



## Getting their voices heard: Three cases of public participation in environmental protection in China

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### ABSTRACT

By comparing three cases of environmental activism in China, our paper answers the following three questions about public participation in environment protection in China: (1) what are the drivers for public participation, (2) who are the agents leading the participation, and (3) do existing laws facilitate public participation? We find heightened public awareness of environmental degradation and increasing anxieties over health and property values drive people to fight for more political space to influence decisions that have an impact on the environment. Despite the promises one finds in the letter of Chinese laws, Chinese society lacks a meaningful institutional framework to allow public participation, even in the area of environmental protection. The Chinese government mainly passively responds to public demands on an ad hoc basis, with no institutional commitment for engaging the public on environmental issues. This is unfortunate, because public policies without adequate public input are doomed to be clouded by illegitimacy.

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### 1. Introduction

The highly visible environmental degradation and associated health problems in China have drawn public attention. The central government has realized the urgent need for environmental protection and tried to influence local policymaking by pursuing Green GDP and other environmental performance evaluation projects (Li and Higgins, 2011). However, local governments have always placed GDP growth before environmental protection (Economy, 2004; Jahiel, 1997; Li, 2011). Thus, the Chinese public has to protect their environmental interests from the development-oriented state and the encroachment by strong business interests, especially during ongoing rapid industrialization and urbanization in China.

Principle 10 of the Rio Declaration on Environment and Development (1992) states that “[e]nvironmental issues are best handled with the participation of all concerned citizens, at the relevant level” and calls for the government’s facilitating public participation (United Nations, 1992). The Aarhus Convention (1998) further requires the government’s provision of public access to information, participation

in decision-making and access to justice in environmental matters (United Nations Economic Commission for Europe (UNECE), 1998). Over the years, public participation has been increasingly institutionalized in environmental decision-making at local, regional, and international levels. Following the global trend, the Chinese government has made big strides in empowering the public to participate in environmental issues by mandating disclosure of environmental information held by the government (State Council, 2007; State Environmental Protection Administration, 2007). However, China has also been criticized for its culture of state secrecy and insufficient space for the public to participate in managing the Chinese society in general. For example, even though the Law of the People’s Republic of China on Environmental Impact Assessment (EIA Law) explicitly requires public participation in environmental impact assessment, questionnaire surveys and public meetings are two most popularly adopted means and have been criticized as insufficient (Ho and Edmonds, 2008; Wu, 2011).

This study looks into the dynamic interplay between environmental stakeholders in the context of three cases of environmental activism in China, aiming to stop the establishment of projects with negative impacts to the ecological system or surrounding environment. The Nu River Dams project in Yunnan province was aimed to develop the local economy as well as to generate electricity for fueling development in other regions. But individuals and groups who were concerned about the Three Parallel Rivers area, a natural heritage,

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acted against the decision; as a result, the construction was put on hold and the development plan was released to the public domain for comments. The Xiamen PX project in Fujian province, a big investment project favored by the city government, was forced by the public to relocate. And the third case, the Liu Li Tun garbage incineration power plant in Beijing was stopped and forced to relocate by local residents' unfaltering protests. In all three cases, individuals and groups organized themselves and worked together to voice their concerns and change decisions that would have negative environmental impacts. By analyzing the drivers and agents of active participation, this study will shed light on evolving organizing mechanisms of gaining political space for public participation in environmental protection movements.

In the following pages, we will first review the literature on public participation both as a political principle and a practice. Then we will discuss the research questions and methods. This will be followed by analytical narratives of the three cases of environmental activism in China. Section 5 will compare drivers and agents of the three cases and will discuss effects of law as well as implications for opening political space for public participation in environmental protection in Chinese society. The paper ends with conclusions.

## 2. Public participation as both a political principle and a practice

Respect for citizens and their self-determination is at the heart of democratic values and good governance. A government that involves the public in decision-making processes would first equip the public with necessary information on the issues of their concern, then provide venues for the public to express views and deliberate on alternatives, and empower them to make decisions to advance their individual as well as collective interests. As a political principle, public participation sets a foundation for accountable government (Feldman and Khademian, 2007; Roberts, 2008).

Besides political philosophers, economists have also argued for public access to environmental information and participation in environmental decision-making. Based on neo-institutionalism theories of the allocation of access to information and decision-making in a contractual relationship, a party who is the residual claimant should be given access to information on a contract's execution and make decisions accordingly (Barzel, 1989; Williamson, 1975, 1996). A government enters into a contractual relationship with the public that it serves, and it employs tax payers' (public) money to protect the environment. In this case, the general public is the residual claimant because it incurs the damage on their health as a form of residual costs caused by pollution (beyond the costs covered by polluters such as pollution fees, fines, factory closures, etc.). Thus, the public should be informed of the environmental performance of both government and polluters and be given the power to make decisions on environmental issues (Li, 2006).

