and reservoir relocation rate averaged at 140 persons/MW. With regard to Southwest China where population is relatively sparse, a most reasonable balance lies between the maximum utilization of hydro resource and a minimum reservoir relocation.

In the 1950s and 1960s in reservoir relocation work, many problems emerged, for example, the money allocated to compensate the emigrants were sometimes shifted for other use by local authorities and do not reach dislocated farmers. Auditoriums and other lavish public buildings were built which relocated people do not need. The emigrants do not like the new place allocated to them and spent all the compensation money in moving back and forth. The emigrants found the place allocated to them has no enough farmland to support their families. Some of the farmers do not believe the water level would increase substantially and are reluctant to move to high ground, which led to second-time relocation. Some people spent all of the compensation money before a new house is built and resorted to government relief. Many relocated people are found to be in poverty, though the hydropower station might have been in operation for many years. In addition, preservation of historic relics is also a concern of those who oppose dam-building in China.

3.5 Dam-building in Southwest China

Until 2020, among 12 national planned hydropower basements, there will be seven located in Southwestern region. The installed capacity of the Jinsha River tops, with 88,910 MW of exploitable hydropower capacity; the Yalong River ranks the second, with 24,940 MW of exploitable hydropower capacity; and that of the Dadu River ranks the fifth, with 23,400 MW of exploitable hydropower capacity. In addition, the exploitable hydropower capacity of the Lancang (upper Mekong) River is 30,000 MW.

The Southwest China is abundant of hydropower resource, including Sichuan, Chongqing, Yunnan, Guizhou and Tibet. The total hydropower potential in China's Southwest region is 232,000 MW, with the total theoretical potential of 96.90 million KW. The total power generation in China's South West region is 1305.036 billion kwh, which accounts for 67.8% of national total power generation, which accounts for 10.9% of national total power generation.

According to the national hydro plan, until 2020, the hydro investment scale of the "Three Parallel Rivers" will reach 51,700 MW, with the exploitable rate of 62.5 percent. There will be 14 cascade dams in the Jinsha watershed, with the installed capacity of 22,000 MW. It is estimated that 7 hydropower basements in Southwest China will be completed by 2015. In addition, hydropower development will focus on Jinsha River, Lancang River, the upper Yellow River, the Nu River, the Yalong River and Yalutsangpo.

According to news released by Yunnan and Sichuan TV stations, 17 cascade hydropower development scheme has been planned between Chongqing and Guangyuan (广元) over the Jialing River (a tributary of the Yangtze River), and the length is 740 kilometers in total. The Mahui and East-west Gate pivotal project have already been constructed.

The six cascade dam plan has been conducted between upper stream of the Min River and Wenchuan, and the Taipingyi and Yingxiuwan hydropower dams have already been constructed. Besides, the construction of the Zipingpu hydropower dam was ongoing and proximate to the Dujiangyan World Cultural Heritage. In addition, 17 cascade hydropower projects have been launched on the mainstream of the Dadu River.

Other hydropower dam projects included eight cascade dams on the Lancang River in Yunnan province, including the Manwan and Dachaoshan hydropower dams, which all have been constructed. The construction of Xiaowan dam was undergoing, while the Nuozhadu hydropower dam, the

fifth cascade hydropower dam on the Lancang River, was in the phrase of preliminary preparation. Four other giant hydropower dams will be constructed on the Jinsha River by the China Yangtze Three Gorges Company with the total investment of 200 billion Yuan, which is even larger than that of the Three Gorges dam project.

3.6 Hydropower Policies

The State Council of central government of China issued the "Decision on Speeding-up Hydropower Reform and Development" (*guanyu jiakuai shuili gaige yu fazhan de jueding*) (also known as the "Central No.1 Document") (*zhongyang yihao wenjian*) on 31st December, 2010. It stated the significance of speeding-up the hydro reform and development, the strategic position, the goal and the mission. It emphasized that finding "a way of hydro modernization with Chinese characteristics" is the primary idea of hydropower development, and the basic principles were "the people's livelihood has a priority (*minsheng youxian*), coordinating and giving consideration to two or more things (*tongcheng jiangu*), building a harmonious relation between the human and water resource (*renshui hexie*), government as the dominating role (*zhengfu zhudao*), and reform and innovation (*gaige chuangxin*)."

In the following year, the central government held the Hydro Working Conference in Beijing in July, 2011. President Jintao Hu, stated that the main goals of speeding-up of hydro reform and development are to change the backwardness of the hydropower construction substantively. The main tasks include completing the flood control and drought reduction system, the system of reasonable distribution and efficient utilization of water resource, the system of water resource protection and healthy river and lake security system, and the mechanism and institutional system facilitating the

scientific development of hydrology by 2020.[13]

In 2011, Guobao Zhang expressed strong willingness to reverse the disadvantageous situation on the hydropower development. According to the "12th Five-year Plan", he pointed out that the installed capacity of hydropower will be increased to 380,000 MW, accounting for 90 percent of its total economic exploitable capacity in 2020 at a conference "the Memorial of the 100th Anniversary of Hydropower Development" in Beijing.

This attitude of the NDRC consequentially triggered a new wave of uncontrolled development of hydropower, which reaches China's southwestern regions as "running the horse to gain water". China's southwestern rivers, including both mainstream and tributaries, have all been cut off and turned into large-scale cascade hydropower dams. The rapid expansion of hydro industry nevertheless induced intensive conflicts between hydropower interest group and marginalized and disadvantageous groups.

In China's history as well as at present, the impact of large-scale hydropower development is multi-facet. As the process of modernization, industrialization and urbanization in China become faster and deeper during thirty years' economic reform, resource waste and environmental pollution become severer. Although the way of "comprehensive, coordinated and sustainable development" is the core concept of the "Scientific Development Concept", the mode of development is more problematic in reality.

In the post-reform era, the current development mode has put much pressure on the resource and environment and national economic configuration relies overwhelmingly on the "infrastructure, raw material, energy and heavy chemical industry". This mode of development consumes

[13] The Guangming Daily, Top News, 2011, "the Central Conference on Hydro Work was Held in Beijing, Hu, Jintao, Wen, Jiabao Delivered Important Speech", (*zhongyang shuili gongzuo huiyi zai bejing juxing hujintao wenjiabao fabiao zhongyao jianghua*), July, 10th, 2011.

large amount of natural resources. According to the updated statistics China consumed world's 80 percent of elevator, 49 percent of steel, 35 percent of coal, and 45 percent of construction material.[14]

The international factor weighs more and more position in Chinese mode of development. Nowadays, the issue of global warming or global climate change has also been paid more and more attention by a variety of governments, international organizations of the United Nations as well as international non-governmental organizations (INGOs). In the global climate change regime, the United Nations held several negotiations to deal with "abrupt or irreversible" impact of global warming and came up with a few frameworks and agreements, such as the UN's Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol in 1997, and Bali Roadmap in 2002.

As China plays more and more important role in the international stage, it has also participated into the international negotiation of the global climate change. In the 2009's Copenhagen Climate Change Summit, as the world's biggest carbon dioxide (CO_2) emitter, Chinese government was committed to reduce the carbon dioxide emissions per unit of GDP by 40 to 45 percent of the 2005 level by 2020.

As the heavy reliance on coal brings about the issue of emission of house-warming gas, the hydropower development has been fastened in China since early 2000s. In the recent decade, the impact of current unprecedented large-scale hydropower development in Southwest China brought a large number of catastrophic consequences economically, ecologically, socially, and politically.

The national hydropower policy has changed its direction accordingly. The guideline of the National tenth Five-year Plan for Economic and Social Development on hydropower development stated "powerfully develop

[14]Interview with an high official of Ministry of Environmental Protection on March 18th, 2011 in Beijing.

hydropower". The hydropower development falls into a rampant and uncontrolled mode of development encouraged following this guideline.

Then the guideline of the 11th Five-year Plan (2005-2010) on hydropower development was adjusted to "give priority to ecological protection, to develop carefully, to orderly exploit and to guarantee the bottom line" (*shengtai youxian, shenzhong fazhan, youxu kaifa, quebao dixian*) and "orderly exploit the hydropower resource based on the protection of ecology and environment" (*zai baohu shengtai jichushang youxu kaifa shuidian*). There is significant impact on the installed capacity of hydropower by the statement on hydropower development in the guideline.

For example, the national installed capacity of hydropower began to decline from 2007 (2,340 MW); it reached 7,240 MW in 2008 and 7,370 MW in 2009. At the end of 2009, eleven hydropower stations were completed with the total installed capacity of 20,030 MW, which was far below the planned installed capacity of 70,000 MW.

However, the guideline of the 12th Five-year Plan (2010-2015) on hydropower development returned to "positively develops the hydropower resource under the precondition of protection of ecology and environment" (*zai baohu shengtaide qiantixia jiji fazhan shuidian*). In terms of protection of ecology and environment, the difference between what the 11th FYP and the 12th FYP in the respect of hydropower development is "technically" (*jichushang*) and "precondition" (*qiantixia*).

The statement in the National 12th Five-year Plan (2010-2015) adds more weight on the hydropower development. Under such background, the outcome of the Nu River hydropower development project becomes even more uncertain. With regard to factors determining the timing, trajectory, and outcome of Chinese hydropower development, the role of public policy on hydropower development should not be underestimated.

Chapter Four

The State and China's Environmental Movement

4.1. Chinese Ecological Crisis

Over the last three decades of fast economic growth China suffered from huge environmental and resourceful pressure, which hinders the future development capacity. A variety of environmental degradations become prominent, such as air pollution, water pollution and water shortage in major rivers and lakes system, interchangeable flood and drought, deteriorating grassland, desertification, and sand storm.

In 1992, the official account of China's environment stated that "Firstly, the environment was improved in some region, however, the overall environment was still deteriorating, and the prospect is worrying. Secondly, the speed of governance is slower than that of the pollution". This was the official speech delivered by former Premier Li Peng in the United Nations Conference on Environment and Development (also known as the Rio Earth Summit) held in Rio de Janerio, Brazil in 1992. These descriptions in the draft of his formal speech were prepared by a senior SEPA official and came into consensus of the leading group of the draft.[15]

In the 1950s and 1960s, under the "philosophy of struggle", the dominated ideology makes the public to believe that human-being is capable in conquering the nature. The CCP government refused to recognize the existence of environmental problems in the socialist China, which were perceived as capitalist phenomena in western countries.[16] However, environmental problems became serious in the 1970s, as rampant mass campaigns nearly destroyed the ecological environment across the country. Famous examples include the great steel-making campaign during the Great

[15]Interview with an official of SPEA, Mu on 2011 May 18th Beijing
[16]Interview with an official of SEPA, Mu, 2011 May 18th Beijing

Leap Forward period in 1958 and "Launching the Revolution with Three Bowls" during the Cultural Revolution. During the Maoist era, environmental degradation is almost invisible in official ideology and discourse. It was after a graduate process that the government officially acknowledged the environmental problems in China.

In 1972, former Premier Zhou Enlai sent out China's first batch of representatives to attend the United Nations Conference on Human Environment (also known as the Stockholm Conference) which held in Stockholm, Sweden from June 5th to 16th, 1972. These international conferences should be viewed as the beginning of China's official efforts in dealing with environmental problems.

In the second year of attending the conference, the State Council established a leading group on environmental protection which was the first high level environmental policy body in China, and held first national conference on environmental protection. Since the establishment of the People's Republic of China, a first guideline on environmental protection has been released by Chinese central government, which is a 32-words guideline "make a comprehensive program (*quanmian guihua*), reasonably distribute (*heli bujun*), synthetically utilize (*zonghe liyong*), turn the harmful into the useful (*huahai weili*), mobilize the masses *(fadong qunzhong*), work together (*dajia dongshou*), protect environment *(baohu huanjing*), benefit mankind (*zaofu renlei*)".

The opening-up policy led to a prosperous economy and dramatically increased people's living standard. Meanwhile China's environmental deterioration was worsened. Although partially alleviated from lower level pollution—the three wastes discharge, "gaseous emission, wastewater discharges, and industrial residue", new pollution problems emerged during the new era. As the constant global warming, the carbon dioxide emission has been topped in the agenda of global climate negotiation. Especially after the Copenhagen Global Climate Change Summit in 2009, the global

community has paid more and more attention to China's responsibility on carbon dioxide emission. Therefore the reduction of carbon dioxide emission has become a central problem in hydro policy making.

On the other hand, traditional pollution problems are still severe. The newest environmental report released by the News Office of the State Council stated that the pollution of China's surface water in major river systems was classified into three categories, lightly polluted, moderately polluted, and seriously polluted. The Yellow and the Liao River have been categorized as lightly polluted, the Songhua and the Huai River have been categorized as moderately polluted, the Hai River has been categorized as seriously polluted. The air quality in 471 counties throughout the country has been classified into three different categories ranging from Class I, II to III. With 3.6 percent of the counties fall into the Class I, the air quality in 79.2 percent of China's counties has been classified as Class II, and 15.5 percent as Class III, and the remaining 1.7 percent does not even enter the Class III[17].

China's Environment Macro and Strategic Report was launched in mid-April of 2011, it pointed out that, Chinese environmental situation has been "regionally improved", "the overall degradation was out of control", "the tendency was still severe" and "the pressure was continuously to be increased". Moreover, the environmental pressure and environmental resource problem become more difficult to resolve. China's environment has been seriously degraded, as the team leader of expert leading group of China Environment Macro Strategic Research Project and academia of the China Academy of Engineering (CAE), Guofang Shen, concluded that China's environmental situation as "overburden", he suggested that the pollution discharge was as much as twice the environmental capacity.

The report stated the major objectives of environmental protection during the "12th Five-years Plan" period include significant reduction of discharge

[17] China Environmental Public Report, 2011

of major pollutants , effective guarantee of environment safety, comprehensive control of total discharge of major pollutants, comprehensive improved of environment quality. In general, the environment quality should be in accordance with the public's increasingly growing living standard and socialist modernized strong nation.

4.2. Governmental Solutions to Environmental Problems

China introduced first Environmental Protection Law in 1979. The 1982 Constitution proclaimed that the state "protects and improves the environment where people live and the ecological environment prevents and controls pollution and other public hazards." China updated the Environmental Protection Law in 1989. The establishment of the leading group on environmental protection signified that CCP government has officially acknowledged the existence of environmental problems and the urgency of environmental protection (Jin, 2007) .

In 1982, the second national conference on environmental protection was established in Beijing, during which environmental protection had been proclaimed as a constant national policy. This conference also proclaimed that "economic construction, environmental construction, and urban-rural construction should be planned, implemented, and developed in parallel, in order to achieve a consistent development on economic effectiveness, environmental effectiveness and social effectiveness."

In the 1980s, a governmental research project analyzed China's environmental problems and tendencies on environmental protection, which was sponsored and conducted by SEPA's Department of Policy, Laws and Regulations. The serious environmental degradation in China did not naturally lead to legal framework and administrative structure on environmental protection in China. It is the China's participation in the international environmental regime that changes the attitude of Chinese government toward environmental welfare and the urgency of

environmental protection (Jin, 2007:69).

During the National 12th Five-year Plan for Environmental Protection, the government emphasized the four aspects of environmental protection, such as the protection of water environment, the prevention and control of atmospheric pollution, protection of soil environment and protection and supervision on ecology. It stated that “In protection of water environment, we should strictly protect drinking water sources; enhance prevention and control of water pollution of river basins and improve environmental quality. Meanwhile, we should strengthen the protection of lakes and rivers with good water quality and fragile ecology; comprehensively prevent and control marine environment pollution and ecological damage; further facilitate prevention and control of groundwater pollution and carry out trial work on remedy of groundwater pollution sites.

“In prevention and control of atmospheric pollution, we will carry out synchronized removal of sulfur and nitrogen and comprehensive control of many kinds of pollutants. In key areas such as the "three regions and six city clusters", we will monitor ozone and PM2.5; strengthen the control of particulates, volatile organic compounds and toxic waste gases; improve the mechanism for joint prevention and control of atmospheric pollution and strengthen joint law enforcement inspection and significantly reduce acid rain, haze and smog.”

In protection of soil environment, the plan requires that China should strengthen the development of soil environmental protection system, enhance supervision on soil environment, and start trial and demonstration work on treatment and remedy of contaminated sites and soil pollution. It is prohibited to transfer, develop and utilize the contaminated land that has not been assessed.

In protection and supervision on ecology, the government ordered to strengthen protection and development of national key ecological functional areas. It is planned that the area of land natural reserves will account for

15% of total national land and 90% the species under national key protection program and typical ecosystems will be under protection by 2015,[18]." In addition to the legal framework, The Chinese government has also adopted multi-facet institutional measures to deal with the environmental degradation, including huge investment and an administrative apparatus to enforce environmental protection.

In the 1980s, only a Commission on Environmental Protection existed, which was subordinated to the State Council, and there was no independent bureaucratic institution on the environment protection. In 1988, the National Environmental Protection Agency was established under the Ministry of Urban and Rural Construction and Environmental Protection (BURCEP), an agency only positioned in the level of "Chuji" of the bureaucratic ladder. In the 1990's, it was lifted up to the level of "Sijuji"—the Bureau of Environmental Protection (BEP). In 1993, it was further promoted to the level of "Zongju" parallel to the level of ministry in the bureaucratic ladder as the State Environment Protection Administration (*guojia huanbao zongju* or "SEPA") and achieved its independent status within the State Council. SEPA was finally upgraded to a full ministry in 2004 (SEPA, 2004b). With regard to institutional arrangement, the upgrading of the status of the department of environmental protection from a bureau-level to a national ministry-level one was the most important step in the central government's effort to reinforce its administrative structure and reinforce its power.

SEPA's local branches include Environmental Protection Bureaus (EPBs) at provincial and prefectural government and Environmental Protection Offices (EPOs) at the level of county government. This dual leadership system has notably undermined SEPA's effort in enforcing environmental protection (Jahiel, 1998). The SEPA is divided into different functioning departments and offices, for example, the Department of Policy, Laws and Regulations (*zhengce fagui si*), the Department of Natural Conservation

[18] MEP Explains the National 12th Five-Year Plan for Environmental Protection", 2012

(*ziran baohu si*), and the Department of Supervision and Management (*jiandu guanli si*) etc.

In 2003, CCP top leadership proposed that the goal of "comprehensive, coordinated and sustainable development" in the 3rd Plenary Session of the 16th CCP Central Committee, when the so-called "the Concept of Scientific Development" has become a widely accepted concept in 2003. In addition, alleviation of the environmental pressure has been put forward. In 2006, construction of a "resources-saving and environmental-friendly society" has been put on the top of the governmental agenda.

On September 1st, 2003, China's new Environmental Impact Assessment Law (EIA law) was enacted by the State Environmental Protection Administration (SEPA). It regulates that any new project should first conduct a comprehensive environmental review in the planning stage. It also called for public participation, including hearings, as part of the review, though it did not detail specific guidelines (New York Times, 2005).

The SEPA approved around 3,600,000 environmental impact assessment (EIA) reviews annually, while local environmental protection bureaus and offices (EPB and EPO) approved around 500,000 EIA reviews. There are hundreds of national-level qualified institutions for approving EIA reviews.

Under official framework of environmental protection, the laws and regulations concerning environmental protection have been fulfilled. For example, the new Environmental Protection law amended by the National People's Congress (NPC) on August 2012 regulated in more details of how to ensure the information openness and public participation, empower the right to ordinary citizens to participate in the process of public policy making, and guarantee the general public's right of knowing and right of supervision in terms of information attainment.

The state environmental watchdog, the SEPA (now the Ministry of Environmental Protection) issued many laws and regulations on many

aspects of environmental protection.[19] However the forcefulness of the SEPA in implementing environmental policies, laws, regulations and measurements seems weak. During the National Economic and Social Development 12th Five-year Plan (2011-2015) period, Gangjie Li, the deputy director of the MEP pointed out that the industry structure, the energy consumption structure and the phrase of socioeconomic development have exerted heavy pressure on environmental protection. Moreover, new environmental problems are becoming increasingly prominent like wastes of electronic productions. "The environmental urgent incidents and polluting accidents come to a booming period. Environmental contamination induced a few social conflicts become dramatically evident." He also stated that the following emphasizing working areas as the key areas of environmental protection -- the safety of urban-rural drinking water, air pollution, heavy mental pollution, and soil pollution.[20]

Some scholars pointed out that some local governments connect the booming of local economy to their personal career advancement. Local officials therefore might see environmental protection as an unnecessary burden, which undermines their effort to boost the economy, and is consequently an obstacle to their career advancement (Vermeer, 2000, cited from Jin, 2007:73).

4.3. The Development of China's Environmental NGOs

From the perspective of the state-society relation approach, there is a consensus that the right of individual and organization to engage in non-state, non-market, independent, autonomous and voluntary activities in China is always contingent on the state approval or indifference. Therefore, the state defines the legal and nonthreatening boundary for actions taken by

[19] http://english.mep.gov.cn/Policies_Regulations/

[20] Qi, Fang, June 3rd, 2011, "Environmental Overall Situation is still Severe", Guangming Daily.

Chinese ENGOs. The concept that this paper discussed here is related to the Nu River anti-dam campaign, which refers mainly to those Chinese ENGOs organized on the principle of independence and autonomy.

The official statistics showed that as of the end of 2006, the total number of environmental NGOs in mainland China was 2,768, with 224,000 employees (Zhang, Jieping, 2006). In recent years, a range of popular protests, petitions, and social movement targeting vulnerable groups were occurring across China, such as hemophiliacs whose blood to be contaminated, household-owners whose house to be illegally dismantled (*qiangchai*), women to be coercively aborted, peasant-workers whose wage payment have been delayed, and lost and trafficked children who were forced to beg in the street.

In order to meet the objectives in terms of checking the state power, articulating the grass roots interest, and cultivating citizenship, environmental movement and other types of protests, petitions and other social activities all demonstrate some key features of civil society. In explaining the emergence of non-governmental organizations (NGOs) in China, the civil society approach suggested that as the state consistently withdrew from social welfare fields, blank areas were left for other social forces. In addition, during the late 1990s, as unemployment, layoffs, and economic inequality continued to increase, it is inadequate to solve social problems by solely depending on existing governmental institutions. Therefore, social organizations increasingly rose to fill this gap. These organizations cover many fields -- advocacy and service for the disabled, environmental protection, consumer protection, disaster relief, HIV/AIDS work, poverty alleviation, care for the elderly, and women's rights protection and services (Paraphrased from Gallagher 2006:435 by citing Young 2001).

In this sense, Chinese ENGOs' activities show certain similarities compared with their counterparts' actions in other countries. Both China and

India’s environmental movements differ from those in the West in that they are concerned of not only environmental preservation but issues of economic equity and social justice (Karan, 1994). Particular groups in the two countries are more vulnerable environmentally than other social groups.

As an alternative source in providing environmental public goods and services during the mid of 1990s in China, NGOs bring about new ideas and practices on how to understand relation between human and environment. Environmental groups have been important in increasing the public’s awareness on environmental protection.

4.4. NGOs' Development in China

Scholars have reached consensus that an NGO should satisfy the following criteria: formal, private, non-profit oriented, self-governing, and voluntary (Salamon and Anheier, 1992; Fisher, 1998). There are also many grassroots NGOs or unregistered voluntary groups in China. Belonging to an “unofficial civil society”, it includes groups with common interests or attributes that remain outside the sphere of state-sanctioned organizations either because the state refuses to recognize them or because these groups themselves avoid registration in order to maintain their autonomy and independence from the state (Gallagher, 2004:420). Among those criteria, autonomy has been regarded as the most important character of an NGO by western scholars. Autonomy means that an NGO should be independent of the state in its decision-making, leaders’ appointment, and fund raising (Hyden, 1997). However, there are certain types of social organizations which have been created by government for multiple reasons, or under the direct or indirect intervention of government, which depend on government for funding and other resources. In order to distinguish this unique phenomenon in China, scholars created a term Government-Established or Organized-Non-Governmental Organizations (GONGOs).

There are generally three types of NGOs in China, (1) GONGOs, the

government-organized NGOs, such as the Chinese Environmental Federation (ACEF); (2) civic, autonomous and voluntary organizations or registered NGOs, including social organization (*shehui tuanti*), private and non-profit work units (*minban feiqiye danwei*) and foundations (*jijinhui*), such as Friend of Nature (FoN) and Global Village of Beijing (GVB); (3) Non-for-profit Enterprises which are registered and regulated under the Bureau of Business and Industry, but operated as non-for-profit organizations; (4) university student environmental protection associations and university-affiliated organizations (Ma, 2002); (5) university research centers/institutes; (6) grassroots NGOs or unregistered voluntary group; (7) web-based groups; and (8) international NGOs (INGOs, including those based in Hong Kong, Macau and Taiwan). The last group refers to those who keep contact with China, and either financially sponsor a program in China or run an office in China.

Chinese grassroots Environmental NGOs (ENGOs) demonstrate themselves as a new and strong social force independent from state control in quite a few protections. ENGOs displayed prominent role in dealing with the recent hydropower controversy in Southwest China against developers with government background.[21] Some groups have also successfully lobbied for greater protection of some endangered animal species (paraphrased from Gallagher 2006: 425).

A number of Chinese indigenous grass roots environmental NGOs (ENGOs) emerged in China during the past fifteen years with a wide scope of activities ranging from environmental protection, policy advocacy, aid to vulnerable groups, public education to promotion of green culture covering every aspects of environmental protection. These environmental organizations are organized by citizens voluntarily and autonomously, which are similar to those in the sense of Western NGOs.

[21] The Thirty Years of Chinese Environmental Protection"(Zhonguo Huanjing Baohu Sanshinian), Chen Hongwei and Du Yueying, China Jingji Shibao, in Wang Yongchen and Wang Aijun eds., 2008 Chinese Environmental Journalists Report (Zhongguo Huanjing Jizhe Diaocha Baogao P.42

In the 1990's, a group of environmental NGOs were established, such as Association of Panjin Saunders' Gull Protection, Friend of Nature (FoN), Green Rivers and Chongqing Association of Green Volunteers, Global Village Beijing (GVB) and Green Earth Volunteers (GEV), Center for Legal Assistance to Pollution Victims of China University of Political Science and Law (CLAPV).

Chinese indigenous grassroots ENGOs specialize in a variety of areas, such as (a) endangered species conservation, e.g. the Association of Panjin Saunders' Gull Protection; (b) community-based garbage classification, e.g. Global Village Beijing; (c) development of ethnic minorities groups in Southwestern China, e.g. Yunnan Biodiversity and Traditional Knowledge Research Society; (d) environmental education, e.g. Friend of Nature and Beijing Brooking Education and Consultant Center; (e) family-based environmental protection, e.g. Shanxi Volunteer Mothers Association for Environmental Protection (SVMAEP); (f) legal assistance to pollution victims, such as Center for Legal Assistance to Pollution Victims of China University of Political Science and Law (CLAPV); (g) nature conservation via documentary films, e.g. Wild China Film; (h) ecology protection in the "origins of three rivers" area, e.g. Qinghai Province Ecological Environment Protection Association; and (i) cross-boundary river protection action group, e.g. the Environmental Protection Association in Xiangyang, Hubei Province.

The co-existence of International NGOs, the GONGOs, and the Grass-root NGOs demonstrates that the status of a semi-civil society in China nowadays. According to official statistics, there were more than 3000 international NGOs and philanthropy groups which have contacts with China around 2005. Among those INGOs, more than 50 China-based groups have been active in diverse fields of Chinese environmental protection, including prevention and treatment of air pollution, environmental governance, energy efficiency, and nature conservatory. There is no

registration and management regulation for INGOs. They have to depend on the tolerance of government and have the risk of depriving the right to launch programs in China. Some of their unsuccessful programs in China over the past years demonstrate the negative impact of lacking protection from the legal system.

GONGOs are registered as social organizations, and are registered and regulated under the Regulations for Registration and Management of Social Organizations. The regulation was enacted in 1998, and defines social organizations as non-governmental and non-profit organizations. Another type of GONGOs is registered as private and non-profit work units regulated by the Regulations for Registration and Management of Private Non-profit Work Units. The third category is registered as foundations, which is regulated by the Regulations of Foundations (CSC, 1998 paraphrased from Jin, 2007:79), such as All China Environmental Protection Federation (ACEF), China Environmental Culture Promotion Association(CECPA), and Foundation of All China Environmental Protection (FACE).

Liang, Xiaoyan, the founder of Beijing Brooking Education and Consultant Center said that "Almost all social organizations registered in the Ministry of Civil Affair are GONGO. With regard to the environmental NGOs (ENGOs), I can confirm that none of China's ENGOs has completely gotten rid of the background of GONGO."[22]

According to the random sampling survey conducted by the NGO Research Center at Tsinghua University in six provinces and eighteen cities across China in spring 2004, there were 3000 ENGOs registered under the Ministry of Civil Affairs. The scope of activity of these NGOs can be divided into two types. One type of NGOs organize activities exclusive to environmental protection; the other's activities involve environmental

[22] Interviewee with an anonymous environmental activist, on 2006 March 1st in Beijing

protection. The former's number is over ten thousand, and the latter's is three thousand.[23]

Table 4.1 Environmental NGOs in China

Types	**Number**
GONGO	1282-1450
University Affiliated Organizations	1116-1170
INGOs[24];	72-90
Grassroots	200-250
Total Number	2770-2960

Source: "The Report of Development of Chinese Environmental NGOs", Investigation Center of China Youth Daily, China Association of Environmental Protection, 2005

The "2008 Report on Chinese Environmental Organizations Development (*zhongguo minjian huanbao zuzhi fazhan baogao*)" released that the number of environmental organization is 3,539 in October 2008. There are also 3,000 international NGOs and charity groups who have connections with China in 2005 according to the NGO Research Center of Tsinghua University.[25]

4.5 Management of NGOs in China

The practices of many Chinese NGOs actually deviate from the principle of NGO's typical definition by western scholars to a great extend. The mechanism of obtaining legitimacy, maintaining legitimacy and depriving of legitimacy for NGOs is arbitrarily controlled by the state and keeps changing from time to time, and case by case. There are two general rules: government connection and trustworthiness of founders of an NGO.

[23] See the "Chinese Enviornmental NGOs Media Investigation by Green Earth Volunteers", Green Earth Volunteers

[24] Note: including Hong Kong, Macau and Taiwan

[25] Wu Fengshi, Chu Juan, 2010, "The Role of International NGO in the Environmental Protection", in Wang Yongchen and Wang Aijun eds., *Green Missionaries——Investigation of International environmental NGOs in China*,Beijing Publishing Co. and Beijing Publishing House.

Connections with government are by all means the foremost source of legitimacy for China's NGOs. The legitimacy of NGOs was largely built on specific personal relations and networks. Under the "dual registration system", the professional supervisory agency is called the "mother-in-law" of social organizations. This agency oversees the day-to-day activities of social organizations, and hold liability if its supervisee gets involved in illegal activities or any "political trouble". Bearing much and heavy liability, no agency is willing to be a social organization's professional business unit without reliable personal connection.

Political potential of the founder of an NGO is the key in obtaining and maintaining legitimate status. Many factors attributed to a founder's government acceptable image. For example, it is an advantage if this founder enjoys a relative high social standing within existing institutional framework. It is also important to make sure that the family background, personal "image" and value system at least do not conflict with that of the dominant ideology of the Chinese government. For example, Congjie Liang, the founder of the Friend of Nature, has the identity of a historian, enjoyed the political privilege as representative of CPPCC, and his family enjoys high social reputation.

When NGOs have developed strongly as an independent useful force, and when the government perceived that the forcefulness of NGOs does not substantially threaten the CCP's rule, the government will incorporate them into the existing framework either for the purpose to improve governance, or to expand administrative department's power. The CCP government is increasingly willing to release the restriction on registration for social organizations, empowering more rights and action space for the growth of social organization. Representatives of NPC and CPPCC even submitted draft during annual NPC and CPPCC conference to appeal for loosing the control of social organizations.

On March 18, 2006, the "Provisional Measurement on the Public

Participation of Environmental Impact Assessment Law" was officially enacted. Pan Yue, the vice president, claimed that this is the first legal norm of public participation in the area of China's environmental protection. This also signified that CCP government has become more responding to the demand and right of participation for the general public. For example, in 2008, Chinese indigenous ENGOs played key roles in the rescue activities during the reconstruction after the Wenchuan earthquake.

However, the requirement of registration and getting approval from supervision department annually still makes grassroots NGOs very instable. Scholar stated that "official registration remains one of the most difficult tasks for Chinese ENGOs" (Jin, 2007:42). In addition, social organizations are ruled by multiple governmental agencies. For example, rural social associations are usually ruled from four different domains, the Science Association (*kexie*), the animal raising department, the Communist Youth League (CYL), and the youth development department. There are tens of thousands of associations have registered under the Science Association, which is actually a quasi-governmental organ. The Ministry of Science is a government institution, while the Association of Science is a mass organization. Generally speaking, social organization can register under CYL, worker union, women union, oversea residents union, science association, and youth association.

Legal and Regulation Guidelines of NGOs include the Temporary Regulations of Social Organizations Registration, which was enacted in 1950s and did not identify the status of social organization. The rights, responsibilities, registration, and management of social organizations largely remained undefined and unchecked (Ma, 2006). The legal framework that regulates the development of NGOs changed after the 1989 Tiananmen Incident with the intention of tightening state's control over social organizations. The regulation serves as an all-encompassing controlling mechanism. The main concern of this regulation, according to an

anonymous interviewee, is to reinforce control over social organizations and keep all NGOs activities under close surveillance. The state contributed the surge of the 1989 student movement to mushroomed student and intellectual organizations, which serves as catalyst for pushing the movement and undermining social stability (Jin, 2007) .

In October 1989, the State Council enacted new Regulations for Registration and Management of Social Organizations. This regulation proclaimed that "there is no need for the establishment of a social organization where there are other social organizations whose business scope is either identical or similar to that of the proposed social organization in the same administrative area[26]". This restrictive corporatist framework is indicated by ministerial provisions aimed at preventing social organizations from "being excessive in number, developing without planning, overlapping of business among the organizations, enrolling members repeatedly, and making members suffer excessive economic burdens." The regulations also warn against "malicious competition among the organizations, which in turn do harms to the society (Ge 2001)". This controlling system fits well in the definition of state-corporatist framework in the sense that "the state grants social groups deliberate representational monopolies in particular sectors in exchange for the certain control on their selection of group leaders and interest articulation (Schmitter, 1974)." Once established, social organizations are permitted to have a monopoly of representation in a given sector (Unger and Chan 1995; Chan 1993; White 1993; Unger 1996; Nevitt, 1996).

Under the double-registration system (*chuangchong guanli tizhi*), any organization intends to gain a legal standing must simultaneously apply to the authorizing government body (*dengji guanli jiguan*, the Ministry of Civil Affair) to register itself as well as seeking an upper-level government-authorized professional business unit to be its supervising body

[26] Paraphrased by Gallagher by citing Ge 2001

(*yewu zhuguan danwei*). The authorizing government body is usually Office of Civil Affairs, which vertically links the social organization to the hierarchy. The government-authorized professional business unit horizontally ties the social organization to the hierarchy. If both the authorizing government body and professional business unit (PBU) agree, a social organization can be finally entitled the legal standing status.

Formalization has a special significance in contemporary China. Formalization of ENGOs means registration, and it is significant in the way that additional advantage brought to an officially registered ENGO. "Firstly, their rights are recognized by the authorities and their operations are protected by law. Secondly, a formalized NGO is better received by the public, making fund raising and recruiting much easier. Therefore, the formalization of an ENGO significantly enhances its mobilization structure (Jin: 43, 2007) . "

The other important feature of the operation of NGOs is double-posting of personnel. The rigorous registration and approval process for a social organization brings about two results. The first one is the privilege of top-down social organizations, many of which are being spun off or devolved from the government or party institutions, which are known as GONGOs. GONGOs are closely connected with and under close control by the government in terms of personnel and financial resources.

There are some preconditions for receiving international aid by a number of INGOs, who provide financial support to China. Therefore, the demand of absorbing large amount of international aid drives ministry and provincial government agencies to intentionally establish GONGOs. The GONGOs therefore serve as the intermediate organization between INGOs and China's government. For example, the international aid for HIV/AIDS prevention and treatment might bring a amount of money, which attracts Henan province government. In order to get international aid on HIV/AIDS, Henan government even used these HIV-infected people as an advantage

when negotiating with the financial provider.

The practice of double-posting can be interpreted as interpenetration between government and party institutions and NGOs. Officials of the GONGOs are directly appointed by higher-level government or party institutions. Even for grassroots organizations or bottom-up organizations, a close relationship with government and party institutions is necessary to be legally registered under the double-registration system.

GONGOs enjoyed many advantages in terms of resources, including funding, expertise, staffing, and links to the government, enterprises, and the media. By contrast, grassroots ENGOs mainly rely on membership fee and donation to support their activities. For example, the Friend of Nature (FON) had received over 2.5 million RMB between 1993 and 1999 in total (Table 4.1). It often received around 1 million RMB annually in the 2000s[27]. Members of FON are required to pay membership fee, which nevertheless contributes small friction to its total revenue. As a funding source, the membership fee is only enough to hire one staff or rent a small office.

Individual and firm donations are the primary sources for the FON. For instance, its journal "the Correspondence of Friend of Nature (*ziran zhiyou tongxun*)" was financed by Taiwan's Tai Da foundation. A Taiwanese entrepreneur donated 15,000 RMB annually for FON's operation since 2001. In addition, the Global Village of Beijing (GVB) obtained well beyond 1 million RMB annually in the 2000s.[28] Green Watershed (GW), the ENGO based in Yunnan, also had an annual budget ranging from 600 thousand to around 1 million RMB in the 2000s.[29]

The Green Earth Volunteers (GEV) mainly resorts to self-finance for its operation. It officially registered in the Bureau of Civil Affairs in Beijing in 2007. The GEV's members are composed of Chinese journalists, lawyers, scientist, governmental officials, university teachers, students and retired

[27] Interview with XY of FON in Beijing, 2005.
[28] Interview with LXY of GVB in Beijing, 2001,2004, and 2005.
[29] Interivew with TL of GW in Kunming, 2004 and 2005.

people. Its registering capital was 100 thousand RMB (15 thousand US dollars), which was mainly donated by environmental activists like Zu Zhengsheng and Wang Yongchen. The Green Earth Volunteers (GEV) was not good at fund-raising long after its establishment. The GEV members attempted to influence public decision-making process of environmental protection with limited or even without monetary resources, whose practice is described as "getting things done without monetary resources (*bu huaqian ye banshi*)"[30]. The activity expenditure is usually covered by its volunteers.

Table 4.2 ENGOs' Funding Level

Organization	**Period**	**Funding**
Friend of Nature (FON)	1993-1999	2,520,000 RMB
Friend of Nature (FON)	2000s	1,000,000 RMB (annual)
Global Village of Beijing (GVB)	Late 1990s	1,300,000 RMB (annual)
Green Watershed (GW)	2000s	1,000,000 RMB (annual)
Green Earth Volunteers (GEV)		N/A

Source: (Jin, 2007: 186)

Although experienced many difficulties, such as material resource shortage, inadequate financial resources, no meeting space, low environmental protection consciousness to Chinese people as well as to the Chinese media, Chinese indigenous ENGOs persisted to spread their voice. As one leading environmentalist in Beijing once commented "(at that time), environmental protection is not as familiar and acceptable as today (Jin, 2007)." The cultivation of audience is full of frustrations. However, Chinese leading ENGOs are still engaged in promoting the consciousness of environmental protection and information dissemination among the general public, which usually costs less than people's expectation.

While most of the four ENGOs witnessed a surge in their funding in the 2000s, their directors downplayed the role of monetary resources in their

[30] Interview with WYC of GEV in Beijing, 2011.

public campaigns, which did not demand much resource from their perspective. In the Jing-Mi and Dujiangyan Campaign, ENGOs expressed their concerns and opposition mainly by the media. Media outlets can afford most logistical expenses for journalists, who were informed by ENGOs on the target project and environmentalism framework (Jin, 2007:187).

Even grassroots mobilization was not as resource-demanding as one might expect. GW organized most grassroots mobilization activities in the Nu Campaign before it was under criminal investigation in the early 2005. It only costs some travel expense for a typical village mobilization in its Participatory Social Impact Assessment (PSIA) program. For another instance, GW and FON once invited five villagers affected by the dam project to attend the UN hydropower development conference in Beijing, which only spent less than 20,000 RMB[31], a small portion of their total annual budget. (Jin, 2007:187)

[31] Interview with two villagers attended the conference GQX and LST in Kunming 2004

Chapter Five

Nu River! Angry River!——the Campaign against the Dam-building on the Nu River

In the process of hydropower development, the interest-driven state-owned hydro companies makes a good fortune. Meanwhile, the performance-obsessed local authorities and local cadres grasp the opportunity to boost local GDP and fill their own personal pockets. In contrast, local people are forced to migrate to areas with limited land capacity and severe living conditions with little compensation. At the same time, the local ecosystem is destroyed.

Building dams is not the only way out of poverty for local people. Fan Xiao, the general engineer of the Investigation Team of Sichuan Bureau of Geology once suggested many measures to improve the dire economic situation of the Nu watershed, such as direct allocation of small loan to peasants, exemption of all kinds of agricultural tax (which has been implemented nationwide since 2006); increased investment on education by the government; and increased financial transferring payment, etc.

Compared to that of the hydropower development plan on the Nu River, the above measures are relatively simple and easier to implement, and could be more effective. Meanwhile, a much larger group of local people can directly benefit from these measures than from the large-scale dam development plan.

However, around the pro-hydro policy formed a powerful hydropower interest group. Facing with the powerful opponents, a broad coalition of grassroots ENGOs, disgruntled local residents and international organizations decided to launch an uphill campaign to fight against the Nu River project.

5.1 Yunnan and the Nu River

Yunnan province is located in the southwestern region of China. With mountainous areas and big rivers, Yunan is well known for its biodiversity and cultural diversity as well. More than 18,000 kinds of high altitude plants grow in this province. Among the 56 officially recognized ethnic minority groups in China, 54 of them have presence in Yunnan Province (Yunnan Provincial Government, 2005). Yunnan is also blessed with abundant water resource given the six major watersheds running through the territory. Most of Yunnan's hydropower potential concentrates in the three biggest watersheds, the Jinsha River (the upstream of Yangtze), Lancang River (known as Mekong in Southeast Asia), and Nu River (becoming Salween outside of China).

In a 2003 report, Yunnan provincial government planned to invest 250 billion RMB (about 32 billion US dollars) in hydropower projects and create a total generation capacity of 50,000 megawatts by 2020. To put this into perspective, this is almost three times as the generation capacity of the Three Gorges Dam Project.

The Nu River is one of the biggest international rivers running through the Southwestern China. It is originated from the southern slope of the Tagulashan Mountain of the Tibetan Plateau east of the Himalayas. It passes through the mountainous areas of Tibet and Yunnan. In Yunnan, the Nu River mainly flows through the Nujiang Lisu Ethnic Minority Autonomous Prefecture, the Diqing Tibetan Autonomous Prefecture, Dehong Dai and Jingpo Ethnic Minority Autonomous Prefecture, and Lijiang Prefecture. The Nu River continues to careen southward and plunge through steep canyons just inside the border with Myanmar. The river is known as the Salween River in Myanmar. After crossing the Burma-Thailand border, it finally enters into the Gulf of Martaban in the Andaman Sea of the Indian Ocean.

The middle and downstream of the mainstream of the Nu River is 742 kilometers long. When it plunges through steep canyons sandwiched

between Gaoligong Snowcapped Mountain and Nushan Mountain (also known as Biluo Snowcapped Mountain), the natural drop is up to 1,578 meters. Its closure in geography well preserves the ecological environment of the drainage area of the Nu River.

Given the large natural drop of the Nu River from the north-western region to the south-eastern region, the topography of the Nu River is diversified, ranging from tall mountains exceeding 6000 meters high to valleys just 100 meters above the sea level. It is also well-known as the Great Canyon of the Orient due to its magnificent scenery consisting of snowy mountains, glaciers, steep gorges and mighty river full of rapids, and high mountain grassland. Before the planned dam project, the Nu River was one of the last two free-flowing rivers unaltered by man-made project. The other is Yalusangpo River. Therefore, the ecological system in Nu River is relatively well-preserved and intact.

5.2 The Hydropower Development of the Nu River

Given the natural drop of 1,578 meters, Nu River makes a perfect site for hydropower development. Its hydropower resource is not only important to Yunnan province but also to China as a whole. According to some estimate, the potential hydropower capacity of Nu River ranks No.6 in the national hydropower capacity and its ready-to-exploit capacity is ranked No.2 among the nation's 12 planned hydropower sites (The Nujiang News, 2003). Meanwhile, the middle and downstream of the Nu River meets the natural condition for hydropower development perfectly.[32]

The abundant hydropower resource in the Nu River therefore becomes a curse to its natural beauty. Both the central and local governments have long been aware of the possibility of hydropower development in Nu River. Under the planned economy, the governments carefully avoided making any "unnecessary" investments in infrastructure and heavy industries in the area

[32] "Report on Hydropower Development on the Middle and Downstream of the Nu River"

that might become the site of hydropower dams. Therefore, local communities along the Nu had a long history of insufficient investment from the state. The state invested only 9.3 billion RMB (1.2 billion of US dollars) in the Nu Prefecture in the last fifty years.[33] However, an amount of 10 billion RMB will be invested in the Nu River hydropower project alone. This is a huge attraction to Nu Prefecture, a state designated county of poverty (*guojiaji pinkunxian*), where a subsidy of one billion RMB is allocated from the central government annually.

Were the hydropower project to be materialized, it would be the largest cascade dam system in the world whose installed generation capacity will surpass that of the Three Gorges Dam. Yunnan provincial government believes that hydropower development is the only option to bring local communities out of poverty and backwardness. To counter the environmentalists, the Nu Autonomous Prefecture government argued that environmentalists were ignoring the poverty of the local people and that local villagers welcomed the project in heart. Hydropower development is the best way to lift the local people out of poverty.