However, the unbalanced distribution of costs and benefits of pollution and counter measures presents barriers for the public to organize and take collective actions against environmental harms. The costs of pollution are dispersed among a large number of individuals but the benefits of discharging pollution are concentrated on a small number of polluters. Thus, those polluters are not willing to bear the concentrated costs of pollution abatement or nature conservation. Moreover, those polluters are usually economically and politically more powerful than the many individuals who are affected by pollution. Besides, those pollution victims usually encounter collective action problems, especially when environmental issues are largely of a technical nature and hard to understand. For these reasons, government intervention on behalf of the public becomes necessary for addressing environmental problems (Buchanan et al., 1980; Esty, 1999; Keohane et al., 1997; Olson, 1971; Portney and

Stavins, 2000; Tullock, 2005). But again, the government has to work together with the public to practice good environmental governance.

China has also endorsed public participation as a political principle and formulated laws and regulations accordingly. According to law, the public can participate in environmental issues at three different stages. Before decisions are made, the public can participate in environmental assessments for revealing their preferences and interests. The assessments identify potential environmental impacts of a contemplated action. Experts, government officials, industry people, and the public can make use of that information and compare it against pre-established thresholds or standards as well as individual preferences. After that, decisions will be made on whether to proceed with the action as originally planned or to pursue an alternative plan. Article 5 of the EIA Law requires the government to invite experts and the public to participate in EIA, and Article 11 prescribes public hearings as a desirable form of participation. Of course, the public can also express their preferences and interests through their representatives who are members of the Chinese People's Congress (CPC) and Chinese People's Political Consultative Conference (CPPCC).

When making environmental decisions, the public can participate both formally and informally. For example, the public can participate via CPC members to make more environmentally friendly laws. That would, at least theoretically, constrain government and industry when making decisions on the environment and development. Other than that, the Chinese public does not have any other formal channels to participate in environmental decision-making. However, when the public is not willing to bear the potential negative environmental impacts, they can make use of the time window after a decision is made but before it is executed to bring their cases to the mass media (Yang and Calhoun, 2007), to send complaint letters or to visit government offices, and even to protest on the streets (Li, 2006).

Lastly, when decisions have been made and pollution has actually occurred, the public can redress their grievances by suing polluters in the courts or again, complaining to the mass media or the government, or taking the issue in their own hands to protest. For example, the villagers near the Rongping Chemical Plant in Pingnan city, Fujian province realized their plants have been dying and they have suffered from cancer and other diseases since the plant started to operate in 1994. Their response was to go to court. The Changjian Zhang et al. vs. Rongping Chemical Plant was an environmental lawsuit that was identified by the State Environmental Protection Administration (SEPA) as one of the ten most important environmental lawsuits in 2003 and was named one of the ten most influential lawsuits in 2005 in China in a poll done by the Legal Daily Newspaper and All China Lawyers Association (OECD, 2006).

Because environmental damages are largely irreversible, the precautionary principle and prevention strategy are always preferable to dealing with environmental harms after they have actually occurred. Thus, the prior solicitation of public preferences and concerns at an impact assessment stage would avoid the tensions and stresses of dealing with environmental conflicts as well as the damaging environmental and health effects that result from pollution at a later time. Scholars have identified the following factors affecting the organizing mechanisms of public participation in environmental issues: how the individual civil and political rights are defined culturally (Pye and Pye, 1985), whether there exist local social networks, whether individuals have a sense of residence or own property in that area, what information is available about environmental risks and how the public perceives it, and whether the public trusts government agencies and other relevant parties. Furthermore, when the public is engaged in decision-making processes, they tend to accept and support the action even when there are negative

environmental impacts (Beierle and Cayford, 2002; Hasegawa, 2004; Laurian, 2004; Reed, 2008).

Even though China has endorsed public participation as a political principle, in practice, as scholars have largely agreed, there is a lack of public participation in environmental decision-making and tensions have accumulated in Chinese society regarding the siting of development projects and locally unwanted land use projects (Li et al., 2008; Wang et al., 2004; Zhu and Ru, 2008). However, not enough attention has been paid to the organizing mechanisms of concerned individuals and groups when reacting to controversial decisions. By studying the drivers for participation and agents who made participation possible in the three cases of environmental activism in the Chinese context, this paper advances our understanding of environmental conflict and strategies for enhancing social harmony in China. Furthermore, this paper speaks to students and scholars concerned about democratization and environmental issues in China.

### 3. Research questions and methods

This study seeks to answer three questions and to examine several related propositions. First, what are the drivers for the public to participate in environmental decision-making? When people have a stake in the environmental decisions, are they willing to participate in the decision-making processes or react to decisions that have been made? If a person does not rely on a project for his or her own livelihood, he/she may oppose it out of concern for the ecological rather than productive value of natural resources while the opposite might be true for local residents. If a person is attached to a place by owning property, having a family, or having a career, he/she may be more concerned about the environmental and health impacts of a project and participate more actively than those who do not have a sense of residence.

Second, who are the agents who make public participation happen? In the Chinese context, officials of environmental protection agencies are sympathetic to public environmental claims and they are important agents for facilitating public participation in environmental protection. Furthermore, given the technical nature of environmental issues, experts are important agents for interpreting relevant scientific knowledge and communicating with the public. And because some experts are attached to the CPC and the CPPCC, some of them mobilize institutional channels to influence government decision-making on behalf of the public. Of course, the mass media is an important channel for disseminating information and bringing pressure to bear upon the government and thus is also considered an agent. Moreover, environmental non-governmental organizations or other civil organizations such as home-owners associations can serve as important agents.

Third, to what extent have the laws facilitated public participation? The laws provide a legal framework that legitimizes public participation in environmental protection and supports their environmental claims. Thus, they set a favorable context for organizing for environmental protection.

Because there are numerous environmental disputes reported in China, we employed the following three principles for selecting cases in the study: (1) public initiated, (2) scopes of public participation are at three different levels, community, regional, and national, and (3) occurred in places where levels of economic development are different. Thus, we selected three nationally well known cases of environmental activism for the study. The public participation in the Liu Li Tun case mostly occurred at a community level, that of the Xiamen PX project at the city/regional level, and the Nu River Dams project at the national and international level. The comprehensive coverage of the geographic scopes and administrative levels allows a good understanding of why different groups of people are concerned about different environmental issues and what

factors drove them to participate. Moreover, the different distances between participants in both geographic and socio-economic terms make it possible to analyze differences in organizing strategies.

Data on the three cases were mostly collected from academic papers, news reports, and publications by environmental NGOs and other relevant institutions. We employed analytical narratives and a comparative case study method for data analysis. By recovering the stories of how the cases have developed over time, we use “narratives to move beyond efforts to describe a universalized, orderly social world” and to put ourselves in touch with “local knowledges,” or aspects of experience that are unique to the actors and case contexts and tell us something important about the motivating factors behind certain claims as well as social interactions (Ospina and Dodge, 2005: 143–144). Furthermore, Robert Yin recommended, “You would use the case study method because you *deliberately wanted to cover contextual conditions* – believing that they might be highly pertinent to your phenomenon of study” (Yin, 2003: 13). If by comparing the three cases, we find the drivers and agents differ by context, the results would then represent a strong start toward theoretical replication – again vastly strengthening the external validity of the findings compared to those from a single case alone. Having described the research questions and methods, the next section tells the stories of the three cases of organizing for environmental protection in China.

### 4. Analytical narratives of the three cases of environmental activism in China

The three cases of environmental activism were all targeted at projects planned to meet the goals of industrialization and urbanization. The thirteen dams planned in 2003 to be built on the Nu River were aimed to provide hydropower of 21 million kilowatts (total installed capacity) for fueling the local economy and growth in other regions. The Xiamen PX chemical plant, with a total investment amounting to 10.8 billion yuan RMB, was one of the biggest investment projects strongly supported by the Xiamen city government and approved by the National Development and Reform Commission (NDRC) in 2006. It was expected to generate 80 billion yuan RMB worth of industrial output annually after it reached full operation.<sup>1</sup> The Liu Li Tun garbage incineration power plant was planned in 2005 as an extension to the existing landfill, which has been generating foul air and was close to reaching its capacity. The plant would convert waste to energy and it was expected to be put in use before August 2008 when the Olympic Games started in Beijing. All three projects encountered opposition from different groups of environmental stakeholders. We will now sketch the narratives by introducing the major actors and their actions in the course of each case’s development.

#### 4.1. Nu River dams project

On 14 March 2003, the China Huadian Corporation, one of the four national power generation companies in the country, signed a *Memorandum of Understanding on Exploring Electricity Generation in Yunnan* with the Yunnan provincial government. On 18 April 2003, the China Huadian Yunnan Corporation was established, and about two months later, on 13 June, the party secretary, governor, and vice governor of Yunnan province received a delegation from the company, congratulated the Chief Executive Officer, and entrusted them with the task of converting the water resources into economic power for the province. After another two months, on 12 August, the NDRC approved the *Hydropower Development Plan for the Middle and*

<sup>1</sup> The GDP of Xiamen city in 2006 was only 110 billion yuan RMB.