The local government finally found a willing partner from the corporate world. In 2003, China Huadian Group, one of China's five state-owned power goliaths, targeted the abundant and low-cost hydropower resource in the Nu River. In collaboration with the industrial giant, the Nu Autonomous Prefecture government completed and submitted a hydropower development plan to the provincial government, namely "the Report on Hydropower Development Scheme of Nu River Middle and Lower Reaches".[34] With a total installed capacity of 21,320 megawatts of two reservoirs and thirteen cascade dams, the Nu watershed will be one of the most important hydro resource centers in China. The preliminary dam sites, located from south to north, are Guangpo, Yansangshu, Saige, Shitouzhai, Liuku, Lushui, Yabiluo,

[33] The Beijing News (Jin, 2007)
[34] "Report on Hydropower Development on the Middle and Downstream of the Nu River"

Bijiang, Fugong, Lumadeng, Maji, Bingzhongluo and Songta.

China's five giant water resources groups, the so-called "five big brothers" Huaneng, Guodian, Huadian, Datang and Three Gorges Group have targeted the affluent hydraulic and hydropower resources in Yunnan, Sichuan and Tibet for a long time. They compete with each other in the new game of hydropower exploitation in China's southwest region.

During the "national 11th Five-year Plan (2005-2010) ", the amount of the installed capacity of hydropower projects only completed about one third of what was planned.[35] From then on, large-scale hydropower projects have gradually become more and more sought-after. Those hydro projects that used to be "illegal" turned into "legal." The examples included the reinstated 6th longkaikou hydropower project and the 9th Ludila project in the "one reservoir eight cascade hydropower dams" scheme of the Middle and Downstream of the Jinsha River. These two projects were carried out by the Huaneng and Huadian Group respectively. With the reversal of the decision to halt the dam project by the Ministry of Environmental Protection in June 2009, the two projects became active again. Meanwhile, the 5th hydropower dam project—Jinanqiao—of the Jinsha River, which was stopped for some years, re-obtained the official approval from the NDRC in 2010.[36]

According to the national hydro plan, until 2020, the investment and production scale of the hydro power in the "Three Parallel River" will reach 51,700 MW, with the 62.5 percent development and utilization rate. In the

[35] Zhang, Boting argued that the negative impact of the dam-building has been aggreviated by dam opponent whom produced a powerful anti-dam public opinion. Such anti-dam discourse forced the one third of the task during the "11th Five-year Plan". In order to to compensate the inadequancy of installed capacity of hydropower during the "11th Five-year Plan" with the new goal of 163,000 MW proposed by the hydropower sector. (The Times Daily, A03 Top News Political Economy, 2011, Cui, X&Huang, Changcheng, "Clean Energy Controversy over the Hydropower", January 3rd, 2011.) Only 2,340 MW in 2007, 7,240 MW in 2008, 7,370 MW in 2009, and 20,030 MW at the end of 2009, these figures were far below 70,000MW of the national planned installed capacity. See Yu, Xiaogang, February 13, 2012, The Environmental and Social Impact of Hydropower Development under the Southwestern Hdyropower Speeding-up, Beijing Youth Daily Home of Journalists.

[36] The Times Daily, A03 Top News Political Economy, 2011, Cui, X&Huang, Changcheng, "Clean Energy Controversy over the Hydropower", January 3rd, 2011.

coming years, there will be a large-scale hydro development campaign in rivers of Southwest China. This development campaign will certainly have environmental and ecological impacts on the regions. (Zhang 2008)

With the goal that the installed capacity would reach 200,000MW and power generated would reach 600 billion kwh, almost all big rivers in China will fall into unprecedented large-scale development. “Running the horse for Water”, “Making the Hydropower Development Blossoming”, “Developing the Mainstreams and Tributaries of rivers in the Parallel Pace for Advancement”, the “Picture of One Hundred Army Units Battlefield” are descriptions given by experts in the Ministry of Environment. The expressions reflect a deep anxiety on the ongoing “Great Leap Forward” style development of southwest china’s hydropower resources. Experts estimated that the devastating destruction resulted from the movement would be no smaller than that of the large-scale forest logging in the 1960s and 1970s in China.

On March 14, 2003, China Huadian Group signed a memorandum titled “the Agreenment on Promoting the Hydropower Development in Yunnan” with Yunnan provincial government. Four parties were to invest 200 million RMB to form a new company, the China Huadian Nu Hydropower Company, with 51 percent owned by Huadian Group, 20 percent by the provincial government, 19 percent by Yunnan Power Group, and 10 percent by Nu River Power Company. Soon, the National Commission on Development and Reform (NDRC) approved the hydropower scheme submitted by Yunnan provincial government and the China Huadian Group.

In a ceremony held in July 2003, He Gong, the general manager of China Huadian Group claimed that the construction of the Liuku dam would begin in two months. It was a middle-scale hydro dam with installed capacity of 180,000 KW. Simultaneously, as He went on, preliminary work of six other dams would be pushed forward including Yabiluo, Bijiang, Maji, Saige, Yansangshu, and Lushui. At least 2 of 6 above dams would be launched as

early as possible.[37] The survey of Yabiluo and Maji dams had been completed by Hydro China Beijing Engineering Corporation (CHECC) and was boosted as one of its major accomplishments of the year.[38]The long term plan for the middle and downstream of the Nu River also involved irrigation, water supply, flood control and tourism, in addition to the main function of power generation.

Chinese hydropower developers had considered building dams on the Nu River for a long time. In 1991, the hydropower development company under the Ministry of Energy created a cascade dam plan with six dams on the Nu River. In 1999, under pressure from the fast-growing domestic demand for energy, the National Commission of Development and Reform decided to launch the hydropower development in the middle and lower stream of the Nu River in Yunnan province. In April 2001, Hydro China Beijing Engineering Corporation and Beijing Guodian Company began to examine the hydro resource of the Nu River. The feasibility report confirmed the profitability of Nu hydropower development.[39] (Cao and Zhang, 2004) After the investigation, a preliminary hydropower development scheme was drafted. It suggested four different preliminary hydropower development schemes varying by the number of cascades to build.

By 2003, the NRDC finally decided to build two reservoirs and thirteen cascade hydropower dams on the middle and downstream of the Nu River. The project had a designed installed capacity of 21,320 magawatt, or MW, a practical capacity of 7,789 MW, and an annual power generation of 100 million kwh. This would account for more than 40 percent of Yunnan's hydropower.

The areas that are affected by the hydropower project are the Nu Lisu

[37] Source: Spring City Daily news report, internet retrieval date is Wed, 16 Jul 2003 08:42:46 +8000

[38] The official website of Hydro China Beijing Engineering Corporation (CHECC) retrieved on 12 Nov, 2010

[39] Cao, Haidong and Zhang Peng, 2004 "The Social Forces behind Suspending the Nujiang Dams, (*jujiang daba turan gezhi muhou de minjian liliang*)," *Economy* (based in Beijing), 2004 vol. 5

Ethnic Minority Autonomous Prefecture and Baoshan City. These places have their significance in biodiversity and precious species. For example, there are at least 48 species of fishes in the river, including four types of very precious fishes. These precious fish also account for 70% of the rare species of fish in China. For another instance, in the lower reaches of Nu River are there 30 hectares of wild rice, a very special breed unique to China and to the world as well. In all, the Nu River valley is considered as the most important and precious gene bank in the world. Many environmentalists strongly believe it should be preserved for biological research and ecological tourism for the world.

5.3 Three Parallel Rivers as World Heritage Site

Together with the Nu River, the Lancang River and Jinsha River also originate from the Tibetan Plateau. These three rivers run through a roughly south-north route respectively across China's Tibetan Autonomous Region, Yunnan and Sichuan Province. While the Jinsha River turns east and becomes the Yangtze River, the Nu River and Lancang River continue flowing south and running into Burma. At the closest point, the Nu is less than 19 kilometers west of the Lancang, and the Lancang is 66 kilometers west of the Jinsha. (Jin: 2007:143)

The United Nations Education, Science and Culture (UNESCO) considered the region "may be the most biologically diverse ecosystem in the world." On July 2, 2003, this area was designated as a World Heritage Site by UNESCO World Heritage Center in the 27th World Heritage Annual Conference, with the title of "Three Parallel River." A UNESCO official even commented that the place is "definitely ranks the top 5 of 183 world heritage sites where I have been to."

The Three Parallel River area consists of high mountains and deep valleys. In terms of the vertical distribution of its topography, it begins with a dry and hot valley at the bottom, gradually evolving upward to cold and

snow-covered mountain. This place is also known as the hinterland of 25 biodiversity hotspots in the world, owning 25% of the world's fauna species and 50% of China's. Its flora has more than 6,000 species of plants. It is a research site frequented by scientists from all over the world. For better or worse, its deep and dense forests still have not left with many footprints of human being. Compared to many world famous great canyons, the one in this area is by and large unknown to the world.

The area of Three Parallel Rivers is also blessed by abundant mineral resources. It has been crowned as the "Kingdom of Non-ferrous Metals". The Three Parallel River Mineral Formation Belt tops in China's 16 important mineral formation belts. It has large reserves of copper, lead, zinc, iron, aluminum, and gold.

This unique geological and topographical landscape is the result of the movement of the Indian Plate. The Nu River valley is almost coincided with the Nu River fault zone, which is part of a larger geological structure from the New Constitution Movement. Two small earthquake prone areas are identified along with the Nu River Fault Zone, known as the Southwestern Yunnan Earthquake Zone and Tengchong Earthquake Zone respectively. A huge fault zone, still active, covers through vast area in China's Qinghai, Tibet, Yunnan and stretches to Burma and even Indonesia. The structure of this fault zone looks like Chinese character "dai" from the space. Severe earthquakes with a magnitude of 6 or above have been recorded in places such as Liuku, Guangpo，Yabiluo, Saige，and Shitouzhai.

The Nujiang Lisu Ethnic Minority Autonomous Prefecture is located in the west part of the Yunnan Province. It gets it name from the Nu River which runs from south to north through the territory. The Nu Prefecture governs four counties, namely, the Lushui, the Fugong, the Gongshan and the Lanping County. All of the four counties are designated as national poverty alleviation counties largely due to natural inhospitality. This place is by and large covered with steep mountainous area or high slope land greater

than 25 degrees.

In Gaoligong Mountain grows a tree king of 28-meter-tall rhododendron blossoming with over 2,000 clusters of flowers and each cluster consists of 22 to 24 flowers. Such species is so precious that it cannot be found in any botanic garden in the world. Despite a cold temperature over minus 10 degrees Celsius along Nu River at night, some plants can still survive and bloom when the sun rises. Each year, a large number of biologists from the most famous vivariums in the world visit this area and try to enrich their own gardens with the rhododendrons found here. "If there were no flowers from Himalayan, there is no garden in the Europe." This dictum is well known in other parts of the world, but not to most Chinese people.

Local people who live along the Nu River watershed are deeply connected with their Mother Nature. There are 14 ethnic minorities, among whom Dulong, Nu, Lisu, Pumi, and Naxi live only in this area. The Nu River area is a natural landscape museum, a genetic basement for species, a collection and exhibition of ethnic minorities' cultures and a virgin land of civilization. The 21st century is an era of knowledge economy. The life science and genetic engineering are at the forefront of the new economy. Rich diversity of the genes is the foundation for research in these areas. Therefore, to lose the bio-diversity of the Nu River would be a huge loss to the scientific community. No wonder that many experts have pointed out that building dams in such a world treasure would be a fatal mistake. [40]

However, the Nu prefecture and Yunnan provincial government embraced the "Mineral and Hydro-Oriented Strategy to Strengthen the Prefecture Economy" in its provincial economic and social development plan. The rich natural resources in Nu Prefecture and Yunnan province make the local governments feel ambitious enough to construct 12 hydropower bases as well as 7 mineral bases.

[40] Cite from "Our Attachment to Nujiang" website, www.nujiang.ngo.org

Having learned that there would be a large-scale hydropower development on the Nu River, on September 15 2003, the ENGO named "Green Watershed" submitted a Chinese translation of the WCD's report on dam and sustainable development to the director of the Nu Prefecture. The "Green Watershed"'s leader Yu and his group used their personal social network *(guanxi)* and tried to persuade local government leaders to have a second thought on the plan. Not surprisingly, their efforts were in vein. On October 1, when Xie Zhenhua, the minister of the SEPA, was visiting the Nu Prefecture, Yu tried to meet face-to-face with Xie and discuss with him on the dam project. However, Xie changed his schedule in the middle of his visit and did not give any chance to Yu for a meeting.

Not only the investment of building dams is significantly large, but huge impacts will be induced by the dam-building concerning geology, ecology and local residents' livelihood. For a long time, there has existed an intense dispute over dam-building. Some experts believe that hydropower is a source of "green energy", and therefore should be forcefully exploited. Some emphasize the negative consequences of hydropower development, making claims that the environment will be destroyed, the geological hazard will be induced, and the number of migrants to be relocated will be huge.[41]

Despite of the unsettled disagreement, building hydro dam has become pervasive across China in recent years, especially in the southwest, vividly depicted as "running horses to obtain water resource". In provinces rich in hydro resources, such as Yunnan and Sichuan, a new cycle of hydropower development has taken place since 2001.

5.4 First Phrase: the Environmental Impact Assessment (EIA) Panel

[41] It is no doubt that the controversy over hydropower with thermal power will continue, but it is certain that no matter the supporter or opponents, both hope convince the opposite side by the discourse of "environmental protection", and secure the hegemony of discourse in the debate. The quality of the water in the reservoir is undermined absolutely not by the pollution of the reservoir's water body, it should be due to a higher requirement of the water body for the reservoir than for the river. Zhang, Boting argued.

War (July 2003--February 2004)

5.4.1 NDRC's Conference and the Mobilization of Environmentalists

"They rushed through the proposal in anticipation of the incoming new Environmental Impact Assessment law." Mu, one of the SEPA officials who attended the evaluation recalled. Mu was the only opponent on the panel citing that the Nu River Dam Project needed an Environmental Impact Assessment (EIA) before being approved. Despite his opposition on behalf of the SEPA, the NDRC gave the Nu River project a green light.

In the period of August 12-14, 2003, the NDRC called on a conference in Beijing to evaluate the proposal of the thirteen cascade dam project and hydropower resource development in Yunnan before submitting it to the State Council for final approval. Major Chinese hydropower companies, such as the National Power Company, related ministries, hydrologists and SEPA's officials were all invited. During the meeting, Yunnan provincial government submitted the report "two reservoirs and thirteen cascade dam plan on the middle and downstream of the Nu River". As Mu recalled above, despite of the fact there was no comprehensive Environmental Impact Assessment (EIA) on the project, an overwhelming majority of the participants supported the hydropower development plan. Later on, Mu, the only opponent against the plan was removed from his position as the vice director of the Environmental Impact Assessment Office at SEPA and was transferred to a less important post in SEPA. Mu remained administratively active but was marginalized politically (Mertha, 2008). With the approval, the construction of Liuku, the first dam along the Nujiang River, would soon begin in the early September of the year.

Besides Mu, there were other environmentalists who were informed and deeply concerned about the Nu River project. During the NDRC meeting about the Nu River dam project, Mu had kept some leading Chinese environmentalists in Beijing in the loop. Upon recognizing his failure to hold back the Nu River proposal in NDRC's meeting, Mu dialed to one of

them, his old friend Wang Yongchen, in a hope that she could mobilize a wider and stronger support in stopping the Nu dam project.

Once hearing the bad news from Mu, Wang Yongchen, one leading environmentalist in China, was quickly taking on an active role in the undertaking. At that time, she probably did not realize this task would take her several years. She first thought of her broad connections with journalists and the media. As a founder of Green Earth Volunteers (GEV), an ENGO, Wang was broadly connected with Chinese major media outlets especially the "green" journalists who covered environment related issues. Wang and her comrades had successfully stopped the Mugecuo dam proposal in Sichuan province as early as 2000. In addition, she played a key role in the campaign in the same year to protect the Dujiangyan Irrigation System from being destroyed by the proposed Yuzui dam project, which was only 1,310 meters away from the main body of the ancient water conservation project.

As soon as Wang Yongchen relayed the news of Nu hydro dam proposal to the media in August 2003, media reports about this controversial project appeared in many Chinese news-papers, broadcasting stations and TV programs. In response to the public concern, the SEPA called on "the Panel of Ecology and Environment Protection of the Hydropower Development on the Nu Watershed" in September 2003. Wang attended the meeting at SEPA, and she recalled that "at that time, I called the Green Journalists Salon's journalists from more than ten media to attend the conference." A majority of attended experts opposed the Nu dam proposal, and the situation was advantageous to the opposition. This was a milestone for the environmentalists, the ENGOs and SEPA officials who were in line with the ENGOs on the Nu River issue. And this event became the so-called "the first outcry of the campaign to save the Nujiang River."

The controversy over the Nu dam proposal is complicated by the related parties which include the local authorities, hydro developers, local residents, ENGOs, SEPA, and the media. These parties, depending on their stance on

the Nu dam plan, can be classified as the pro-hydro and anti-hydro coalition. The pro-hydro coalition, united by economic interests, includes local authority and hydro developers. The basis of the anti-hydro coalition is the shared values in environmental protection. The camp was constituted of environmental department officials who supported the suspension of the Nu dam proposal, ENGOs' leaders and environmental volunteers.

When the SEPA formed the panel to review the Nu River project, Wang understood that if experts could elaborate the negative ecological impacts of the Nu dam proposal in SEPA's panel, the arguments of the anti-hydro camp would be strengthened. Therefore, Wang phoned environmentalists and environmental protection experts for help. The first person she called was an expert she knew well, He Daming, a leading expert in international watershed management and the director of Asian International Rivers Center of Yunnan University. Professor He clearly expressed his opposition against the Nu River dam plan, citing its potential and significant ecological impacts on the Nu watershed in an earlier SEPA meeting. Therefore, a collaborative relation between SEPA and Chinese ENGOs was formed in their opposition to the Nu dam plan.

Before accepting the invitation to attend the review panel on Nu dam project, Professor He had already organized two panels to examine the impacts of hydropower development on the Nu River. His expertly summarized six major issues involving the Nu dam plan were expressed in SEPA's early September panel and later became the outline of a report published in the Chinese Environmental News. (The Beijing News, 2003).

5.4.2 SEPA's Objection to the Nu River Dam Project

In August 2003, The State Development and Reform Commission (NDRC) approved the thirteen-dam proposal on the Nu River in Beijing and planned to present the plan to the State Council for a final approval. If no accident happened, the construction of Liuku Dam in the Nu River would

start in September 2003. However, the SEPA opposed the plan.

Since 2003 the national demand on electricity had increased rapidly. Despite of the state directive that the power construction should be undertaken orderly, some regions and enterprises launched a large number of hydropower dam projects either illegally or against the regulations. On September 3, 2003, SEPA organized its own evaluation panel to examine the possible environmental impacts of the proposed hydropower development in the Nu watershed. The panel was called the Panel of Ecology and Environment Protection of the Hydropower Development on the Nu Watershed. Thirty-six experts from hydrology, geology and geography, river ecology, environmental protection, flora and fauna conservation, and sociology were invited to attend the panel discussion. Experts in the panel expressed their opinions quite different from the opinion of the "Report on Two Reservoirs and Thirteen Cascade Dams on the Middle and Downstream of the Nu River" approved by the NDRC.

The SEPA panel focused more on the ecological and environmental problems brought out by hydropower development. It noted that hydropower development in China had been active. Although it was needed for boosting a new cycle of economic growth, environmental problems induced by these projects, especially aquatic ecological problem, had become acute and prominent. The panel used the Hengduan Mountain as an example. It was the most concentrated area endowed with affluent hydraulic resource including the Jinsha River, the Dadu River, the Yalong River, the Lancang River, and the Nu River. This area had become a place with intensive hydropower development projects. At that time, no matter the mainstream or the tributary of the rivers in this area were dotted by cascade development plans. The middle and downstream of the Jinsha River was planned to build 13 cascade dams, the mainstream of the Lancang River 14 cascade dams, the upper stream of the Lancang River 6 cascade dams, and the middle and downstream of the Lancang River 8 cascade dams.

Besides government's officials, experts and journalists also played an active role in the discussion. The majority of them criticized and opposed the dam plan on the Nu River and pointed out the negative effects to environment and ecological system. The impact on the rich biodiversity and cultural diversity of the Nu watershed was the main concern. During the meeting, representatives from the NDRC and National Power Company still claimed poverty relief was the main reason for dam-building on the Nu River.

The SEPA panel's opposition to the Nu River dam proposal was included in the State Council's internal report. The panel expressed six major concerns. First, the Nu dam plan is located within the Three Parallel River Protected Area. Second, the Nu valley is known for its unique natural conditions and is a precious site for scientific research. Third, the Nu watershed has the richest biodiversity not only in China but in Southeast Asia. Fourth, the dam sites are along the active orographic belt, where earthquakes, erosions and landslides occur frequently. Fifth, there is a large population whom the project would displace. Sixth, hydro power development is not an effective way to eradicate poverty.

5.4.3 SEPA's Usage of Media

On September 10, 2003, Chinese Environmental News, the official newspaper run by SEPA released an editorial concerning the Nu River dam proposal. It argued that the Nu dam plan must abide by the Environmental Impact Assessment Law, which took effect on September 1, 2003. Moreover, local ethnic minorities should be informed in advance about the potential impacts of dam-building to their lives. They should participate in the decision-making process of the Nu dam plan.

In March, 2004, Shen, Xiaohui published an article titled "Six Questions on the Nujiang River" and claimed that, firstly of all, river water is not wasted if not being used to generate electricity; usage of the water resource

in the Nu River is not as simple as hydropower development. Furthermore, Shen argued that hydropower was not the only way that could lead Nujiang people to affluence. More importantly, constructing a dam on Nujiang River would bring about irreversible negative effects on the Three Parallel Rivers' application for World Heritage. Shen also pointed out that there were alternative ways to solve the energy shortage problem such as increasing the efficiency of energy usage. Such methods would be more effective than hydropower development projects. Shen maintained that the controversy over the Nu River hydropower development reflected the maturity of public's environmental consciousness. [42] Despite of the evaluation materials from ecological experts and other scholars, the NDRC and SEPA's respective evaluation panels drew strikingly opposite conclusions on the impacts of the Nu River project on environment.

5.4.4 Petition (Open Letter Signed by CECPA)

On October 25, 2003, the Second Membership Representative Conference of China Environmental Culture Improvement Association (CECPA) a leading environmental GONGO overseen by Pan Yue, the vice director of the SEPA. In order to form a wide coalition for environmental protection, Pan Yue and SEPA brought in many social elites from a wide spectrum. Many famous writers, singers, movie stars, and sports stars became standing members of the CECPA. The "Green Forum" of the CECPA was a big public relations event. Wang Yongchen, who was also a standing member of the CECPA, suddenly got the idea that a petition letter co-signed by social celebrities would greatly expand the influence of the opposition of the Nu dam proposal and this public relation event would be newsworthy. Wang Yongchen gave an emotional speech and persuaded the

[42] See Chen, Hongwei, "the beginning and the ending of an Environmental Journalist Suing the Hydrologist" in "Confusion——China's Environmental Journalists Investigating Report, 2009's version", eds. Wang, Yongchen, and Wang, Aijun.

attendants to openly support the protection of the Nu River. Soon a petition co-signed by sixty-two influential elites from science, culture and arts, media, and sports[43] drew nationwide attention overnight. Yu Junjian, a famous Chinese singer and the vice president of the CECPA, advocated that "currently there are very few river maintaining ecological sites in the world, while we have two located in China, Yalutsangpo and the Nu River. However, we feel furious on hearing from the latest news that there will be a large-scale hydropower development in the Nu River." However, hydropower companies responded to this by denouncing those social celebrities as know-nothing about hydraulic engineering and hydropower development.