*Lower Reaches of the Nu River* (referred to as “Plan” hereafter) submitted by the Nu River county of Yunnan province (Guo, 2003). The Nu River is ranked No. 2 among all the river basins in the country by its potential for generating hydropower. So the plan was to fully explore the potential to develop Yunnan province into an important base of generating and transmitting electricity from the west to the east, and of course, to improve the local economy. The plan was to start building the first hydropower plant in 2003 (Yunnan Huadian Nu River Hydropower Corporation Ltd., 2003).

However, at the Assessment Panel meeting held by the NDRC on 14 August, representatives from the then SEPA expressed concerns that the plan may affect the ecological value and nature conservation of the river. The Three Parallel Rivers area (including the Jinsha, Nu and Lancang rivers) was just added to the World Heritage List as a natural property at the 27th session of the United Nations Educational, Scientific and Cultural Organization’s (UNESCO) World Heritage Committee in July 2003 (Chen, 2003). SEPA people also noted that the EIA law would become effective starting on 1 September 2003. They would expect the Nu River dams project to undergo the required EIA procedures.

Dam projects, especially big dam projects, have been controversial in China because of their environmental and social impacts. Similar to the Three Gorges Dam project in the 1990s, the conflicting objectives of developing hydropower and conserving the natural heritage on the Nu River became highly visible issues at the national level. Not surprisingly, Chinese Central Television (CCTV) called for preserving the Nu River, one of the two intact ecological rivers in China, on 21 August 2003 (Chinese Central Television International, 2003a). The China News Agency reported that 36 experts expressed their concerns about the ecological consequences of the Plan at a round-table discussion held by SEPA on 3 September 2003 (Zhang, 2003). Moreover, the expert opinions were picked up by CCTV on 11 September 2003 and proposed alternative routes toward prosperity such as ecological compensation (Chinese Central Television International, 2003b). Then the Renmin Net reported the next three expert assessment meetings conducted by SEPA 20–21 October and the Yunnan provincial environmental protection bureau on 29 September and 10 October 2003. Experts did not necessarily agree with each other, with some more concerned about stimulating economic development while others were more concerned about the negative environmental and social impacts (Liu, 2003).

Despite the controversies and fierce debates among experts, the investors and Yunnan provincial government were aiming to keep the project on schedule so they pushed for the construction to start soon. Then concerned individuals and groups started to take action against the decisions. On 25 October 2003, 62 scientists, artists, journalists, and environmental activists signed a petition to preserve the Nu River at their Chinese Environmental Culture Promotion Association meeting. Representatives who joined the International Rivers meeting in November 2003 in Thailand also signed a petition against the decision to build dams on the Nu River (Wang, 2004). The New York Times quoted Wu Dengming, “The west development program has turned into the west destruction.” Wu’s environmental group, the Chongqing Green Volunteer Union, collected 15,000 petition signatures opposing the dams planned on the Nu River (Yardley, 2004b). Moreover, members of the CPC and CPPCC expressed their concerns about the Nu River dams project at their annual meetings in March 2004.

Within the international arena, in January 2004, five research and environmental organizations, including Friends of Nature and Green Watershed, organized a forum in Beijing to discuss the economic, social, and ecological impacts of hydropower projects and criticized the Nu River project (Baum, 2007). After a group tour along the Nu River in February 2004, the Green Earth and Institute of Environment and Development held a picture exhibition in March 2004 both in

Beijing and South Korea, in order to mobilize broader support (Yang and Calhoun, 2007). Rising in the Tanggula Mountains, the Nu River passes through China’s Tibet and Yunnan, then Myanmar (where the river is known as Thanlwin) and eventually flows into the Indian Ocean. Thus, more than 80 groups from Thailand and Myanmar handed a protest letter to the Chinese embassy in Bangkok in December 2003 requesting the Chinese government to consult neighboring countries downstream before building the dams. Thailand’s Prime Minister Thaksin Shinawatra also voiced his concerns (Cheng, 2004; Litzinger, 2007).

Eventually, the State Council did not approve the Plan and Premier Wen Jiabao instructed, “We should carefully consider and make a scientific decision about major hydro-electric projects like this that have aroused a high level of concern in society, and with which the environmental protection side disagrees” (Yardley, 2004a). Later on, debates were centered around (1) whether the EIA reports were publicly available and truthful; (2) how to balance development and nature conservation; (3) whether such big hydropower projects are beneficial to local people; (4) how to deal with forced migration; (5) whether electricity generated from big hydropower plants is green; and (6) whether it was wise to build dams in earthquake prone areas. In January 2011, the National Energy Bureau announced that even though the detailed plan is still under consideration, developing hydropower on the Nu River has already been decided (Zhang, 2011).

Mr. Hu, a teacher in a local school said, “Most villagers have no idea where the dams are to be built or whether their village will have to move. It’s useless caring anyway, because nobody cares what we think. If the government wants to go ahead with the dams, there’s nothing peasants can do about it” (Yardley, 2004b). Professor Mudun Li said, “We did anticipate the decision of developing hydropower on the Nu River. But we were at least allowed to express our opposing views, which was already good enough” (Liu, 2003). Both comments captured well the gradual openness of the public space for discussion and debate but frustration with decisions still being made behind closed doors in China.

#### 4.2. Xiamen PX project

Chemical production has become a key industry in Fujian province. With the aim of replacing imported paraxylene (PX), the Tenglong Aromatic PX (Xiamen) Corporation invested 10.8 billion yuan RMB to build the PX chemical plant in 2006 in Haicang district, Xiamen. The project was approved by the NDRC in July 2006 and the construction started in November. The plant would add 80 billion yuan RMB worth of industrial output annually (1/4 of Xiamen’s GDP) if it were fully operational in 2008 (Three projects got approved including the Tenglong Aromatic PX project, 2006).

Such chemical plants in Taiwan and Korea are located 70 kilometers away from residences. Because they produce highly toxic petrochemicals and there is a risk of explosion and leakage, the desirable distance from residential areas is 100 kms. However, the planned PX plant in Xiamen is only 4 km away from two university campuses and 6 km from the city center and there are altogether 100,000 people living within a 5-km radius. After sending a letter jointly signed by 6 academicians to the party secretary of the Xiamen city government at the end of November 2006, on 13 March 2007, 105 CPPCC members led by ZHAO Yufen, submitted a collective plea during the CPPCC annual session calling for relocation of the PX project. The next day, SEPA officials responded to the plea saying that relocating an approved project is beyond their jurisdiction and thus, no follow up actions could be taken (Qu, 2007). Furthermore, the NDRC sent a team in April for an on-site visit in Haicang. The team leader met with ZHAO on 15 May saying the Xiamen PX project had met all the government requirements and stoppage or relocation was



out of the question ([One hundred PPCC members could not stop the 10 billion PX project, 2007](#)).

On 1 June 2007, about 15,000 people wearing yellow armbands, holding banners, and some wearing gas masks, marched through the city to the Xiamen city government headquarters on Hubin Road. They demanded the resignation of the Communist Party Secretary of Xiamen, HE Lifeng, and cancellation of the PX plant, not just suspension. The demonstration was organized through text messages sent to the Xiamen residents' mobile phones on 25–31 May. The first message described the PX plan as “releasing an atomic bomb on Xiamen” and asked recipients to join “a ‘10,000-man march’ on 1 June to the local government’s office.” People circulated this message over the next few days. Even though the Xiamen city government announced the suspension of the PX project on 30 May and tried to block the text message when they found it, they could not stop people from taking to the streets ([Chua, 2007](#)).

Due to the public protest, on 7 June, the Xiamen city government took the suggestion by SEPA and announced plans to conduct another environmental assessment before making a final decision on the PX project. On 5 December 2007, the assessment report was made available for public comment in the next 10 days. The Xiamen city government opened an online voting system at about 9PM on 8 December and closed it at about 10:44PM the next day. The results one hour before the closure indicated, there were 55,376 votes opposing the PX project while only 3078 votes supporting it. Because there was a flaw in the web design that allowed people to repeatedly vote online, the city government was concerned about the accuracy of the voting results and the number of opponents might have been exaggerated ([Zhang, 2007](#)). On 13 and 14 December, two roundtable discussions were held by the Xiamen city government. The participants included 200 individual citizens randomly selected from self-registered city residents including CPC and CPPCC members. The majority chose to stop building the PX plant in Xiamen and to relocate it to the west in Fujian province ([Zhu and Jiang, 2007](#)). On 9 January 2009, the Ministry of Environment Protection approved the EIA reports, and announced that the PX projects would be relocated to Zhangzhou, Fujian province ([Ministry of Environmental Protection, 2009](#)).

The processes and effects of public participation in the decision-making regarding the Xiamen PX project have been praised by the mass media as a milestone in environmental decision-making in China ([Zhu and Jiang, 2007](#)).

#### 4.3. Liu Li Tun garbage incineration plant

The Liu Li Tun garbage incineration power plant was planned to be an extension of the Liu Li Tun landfill, built in 1996, which was expected to be closed down and turned into a park by the Haidian district government. The landfill is located in northwest Beijing, which is also the direction the wind blows from. It is adjacent to the Baiwang New Town community, which has hundreds of thousands of residents who have always complained about the stinky smell from the dump ([Capital's waste disposal plan raises a stink, 2007](#)), to universities such as Tsinghua and Beida to its south; and to high-tech industrial parks both to its east and north. Furthermore, the Beijing–Miyun drinking water diversion canal is only 1.14 km to the south of the planned garbage incineration power plant ([Zhou, 2007](#)). The project passed EIA in 2006 and construction was planned to start in March 2007; the power plant was to be put into use before the Olympic Games started in August 2008 in Beijing.