This public event demonstrated the creativity and capacity of Chinese environmental groups to find opportunity to serve their own agenda. Meanwhile, the connection between grassroots ENGOs and their GONGO's partners was reinforced through this event.

5.4.5 The Environmental Impact Assessment (EIA) Panels

On October 20-21, a division between pro-dam and the opposition became obvious when SEPA invited experts from Yunnan to attend the conference in Beijing. As the opponents of the dam proposal were mainly coming from Beijing while the other side were local Kunming experts, some ENGO leader even made a joke that "household registration (*hukouben*) determines position".

In the panel, a Nu Prefecture official emphasized that hydropower development was the only solution to eradicate persistent poverty in the local community. While one SEPA official reemphasized that the hydropower development in the Nu River would cause unrecoverable

[43] Including Tang Xiaoyan, Wang Jinnan, Niu Wenyuan, Li Hao, Su Shuyang, Zhang Biao, Zhang Kangkang, Xu Gang, Yu Junjian, Guan Mucun, Lu Qi, Li Qi, Jia Ding, Liu Quanhe and Liu Quanli, Zhao Zhongxiang, Song Yingjie, Tian Shanchuan, Deng Jia, Liang Congjie, Wang Canfa, Hao Bing, Liao Xiaoyi and Wang Yongchen

environmental damages, he also suggested that local government incorporate alternative approaches to poverty relief. One expert from Beijing questioned the legitimacy of hydropower development by asking "is it an effective means to relieve the poverty in the communities along the Nu River?" and "could displaced local people of the Nu dam project benefit from the huge profit of hydropower development?" He suggested that the interest of the local people must be considered in the overall development plan of any hydropower project, which should be a three-party game including developer, local government and local residents (Jin, 2007:150). Yu Xiaogang examined a major hydropower dam built on the Lancang River in the 1990s. The project created high profit. However, local communities had not become wealthy or shared any profits from power generation. On the contrary, local people's annual income and living standards decreased sharply after the dam was built. The average income of the local people was 11 percent higher than the provincial average before and was strikingly reduced to only 46 percent of the provincial average afterwards (Yu 2002). Such instance provided a strong case against the discourse of poverty relief through profitable hydropower development (Jin, 2007:151). Another heated topic was revolved around the Nu dam's impacts to fishery, forestry, biodiversity and cultural diversity. In the internal report to the State Council, SEPA recorded the debate between the two camps on the Nu hydropower development project.

5.4.6 Divided Government Agencies

The SEPA was viewed as one of the weakest ministries in the state apparatus. Inadequate manpower and limited budget made it inefficient in implementing environmental laws. After the 1998 reform, SEPA cut off its staff from 321 to 200 which further lowered its capacity.

In order to make more comprehensive evaluation of the impacts of the Nu dam proposal, Xie Zhenhua, then the director of SEPA (he is now the vice

director of the NDRC, which is the most powerful ministry-level government organ in China in reviewing and approving big projects.) took one week visit along the Nu watershed to investigate the proposed dam sites and local communities in the early October. Right after his visit, SEPA sent a group of experts to tour several preliminary dam sites of the Nu proposal too.

5.5 Second phrase: ENGO's Media Campaign and Petition (March 2004-March 2005)

Since 2003, a group of Chinese environmental journalists and ENGOs had kept a keen eye in examining and reporting the potential negative impacts of hydropower projects on local ecology and geology and the difficulties of large-scale resettlement of local population. In 2003, the Mugecuo reservoir was planned to be constructed on the Wasigou, a tributary of the Dadu River at Ganzi Prefecture of Sichuan Province. The Gongga Mountain is located in this area. Local Tibetan villagers benefited from the tourism industry thanks to the beautiful scenery. However, due to the hydropower project, this area had turned into a large construction site. The business brought by horse riding, photo taking and traditional herb had all gone. After five years of efforts by ENGOs, the Mugecuo reservoir was finally stopped. Local government changed their mind and decided to develop "green economy" instead. Encouraged by this success, environmental activists put greater efforts in protecting one of China's last free flowing rivers, the Nu River, from being dammed.

Although the dam sites of the Nu River are in the remote area of northwestern Yunnan province, the majority of the controversy over the Nu dam occurred in Beijing. Chinese ENGOs' agenda and expectations included promoting good governance especially incorporating local villagers' interest into the hydropower development decision-making and promoting sustainable mode of development for local community. Thanks to

the participation of Chinese intellectuals, the media and the ENGOs, various issues that used to be ignored in the decision-making process began to be noticed by the public.

5.5.1 The Green Earth Volunteers' Action

Although The Green Earth Volunteers (GEVs) had recommended environmental experts to support the EIA panel of the SEPA, the issue of Nu dam proposal was still confined within a narrowly-defined group, mainly professors and experts focusing on highly-technical issues. Wang felt it was important to reach out for a wider audience. There was a golden opportunity ahead to increase the influence of the opposition to the Nu River Dam proposal. Wang and other environmentalists orchestrated a national public media campaign.

5.5.1.1 The Media Campaign Initiated by Green Earth Volunteers

From August 2003 to January 2005, the Beijing-based NGO, the Green Earth Volunteers (GEV) organized a series of forums and salons to disseminate knowledge about potential negative effects of dam-building to environment and related difficulties of resettlement in such a geologically unstable area. Gradually saving the Nu River from being dammed became a hot topic among some green journalists. Various news-reports on this topic appeared on Chinese domestic media as well as the international media.

5.5.1.2 Green Journalists' and ENGOs' Investigation Trip

Although Wang Yongchen and other green journalists and activists had already been informed of the Nu cascade dam proposal as early as August 2003, no one had actually visited this remote area in person. In February 2004, Yu Xiaogang organized an investigative tour to the Nu River with a group of reporters from newspapers, broadcasting stations and TV stations based in Beijing. This tour provided a great opportunity for journalists to

gain some first-hand experience about the Nu watershed.

Twenty journalists, volunteers in environmental protection, experts and scholars coming from Beijing and Yunnan made another trip along the Nu River for 9 days from February 16 to 24, 2004.[44] Environmental volunteers came from several ENGOs, including the Green Earth Volunteers and many others. They travelled along the river, visited villages and talked to local residents. Of them the deepest impression for the group was the mutual reinforcement between biodiversity and cultural diversity along the banks of the river. Rich natural resources lay the foundation for different ways of life for 22 local nationalities. Without the abundant traditional culture, the natural ecologic diversity along the river will be hard to reserve.

5.5.1.3 Photo Exhibition

In order to spread out the words to the general public, from March 22nd to 31st, 2004, the Green Earth Volunteers collaborated with several other ENGOs, including the Green Island, the Global Village of Earth, the Friend of Nature, the Green China, the Conservation International, the Environmental and Development Institute, and the Hong Kong Community Participation Action to hold a photo exhibition "Our Attachment to Nu River" in Beijing's New Century Post Station during the International Water Day. These photos were taken during the investigative trip along the Nujiang River in February and selected from more than thousands of them. The beauty and splendid natural environment in the Nujiang River not only drew a large number of audiences but collected donation of 2,000 RMB during the exhibition. This money was collected to build up several libraries for local children alongside the Nujiang River. Immediately after the photo exhibition, a website "Our Attachment to Nu River" [http://www.nujiang.org.cn] was established to drawing long-term concerns to the Nu cascade hydropower project's impact on local environment and

[44] "Our Attachment to Nujiang River" homepage, http://www.nujiang.ngo.cn/Frontpage/01.htm

community. This website has served as an information-exchange platform and managed an email list called “Everyday River Information” by Green Earth Volunteers ever since. “When we were preparing for this photo exhibition, an amateur photographer found us and gave us a collection of Nujiang photos that he took 8 years ago. Aside from feeling thankful, we are glad that the ecological environment at Nujiang River has been kept beautiful, unpolluted, and natural in the last 8 years. How will the future be?” One organizer recalled this vividly during my interview.

5.5.1.4 Information Exchange via the Salon of Green Journalists, Beijing

Environmental journalists aggregated to form a core network which played as a communication and mobilization structure. Wang and Yu became the de facto leaders of the Nu Anti-Dam Campaign.

In 2002, initiated by two female Chinese journalists, Zhang Kejia and Wang Yongchen, Beijing Green Salon of Journalists was formed to serve as bridge between environmental movement organizations and mass media. Zhang Kejia was a senior journalist from the China Youth Daily and a founder of ENGO "Green Island." Wang Yongchen was a senior journalist of the China Central Broadcasting Station and a founder of "Green Earth Volunteers". Their reports focused on environment problems in China and kept seeking for solutions. They constantly invited environment experts and government officials to deliver lectures in the salon they organized. Topics touched on the overall environment, energy, water, forest, protected area, flora and fauna, city conservation, public participation, and ecological compensation etc. Those talks kept drawing general public's attention to China’s serious environmental problems and promoting the environmental awareness of the general public, many of whom had grown up as an observer and bystander and later turned to a participant and even activists in the environmental protection movement.

The Green Salon of Journalists serves well as an appropriable

organization, a concept developed by Edward and McCarty (2005) in their fivefold resource typology. Such bridging structure is different from intentional organization in securing social-organizational resource in that they are not created for the purpose of movement but provide channels for movement activists to mobilize external resources.

5.5.1.5 "The Bloody Dam Week" initiated by Tom.com

Environmentalists also utilized new media to express the opposition. For example, tom.com, a leading Chinese language website initiated an on-line program titled "the Bloody Dam Week" (*qixue daba zhou*)

In January 2004, Tom Online, a Chinese company operating a popular Chinese language Internet portal and many online services, organized a web broadcasting forum called "Bloody Dam Week". The forum invited five opponents of the Nu project to interact with a group of audience under the age of 24 online (Tai, 2006 cited by Jin, 2007). Experts who attended the SEPA's environmental panel on Nu hydropower development included Li Dun, a legal scholar and Yu Xiaogang, an environmentalist from Yunnan.

5.5.1.6 Forums

5-5-1-6-1 The Anti-dam Conference of World Rivers and their Allies in Thailand

ENGOs attended international conferences and forums on environmental protection in order to promote international awareness of the environmental and social aspects of the Nu cascade hydropower project. This was another strategy they used for pressing the Chinese authority to have an Environmental Impact Assessment (EIA) evaluation on the Nu dam project.

In November 2003, several Chinese ENGOs, including the Green Watershed and the GEV, joined in the “Anti-dam Conference of World Rivers and their Allies” in Thailand. 320 representatives from 61 countries and areas attended the event. The venue of the meeting was a grass-roofed

house. When the forum ended, the house was donated to a local school as a school building.[45]

During the forum, GEV successfully lobbied sixty NGOs to sign a petition for saving the Nu River from being dammed. Later on, during the Sino-America Environmental Forum and Civil Society Forum in South Korea, GEV successfully shifted the theme of the forum to “how to protect the Nu River--the last ecological river in China”. Chinese ENGOs, including GW, GEV and FoN, attended this forum.

Green Earth Volunteer together with other Chinese ENGOs successfully brought the issue of protection of the Nu River into the discussion and lobbied NGOs' representatives from sixty countries to sign on a open letter, which called on international community to protect China's Nu River and to pay attention to the possible environmental impact of Nu dam proposal on the down stream countries.

In December 2003, a petition letter signed by eighty-three Southeastern Asian environmental groups urging Chinese authorities to halt the dam plan on the Nu River was submitted to Chinese embassies in Thailand and Burma. In the letter, it wrote "As brothers and sisters of Chinese green activists, we Thailand and Burma's activists have called on international community to support Chinese activists' concern on the Nu River dam proposal. We come together to call for a suspension of the dam plan as well as a more stringent assessment of potential environmental impacts of dam projects on the Nu (Salween) River."

In addition to the opposition from Thailand and Burma's non-governmental groups, the premier of Thailand also commented on the issue, "I believe that as a responsible big country, it will consider smaller countries' interest when undergoing economic development. It shall not undertake hydropower development at the expense of lower stream

[45] See Shen Xiaohui, January 15, 2004, in “Ten Questions to the Nu River” (*nujiang shiwen*), in “Our Attachement to Nujiang River” (*qingxi nujiang*), http://www.nujiang.ngo.cn/Frontpage/02.htm

countries' interest."

5-5-1-6-2 The "3rd Sino-American Environmental Forum

In mid November 2003, most influential Chinese ENGOs attended the "Third NGO Forum on U.S.-China Environmental Cooperation" in Beijing. The Green Earth Volunteers, led by its founder Wang Yongchen, successfully made the Nu hydropower development project the central topic of this forum (Jin, 2007: 154). Chinese ENGOs heatedly debated whether the hydropower development would be beneficial to the Nu River. Although some environmentalists believed that hydropower development was the only solution to local poverty, opposing the project emerged as the dominant voice among Chinese ENGOs. (Cao and Zhang, 2004)

More importantly, Chinese ENGOs discussed the possibility and strategy for a national media campaign. Some environmentalists suggested employing one tactic that had proved effective in the Dujiangyan Campaign—calling the Beijing Office of UNESCO to press the Chinese central government to protect the World Natural Heritage Site of the Three Parallel Rivers.[46] By contacting with a famous international environmental organization, the International River Network (IRN), environmentalists hoped to connect with UNESCO.

5.5.2 Bringing International Organizations In

At this stage, ENGOs tried to seek international allies and establish connections with international organizations, such as the International River Network (IRN), the International Union for the Conservation of Nature and Natural Resources (IUCN) which is the official assessment body for World Heritage Committee of the UNESCO. It is this organization that nominated the Three Parallel Rivers area to be the World Natural Heritage Site. In the

[46] Interview with two environmentalists who attended the forum, Beijing, 2005, paraphrased from Jin, 200:154.

letter, IUCN wrote that "local ethnic groups present together their relationships in rich culture, land, religious believes, mythos and arts."[47]IUCN China's program coordinator Doris Shen was assigned to focus on China's Nu River dam project after IUCN was informed of the hydropower development plan in Yunnan.[48]

5.5.2.1 Petition to Chinese Leader

Around the Spring Festival of 2004, IRN submitted an open letter to the Chinese President and general party secretary of CCP Hu Jintao. They urged Chinese government to suspend the dam plan on the Nu River citing that it would have significant negative impacts on downstream countries and people's livelihood. Moreover, they asked for a comprehensive environmental impact assessment on the project.

5.5.2.2 Petition to the World Heritage Committee of UNESCO

On January 26, 2004, another petition letter was submitted to the World Heritage Committee of UNESCO via The World Conservation Union (IUCN). IUCN is a non-governmental organization, providing professional assessment on the selection of World Heritage. It is the official technical advisory body to the World Heritage Center[49]. In October 2002, IUCN's expert Dr.Jim Throsell and Dr.Les Molloy paid a twelve-day visit to the Three Parallel Rivers of Yunnan Protected Area. After receiving the petition, the director of UNESCO's World Heritage Center wrote in reply, "The 'Three Parallel Rivers area' was, in fact, listed as World Heritage property by UNESCO at the 27th session of the World Heritage Committee held from 30 June to 5 July, 2003. We noted that a proposal to construct a total of 13 dams on the Nujiang River has been submitted to the Chinese authorities,

[47] Preface of Website "Our Attachment to Nujiang River", http://www.nujiang.ngo.cn/Frontpage/01.htm
[48] See IRN's homepage related topics on Lancang upper Mekong campaign at http://irn.org/programs/lancang/index/php?id=010319.strangling.html
[49] http://www.iucn.org/themes/wcpa/wheritage/wheritageindex.htm

and it claimed that none of which will fall into the territory of the World Heritage Site……We will certainly express our concerns to the Chinese authorities regarding the proposed project and will keep you informed accordingly." Chinese environmentalists got this letter from UNESCO, and forwarded it to Chinese delegate of UNESCO, Mr.Zhang, Xinshang.

5.5.3 Local Authorities' Reaction

Facing objections from SEPA, senior officials of Nu prefecture urgently flew to Beijing to lobby relevant ministries, including the NDRC, SEPA , Ministry of Water Resources, Ministry of Transportation, and State Ethnic Affairs Commission. These officials also visited the China Huadian Corporation (CHC), the main developer of the Nu hydropower development project (The Beijing News, 2003). Although no report released the details of the Nu officials' activities, the lobbying worked. Two weeks later, the SEPA sent another work team to the Nu to investigate the proposed dam sites of the thirteen cascade dams. Unlike the previous tour in October, all the six members of the work team came from the Evaluation Center of the SEPA. The work team did not oppose the proposal directly. Most of the negotiations among the work team, the local government and hydropower developers were about how to make minor modifications to the original proposal, such as suspending two dams that might destroy the habitat of wild rice, and decreasing the height of one dam to attenuate its impact on the First Bend of the Nu, a spectacular scene of the Three Parallel Rivers. (Jin, 2007: 151-152)

Local government took the moderate position of the work team as a sign of the future concession of the SEPA. The general director of Yunnan Company of CHC was optimistic about the final approval of the Nu project (the Beijing News, 2003). This optimism was reassured on January 5th, 2004 when a rumor circulated that the Nu project's environmental impact assessment report had been approved by the SEPA. Although this news

cannot be confirmed, many environmentalists believed that the official approval of the Nu project was inevitable. (Jin, 2007: 151-152)

While it seemed that the SEPA could not halt the Nu hydropower development project through the institutionalized approach, Chinese ENGOs came to the center of the stage. (Jin, 2007: 151-152)

However, cooperation with SEPA and other governmental agencies is a sophisticated art, including establishing relations with officials, maintaining the balance between civil groups and state agencies. Just like what one famous Chinese environmentalist commented, "How to cooperate with the government is the focus of almost all Chinese NGOs."

Meanwhile, from June 2003 to October 2004, Chinese ENGOs mobilized yet another national media campaign. Major Chinese domestic media outlets reported on the issue of Nu cascade dam project, including China's Youth Daily and Southern Weekend. Furthermore, Chinese ENGOs tried to make themselves exposed to the audiences of global civil society by various ways, built up coalition with international organizations, especially international environmental NGOs and attended international conferences and forums. Chinese ENGOs gradually accumulated internationally-acknowledged identity, credibility and reputation in this process. Chinese ENGOs then leveraged international support to put pressure on Chinese authority.

It became clear that Yunnan provincial government strongly supported the Nu hydropower development plan. The governor of the Yunnan Province even declared that "(the Yunnan Province) will launch the hydropower project on the Nu River at any expenses". Related governmental departments of Yunnan province also repeatedly claimed that the majority of local people (*laobaixing*), in their words "95 percent" of local people, supported the Nu River hydropower development and demanded to develop hydropower resource in the Nu River as soon as possible. Local cadres claimed that building dams on the Nu River was of great necessity and should be conducted immediately despite experts' opposition. (Li, 2004)

In addition, local authorities also launch their own media campaign. While Yunnan scholars seemed to lack creditability to the general public, the provincial government invited famous scholars outside Yunnan to advocate for the Nu project. Since 2004, proponents of hydropower had published a series of articles in national media outlets to promote hydropower as a clean and renewable energy. (Xiao, 2004; Jin, 2007:168)

5.5.4 NGOs' Coalition with SEPA

Chinese ENGOs' efforts in saving the Nu River has been largely back-up by the China's environmental watchdog, the State Environmental Protection Administration (SEPA). In 2003, SEPA held an Environmental Impact Assessment (EIA) panel to discuss and openly object the feasibility of the cascade dam project on the Nu River. However, SEPA's EIA panel encountered strong resistance from Yunnan local authorities later on. Yunnan local authority organized a similar EIA panel to defend the legitimacy of hydropower development and the necessity of dam-building. In 2005, the SEPA launched an 'Environmental Impact Assessment (EIA) Storm'. This governmental action aimed to reinforce EIA evaluation before project construction. On March 18, 2006, the Provisional Measurement of the EIA Public Participation was enacted by the Ministry of Environment (MoE). Pan Yue, the vice minister of the MoE considered it as the first official document with legal validity in the field of environmental protection in China.

5.5.5 Premier's Intervention

It was the Premier's intervention that to a great extent determined the direction of the Nu dam controversy. Premier Wen intervened twice in the Nu dam case. According to the news released by the Hong Kong Mingpao, on 2nd February, 2004 Premier Wen sanctioned that "such (Nu River dam project) event that arose social attention widely, should be cautiously

studied and decided on scientific evidence". It implied that previous decision-making had been neither thoroughly studied nor scientifically undertaken. The premier Wen's commentary provided great support to ENGOs in the anti-dam campaign. Many environmentalists felt encouraged by the premier's stance, especially Wang, Yonchen who was so happy and broke into tears. However, others still kept a calmer mind. Yu cautioned that those hydropower companies would not permit the hydropower project to be halted so easily.

In February 2004, Ma Xiaotian, a delegate from China's People's Liberation Army attended an international conference in Singapore and also reported to the PLA upper-level officials about the international opposition to the Nu River dam-building. This added more weight in addition to the Premier's opinion.

On April 2009 Premier Wen reiterated again that "this (Nujiang River cascade hydropower project) event has wide impacts. We should listen to various opinions further, make in-depth study and decided on cautiously. The Jinsha River hydropower project has been launched without careful deliberation, and so far has left many unsolved problems. The lesson should be learned."[50]

5.5.6 Arguments from the Two Camps

The Nu cascade hydropower dam project had drawn attention from other elites. While the pro-dam group argued that the degree of hydropower development was inadequate and maintained that the issue of hydro interest was misperceived by the dam opponents. In the other side, a group of intellectuals who opposed the Nu dam plan offered their counter-argument in terms of resettlement, biodiversity, and ideology of development, and many other relevant issues.

[50] "Stepping into the Longkaikou hydropower dam project site" in "2009's Ten Years River Survey", Green Home (Green Earth Volunteers) and www.greensos.cn (Green Journalists' Salon), internal publication

The dam supporters argued that since the production and living conditions of the inhabitants in Nu river valley had already impacted on the Nu river area's ecology and environment, the primitive ecosystem did not exist anymore. It did not make sense to discuss the issue of biodiversity and environment any more. The added impact on aqua and terrestrial species would be minimal. Moreover, the relocation of local population would be conducted within the territory of the Nu Autonomous Prefecture (NAP), which remained the same cultural environment. Furthermore, ethnic minorities' cultures would be preserved once the survival and development were solved otherwise these cultures would disappear anyway in poverty.

Dam supporters argued that "Nu river hydropower exploitation can function as a kind of vehicle, a large amount of market demand will be created in the process of construction and operation. The local peasants will receive substantial direct and indirect benefits."

To counter such argument, Shen, Xiaohui, a committee member of the National Commission of China's People and Biological Cycle threw out ten sharp questions on the website "Our Attachment to Nu River" which was established specifically for conserving the Nu River.[51] He wrote, "Is hydropower exploitation the only way for Nu river poverty alleviation?"

Fan Xiao, the general engineer of the Bureau of Sichuan Geological Investigation argued that there are many difficulties in terms of farmland inundation and resettlement. He wrote that "According to the 13-cascade dams scheme, the total amount of arable land to be inundated is 58,996 mu [3,933 hectares] in the reservoir area, accounting for 2.4 percent of the total arable land in the reservoir area, including Chayu county in Tibetan Autonomous Region, Gongshan, Gugong, Lushui, Yunlong, Longyang, Longling, Shidian and Zhengkang counties in Yunnan province. There are 17 percent of the submerged land due to the cascade hydropower project

[51] Shen, Xiaohui "Ten Questions Concerning the Nu Dam Project", in the homepage of Our Attachment to the Nujiang website, www.ngo.org.cn

within the territory of Chayu, Gongshan, Fugong and Lushui counties of Nu Autonomous Prefecture. Among them, the Gongshan county will suffer 38.6% of land loss."

More importantly, Fan went on, the submerged farmland was the best arable land with the highest productivity in the Nu River watershed, mainly water-logged land and farmland with the gradient slope below 25. The climate in the Nu River is warm and humid, having a plentiful raining, with the multiple-year average precipitation ranged from 960mm to 1730mm. The annual average temperature is ranged from 14-16 ℃. The precipitation and temperature provide advantageous conditions for agricultural production. Therefore, the dam building induced resettlement is not about moving people from "area where living condition is bad or unsustainable", but uprooting people from the area both productive and with relative good living conditions" (Fan 2008). According to a report on the People's Net on October 22nd, 2005, the number of poverty population is 127,000 in the Nu Autonomous Prefecture (NAP). Resettlement is a way to resolve the issue of survival and development only if it is conducted in areas where the living condition is poor and ecologically unsustainable. This requirement is of great difference for the Nu dam project as discussed above.

5.5.6.1 Submerged Farmland and Arable Land Resources

In the three submerged counties, Gong Shan, Fu Gong and Lu Shui, 40,373 of population needed to resettle, accounting for 17.6 percent of the local population. The figure was calculated as a static other than a dynamic one. If we include factors such as population natural growth, second-time resettlement caused by geologic disaster and siltation backwater flooding, not only the absolute number but the percentage will increase dramatically. Some experts argued it was impossible to complete resettlement inside the Nu river area. At least half of the population in the submerged area are required to migrate to other regions. The upward and backward resettlement

will further augment population density and increase cultivation index of middle and high mountainous area where survival condition is not as good as Nu river valley. Ironically, the living and production condition for area to receive Nu river residents was worse than that of original inhabited area. It is almost impossible to expect a better survival and development condition after the resettlement.

The government always put the protection of farmland a priority. The state has drawn a red line to protect farmland from being converted to other usage. According to "Chinese Land Management Law" and "Basic Farmland Protection Regulation", it is stipulated that occupation and destruction of basic farmland is forbidden.

The Nu River area has done resettlement work in previous poverty alleviation activities. For example, the "withdrawing farmland and returning forest" was mainly conducted in the hillside areas, moving hillside residents who ploughed dry land with the gradient slope above 25 down to the valley area. Compared with previous resettlement, this time, the displaced people of hydropower development are actually living in area with relative good productive and living conditions. Even the report submitted by the Yunnan provincial government acknowledged that "the farmland submerged by the hydropower development is the premier farmland in the Nu watershed with a relative high productivity. From the perspective of farmland loss, it has a significant impact on the economy of the Nu prefecture." The report also noted that "based on the analysis of the environmental capacity of reservoir areas, it is deprived of condition for backward relocation, the major way for resettlement is outward immigration."

One big shortcoming of the relocation plan lies in that it was set up solely by the hydro sector and the local government without the inputs from dam-impacted villagers. In the relocation plan which will directly influence their livelihood, local villagers were deprived of channels to pursue their interests and express their opinions. A coordinated mechanism to take local

villagers' interest into consideration was absent.

In history, local peasants of the Nu watershed originally resided in the mountain area with higher latitude and their farmlands are dry land located in the steep slope of mountain. These high mountain inhabitants successfully relocated to lower area of the Nu watershed and the Nu valley. They were “ecological migrants” according to the “returning forest and grassland, withdrawing farmland” policy by local government over the past years. Local government has built many new villages to settle these migrants down. And they now plough farmland located in the Nu valley with lower latitude and gradient slope. However, their farmland will be inundated by the 13 cascade dam plan. According to the dam plan, “ecological migrants” would be “moved backward and upward” to the middle and high mountainous area again. (Shen, 2004)

5.5.6.2 the Issue of Biodiversity

Fan pointed out that “more importantly, the main threat to the biodiversity and ecological environment in the Nu watershed lies in the fact that a great number of dam zone migrants have to be moved “backwardly and upwardly” to the middle and high mountainous area where the capacity of land resource is scarce, resulting in the movement and expansion of human activities to ecologically sensitive area.” Shen argued that “Geological hazard will increase after the reservoir is completed. Induced by water storage and releasing of reservoir, mud-rock flow, landslide, and collapse of mountain will happen frequently.” (Shen, 2004)

As far as biodiversity was concerned, experts pointed out the fish population as an example. There are 48 precious species of fish in Nu River along with other fish species. The fish in Nujiang all belong to short-term migratory fish, and the dam will blockade the life-cycle circulation of the fish. Moreover, there is no assessment on the adaptation of fish from rapid water environment to tranquil water environment. Neither is there an

assessment about how the fish would adapt to abnormal water temperature fluctuation and air over-saturation of falling water. In short, the dam blockade may likely cause the fish population to decline.

Due to the steep geological landscape, there are intact original forest and natural wasteland in Nu river valley, together with middle and high mountainous area, constituting an ecological spectrum with intactness and consistence. However, the location of the submerged area is with latitude less than 1100 meters, where 40 percent of terrestrial species inhabit. Scientific assessment on the potential impact of such scenario is missing.

Another threatening factor to biodiversity and ecosystem on Nu river valley is the human migration backwardly to middle and high mountainous area where the land capacity is very limited. Human activities such as reclamation and deforestation will soon spread in such an ecologically sensitive area. It is concluded that human activities will speed up ecological degradation in an area which original land capacity is limited.

5.5.6.3 the Issue of Geological Environment

Nu River Valley is featured by steep slopes and deep valleys, fault growth, fragmented body of mountain, frequent earthquake activities, concentrated precipitation in rain season, resulting in a dynamic movement of substance on the surface of the land and an area with frequent geological hazard including landslide, mud and rock flow, erosion and collapse of mountain.

The area is a combination between the north-eastern Indian Ocean Continent Plate and European-Asian Continent Plate, where the south-eastern edge of the Tibetan Plateau transformed gradually into Yunnan Plateau. The “New Construction Movement” is still in play here. Therefore, this area is threatened by frequent geological hazard such as earthquake and silt.

The reason behind the formation of south-north waterways of the Nu River, Lancang River and Jinsha River was largely due to the

south-northbound intensive fault zones of north-eastern edge of the Indian Ocean Continent Plate. The Nujiang River valley almost looks like a straight line, sandwiched between the Gaoligong Snowcapped Mountain and Boluo Mountain. The Nu valley grows up and comes into being almost along the famous Nujiang Great Fault. Moreover, this fault is so far very dynamic. The main evidence is that the formation of Southwestern Yunnan and Tengchong Earthquake Zones along the Nujiang Fault which are two of China's most active earthquake zones. Once tall dams and large reservoirs are built, earthquake will more likely to occur in the area with very dynamic fault.

5.5.6.4 the Issue of Ideology of Development

The pro-hydro camp also tried to turn the issue to a political matter. First, whether or not to implement Nu river cascade hydropower exploitation was framed into a political issue, evidenced by their frequent citation of political slogans such as "talking politics (Jiang Zhengzhi)", "embodying Three Representatives" and "doing good to territorial stability and territorial security."

Second, they argued that large-scale construction projects contributed to the economy mainly through boosting GDP, increasing tax and governmental revenues.

However, as the opposition pointed out, this kind of contribution to economy probably would not benefit local residents. This economic argument was therefore short-sighted and partial, leading to excessive consumption of energy and environment degradation. Therefore, the mode of development through large-scale investment and construction projects, the conflicts between government and impacted people, and the contention between developers and public interests had all come to the forefront of the debate.

Underlying the propaganda and slogan of eliminating poverty and

development, what are reflected in the debate are also imperfect market mechanisms, defective political institutions, pursue of profit by interest groups, and the capital's tendency to rule.

5.5.7 Open Letters in 2005 and 2008

The Chinese ENGOs and environmentalists proposed that hydropower development in the Nu River would bring about negative effects in terms of biodiversity, ethnic minority cultures and traditions, resettlement, safety of dam-building in geologically unstable area, as well as concentration of highly-polluted industries.

In the open letters to urge opening the EIA report of the Nu project to the public in 2005 and 2008 respectively, **C**hinese environmentalists claimed that Nu River's great potential in developing tourism and international sport events will soon be threatened even in danger of disappearance due to the dam construction. In addition to the loss of a natural treasure of biodiversity, large-scale of dam-building will increase the risk of geological disasters. Furthermore, from engineering perspective, sediment is always a problem remained unsolved in China's dam industry, which has caused irrevocable damage to the capacity of the reservoirs'. Finally, there would be the problem of resettlement of inhabitants caused by land inundation.

5.5.8 Decision-making Mechanism and Procedure

Projects of such magnitude such as the Nu dam project and the Tiger Jumping Gorge dam project where the first bend of the Yangtze River is located were launched without a formal approval by the central government. "100 billion Yuan RMB has been invested in "one reservoir and eight cascade dams" of the Tiger Jumping Gorge, and 100 thousand people have been displaced" (Southern Weekend, September 29, 2004). These projects were neither open to the society via the media nor listening to various experts' and public's opinions in advance. They were not even vetted by

Yunnan Provincial People's Congress as well as the National People's Congress.

Under pressure, related departments used to hold panel discussion. However, they did not listen to the opinions and suggestions gave by experts who hold opposing opinions. They even refused to invite the opposition. The strategy they adopted can be summarized as "inviting those agreeable and excluding those with dissent voices." The panel was problematic in that "the form is often more important than the substance." Besides, both hearings and EIA panel discussion were not open to the media and the general public. The environmental impact assessment department of the SEPA often received directives from top government officials.

Without any substance, the panel formed to discuss the EIA of the Nu project was in vein and different voices were repressed. One cadre of the poverty alleviation office of the Yunnan provincial government was removed from his position for his opposition to the project. Li Dun, a legal scholar affiliated with Tsinghua University, participated in a panel discussion said that "the procedure of the decision-making process of many of our significant projects was top-down. Once the government decides to launch a specific project. The project will be discussed in terms of how to do it rather than why to do it, or in term of feasibility other than necessity. The normal practice is that related departments present the schematic plan. Then the project is approved by the government. Only after the approval has been passed would the general public be informed of the result." Li also noted that "A project may not be approved due to one or two experts' opposition for the first couple of meetings. However, these dissent experts would not be invited back during the next panel discussion. It is not surprising that this project would be approved without opposition in the end."

5.5.9 Impact to Local Peasants

Local people have been greatly impacted by the dam-building, many even become “ecological refugee”. For example, migrants of the Manwan hydropower dam project are making a livelihood by garbage collection. Voluntarily organized peasants raised their opinions to related departments. Often time, their residence was monitored, their personal freedom was restricted, they were fined, their IDs were retained, and they may even be put into prison or labor-education camp (*laojiao*).

5.6 Third Phrase: ENGOs--at the Bottom of the Anti-dam Campaign (March 2005 to October 2005)

In April 2005, the hydropower group including the Yunnan provincial government invited an expert team including He Zuoxiu from China Academy of Science, Lu Youmei, the former general manager of Three Gorges Group, Fang Zhouzi, a well known public figure, and several others to inspect the Nu watershed. The team in principle supported the Nu dam project and questioned Chinese ENGOs' claims including whether native residents of the Nu opposed hydropower development (Xiao, 2005). They also launched a media campaign to offset the public opinion on the Nu dam proposal. These hydropower proponents labeled the environmentalists as irrational, superstitious, even pseudo-environmentalist. They accused that the ENGOs’ funding mainly came from oversea anti-dam organizations and religious foundations. This accusation is not true, because the expense is covered by donations from the environmentalists themselves, not from overseas organizations.

In contrast, this “Chinese Academy of Science Investigation Team” was accommodated in a luxury style. Local officials of the Nujiang Lisu Autonomous Prefecture, and Yunnan provincial officials accompanied their tour in Yunnan. The Governor of the Yunnan province also held a formal meeting with them and discussed with them warm-heartedly.

On April, 8th, 2005, by the invitation from Yunnan provincial government,

Xue, Ye, the former secretary general of the Friend of Nature, Yu, Xiaogang, the person who was in charge of the Green Watershed, Xi, Zhinong, and Shi, Lihong the two founders of the Wild China Workshop joined in the dialogue and visited Yunnan. In the meeting between the expert team and the environmentalists, Si Manan and Fang Zhouzi criticized and denounced ENGOs and environmentalists by sharp words with strong emotions. At one time, Xue Ye stood up from the seat and wanted to express his opinion to defense ENGOs' action on the Nu River dam project, however he was stopped by the host rudely.

The dispute over the issue was not finished at all. In late 2004 and early 2005, the Southeast Asia tsunami attacked the Indonesia and caused catastrophic outcome. "Should human-being worship the nature?" a question raised by one article in the New Beijing News (*xinjingbao*) initiated another round of debate between Zhang Boting, Fang Zhouzi, He Zuoxiu and environmentalists.

Afterward, in November 2005, Zhang Boting denounced the green journalists for "manipulating the truth and bitterly fomenting the anti-dam emotion and campaign." [52] In January 2006, Zhang, Boting denounced Liao Xiaoyi, the founder of Global Village of Beijing to be an environmental extremist. In February 2008, Zhang, Boting further accused the activities organized by environmentalists were featured by "ignorant emotional showing, and impudent rumormonger, taking advantage of the eco-tourism to disseminate green activism ". [53]

Fang, Zhouzi criticized environmentalists sharply on their "Saving the Nu River" during a forum held by China Investment Magazine in Beijing on

[52] See Yi, Rongrong,"Scientific Daily", "the Controversy over the Nujiang River Hydropower Development reflects the birth pangs", 2005.

[53] See Chen, Hongwei, "the beginning and the ending of an Environmental Journalist Suing the Hydrologist" in "Confusion——China's Environmental Journalists Investigating Report, 2009's version", eds. Wang, Yongchen, and Wang, Aijun. Also see "Fang, Zhouzi: Critique on Several Statements of Anti-Nujiang River Hydropower Development".

October 22, 2005. The event was hosted by Zhang, Hanya, the Chief Editor of China Investment Magazine, participated by Cao, Guangjing, the Chairman of the Board, China Yangtze Three Gorge's Cooperation, who was in charge of the operation and management of the Three Gorge's project.[54]

5.6.1 Green Watershed's Strategy (December 2004 to 2005)

As early as October of 2004, after being informed of the news of Nu River dam plan, Yu Xiaogang and his Yunnan-based ENGOs played a key role in this campaign.

5.6.1.1 World Commission on Dams (WCD)

On September 15, 2003, the Green Watershed (GW) and its leader Yu Xiaogang submitted the newly-translated guidelines and report of World Commission on Dams (WCD) to the Nu Prefecture party and government officials. The guidelines of the World Commission on Dams pointed out potential ecological impacts of dam-building, emphasized protection of lower stream areas relocatees' interest and the necessity of public participation of decision-making in any large-scale hydro project in international rivers, like the Nu River.

Because the governor of the Nu Prefecture is Yu Xiaogang's college classmate, Yu Xiaogang can easily access him. Yu tried to persuade his former classmate to give up the dam plan by invoking the Three Parallel River World Natural Heritage (TPRWNH). Yu recalled: "I told him, the award of TPRWNH by United Nations Education, Science and Culture Organization (UNESCO) is somehow equivalent to the highest degree from a world-class university. However your pursuit of the hydropower development scheme is only like a diploma from a technology institute. The promotion of the hydro development is at the expense of the former."

In order to influence local Nu Prefecture government's decision-making,

[54] "Fang, Zhouzi: Critique on Several Discourses of Anti-Nu River Hydropower Development"

Yu also introduced some other alternative ways to develop local economy. For example, tourism has been proved by international experiences as an effective practice in WNH management. Such practice strikes a balance between development and protection.

Yu also recalled, “We took a large amount of photos from the investigation tour in the Nu watershed in 2003. Upon returning to Kunming, we focused two tasks. One was to promote the influence of the Nu watershed in the civil society. We also disseminated the knowledge of the impact of Nu hydropower development among Chinese ENGOs. The other was to initiate a scientific and substantive research on the Nu hydropower development. The Green Watershed heard the International Union for Conservation of Nature (IUCN), a NGO located in Bangkok, which is authorized by UNESCO to designate World Natural Heritages, published a report. We need their support."

An official of IUCN emphasized that it was important to point out three dimensions in the research. First, many ideas in the Nu hydropower development were not sustainable; Second, China's hydropower sector were highly monopolized by five big hydro companies. Third, the general public was unable to participate in the hydropower development decision-making process. In one word, such hydropower decision-making is neither good governance nor sustainable. After the publication of the report by Green Watershed and IUCN, the report was leaked to the Internet. Many domestic hydropower companies criticized the Green Watershed to leak secret.[55]

5.6.1.2 Non-official Panel

In January 2004, in order to promote the influence of the opposition to the Nu dam proposal, Yu Xiaogang and Green Watershed (GW) organized its own panel in the Chinese Academy of Social Science (CASS) in Beijing to discuss the socioeconomic and environmental impacts of the hydropower

[55] Interview with Yu Xiaogang, Beijing 2006.

development on the Nu watershed.

Firstly, this non-official panel served as an information platform and coordination network for 50 Chinese domestic ENGOs. And it gave chance to further increase the public awareness of the Nu River dam plan as well as to form a coalition among anti-dam agents.

This panel was in collaboration with other influential Beijing-based ENGOs, such as the Friend of Nature (FoN), supported by the academia, such as the Chinese Academy of Social Science (CASS) and sponsored by a famous Hong Kong NGO, the Oxfam. This non-official panel organized by GW and Yu called on more than fifty ENGOs that almost covered the whole spectrum of environmental protection NGOs in Beijing. The GW introduced the overall situation of the Nu watershed and the background of hydropower development on the Nu River with plentiful photographs.

As an outcome of the panel, a book titled The Scientific Development and River Development (*kexuefazhan yu jianghe kaifa*) was released by the China Huaxia Publishing House in 2005 with the sponsorship of the Oxfam Hong Kong.

5.6.1.3 the International River Network (IRN)

This non-official panel drew international attention over the Nu dam proposal. After the successful coordination of Chinese domestic ENGOs, some international ENGOs also seek cooperation with Yu and GW. For example, the International River Network (IRN) was an environmental NGO based in California which was concerned with global dam industry and global climate change. After being informed of potential negative impacts of hydropower development to the local environment and damages to the World Heritage Site and other southwestern China rivers, IRN began to take some actions. For example, it assigned Doris Shen, who was IRN's China Program Coordinator to be responsible for the special issue of Nu River hydropower development. There is a series of cover stories of Nu dam

proposal posted in its Internet portal.[56]

5.6.1.4 Failed Lobby to the Director of the SEPA

During Xie Zhenhua's investigation tour to several proposed dam sites and local communities in the Spring Festival (Chinese New Year) of 2004. Yu Xiaogang recalled that "We happened to know that Xie Zhenghua, the director of the SEPA was in somewhere along the Nu River. We were eager to get him informed of the negative environmental impacts caused by the Nu hydropower development project by meeting him face to face. However his itinerary was suddenly changed therefore we missed the golden chance."

On May 2004, Green Watershed led Nu villager representatives to visit the resettlement villages due to the construction of the Manwan dam on the middle and downstream of the Lancang River. On October 2004, Chinese representatives of dam resettlement spoke in the UN's Hydro Power and Sustainable Development Convention in Beijing. The problem of resettlement was made known to the outside and broader audience

5.6.1.5 Repression

Yu, Xiaogang, a research associate of the Yunnan Social Science Academy and the director of ENGO “Green Watershed,” was given a “warning” from Yunnan provincial bureau of civil affairs because he helped dam migrants to defend their rights. Yu’s situation was very difficult at that time. He was checked and body-searched in airport when he was going to attend international conferences. His passport, computer and other personal properties were retained and he was warned not to leave China when he was in the Kunming international airport on 12 December 2004. When he asked about the reason, related department refused to give explanation and only said the order was from “upper-level government”.

At the previous stage, the media campaign greatly increased the

[56] See http://irn.org/programs/lancang/index/php?id=010319.strangling.html

awareness of the public on hydropower development. However, on the other hand, the active participation of ENGOs agitated attention from dam supporters. In Yu's words, in 2003 and 2004, the media campaign and grassroots mobilization were relatively successful, therefore shocked the hydropower interest group and brought severe repression from them and their government supporters. For example, the force of pro-dam called on a conference in 2005, He Zuoxiu, a member of China's Academy of Science, and Lu Youmei, a member of the China's Academy of Engineering wrote an internal report and denounced ENGOs as "green party". They called the ENGOs as pioneers of and having potential of a "color revolution". The alleged evidence was that the Global Village of Earth, an ENGO，received financial resource from a German foundation. In result, Hu Jintao, the CCP's general secretary ordered to purge Chinese ENGOs by releasing a top-down official document to various ministries and departments.

Also, for bringing "peasant representatives" to participate the United Nations' hydropower and sustainable development conference, Yunnan Green Watershed and Yu, Xiaogang were also confronted with serious repression from the public security department. Green Watershed was warned by Yunnan Provincial Bureau of Civil Affairs, and its annual registration (*nianjian*) was not approved. Yu was banned to go abroad even the invitation came from the United Nations. As a NGO member of the Hydropower and Sustainable Development Forum of the United Nations Environmental Programme (UNEP), Yu was unable to attend the annual meeting in 2004 and 2005. Yu's mobile phone and his office telephones were tapped. Their faxes were hacked in the midway and cannot arrive at receivers. The locks of their office were destroyed and trashed.

Yu said to me that, "The Yunnan government also stigmatized ENGOs as pseudo-environmentalist who did not learn about the truth. The government blamed the ENGOs as ignorant about the hydropower development, 'your organization opposes our hydropower development

project because you do not know the truth and related information'". The ENGOs were also accused for not providing a resolution. The government would say "raising a problem is not the key; on the contrary, providing a solution is the key." The government also blamed that ENGOs aimed to become famous and gain foreign aid. In order to silence dissent voice, government even adopted unlawful measurements.[57]

5.6.1.6 Counter Campaign

Some employees left after Green Watershed was seriously purged. In Yu's words, there were three paths in front of the Green Watershed at that time: (1) dissolving (2) doing nothing (3) persisting to live. Yu recounted, "For those who were willing to continue to serve for GW, we stayed and continued to do things. For those who were not willing to do so, they left." At the same time, Yu was thinking about alternative strategies. In his mind, one of the most important things was to uphold GW's environmental ideal while at the meantime reducing possible risks for its survival. Green Watershed began to initiate a counter-campaign.

The attendance of Yu and GW to the UN's Symposium on hydro power and sustainable development in October, 2004 played a key role in offsetting the government's repression. Yu and GW organized a four-day long resettlement training program for dam-impacted villagers alongside the "Three Rivers" from 20th to 24th July, 2004. This was the first time a workshop for dam resettled peasants in the country.[58]

Yu also organized participatory Social Impact Assessment (PSIA) workshop to diffuse related knowledge, polices and law on hydropower development, environmental protection, the government policies on resettlement, the international practice on involuntary resettlement, and China's decision-making on local development projects. He also organized

[57] Interview with Yu, Xiaogang
[58] Interview with Yu, Xiaogang in 2006 Beijing

petition to upper-level government during the "Two Conferences" period and made media exposure.