However, when the decision was announced in 2006, residents in Baiwang New Town were not happy about it. Dioxin emitted from the burning of garbage, a cancer-causing toxic has become the major concern of residents in Baiwang New Town. The homeowners discussed the issue and expressed their wishes of “No Stench, No

Cancer” on their community Internet bulletin board. Furthermore, they handed two petitions to SEPA and the Legislative Affairs Office of the Beijing municipal government, asking the Beijing environmental protection bureau to withdraw approval for the power plant. In the meantime, they hired lawyers to talk to the administration. ZHOU Jinfeng, a CPPCC member was also approached by the residents to help express their concerns at the upcoming CPPCC annual session in 2007 ([Capital's waste disposal plan raises a stink, 2007](#)).

The development and reform commission (DRC) of the Beijing municipal government strongly supported the 1.05 billion yuan RMB project and held a press conference on 23 January 2007 trying to assure the public that the dioxin emitted would be within accepted safety levels ([Guo, 2007](#)). But distrust in government and technology still emanated among the residents. “The Haidian District government could not ensure a stink-free dump, so how can we believe it’s capable of handling such a high-risk project?” said Luo who moved into Fenglian Community in the year 2000, unaware of the nearby dump ([Capital's waste disposal plan raises a stink, 2007](#)).<sup>2</sup>

After careful study of the issue, ZHOU Jinfeng submitted a plea to stop building the Liu Li Tun garbage incineration power plant during the CPPCC annual session on 7 March 2007. On 5 June, World Environment Day, more than 1000 residents took to the streets to demonstrate in front of SEPA’s headquarters in Xicheng district ([Shi, 2007](#)). On 7 June, the vice minister of SEPA, PAN Yue suggested postponing construction of the Liu Li Tun garbage incineration power plant, to allow more debate among experts, and to give the public a bigger say in the environmental impact assessment. Furthermore, on 12 June 2007, SEPA announced that the EIA of the project would be open for public comment and the Beijing environmental protection bureau would receive and make them publicly available. The construction was pending on whether the new EIA report could be passed or not. Lastly, on 20 January 2011, the Haidian district government confirmed that they had dropped the plan to build the Liu Li Tun garbage incineration power plant. Instead, a garbage incineration power plant would be built in Su Jia Tuo, 20 km away from Liu Li Tun ([Yi, 2011](#)).

#### 5. Comparative case analysis: drivers of, agents for, and effects of law on public participation in environmental decision-making

These three cases of environmental activism tell us that, first of all, the public cares about government decisions that have social and environmental implications and they are willing to act upon them. Second, access to participate in environmental decision-making cannot be taken for granted; it was subject to careful analysis of who the individuals and groups were, what they were concerned about, and how they got their voices heard and influenced the environmentally unfavorable decisions. And lastly, public participation did make impacts and it was possible for it to change government decisions.

Table 1 compares the three controversial projects in terms of who the project owner was, the nature of harm, when the harm was likely to occur, benefits and costs to both project owners and local residents, who opposed the project and strategies adopted to get their voices heard. It is clear that no matter whether a project was owned by

<sup>2</sup> It is not surprising that the residents in Liu Li Tun area had such a deep distrust in government decisions. Back in 1995 when the Liu Li Tun landfill was planned, the Beijing environmental protection bureau commented the Liu Li Tun is not a suitable site for landfill because it is where the wind blows from and close to residential buildings and military stations. Furthermore, they commented if the Liu Li Tun landfill is to be built the residents and other establishments should be moved away. However, the government went ahead and built the landfill in 1996 and even worse, more residential buildings and hi-tech parks were built nearby in the following years.

**Table 1**  
Comparing the three cases of environmental activism in China.

	Nu River dams project	Xiamen PX project	Liu Li Tun garbage incineration power plant
Project owner	Corporation	Corporation	Government
Harm (nature)	Ecological	Health and safety	Health and safety
Harm (time frame)	Distant	Immediate	Immediate
Benefit to project owner	Profit from generating and selling electricity	Profit from producing and selling PX	Reduce the amount of garbage for final disposal Generate electricity
Cost to the project owner	Construction and operation	Construction and operation	Public land use, construction and operation, and public opinions
Benefit to local residents	Benefits associated with GDP growth (in theory)	Benefits associated with GDP growth (in theory)	Electricity and reduced waste for final disposal (in theory)
Cost to local residents	Migration	<ul style="list-style-type: none"> <li>• High risk to health and safety like an atomic bomb</li> <li>• Depreciated property price</li> </ul>	Stink plus high risk of inhaling cancer causing dioxin
Who opposed the project	<ul style="list-style-type: none"> <li>• Environmental activists</li> <li>• Some experts</li> <li>• CPC and CPPCC members (some overlap with experts)</li> <li>• Domestic as well as international environmental NGOs</li> <li>• Officials of a neighbor country</li> </ul>	<ul style="list-style-type: none"> <li>• Local residents</li> <li>• Some experts</li> <li>• CPPCC members (some overlap with experts)</li> </ul>	<ul style="list-style-type: none"> <li>• Local residents</li> <li>• Some experts</li> <li>• CPPCC members (some overlap with experts)</li> </ul>
Strategies of getting voices heard	<ul style="list-style-type: none"> <li>• Complaint letters</li> <li>• Plea to the CPPCC and CPC</li> <li>• Picture show</li> </ul>	<ul style="list-style-type: none"> <li>• Complaint letters</li> <li>• Plea to the CPPCC</li> <li>• Demonstration</li> <li>• Submitting comments</li> </ul>	<ul style="list-style-type: none"> <li>• Complaint letters</li> <li>• Plea to the CPPCC</li> <li>• Demonstration</li> <li>• Submitting comments</li> </ul>

a corporation or the government, the public responded according to the estimated potential costs they would have to bear and was not particularly afraid of strong business or government interests. As mentioned before, not everyone in society responded to the same environmental decision in the same way. The following factors, calculation of costs and benefits, ownership of private property, social affiliations, access to participation prescribed by the EIA law as well as determined by socio-economic contingent factors, all entered into the equation of public participation in environmental decision-making.

Undoubtedly, the three projects all had their merits. They satisfied the need for economic growth or reducing garbage, a public bad associated with urbanization and increased consumption. Thus, the competent DRCs at both the national and local levels approved all three projects and their decisions were backed up by expert opinions in the original EIA reports. What drove the public to participate in environmental decision-making and oppose the projects? The concerned individuals and groups could easily infer, from past experience with other approved projects, foreseeable damages to nature, living environment, properties, and health. Furthermore, experts did not fully agree with each other on the potential risks and harms and that weakened the validity of governments' arguments. Even worse, people did not trust the government because they were hurt in repeated interactions with it in the past under similar situations.

In the Nu River case, environmental groups and some scientists were concerned about whether the ecological value of the Three Parallel Rivers area, a UNESCO designated world natural heritage would be maintained after the series of dams had been built. The national media and newspapers were sympathetic to their claims while the local newspapers mainly covered reports about how hydropower development on the Nu River was a feasible, effective, and environmentally friendly method to lift the poor in the Nu River County out of their chronic poverty. Even though the peasants were unsure about whether they would have a share in the growing local economy, these potential consequences were still future concerns and their voice seemed to be much weaker than that of developmentalists. Not surprisingly, the opposing voices, in the Nu River case were mainly from environmentally concerned individuals and groups who were located either in other parts of the country or internationally, or from academics. In contrast, the Xiamen PX project would cause harm

to the health and safety of the residents in the adjacent local communities. People held a banner saying "We don't want GDP, we want to protect our children" when they demonstrated on 1 June 2007. Furthermore, people purchased property and moved to Xiamen partially because it is a garden city with good environmental qualities. However, Xiamen dropped from its prior rank as No. 1 in air quality to the third worst among the 9 prefectural cities in 2006 in Fujian province ([One hundred PPCC members could not stop the 10 billion PX project, 2007](#)). Furthermore, property prices have been affected by the degraded environment. For example, the prices of apartments at the Future Coast community have stagnated since the negative publicity about the chemical plants in Haicang in 2005. It was concern for the health of family members and properties that drove the Xiamen residents to oppose the PX project. Similarly, the Liu Li Tun garbage incineration power plant would damage the underground drinking water more and even add another cancer causing chemical, dioxin to the stinky air. As noted earlier, the slogan, "No Stench, No Cancer," posted on the community Internet bulletin board, reflected their fear that the emissions from the burning of waste would be a health hazard ([Capital's waste disposal plan raises a stink, 2007](#)). Not willing to bear the highly concentrated costs to health and safety, the residents in the Liu Li Tun area acted against the decision to build a garbage incineration power plant nearby, even though it would have provided public good to the Haidian district and the Beijing municipality. It is clear that the environment has become a major consideration of the Chinese public, especially urban residents when they decide where to work and live. This has implications for the agents of public participation in environmental decision-making.

Environmental protection agencies stand as strong opponents to blindly economic growth oriented government or business decisions. However, local environmental protection bureaus alone were not strong enough and more agents had to join to be able to bring the case to a turning point, where the politically powerful such as Premier Wen could no longer ignore. In the Nu River case, after domestic environmental activists such as WANG Yongchen and international environmental NGOs, experts, CPC and CPPCC members, and Prime Minister of Thailand expressed their concerns, on 2 April 2004, Premier Wen intervened. But SEPA intervened in the other two cases only after the demonstrations on 1 June 2007 in Xiamen and on 5 June 2007 in Beijing.