5.6.1.7 PSIA and EIA Workshop in the Decision-making on Local Development Projects

Based on the Participatory Rural Approach (PRA), a framework through which local beneficiaries became involved in decision making on local development projects, Yu developed a new method called Participatory Social Impact Assessment (PSIA). According to Yu (2004:2-3), PSIA is "a process of evaluation and assessment of future social impacts prior to the implementation of policies and development projects."[59]

The process of the implementation was as follows, once arriving in the target village, Green Watershed members briefly introduced the methods to the whole village. Villagers then elected one or two dozen representatives to participate in the evaluation of the development project. These representatives went through a series of workshops, covering topics such as index of resources, production and living, social culture, ecological change, social participation, and gender issues. Villager representatives finally were given a set of forms to score the severity and scope of impact, the consequential reactions, and the time duration of the development project's impact on their everyday life.

Meanwhile, since the Social Impact Assessment (SIA) and Environmental Impact Assessment (EIA) were relatively new standards, supervision and management from authority was incomprehensive or even absent. This provided room for the formation of conspiracy between enterprises and related government departments. Enterprises that wanted to gain more profit were likely to bribe officials who were responsible to supervise the

[59] Yu, Xiaogang, 2004, "The New Development View Is Calling For Participatory Social Impacts Evaluation: the Case Study of Manwan Hydropower Station," presented at United Nations Symposium of Hydropower and Sustainable Development, Oct.27th to 29th, 2004 in Beijing: http://www.un.org/esa/sustdev/sdissues/energy/op/hydro_yu.pdf

implementation of the SIA and EIA. Regarding such situation, Yu commented that "as a third party in the EIA of the hydropower development, ENGOs is responsible for supervising the implementation of the EIA. ENGOs should be aware of the possibility that government manipulates the EIA through their influence and participation in the process of EIA constitution. ENGOs should also be particularly careful on their position, influence and power of public credibility. In one word, ENGOs should carefully exert their influence."[60]

5.6.1.8 The Grassroots Mobilization

The Green Watershed (GW) mobilized grassroots community alongside the Nu River to visit the dam sites along the Lancang River during July 20 to 24 of 2005. After this mobilization and training program, on October 2005, five villagers attended UN's Symposium on Hydropower Development and the Sustainable Development sponsored by United Nations Development Plan (UNDP) and China's NDRC in Beijing. By expressing their own concerns as dam-impacted people they petitioned to the Chinese central government and even asked for international support.

5.6.1.9 Petition to Upper-level Government through "Two Conferences"

In February 2004, Yunnan province held the annual "Two Conferences", known as China People's Congress (CPC) (*renda*) and People's Political Consultative Conference (CPPCC) (*zhengxie*). The Yunnan provincial committee of China's National Democratic League (CNDL) (*minmeng*), the second biggest political parties among China's nine democratic parties, was preparing a draft paper relating to the Nu River dam project to the two conferences. As Yunnan provincial's legislative body, around 500 delegates of Yunnan provincial CPC and CPPCC attended this conference. During this time, Yu, Xiaogang and Green Watershed collaborated with committee

[60] Interview of Yu, Xiaogang

members of the CNDL and submitted a co-signed draft on environmental and social impacts of the Nu cascade hydropower project to the Yunnan provincial government. In this draft, it stated that an integrated plan in general and the environmental impacts in specific should be taken under serious consideration. After two CNDL members delivered this draft in the session of Yunnan's "Two Conference", it was well received by the delegates. The Yunnan official media, including Yunnan Provincial Political Consultative Conference News (*Yunnansheng zhengxie bao*) and China's National People's Political Consultative Conference News (*zhongguo zhengxie bao*) reported the content of the draft. Although the local Yunnan government did not show any clear attitude at the conference, the media coverage fueled the controversy over the Nu cascade dam project in Yunnan. Meanwhile, Yu, Xiaogang and the Green Watershed were under great pressure and became target for repression.

5.6.1.10 Award-taking

In Yu's words, he and his organization were both in a struggling process in 2005. Green Watershed and Yu put great efforts in building up legitimacy of the organization and himself. One signal was the various awards and public recognitions the Green Watershed received.

In March 2005, the sustainable development in China competition was held, which was sponsored by Shell Group China and hosted by the Economic Observation Daily (*jingji guancha bao*). Green Watershed won the top award by its project "Lashi Lake Participatory Watershed Management" project. This project promoted the idea of participatory community resource management.

GW had been known for its projects in advocating public participation in watershed management and accumulated rich experience in grassroots mobilization and organization. One of its most influential projects was the participatory watershed management of Lashi Lake. In the late 1990s,

during his fieldwork on the watershed management in northwest Yunnan, Yu visited Lashi Lake, a natural highland wetland in Lijiang County. With 10 square kilometers of water area, Lashi Lake was the biggest freshwater lake in the county and supported an active local fishery. However, in the 1990s the ecological system of Lashi Lake had been severely threatened by a freshwater transportation project, which transported freshwater to Lijiang 12 km away. With support from the Nature conservancy (TNC), GW organized Participatory Rural Approach (PRA) workshop to teach local peasants and fishermen to manage local fishery resources. GW also organized a NGO, Lashi Association of Wetland Fishers (LAWF) and registered it officially in 2004. LAWF projected that the fishery productivity would recover to 150 tons per year in 2008. (Jin, 2007:163-164) This project lays down a very solid foundation for the sustainable development in the Lashi Lake watershed. This project had also been awarded the Ford Automobile Environmental Protection Award. In addition, The Scientific American Magazine recognized the Green Watershed as the "annual 50 best group" due to its distinguished contribution to Chinese environment protection as China's indigenous NGO.

These renowned awards to some extent polished the Green Watershed's image and brought about legitimacy to it. Through taking part in a series of public events, and conducting participatory watershed management and sustainable community development, using Yu's words, Green Watershed kept "dialoguing" with the government. Yu, Xiaogang and the Green Watershed finally got through the survival crisis. More or less, some former restrictions on this green NGO were loosened gradually. However, the controversy over Nu cascade hydropower project was still going on.

5.6.1.11 Making Media Exposure

Yu, Xiaogang accepted interviews from various China's influential media outlets ranging from TV stations, broadcasting stations, and newspapers to

magazines, including the China's Central Television (CCTV), China's Central Broadcasting Station (CCBS), and Tom.com. At the time, the debate over the cascade hydropower development project had drawn more and more high-level intervention from the Chinese authority. The topic of the Nujiang River even became politically sensitive. Around the New Year of 2004, China's Central Television (CCTV)'s program "The News Probe" (*xinwen diaocha*) decided to produce a documentary film titled "The Choice of the Nu River" (*nujiang de xuanze*) to record the historical trajectory of the controversy over the Nu cascade hydropower development project. In order to make the debate objective, the production team found Yu, Xiaogang and invited him to give opinion on the event from the perspective of ENGOs.

Yu recalled that, "They (the "The News Probe" team) were aware that the program will not be openly displayed in CCTV. The major purpose of this program is to record the undammed Nu for the next generation and give a comprehensive and objective overview on the Nu dam project controversy for the next ten or even twenty years."[61]

Although both Yu and the TV production team were pessimistic, a political opportunity emerged. On March 2004, when Yunnan province held its "Two Conferences" (*lianghui*), out of expectation, "The News Probe" team of the CCTV openly aired the documentary film "The Choice of the Nu River".

The reasons behind the successful transgression of the control over media by state authority, especially the CCP's Ministry of Propaganda (MP), are hardly known. However, it is highly possible that an internal power reconfiguration within the government opened a window for this to happen. For example, one tactic is to manipulate the "time lag" (*da shijian cha*). It means that journalists who are endowed with social responsibility and/or enthusiastic about environment protection and ENGOs would preempt to

[61] Interview Yu, Xiaogang on February 26, 2006

release news report before it is officially banned by the MP.

5.6.1.12 Pseudo Environmentalists?

However, the path for ENGOs' participation in the Nu River hydropower development controversy was full of stalemate, dilemma, back-and-forth and even repression. As mentioned above, in late 2004 and early 2005, many ENGOs were labeled as pseudo-environmentalist by some intellectuals who held leading positions in China's national scientific institutions. This label seriously challenged the legitimacy and credibility of Chinese ENGOs in the debate over the Nu dam project. He Zuoxiu, member of the China's Academy of Science, Lu Youmei, former general manager of the China's Three Gorges Group, Fang Zhouzi, founder of the California-based www.xyz.org [New Thread] and Si Manan, China's anti-pseudo activist are the four persons who published anti-environmentalist opinion in media.

In December 2004, the Southeastern Asian's tsunami triggered debate on "whether human-beings should respect to the nature" between environmentalists and pro-science members of China's Academy of Science. Later on, Fang Zhouzi, the founder of the New Threads [xinyusi], a California-based website joined the debate. The New Beijing Daily opened a column for this debate. Friend of Nature's Liang, Congjie, Global Village of Earth's Liao, Xiaoyi and Green Earth Volunteers' Wang Yongchen jointly together to argue with members of China's Academy of Science, He, Zuoxiu. There were other scholars to participate in the debate one after another. However, the CCP's Ministry of Propaganda banned this newspaper-based debate soon. Wang and He, Zuoxiu debated on "if tiger stands in front of you, what should you do" in Sina.com, a major Chinese language internet portal. He and other pro-dam scholars denounced that environmentalists cared too much on wild animal protection however cared too little on human-being, and environmentalists were "fed and warmly-clothed taking

the visit on the Nujiang River as a leisure activity". Besides, on 28 October, 2005, Hong Kong Phoenix Television Transparency of Society program interviewed Wang and Fang Zhouzi on the Nu cascade hydropower dam project. In this program Fang argued that China's domestic grassroots environmental groups such as Global Village of Earth and Friend of Nature accepted financial assistance from overseas anti-dam foundations, even those with religious background. He accused China's environmentalists such as Wang, Liao, Xiaoyi and others were radical and pseudo-environmentalist.

5.6.2 Are They really Anti-dam People?

Li wrote that, "with regard to dam-building, I do not oppose dam-building per se. What I propose is to establish scientific decision-making procedure and to make decisions cautiously. According to my knowledge, there never exists a single person in my camp who oppose to all dams in China. Not to mention to dismantle them."

Yu emphasized that **"**we do not oppose every single hydropower dam on the Nujiang River without a reasonable explanation. If there is a hydropower dam in accordance with main criteria, for example, environmental and social criteria on the Nujiang River, we will not oppose it. In turn, we hope a model dam will emerge and play a leading role for other hydropower decision-making processes."

5.6.3 Thirteen Cascade Dams Reduced

Under jointly efforts of Chinese ENGOs, in 2005, news had it that the central government was considering rearrangement of the Nu dam proposal, and it was likely to reduce the number of cascade dams from 13 to 4. However, Yu, Xiaogang insisted that the new plan of 4 cascade dams should be also evaluated and assessed in terms of environmental and social impacts. He said, "The 4 cascade dams plan as it is. Still we need to be convinced."

Mu Guangfeng, a vice director of the Bureau of Environmental Impact

Assessment of SEPA, felt troubled by this news too. Mu, described by Southern Weekend as "a lone voice in the wilderness", sought the assistance of Wang Yongchen. Wang suggested that the SEPA must stand firm and never give up. (Mertha, 2008)

On December 27, 2008, we interviewed Hou, Xinhua, the Governor of the Nu Autonomous Prefecture (NAP), "Governor, it is a pleasure to meet you in the riverbank of the beautiful Nu River. In our way, we have appreciated natural beauty, and simple and natural ethnic minorities' cultures along the Nu River. Could you talk about local measurements on developing eco-tourism?" Hou replied, "The area of Nu River belongs to the Three Parallel Rivers World Cultural Heritage. It possesses resources in terms of tourism, cultures, and other resources. Specially, this area has been barely visited by outsiders." He continued,"These two years, the party of the prefecture and the government of the prefecture raised up the objectives of 'ecological prefecture, technological prefecture, mineral-development and electricity-generating prefecture and cultural prefecture' as our long term goals. In developing eco-tourism, biodiversity and cultural diversity, the local government invested heavily on the ecological construction…The per capita income of our local population is only 1079 yuan RMB. The Nu River upstream in the Tibet part has been already developed. The downstream of the Salween within the border of the Myamar has also been built by three additional hydro dams. Therefore, the only stretch of the river that has not been developed is in our Nu Prefecture…with regard to the development and environmental protection of the Nu River, either protection without development or development without protection is wrong. It should be developed while in protection simultaneously, protection in development. This is the balance. We would like to adopt a sustainable development to reach a Xiaokang society." He went on, "In the past, the project consisted of building "Two Reservoirs and Thirteen Cascade Dams". Nowadays the plan has been adjusted to "One Reservoirs and Two Cascade

Dams" or "One Reservoirs and Six Cascade Dams", both of which are more reasonable than the previous plan."

5.7 The Post-Nu River Dam Suspension Era (2006-2012)

5.7.1 "Ten-years Survey of Rivers in China"

In 2006, the Green Earth Volunteer organized an investigative tour called "Ten Years River Survey" aiming to record the change of Chinese southwestern rivers due to hydropower projects. These dam-impacted rivers included the Min, the Dadu and the Yalong River running through the territory of Sichuan province, and the Three Parallel Rivers of the Jinsha, the Lancang and the Nu River running through the Yunnan province. In response to the critique faced by ENGOs, Wang Yongchen hoped she would be able to acquire first-hand materials on the ecological, geographical, economic and ethnic impacts of hydropower projects on these rivers. She planned to trace and record the changes in ten years caused by dam-building in a deeper and more systematic way. The influence of the so-called "Ten-year River Survey" activity on promoting environmental information openness, public participation and hydropower policies became increasingly significant.

As a result of this program, a series of in-depth reports and books were published. For example, a book titled "Ten-year River Trek" was published by Beijing Publishing House. Since 2006, this activity has attracted more than 20 journalists and experts annually. The participants of the activity come from major news-papers, such as China Youth Daily and Southern Weekly, influential magazines such as Chinese National Geography, TV stations such as the Chinese Central Television (CCTV), and internet-based media in addition to some water resources experts, geologists, ecologists, and individual film producers. By displaying to the public the true impacts of hydropower development on local environment by words and photos, the activity successfully triggers the passion of the public in river protection in

Southwest China.

In the Nu River watershed, environmental volunteers of the Green Earth Volunteers (GEVs) visited local elementary schools and donated the income of book sale (*yimai*) to build up Reading Rooms for the elementary schools along the Nu River. 40 reading rooms in elementary schools have been opened along the Nu River, the Jinsha River, Wen county of Gansu, and Yushu county of Qinghai.

The mission of the activity is broadly defined as recording the change of rivers, figuring out systematic conclusions and benefiting river protection. In order to map and cover a few cascade dams scattered in complicated landscape along more than 2,000 kilometers in the vast areas of China's southwestern regions, the route was planned and adjusted from time to time. The river trek group usually started from Chengdu, Sichuan province, went along the Min River to visit the city of Dujiangyan by the Min River, where the Zipingpu Hydropower station is located. After the "5.12" Wenchuan earthquake in 2008, the route included the earthquake-impacted areas and earthquake-impacted stretch of rivers, including Shiziping Hydropower station next to Wenchuan. After visiting the Maerkang Hydropower station, the route turned south to the Houziyan Hydropower station near Danba, Mugecuo and Kangding, then to the Luding Hydropower station, and the Changheba Hydropower station. The group would also visit the Dadu River in Sichuan province and the Pubugou Hydropower station in Hanyuan. Leaving the Dadu River, the team would enter into the Yalong River, where several hydropower stations were built on, including the Jinping First Cascade and Second Cascade Hydropower Stations, and the Guandi Hydropower Stations near the City of Xichang. After that, the group would visit the two last dams in the Yalong river, namely the Ertan Hydropower Station and Guanyinyan Hydropower Station near the city of Panzhihua, Sichuan province. From the city of Panzhihua, the group would visit the Jinsha River, where there were eight cascade dams (now reduced to six).

Then the group would go southward to reach the Lancang River and visit the Xiaowan and Manwan hydropower stations.

After heading northward to the Jinsha River and turning southward to the Lancang River, the group would finally come to the Nu River. The team would visit the Liuku , Gongshan dam sites along the middle and downstream of the Nu River within the Nu Lisu Ethnic Minority Autonomous Prefecture (NAP). They would also visit eight counties in Yunnan.

Encouraged by the success of the Ten-years Survey of Rivers project, in August 2010, the GEVs initiated another project called the "Yellow River Ten-year Trek" aiming to investigate the ecological circumstances of the Yellow River watershed, to improve the concerns and participation of the public on the environmental problems in Yellow River watershed, to promote the ecological and cultural protection of Yellow River watershed, and to facilitate open and scientific public decision-making.

5.7.2 Pro-Hydro Discourse

Since 2003, the topic of the on-going dispute between dam supporters and the opposition have changed over time, from the issue of biodiversity protection and ecological impact of dam-building, the issue of World Heritage conservation, the issue of the interest of dam-impacted people to the issue of reservoir-induced seismicity, and to the issue of hydropower as clean energy. The opposition brought up a variety of issues critical to hydropower development. These issues were highly relevant but had been ignored in the decision-making process. But this time, the outcome was not due to the intervention of the power—what happened in the case of the Three Gate Gorge dam project during which the academic debate over different merits of dam-building had been transformed into political struggle—but the huge economic interest involved in the Nu dam project.

Dam supporters strongly promoted the positive effect of hydropower development by citing different reasons. For example, the degree of China's hydropower exploitation was lower than that of developed countries such as France, Germany, the United States, and Japan. For example, Zhang, the General Secretary of the China's Hydrology and Hydropower Research Institute, claimed that if we were willing to achieve the western counties' hydropower development level we should build another ten more projects with the scale of the Three Gorges Dam. Zhang stated that the degree of hydropower exploitation of France is 100 percent, with 1500 small and large-scale hydro power stations in a national territory of 540,000 square kilometers. He also refuted the statement of "hydropower interest" and "hydropower interest group" used by environmentalists to criticize the injustice of the hydropower development. He maintained that the hydro developers were economic entities, however at the same time they represented the state; hydro development was activity in accordance with the market mechanism.

Gu, Hongbin, the Chairman of China Hydro Engineering Institute presented his view on the priority of hydropower over the thermal power. Shi, Lishan, Director of the Bureau of Energy of NDRC also supported the development of hydropower (The Southern Weekend, 2011). Pan, Jiazheng, a hydrologist and member of China's Academy of Science (CAS) (-July 2012), argued that the hydropower development had been dragged into a "stagnation period" in terms of approval of hydro projects during the 11th Five-year Plan. Therefore, it is necessary to speed up the development during the 12th Five-year Plan.

These pro-hydro officials and experts were very resourceful in that they hold important positions in prestigious research institutions. They were firmly and purposeful supportive of the hydropower development project, aiming to benefit from a share of the interest related with the 12th five years plan for hydropower development. They would attack anyone who was in

their way.

In order to meet the goal of "reducing the CO2 emissions per unit GDP by 40 to 45 percent of 2005 levels by 2020" , Chinese government changed the domestic policy on hydropower development and launched a "Great Leap Forward" on Hydropower Development. The proponents saw their time had finally come and demanded "free the restrictions" on hydropower development. Therefore, the policy of hydropower becomes "positive" in the "12th Five-year Plan".

In 2009, China consumed 3.4 billion tons of standard coal, and the consumption of coal per capita in 2009 was 2.5 tons. According to China's National 12th five years plan (2011-2015), the consumption of coal will be further increased to 5 billion tons of standard coal and will be peaked at 7.5 billion tons of standard coal in 2020. As a country endowed with abundant coal reserves, China's reliance on the coal accounts for 70 percent of the total energy consumption. In order to reduce the use of coal, China needs to increase the share of hydropower in the total energy structure.

The ratio between hydropower and thermal power is 1:1 in the practical development of hydropower in China's southwestern region. In order to compensate the instability of hydropower, during the flood season, the power generated by hydropower project is in the peak. While during the dry season, the power generated is at the bottom. Therefore, the increase of the share of hydropower does not necessarily mean decrease of that of the thermal power.

5.8 Summary

This chapter recounted the whole Nu Anti-dam Campaign in three different phases. The first phase is dated from July 2003 to February 2004. During this phase, the Nu River anti-dam campaign was still at its early stage, and the dispute over the hydropower development was between the Ministry of Environmental Protection, MoEP (formerly the State

Environmental Protection Administration SEPA) and the National Development and Reform Commission (NDRC) involving around the issue of the Environmental Impact Assessment (EIA) of the Nu hydropower project.

The official attitude is not consistent over the Nu River case. Large-scale utilization of hydro resource triggers anxious concerns of experts of MoEP. They worry that uncontrolled large-scale hydro development will destroy local ecology and environment. I examined the decision-making process within the ministry-level agencies in some detail and described the role of some open-minded officials in the SEPA and their effort in demanding the Environmental Impact Assessment (EIA) of the Nu hydropower project. For the environmentalists, the division within the state hierarchy opened a political opportunity to pursue their goals to halt the Nu River dam project. As it has long been emphasized, the dynamics of social movement are connected to not only their social and economic context but political context as well (Tilly 1978).

The conflict between the SEPA and NDRC over the Nu River dam project made the government vulnerable to the claims made by the ENGOs and therefore enhanced the latter's likelihood of realizing their goals. To make alliance with SEPA, the ENGOs changes the relationship between the state and society to its favor. SEPA also pushed the environmental agenda by different means, including media criticism, panel discussion, and policy evaluation.

The second phase of the Nu Anti-dam Campaign is dated from March 2004 to March 2005. Sided with the SEPA officials, Chinese ENGOs for the first time launched a large-scale media campaign. Hundreds of news reports had been seen from a wide range of media outlets, such as newspaper, television, broadcasting stations and internet. The Nu hydropower development became an influential topic. SEPA is a resourceful member of the polity and its support and alliance with the ENGOs plays an

instrumental role to the expansion of the space or even a “grey area” (Yang 2006; Lin and Zhao 2008) for the ENGOs to exist and operate.

The third phase of the Anti-dam Campaign was between March 2005 and October 2005. During this phase, both sides over the dam project debated intensely on the forums, the media, and other occasions. The ENGOs were criticized and denounced by their governmental and civil opponents, who labeled the participants of the campaign as “pseudo-environmentalists”. This label seriously challenged the legitimacy and credibility of Chinese ENGOs in the debate over the Nu dam project. The local government even gave “warning” to environmental activists and limited their international movements.

Under such pressure, the Green Watershed (GW) and its leader Yu Xiaogang successfully fought back and utilized several channels to publicize the socioeconomic and environmental impacts of the hydropower development on the Nu watershed, which further increased the public awareness of the Nu River dam plan as well as to form a coalition among anti-dam individuals and organizations.