Not only did who the agents are mattered, the transaction costs of different organizing strategies also played an important role in whether the opponents could get their voices heard. People living on the Nu River were mainly farmers or herders who were not well educated. They failed to take a side and organize themselves to engage in the debates on which should be prioritized, hydropower, economic growth, or environmental and social impacts. They were remotely located from each other in the mountains and organizing would have incurred high time and financial costs in communicating and traveling, especially when the level of Internet literacy was low among those farmers and herders. Thus, facing loosely organized and weak opposition from the local people, the idea of developing hydropower on the Nu River was picked up again early this year and we have to wait and see how the public responds when a new dam project will be announced in the near future. In contrast, the Xiamen residents innovatively used text messaging as a tool for communicating and mobilizing. In addition, they actively participated in the public commenting on the EIA report of the regional development plan. Moreover, even though unconfirmed, police suspected that real estate companies and home-owners associations were behind and supported the demonstrations in Xiamen. In the case of concentrated costs but dispersed benefits, not in my backyard was the dominant attitude of the local residents in the Liu Li Tun area; they sought professional help from lawyers to deal with government officials and approached ZHOU Jinfeng, a CPPCC member to speak on their behalf. In all three cases, people who could not afford their interests being negatively affected by environmental decisions were no longer willing to remain silent or passively wait for environmentally conscious people to act on their behalf. They had the capacity and took the initiative to organize themselves and also reached out actively to find and work with other agents.

What effects did Chinese law have on public participation in environmental decision-making? While the discussion on the Nu River dams project was mainly focused on which should be the priority, development or environment, public participation and procedural rights have appeared in news headlines about the Xiamen PX project and the Liu Li Tun garbage incineration power plant (Editorial comment, 2007). These indicated the local residents were conscious about their desire to participate in the decision-making processes was rightful. However, they had to make space and means available to have a say. For example, before they went on the streets to demonstrate, the online bulletin boards such as the “Xiamen little fish” and “Lianyue’s eight oceans” were shut down (More than a million of the Xiamen residents forwarded a same text message? 2007). The police had warned some active members of local communities both in Xiamen and Beijing not to engage in *guoji* (dramatic) behaviors (Tatlow, 2007). Thus, not enough opportunities have been made available for the ordinary citizens in Chinese society to express their views and participate in government decision-making. But the EIA law has established a solid ground for people to make claims on the government to provide the access needed for the public to participate in environmental decision-making.

Furthermore, the home-owners associations in urban areas have become a strong organizing force that cannot be ignored in Chinese society. They have organized residents to negotiate and work with property management companies for governing affairs within their communities. They can also organize and strive for a better living environment by fighting against government decisions that will exert harm on their properties and communities. O’Brien and Li coined the term “rightful resistance” to capture the tension between society and state in rural China (O’Brien and Li, 2006). The same rightful resistance has also been observed in urban China. It would be an interesting empirical question to understand, to what extent the home owners associations in Xiamen and Liu Li Tun have facilitated the public participation.

## 6. Conclusions

These three cases of environmental activism in China are all considered victories.<sup>3</sup> The following transformation in Chinese society prepared for those successes: higher public environmental awareness, increased private concern about health and property, and more political space for public participation in environmental decision-making. When the Chinese government provides legal protection to private properties, the Chinese public has a strong incentive to invest in private housing and to maintain its value. Thus, urban residents and their home-owners associations form an important source for organizing for self-governance because they have the necessary financial resources and social skills even they have been given only limited access to participate in government decision-making via formal channels. Those well educated and well-off Chinese citizens know how to legitimize their concerns as well as how to mobilize broad societal support for counter measures against decisions that threaten valuable ecological systems, human health and property.

So, even though the EIA law has followed the principle of public participation in environmental impact assessment, the procedural rights of the public cannot be taken for granted. As this paper has illustrated, public participation in practice was contested and negotiated; in the end it depended on whether the public had the desire and capacity to gain the access needed to participate. The three cases are important victories not only because the public forced the government to change their original decisions but also because they set examples for effective public participation. Ms Azure Ma, who has been running the non-governmental Xiamen Greencross Association since the year of 2000, said: “For the government, its competence and decisions are now being questioned by a population that has more channels of communication than ever” (Chua, 2007). The question now for the Chinese government as well as policy advisors is, how can we see a more systematic change in government decision-making from passively responding to public claims on an ad hoc basis to actively engaging the public and thus enhancing the legitimacy of and mass support for public policies?

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<sup>3</sup> We expect public participation and resistance will emerge when the actual hydropower development projects go through EIA processes during the 12th Five-Year Plan period. We can still consider the planned Nu River dams project in 2003 was successfully blocked by the public.

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