The Chinese ENGOs also mobilized foreign resources and obtained international support in this phase. For example, they submitted related international guidelines and reports of World Commission on Dams (WCD) to the Nu Prefecture party and government officials. They also drew international attention as some international ENGOs seek to cooperate the GW after its successful coordination with its domestic counterparts. Their attendance to the UN’s Symposium on hydro power and sustainable development helped to offset the government’s repression. As Economy (2004) insightfully points out, China’s current approach to environmental protection mirrors the one embraced for economic development: devolving authority to local officials, opening the door to private actors, and inviting participation from the international community. The ENGO grasped the opportunities embedded in this reality and brought the international

community to the debate which in turn exerted external pressure on China's top leadership. Given that environmental issues has gained a heightened profile in China's foreign relations (Edmonds 1998), using international forces has turned out to be an effective strategy tilt the balance further to the ENGOs' favor.

Like Chinese ENGOs, other countries' environmental movements are also linked with foreign organizations and receive certain international support. In the Nu campaign, ENGOs tried to seek international allies and establish connections with international organizations, which played a key role in drawing public's attention and gain support from foreign countries. By analyzing a case study of the anti-dam movement in southern Brazil, Rothman and Oliver (1999) shows how particular local mobilizations are connected with national and global economics, politics, and social movements: "…the initiative for protest and resistance always began with local people, as did the initiative to seek external resources." The authors also mentioned that "these local-national-international ties … constituted the formation of transnational advocacy networks which provide leverage in negotiations with the Brazilian government."

More importantly, the Green Watershed collaborated with committee members of the CNDL and submitted a co-signed draft on environmental and social impacts of the Nu cascade hydropower project to Yunnan's "Two Conference". Under joint efforts of Chinese ENGOs, in 2005, the central government was considering rearrangement of the Nu dam proposal, and it was likely to reduce the number of cascade dams from 13 to 4.

The Fourth Phrase of the Anti-dam Campaign is what I call the post-Nujiang river dam era ranging from 2006 to 2012. Encouraged by the suspension of the dam project, the Green Earth Volunteer organized an investigative tour called "Ten Years River Survey" to visit areas impacted by various dam projects in the southwest of China. The project had two main purposes. One was to acquire first-hand materials on the ecological,

geographical, economic and ethnic impacts of hydropower projects; the other was to promote environmental information openness and encourage public input to hydropower policies. As a result of this project, a series of in-depth reports and books were published which continually attracted attention from the media and the public.

However, the pro-hydro camp never stopped their efforts for a comeback and finally found an opportunity when the state was contemplating for the 12th five-year plan. According to China's National 12th five years plan (2011-2015), the consumption of coal will be further increased to 5 billion tons of standard coal and will be peaked at 7.5 billion tons of standard coal in 2020. In order to reduce the consumption of coal, it needs to increase the share of hydropower in the total energy structure. Meanwhile, the government set another related goal of "reducing the CO2 emissions per unit GDP by 40 to 45 percent of 2005 levels by 2020." To achieve those goals, the only viable solution seems to be hydropower. Thus the Chinese government changed its prudent attitude toward hydropower and launched a "Great Leap Forward" on hydropower development instead.

So, what does the anti-dam campaign tell us about China's ENGOs and civil society in general? On the one hand, the successful anti-dam campaign on the Nu River demonstrates the strength of Chinese ENGOs, such as the Green Watersheds (GW), and the Green Earth Volunteers (GEVs), environmentalists, journalists, and academics. These non-state actors displayed their advantage in mobilizing the general public by various strategies. The ENGOs thrived by learning where and when to push the right button. Their acted carefully and largely fended off the repressions from the opposition. Their goal was not to challenge the political monopoly or work to change it; instead they aptly adapted to the political and social environment (Hildebrantdt 2009). It is also worth noting that the Chinese ENGOs successfully influenced the public policy decision making on environmental protection with very limited financial backup, only ten to one

hundred thousand RMB per year for majority of the Chinese ENGOs. Few of them had a budget over million RMB during that period.

On the other hand, the controversy over the large-scale hydroelectric schemes in Yunnan on the Nu River also showed the public's increasing awareness of environmental protection. In the anti-dam Campaign on the Nu River, Chinese ENGOs together with other type of civil society organizations (CSOs) took collective action in constructing, protecting and expanding the public sphere, limiting the hydropower development supporter's power, making demand on the central government, affecting the public policy-making on the Environmental Impact Assessment (EIA), and reconstructing the relations among the actors in the different realms, such as NGOs, volunteers, the decision-maker, the hydropower developer, and the local government, helping to cultivate a self-governance space in the interstices among the state, the market, and the society at large. In this sense, Chinese ENGOs demonstrated some key features of a civil society.

In the process of modernization and industrialization, it is inevitable to increase the exploitation of natural resource including water resource. The exploitation of water resource is always the key issue in the long-standing dispute over the Nu River hydropower development and other water resources in China's southwestern region. A balance needs to be maintained between development and environmental protection. As public good, when the water resource in a river is transited into a kind of profitable commodity, such as hydropower, this will naturally induce the problem that who will benefit from the hydropower development. Hydropower is both a technological and engineering process and a process of production and consumption, which is carried out with the expansion of market economy and privatization. On the one side, the right of exploitation has fallen into the hands of few interest groups; on the other side, the exploitation of water resource needs to meet the criteria of sustainable development, which is

widely accepted internationally and within the realm of CCP's "scientific development perspective." Therefore, the development of hydropower should take into account the local population' interests and environmental impacts. With the participation of Chinese ENGOs, these above dynamics have played out no matter whether or not the related parties, i.e. the state, the hydropower developers, and local residents are willing to confront with one or another. The outcome is the emergence of what I call a "Semi-Civil Society", a characteristics of contemporary Chinese society.

Chapter Six Local People and the Movement

6.1 The Resettlement of the Nu Dam Project

If thirteen cascade dams scheme were implemented, a large amount of high productivity farmland will be lost in the process. According to the official scheme, the total submerged area of arable land will be 58,996 *mu* or 3,933 hectares. In other words, 2.4 percent of total farmland in the reservoir area will be submerged. The places affected include Gongshan, Fugong, Lushui County of the Nu Autonomous Prefecture, and Yunlong, Longyang, Longling, Shidian, and Zhenkang counties in Yunnan province. 17 percent of the farmland in Chayu county of Tibetan Autonomous Region will be submerged. And the highest percent of land loss will happen to the Gongshan County where 38.6 percent of farmland will be submerged. (Fan, 2007)

According to the “Temporary Scheme of Relocation”, there will be more than 50,000 people to be relocated with a majority coming from ethnic minority hillside tribes. In some places, a whole village will be relocated to a new village (*nongmin xincun*). Villagers were largely ill-informed about the dam plan. They only recognized that their fate when a team of surveyors came into the village to make inventory of the properties and to measure the farmland. The decisions related to relocation were often made by hydropower interest group and local government. Some scholars worried that without right-to-know and participation of local villagers, it was difficult for dam-impacted villagers’ interests to be protected.

In the “Report of Middle and Downstream of the Nu River Hydropower Development Scheme," the resettlement policy is called the "move-out" policy. It is to let people whose living condition is severe or unsustainable" to move out of the area. However, the land in the Nu river valley where local Nu people live is fertile farmland with high productivity. These

residents' living conditions are relatively better off. Therefore, the policy of moving-out does not reflect the reality in that the land the project will submerge composes the highest productivity arable land with the gradient slope below 25 degree in the valley.

Fan Xiao, the general engineer of the Bureau of Sichuan Geological Investigation, pointed out that the Chinese government always put the protection of farmland a priority. The state policy is to guarantee the "red line of 1.8 billion *mu* farmland" according to "Laws on China's Land Management" and "Basic Farmland Protection Regulation". In previous poverty alleviation activities, for example, in the "withdrawing farmland and returning forest" campaign, in order to revive the forest in the hillside area, people who ploughed dry land with the gradient slope above 25 degree were moved down from hillside to the area in the valley. However, the Nu hydropower project plans to resettle people who lived in the valley where the farmland are higher productive with the gradient slope below 25 degree. This means to move people out from places with relative good living conditions rather than as claimed as local government that to move people out from place with bad conditions.

In the Report of Nu Middle and Downstream Hydropower Development Planning, local government acknowledged that "The farmland submerged by the hydropower development is the premier farmland in the Nu watershed with a relative high productiveness. From the perspective of farmland loss, it has a significant impact to the economy of the Nu prefecture…Based on the analysis of the environmental capacity of reservoir areas, it is deprived of condition for backward relocation (*houkao*), and the major way for resettlement is outward relocation (*waiqian*)."

6.2 Xiaoshaba Villagers' Resistance alongside the Nu River

In February 2009, I visited Xiaoshaba village, Liuku county with a group of volunteers by long-distance bus. Then I stayed in a family hotel in

Bingzhongluo township which was run by a middle-aged local villager, Liu Jian, a Lisu minority. A patch of fertile land in Bingzhongluo was located in the area of the Nu River valley. Far away is the Snowcapped Biluo Mountain, and the Nu River just flowers in front of the Bingzhongluo. However, due to the dam construction in nearby county, the land would probably be submerged. The news of relocation and inundation was not viewed as a big deal by local villagers than by a group of environmental volunteers, including me—the so-called outsiders.

The upper-level administrative government of Xiaoshaba village is Liuku Township, which is subordinated to Lushui county, Nu Autonomous Prefecture, Yunnan province, China. The crude peasant houses are in the jagged mountains along China's remote southwestern border, a place seemed disconnected from the pulsing cities that symbolize modern China in the 21st century. The "flying cable" (*liusuo*) is the main transportation method to cross the Nu River. However, the hydropower dam plan of the Nu Thirteen Cascade Dam will change many aspects of local people's lives.

6.2.1 "Houses Gone, the Dam Still in Vein" and "Move Further, Live Poorer"

Due to the construction of the Liuku Hydropower Dam, the whole Xiaoshaba Village of Liuku Township was relocated in 2006. When we passed through swiftly on the newly-built road within the village, all we saw were two-floored new residential buildings standing in a line along the road. We were surprised by the cleanness and emptiness of the new town. This was the "new village" (*xinnongcun*) built by the government.

The compensation contract was temporarily signed between local government and Xiaoshaba villagers. However, the compensation on the land was incomplete. For example, the calculation of land's area was sixty or seventy percent of the original size when preliminary investigation was conducted. Moreover, the calculation of the gradient slope land was a

shadowy area up to dispute. The compensation was ninety thousand for an old house, and one hundred and seventy thousand for a new one.

The compensation for grown-up tree was 200 yuan RMB, 300 yuan lower than that of villagers' expectation, and 300 yuan RMB for a younger one. Taking the mango tree as an example, it generated 350 yuan RMB annual income, while the compensated price was only 100 yuan RMB. Therefore, life became harder for resettled villagers for their lands and trees were sufficiently compensated. In addition, the allowance for the elderly in village was 30 yuan RMB in 2007; however, there had been no elderly allowance since 2008.

Many villagers voluntarily returned to the old village. Half-roofed and walled, some villagers lived in partially remained former residence. One of them was Mi Qingrong. His shabby house was easy to identify in the wilderness of the riverbank of Nu River. Mi Qingrong moved back to look after his 200 mango trees and stayed in his "old house" without water supply or electricity. What remained were a small and shabby kitchen and a small room. He estimated that the annual income per tree is roughly 350 yuan RMB. Mi's wife said with smile, "The ham I made is delicious. We are no longer to be able to raise pigs and there is no place to hang-dry these meat." However, this room that was full of hanging dried hams would be dismantled soon.

Mi said, "the newly assigned farmland is too far for peasants to reach; there is no backyard to cultivate pigs and chicken. We got insufficient compensation for loss of land. Once upon a time, we can live a life on our own for one or two months without making a penny outside. Now, we cannot live like that any more." "(Our) way of living has been changed!" shouted Mi Qingrong, in front of his house.

He Xuewen, 75 years old, used to be the village head of Xiaoshaba. He was schooled and had been working in government's legal department before he was fired for his parents' family background, which was classified

as landlord in early 1950s. He Xuemin told me that “the backyard’s ground is now cement, which is not suitable for conducting agricultural activity. The space of chicken cage allocated by the village is too small for chicken to grow up. The cage is designed to grow 20 chickens; in practice, however, it is only enough for 5 to 6 chickens.” His son and daughter-in-law worked outside to haul cargo boat along the river. However, the work opportunity was too few and the number of people waiting for work was too many. The large number of unemployment pushed down the wage so low that they made less than ten RMB per day in a good day. However, the price for vegetable and other necessities had all gone up in recent years.

He Xuewen used to own two mu paddy land and five mu dry arable land. After relocation (*zhihuan*) he loses the paddy land. What remained was the dry land on the sloppy hillside. He had two grand-daughters. The older was in the high school and the younger one would soon go to high school.

He also told me that in the past, villagers did not worry about anything. Even without income for half a year, vegetable was in the land, chicken in the backyard, and smoked meat hanging by the wall. Now they had to buy everything for the living.

He said that “This year, we have only been allocated with a few dry land, however the yield is not enough to feed ourselves.…*laobaixing* loves land, however we have to make a living by going outside and looking for a job (*dagong*). We cannot live without land. Peasants here in the Nu only are good at farming. If compensation is reasonable, we can build houses by our own. Government should provide a reasonable compensation for our land loss. It should not build dam without our consent. Government should not take away our land without considering our future livelihood. *Laobaixing* are suffering now."

He Xuewen was also confused and even angry about the destruction of peasants’ houses. He said that “if they (construction team for the Liuku hydro dam project) come, they could rent our houses for living, and

everything available inside. Instead they build new houses for accommodating workers. Now the dam has been halted for years, peasants' houses disappear forever.

Zha, who was the manager of the travel agency we hired to drive and guide us, said to us that "The biggest winner of the dam plan is the power company. It is the mode of "who develops, who benefits."After the dam is completed, as a source of tax, the revenue of government will increase. However, local Nu peasants become poorer in the process of relocation." He continued, "Relocation means building new houses. Building new houses will occupy farmland, which are peasants' farmland. After limited farmland is used for house-building, peasants have to buy rice, vegetable, and everything they need which used to be harvested from their own farmland." He went on, "*Laobaixing* are miserable and shortsighted. They do not have a long-term plan, only aware of things that will come shortly, thinking about the money compensated to them, having no idea on future difficulties….It is understandable that peasants become very angry about the dam plan."

6.2.1.1 Villager Hu Chenzhen

Hu Chenzhen, aged 52, a Lisu ethnic minority woman who lived in Xiaoshaba village, owns a tiny shop. She earned 10 thousand yuan RMB per year from the tiny shop, which was not trivial for a peasant family. In addition, her family owned 1 mu rice paddy land with the total production of 2000 to 3000 jin or 1000 to 1500 kilogram per year, plus 10 mu dry land.

In our interview, she told she was wishing for an amount of 50 thousand yuan RMB to be compensated for the loss of land and the shop. "They (cadre) measured house and land for two to three times, but did not mention about the compensation", said Hu, "I hope we can move to a location nearby. However, the government at last ordered us to move to Liuku, which is miles away from Xiaoshaba. I do not want to tend farmland far away from my home."

Before the construction of dam in Liuku, local peasants can earn tens of thousands of Yuan RMB per year by cultivating a dozen of chicken, few cows, and planting various fruit trees. Because the land was reduced significantly, villagers of Xiaoshaba cannot lead their lives anymore solely on land. They had to go out to be employed (*dagong*). Hauling cargos and doing transportation in the nearby Liuku township were the jobs they can find. Some went further to big city like Kunming and even Shanghai. Leaving land means abandoning traditional culture and the way of life.

6.2.1.2 The Owner of the Family Hotel, Liu Jian

Bingzhongluo is a township with six thousand inhabitants. This town is located in a flat plain by the Nu River. Local ethnic minorities include Dulong, Nu, Lisu and Tibet and have lived here for generations. This is a mountainous area sandwiched by the Galigong Snow Mountain and Biluo Snow Mountain and surrounded by the Nu River. The existing religions include folk religion, Lama, Christianity, and Buddhism.

Liu Jian was the owner of a family hotel in Bingzhongluo township, northwest of Yunnan. The territory was bordered with Burma southbound and Tibet northbound. Liu used to serve in the China-Burma border area in the Chinese military. His nickname was Liu Zhanyou, literally means comrade. Liu is a Dulong ethnic minority, known for the tattoo on Dulong women's face (*wenmian*).

Liu's extended family had 16 family members from four different ethnic minorities, including Tibet, Lisu, Nu and Bai. He was Nu ethnic minority, his wife was Tibetan ethnic minority, his son was Tibetan and two daughter-in-laws are the Nu and the Lisu, and other family members were Nu. Liu Jian could speak five languages, including Tibet, Nu, Dulong, Lisu and Mandarin. Liu's family owned 2 mu rice paddy and 3 mu dry land, cultivated rice and corn, raised 9 pigs, owned 4 mu fruit tree, and 4 mu forest land.

In order to earn extra money, Liu ran a family hotel which was a two-floored wooden building. Four big rooms on the second floor can accommodate as many as 50 people. The first floor was used as a dining room. The family hotel earned about 2000-3000 RMB yuan per year.

His own house was a two-floored wood-structured concrete compound with a large basement. The basement was used for raising cows, and the entire first floor was the kitchen. The second floor was also used for drying and storing meat. The meat was usually hung up from the ceiling and smoked by wooden fire underneath.

Electricity was created by a pump, seldom used by the Liu family. Other than fire, no lighting was available. The energy source mainly came from wood collected from the hills. Smoking port meat and self-made wine were what local peasants to treat honored guests.

Being asked about the hydropower station, he replied that "It is part of the nation’s plan, and things are decided by county and township level officials. The process had nothing to do with villagers like me. It will cause endless trouble if they (i.e. government) negotiate with us.”

Since Liu was a representative of county-level People's Congress, I asked about whether he would inform the upper level government about local people's opinions. Liu explained "I cannot write; it is no use only to speak."

6.2.2 Collective Petition

Unsatisfied with the compensation standard set by local government, villagers of Xiaoshaba petitioned collectively to the higher level government in January 2007, demanding for a more reasonable compensation. In the petition letter, the villagers focused on the issue of re-calculation and redistribution of farmland and house-building land (*zhaijidi*), asking for reasonable compensation on cash-generating trees, and making known the problems related to house and backyard. Villagers of Xiaoshaba demanded

that “(the upper level government should) keep the promise and resolve our problems as soon as possible”.

Table 6.1 Xiaoshaba Villagers’ Compensation Standard

Name of the Plant	**Amount of Money Per Tree Gained (yuan RMB)**
Coffee tree	80 yuan RMB per tree
Tea tree	50
Tung tree	300
Little Tung tree	200
Plantain	200
Dragon Bamboo	30
Bamboo	20
Wolfberry	80
Panzhihua	600
Big black tree	1500

Source: Xiaoshaba Villagers Petition Letter, 2007

Local peasants of Xiaoshaba asked for a reasonable standard for compensation on submerged Farmland and land (*zhaijidi*) allocated to every household for building their own houses. The detailed compensation standard they asked for is listed below:

(1) 100,000 yuan RMB per mu (1 mu roughly equals to 667 square meters) for house land (*zhaijidi*) and household farmland (*ziliudi*), 100,000 yuan RMB per mu for paddy land，and 80,000 yuan RMB per mu for dry land.

(2) Re-evaluate the gradient of land levied.

(3) Property right and usage right of non-occupied land in new village must be uniformly managed by the village collective (*jiti*). For example, local county government uses the most productive farmland usually the

paddy arable land (*shui tian*) to build house.

(4) For residual land in the new village, if the policy is to replace the residual land by house land (*zhaijidi*) and farmland, the villagers are willing to do so according to a certain replacement ratio.

(5) The farmland in the new village is too far to reach; the distance is almost six hours by foot

(6) The income stipend should be increased to 250 yuan RMB per month.

Besides those listed above, villagers also demanded for property certificates for the newly allocated properties. This should be implemented immediately as the government had promised during the "demolition mobilization conference" (*banqian dongyuan dahui*). Moreover, peasants needed a backyard in the new peasant village for raising large domestic animals, such as pig and cow, and some land for planting trees. For villagers, the space of the backyard in new village was too tiny. It can only be used for raising chicken.[62]

6.2.3 Poverty in Local People's Eyes

Being poor from an outsider's view is very different from what the poor perceive. "We are poor. However, whatever we inherited and preserved from our ascendants will be saved and passed on to our descendants through our hand, the landscape, the mountain, and the river…We are Nu and Dulong minority nationalities. We live in the mountainous area. Here the Nu valley is not wealthy. However, we live a positive life every single day. Usually we are not able to eat meat or oil every single day. But we are singing, dancing, and drinking every single day. This is our culture and our life. "

But their way of life can easily be changed overnight because of the dam project. In a cold winter evening around Chinese New Year, two heavy duty

[62] Phone conference with Xiaoshaba villagers on February 20, 2008 Wednesday , second floor of Sanlian Bookstore of Beijing; interview with Wang Yongchen on May 18, 2011 in Beijing.

loading trucks and one earth pushing trucks invaded into the old village and dug a huge hole in the farmland beside the highway, and buried an oil tank there. Filled with anger and desperation, the villagers decided to obstruct the construction and stop the destruction of farmland. They organized to protect the farmland in the next morning. In the noon, the confrontation was temporarily resolved as the construction team withdrew from the farmland. Afraid that the construction team would come back soon, villagers voluntarily organized a vigil on the construction site.

During previous interviews by outsiders, including journalists, He Xuemin publicly expressed his opposition to the dam-building in the Liuku dam site. He become a trouble-maker in the eyes of the local government. He was not even allowed to contact with any outsider without the local government's approval. Agents of the local public security were dispatched to watch his daily activities near his old house in Xiaoshaba. In February, 2009 when we tried to visit him secretly, we were confronted face-to-face with local police. We had to give up our attempt and returned to Kunming.

6.3 Resistance along the Jinsha River

6.3.1 Hydropower Development Plan in the Jinsha River

In early 2003, one reservoir and eight dams along the middle stream of the Jinsha River were set to be built as the "Hydropower Development Plan in the Middle Stream of the Jinsha River" received the approval from the National Planning Commission (former NDRC). The sites involved include Upper Tiger Jumping Gorge, liangjiaren, Liyuan, Ahai, Jinanqiao, Longkaikou, Ludila and Guanyinyan.

In April 2009, Premier Wen Jiabao ordered to reconsider hydro project on the Jinsha River and mentioned the Nu River hydropower development project as a comparison, he wrote that "The impacts (of the Nu project) are consequential, (therefore) we should listen to different opinions again, make in-depth evaluation and make decision prudently. The hydropower project of

the Jinsha River has begun to construct before getting official approval from the State Council. Many problems are remained to be resolved, and we should learn from the precedent (i.e. the Nu dam project)."

On June 11, 2009, the hydropower development projects by the Huaneng and Huadian Group in Jinsha River were halted by the NRDC. However, these hydro developers continued to work after the ban. The Ministry of Environment (MoE) ordered that "from June 11th, the approval on hydropower project in the Jinsha River is in abeyance. The two hydropower projects under construction by Huaneng and Huadian should be stopped."[63]

Table 6.2 The Hydropower Development Plan in the Middle Stream of the Jinsha River

	1st Upper Tiger Jumping Gorge	2nd Two Families	3rd Liyuan
Name of Developer	Yunnan Jinsha River Hydropower Development Ltd	Yunnan Jinsha River Hydropower Development Ltd	Yunnan Jinsha River Hydropower Development Ltd
Status	Planned	Planned	Under Construction
Investment (100 million yuan RMB)	389	169	161.2
Installed Capacity (MW)	600	400	240
Annual Electricity Generated (Twh)	260	163	107.03
Total Storage Capacity (100 million cubic meters)	371	0.0074	8.91
Normal Water Storage Level (meter)	2,012	1,810	1,620
Submerged Farmland (mu)	160,000	23	2,850
Amount of resettled population	10,000	10	1,300
Maximum Dam Height (meter)	276	81	155

[63] June 22, 2009, China News Net "Huaneng, Huadian Jinsha River Hydropower Development Projects Continue to Work Even Called to Stop by Environmental Department"

Earthquake Proof Intensity	8	8	8

	4th Ahai	**5th Jinanqiao**	**6th Longkaikou**
Name of Developer	Yunnan Jinsha River Hydropower Development Ltd	Hanneng Stock Cooperation Ltd	Huaneng Longkaikou Hydropower Development Ltd
Status	Under Construction	Complete	Under Construction
Investment (100 million yuan RMB)	207	147	96
Installed Capacity (MW)	475	280	190
Annual Electricity Generated (Twh)	88.77	124	82.7
Total Storage Capacity (100 million cubic meters)	8.06	8.47	5.58
Normal Water Storage Level (meter)	1,504	1,418	1,298
Submerged Farmland (mu)	4,690 (Planned)	2,478	4,315 (Planned)
Amount of resettled population	2,551 (Planned)	1,868	1,941(planned)
Maximum Dam Height (meter)	139(planned)	160	119
Earthquake Proof Intensity	7	8	8

	7th Ludila	**8th Guanyinyan**	**9th Jinsha**
Name of Developer	Yunnan Huadian Ludila Hydropower Development Ltd	Datang Guanyinyan Hydropower Development Ltd	Panzhihua Huarun Hydropower Development Ltd
Status	Under Construction	Under Construction	Under Construction
Investment (100 million yuan RMB)	178	307	N/A
Installed Capacity (MW)	220	300	52
Annual Electricity Generated (Twh)	102	135.1	23.53
Total Storage Capacity (100 million cubic meters)	17.18	0.72	1.12

Normal Water Storage Level (meter)	1,221	1,134	1,022
Submerged Farmland (mu)	31,229 (planned)	14,059 (planned)	281
Amount of resettled population	1,402	8,853 (planned)	366
Maximum Dam Height (meter)	140	159	70
Earthquake Proof Intensity	8	7	N/A

Source: The Investigation Report of the Jinsha' Hydropower (*jinshajiang shuidian xianchang baogao*), 2011, news-report.

6.3.2 Li Family

Li Jiazhen was relocated from Shigu, a township near the "first big bend" of the Jinsha River due to the dam construction in the Tiger Leaping Gorge. The family of Li lived upon seven pigs, thirty chickens, little dry land and a couple of fruit trees. The annual yield of grain was seven hundred *jin*, and that of the paddy rice was two thousand *jin*. The output of the grain was used mainly to feed his family. The annual output of the cherry tree was two thousand and six hundred *jin*. Based on four yuan RMB per *jin* as the average market price, Li family earned an additional income of ten thousand yuan RMB per year. They can earn one hundred thousand yuan RMB per year by selling the pigs raised by their own. The household of Li's older son and daughter-in-law had an annual income around fifty thousand yuan RMB, and the younger son had an annual income of two thousand yuan RMB from a furniture factory in Lijiang. In addition, as a skilled carpenter, he earned fifty yuan RMB per day by making hand-made furniture, twenty yuan higher than the average. According to Yang Xueqin, a farmer in the Shigu, the income of the Li's family was at the middle level in the town.

6.3.3 Jinyi Resettlement Village

The Jinanqiao dam is the fifth of the hydropower plan in the middle

stream of the Jinsha River, with a total installed capacity of 2,500 MW. The project submerged about 2,000-mu (or 133.3 hectare) farmland and had a resettled population of two thousand. The dam has a total investment of 12 billion RMB (or 2 billon US dollar).

In the resettlement process, a new village was built as the new home for the villagers. However there are many problems with regard to the newly built infrastructure and house. For example, in some new houses, the basement is moving down and the roof has cleavages. The biggest problem for the Jinyi resettlement village is the village site selection. It is too far from the water source, making it very difficult for villagers to utilize water.

Elder uncle Li told me that “We used to pump water from the other side of the mountain. However, the pump is out of work for five days. Every household here has to use water stored for emergency. I used to have five *mu* dry land and more than ten pigs, a lot of fruit trees and some forest land. However, everything is gone. And the backyard (of the new resettlement village) is too small to feed pigs.”

6.3.4 Resettlement along the Middle and Downstream of the Lancang River

Liu Yuhua, 28-year-old, lived with her husband, her father, her mother and two children. She was relocated from the Xiaowan Hydropower Dam on the Lancang River. The family now lived in village of Bawan, Lujiang county, Longyang District, city of Baoshan, Yunnan province.

Her family used to own five *mu* dry land, one *mu* rice paddy, five *mu* vegetable land, and three and half *mu* forest land, and seven pigs. She and her father dealt with the agriculture work at home while her husband went out as a migrant worker. They had a peaceful and sufficient life before the Xiaowan Hydropower Dam was built.

Her land was not compensated yet due to the policy of "land replacement ", (*tudi zhihuan*) which meant replacing old land with new land in the new

resettlement village. The governmental compensation for house was three hundred yuan RMB per square meters. The new houses were built uniformly by government and sold to peasants at seven hundred RMB per square meter. Therefore Liu's family had to pay more than fifty thousand yuan RMB to fill the price difference.

The majority of savings had been paid for buying the new house. Therefore, there was no extra money left for buying necessities. Many households even had a debt. Six months passed since they had been relocated to the new village, and they had not got the new land. So the Liu's family relied on operating a tiny restaurant. However, it was barely visited by customers. The dilemma was described by Liu like this: "every household is facing the street and is supposed to open a small business, but with whom we will do business?"

Without the land, everything in the life needed to be purchased, especially the vegetable. The high price also prohibited many households from having vegetables. "Now the restaurant is nearly to be closed. We are waiting for new land being allocated by government. Upon getting land, I will cultivate grain, vegetable and corn. I will also feed pigs." said Liu Yuhua.

6.4 Summary

From 2003 to 2011, a group of ENGOs have taken different kinds of actions to try to halt the Nu dam project. As an integrated dimension of this anti-dam movement, local peasants' voice has yet to be heard. This chapter focuses on how local peasants perceive and experience the dam project in their own ways. Although residents in Xiaoshaba of Liuku county along the Nu River will be relocated and their land will also be submerged, they lack of the capacity of mobilization comparable to that of the ENGOs in Beijing. The resistance strategies they can deploy are limited. It seems that petition is the only way they adopted in pursuit of their interest in the case of Nu anti-dam campaign. By writing to the upper-level county government an

open letter for a more reasonable compensation, Xiaoshaba villagers demonstrate strong willingness of resistance and a certain degree of organization in the process.

However, the local resistance observed on the ground is largely disconnected from that of the ENGOs. This is another reason that I called the emergence of the "semi-civil society" symbolized by the collective of ENGOs. The ENGOs tend to adopt a top-down approach to environmental problems whereas the local residents' grievances have to be tackled from bottom-up. There is a missed linkage between the ENGOs and the local peasants except on a few occasions. Understandably, the ENGOs face many practical difficulties in helping the local residents. Geographic distance is one reason. More importantly, in order to gain government support and avoid state repression at the same time, the ENGOs have to fame their intentions and activities in a way that are in alignment with government interest. The disconnection between the ENGOs and the local people is to some extent a rational choice made by the former ensure their survival and operation (Hildebrandt 2009). Therefore, the "semi-civil society" is yet to adopt an antagonistic posture to the politic monopoly of the State, which speaks much to the resilience of the authoritarian regime. This point is more revealing when we compare the Chinese case with those in other countries.

Although ENGOs in China and other developing countries undertake similar measures to achieve their goals with some adaption (Bredariol and Magrini 2003), there is considerable difference in terms of their mobilization capability. For example, Gadgil and Guha (1994) suggests that a wide spectrum of nature-based conflicts lies at the heart of the Indian environment debate. As Karan (1994) pointed out, "These movements mobilize large masses of people, organize popular resistance that transcends political and social barriers, and create new social-political actors. They cut across social and cultural cleavages that might have been expected to be divisive. They unite people who differ by sex, age, religion, ethnicity, caste,

class and region by stressing shared interests in saving the environment.” By contrast, China’s movements can only mobilize a particular group of people in many cases.

Chapter Seven Conclusion

A Semi-Civil Society and a Non-stop and Cross-boundary Environmental Movement

Over the past thirty years, on the one hand, China has a rapidly-growing economy. On the other hand, the booming economy has brought about large consumption of natural resource at the expense of the environment. Scholars agree that Chinese economic growth is driven by the "expanding infrastructure investment, large-consumption of raw material, fast growth of energy, heavy and chemical industries", consequentially resulting in severe pollution to the environment.

China's energy structure mainly relies on fossil fuel in general, and coal in particular. In order to alleviate heavy pollution caused by coal consumption, the central government plans to further expand its hydropower capacity and has speeded up the development of hydro projects. As a consequence, new opportunities have been opened for the hydropower industry.

As China becomes more and more integrated with the world, the concern over the global warming has also become a salient factor in the government's energy related policy-making process. Playing an increasingly important role on the international stage and being a major player in the international dialogue of the global climate change, China promised to reduce the carbon dioxide emissions per unit of GDP substantially. The concern over global warming and the commitment of reducing carbon dioxide pushed China to further explore its hydropower potential. Therefore the hydropower development has been accelerated since early 2000s.

However, building large dams brings various technical, ecological and social problems. Dam building has certain technical deficiencies, such as

excessive silting, geological hazards and even dam collapse. Hydro projects often exert negative impacts on local ecology, threatening indigenous livelihoods and existing biodiversity. Moreover, since most of the river valleys provide fertile soil and are densely populated, the scale of population relocation is usually large. Forced land appropriation and relocation often invites popular unrest and protest in China. Compensation for resettlement is either too little or sometimes shifted for other use by local authorities.

In the recent decade, environmental contentions have increased dramatically. Besides land dispute, environmental issues and pollution in particular are among the most urgent concerns of Chinese people along with income disparity and corruption (Economy 2004). Nowadays in China, the non-governmental organizations (NGOs) are becoming increasingly responsive to pollution and other environmental degradation. They have played an important role in public education and other related areas, and become active in opposing dam building in general, and those in Southwest China in particular.

A rampant wave of hydropower development had swept southwestern China since the early 2000s, which was driven by China's gigantic appetite for energy. The case over the Nu River was particularly controversial among them. The river means "Angry River" in Chinese, which flows from the Tibetan Plateau into the Andaman Sea in Southeast Asia.

In 2003, Huaneng Power International Inc. and the provincial government of Yunnan province signed an agreement to build fourteen dams and two reservoirs on the lower reaches of the Nu River, some of which lie within the Three Parallel Rivers, a designed world natural heritage. The dam proposal triggered a bourgeoning environmental movement, which was mobilized in opposition to the project. Due to the concerted efforts of many ENGOs, Chinese government finally announced a suspension of the dam project in 2004.

During the disputes over the Nu River case, the local government and developers were richly endowed with financial resources and backed up by political powers. At the state level, the Nu hydropower development plan was legitimated under the name of tackling energy shortage and maintaining a high economic growth rate for the nation. By contrast, the resources deployable by ENGOs were quite limited; they were disadvantageous in many aspects compared to their rivals. However, during the Nu campaign, Chinese ENGOs monitored the impacts of dam-building on the local environment, articulated the interests of dam-affected disadvantageous ethnic minority people along the Nu River and challenged the powerful hydropower interest groups.

This study, based on the case of Nu River dam project, tracks the process through which Chinese environmental NGOs took up collective actions to halt the construction of the Nu River dam building over the past decade. The purpose is to explore the case's implications for China's emerging civil society. Based on in-depth first-hand interviews with those involved and extensive collection of archive materials and secondary data, the dissertation reveals an encouraging but limited role of Chinese ENGOs in constructing, protecting, and expanding the public sphere.

The study tries to answer three research questions. The first one is: "To what extent did ENGOs' participation in the protection of Nu River indicate an emerging civil society in China?". My study shows, over the course of the anti-dam movement, Chinese ENGOs demonstrated considerable autonomy and independence in environmental advocacy. They showed flexible and strong capacities of financing and organizing, mobilized different sources of resources, and successfully intervened the state's policy-making process. These activities indicate that Chinese citizens have raised up to have their voice heard when defending their civil rights, and Chinese ENGOs has successfully achieved a larger legitimated space for the civil society in China.

The second question asks " How did the relationship between ENGOs and the state evolve over the Nu River case?" The Nu River campaign reflects new dynamics between China's civil society and the state. The authoritarian regime has gradually transformed itself and achieved certain checks and balances between the central and local governments, and between different bureaucratic branches. For example, the conflicts between the SEPA and NDRC over the Nu River dam project made the government vulnerable to the claims made by the ENGOs and therefore enhanced the latter's likelihood of realizing their goals. This study also shows, by making alliance with SEPA, the ENGOs changes the relationship between the state and society to its favor.

Nevertheless, the ENGOs in China did not seek to challenge the legitimacy of the regime directly, though they complained about ill-functioning bureaucracy or lack of rule of law. Chinese ENGOs strive to implement environmental policies and represent the interests of those whose lives are directly affected by the dam project. These new dynamics suggest the inception of a "semi-civil society" in China. My analysis shows that ENGOs' participation in the protection of Nu River had strengthened their social influence and organizational capacity. It would be, however, too hasty to foretell an ever- expanding NGO sector at the expense of the state. The relationship between the two is more complicated than that in a zero-sum game even in an authoritarian society like China.

The third question asks " How was ENGOs' participation in the protection of Nu River connected with local people?" The study shows local residents perceive and experience the dam project in their own ways. Although it is the residents in Xiaoshaba of Liuku county along the Nu River who will be relocated and whose land will be submerged, they lack resources and capacity of mobilization comparable to that of the ENGOs in Beijing. Nor were they equipped with a repertoire of strategies as the ENGOs do.

It seems that petition is the only way local residents adopted in pursuit of their interest during the anti-dam campaign. Such local resistance observed on the ground is largely disconnected from that of the ENGOs. The ENGOs tended to adopt a top-down approach to the problems by appealing to the top leaders of the state whereas the local residents' grievances had to be tackled from bottom-up. There is a missed linkage between the ENGOs and the local peasants except on a few occasions. Without a direct coordination with ordinary people, the collective actions of ENGOs only symbolized the emergence of a "semi-civil society".

Through the Nu River case, this study shows that civil society in contemporary China diverges in many aspects from the western discourse of civil society. There are four features of Europe-generated idea of civil society, (1) the non-state and non-market nature, (2) a space for voluntary and non-voluntary groups to be located, (3) a space for self-governance, and (4) activity in the civil society seeks to change the rule of political game.

By contrast, Chinese civil society has its unique features, it is better defined as a "semi-civil society", instead of a full civil society. First, with political, economic and social rights being released to individuals during the reform era, Chinese people start to enjoy albeit tailored and restricted civil rights. Second, the environmental volunteers sometimes take actions outside the official boundary. However, they still lack full capacity of self-organization and their very existence is legally questionable in some cases. Third, media exposure and other strategies adopted by NGOs have helped to halt the thirteen cascade Nu dams but they were implemented spontaneously, informally, and vulnerably. Finally, the abeyance of dam project on the Nu River and the percussions from the society has re-shaped the state-civil society relation in China, making new demands on Chinese government, state and administrative procedure.

The mechanisms of the anti-Nu dam movement is either less likely to be replaced or to be copied in that the delivery of the success is contingent on

emergent political opportunities and other happenstances. The endeavor taken by Chinese ENGOs and the functions played by the environmental movement are by all means in accordance with other social movement in China, such as that in the internet, petition, and village election. All these social movements help curb the arbitrariness of state policies and herald a fully developed civil society. Hence the semi-civil society in contemporary China mirrors a dichotomy of mentality of Chinese people.

The study finds that some key features of a civil society have emerged in environmental protection movement and are especially prominent in the Nu anti-dam campaign. For example, we observe a group of individuals who are willing to take full responsibility to protect the environment and endowed with zealous interests on environmental protection, the demonstration of the individuals as free and responsible citizens and as independent non-state and nonmarket group. In the process of protecting the Nu River and against the hydropower development plan, Chinese ENGOs become more responsive and demonstrate increasingly enhanced capacity of communication and action, higher degree of self-governance and increasingly strong ability in mobilizing the media.

However, as an organized social force with distinctive value and clear boundary of action, Chinese environmental NGOs have not fully displayed their strength in several significant polluting events and environmental disputes in recent years. They are also relative weak in articulating and acting on grass roots' interests, maintain public's environmental rights, influencing public's policy and even limiting state power embodied by powerful state institutions and abusive market force.

To conclude, Chinese society resembles the European-rooted conception of civil society, but it is not yet fully-fledged. NGOs in China help to build a "semi-civil society," a distinctive public sphere of organizations, with restricted freedom to deploy civil means to influence the state and its policy-making in particular.

Appendix - Major events of the Nu River case

April 2001, Hydro China Beijing Engineering Coorperation and Beijing Guodian Company began to examine the hydro resources of the Nu River. The feasibility report confirmed the profitability of Nu hydropower development.

Early 2003, one reservoir and eight dams along the middle stream of the Jinsha River were set to be built as the "Hydropower Development Plan in the Middle Stream of the Jinsha River" received the approval from the National Planning Commission (former NDRC)

September 15, 2003, The Green Watershed (GW) and its leader Yu Xiaogang submitted the newly-translated guidelines and reports of World Commission on Dams (WCD) to the Nu prefecture party and government leaders.

October 25, 2003, In order to draw a widest coalition for environmental protection, Pan Yue, the vice minister of SEPA and SEPA incorporated elites from a wide spectrum, many famous writers, singers, movie stars, and sports stars become standing members of the CECPA, China Environmental Culture Promotion Association, a leading GONGO. The "Green Forum" of the CECPA is a public relation event.

November 2003, Several Chinese ENGOs, including the Green Watersheds (GW) and the Green Earth Volunteers (GEV), joined in the "Anti-dam Conference of World Rivers and their Allies" in Thailand. During the forum, GEV successfully lobbied sixty NGOs to sign a petition for saving the Nu River from being dammed.

February 2004, Yunnan province held the annual "Two Conference". During this time, Yu Xiaogang and Green Watershed collaborated with committee members of the CNDL and submitted a co-signed draft on

environmental and social impacts of the Nu cascade hydropower project to the Yunnan provincial government.

Premier Wen sanctioned that "such (Nu River dam project) event that arose social attention widely, should be cautiously studied and decided on scientifically".

March 22 to 31, 2004, The Green Earth Volunteers collaborated with several other ENGOs in China, held a photo exhibition “Our attachment to Nu River” in Beijing’s New Century Post Station. Immediately after the photo exhibition, a website “Our Attachment to Nu River” [http://www.nujiang.org.cn] was established

July 20 to 24, 2004, Yu Xiaogang and Green Watershed organized a four-day long resettlement training program for dam-impacted villagers alongside the “Three Rivers”

October 2004, Chinese representatives of dam resettlement spoke in the UN's Hydro Power and Sustainable Development Convention in Beijing.

2005, The force of pro-dam called on a conference. He Zuoxiu, the member of China’s Academy of Science, and Lu Youmei, member of the China’s Academy of Engineering wrote an internal report and they denounced ENGOs as “green party”.

The SEPA launched an “Environmental Impact Assessment (EIA) Storm”. This governmental action aimed to reinforce EIA evaluation before project construction.

April 2005, The hydropower group including the Yunnan provincial government invited an expert team including He Zuoxiu from China Academy of Science, Lu Youmei , former general manager of Three Gorges Group, Fang Zhouzi, famous civil anti-pseudo science figure, founder of the New Threads [www.xys.org] and others to investigate the Nu watershed.

April 8, 2005, Accepting the invitation from Yunnan provincial government, Xue, Ye, the former secretary general of the Friend of Nature, Yu, Xiaogang, the leader of the Green Watershed, Xi, Zhinong, and Shi, Lihong the two founders of the Wild China Workshop went to Yunnan to attend the dialogue

with the Chinese Academy of Science investigation team.

August 2005, Returned from Yunnan investigation tour, He Zuoxiu and Lu Youmei wrote a letter Two Members of Academy of Science Petition to President Hu and Premier Wen to Promote the Resume of the Nu Hydropower dam project to the State Council.

An open letter from China Rivers Network "Calling on to Publicize the Environmental Impact Assessment Report of the Hydropower Project on the Nu River According to the Law" had been sent to the State Council, NDRC, SEPA and related ministries via normal posting service.

October 2005, Five villagers attended UN's Symposium on Hydropower Development and the Sustainable Development sponsored by United Nations Development Plan (UNDP) and China's NDRC in Beijing. By expressing their own concerns as dam-impacted people they petitioned to the Chinese central government and asked for international support.

October 22, 2005, Fang Zhouzi criticized environmentalists sharply on their "Saving the Nu River" during a forum held by China Investment Magazine in Guohong Plaza.

October 28, 2005, Hong Kong Phoenix Television Transparency of Society program interviewed Wang Yongchen and Fang Zhouzi on the Nu cascade hydropower dam project.

November 2005, Zhang Boting denounced the green journalists for "manipulating the truth and bitterly fomenting the anti-dam emotion and campaign."

2006, Due to the construction of the Liuku Hydropower Dam, the whole Xiaoshaba village of Liuku Township was relocated

The Green Earth Volunteer organized an investigative tour called "Ten Years River Survey" aiming to record the change of Chinese southwestern rivers due to hydropower projects.

January 2006, Zhang, Boting denounced Liao Xiaoyi, the founder of Global Village of Beijing to be an environmental extremist.

March 18, 2006, The Provisional Measurement of the EIA Public Participation was enacted by the Ministry of Environment (MoE). Pan Yue, the vice minister of the MoE considered it as the first official document with legal validity in the field of environmental protection in China.

January 2007, Unsatisfied with the compensation standard set by local government, villagers of Xiaoshaba petitioned collectively to the higher level government demanding for a more reasonable compensation.

February 2008, Zhang, Boting further accused the activities organized by environmentalists were featured by "ignorant emotional showing, and impudent rumormonger, taking advantage of the eco-tourism to disseminate green activism.

April 2009, Premier Wen Jiabao ordered to reconsider hydro project on the Nu River and mentioned the Jinsha River hydropower development project as a comparison.

June 11, 2009, the hydropower development projects by the Huaneng and Huadian Group in Jinsha River were halted by the NDRC. The MoE ordered that "from June 11th, the approval on hydropower project in the Jinsha River is in abeyance."

2010, The 5th hydropower dam project—Jinanqiao—of the Jinsha River, which was stopped for some years, re-obtained the official approval from the NDRC.

August 2010, Encouraged by the success of the Ten-years Survey of Rivers project, the Green Earth Volunteers (GEVs) initiated another project called the "Yellow River Ten-year Trek" aiming to investigate the ecological circumstances of the Yellow River watershed.

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