

## ABSTRACT

Title of dissertation:       THE POLITICS OF PUBLIC PARTICIPATION  
  AND THE EMERGENCE OF  
  ENVIRONMENTAL  
  PROTO-MOVEMENTS IN CHINA

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This dissertation provides new empirical evidence which shows that environmental activism has been increasing in China since the early 1990s. It explains why participation has increased and why it varies across provinces. It examines the potential emergence of environmental movements and shows the utility of applying social movement theories to studying participation more broadly. Finally, It shows how participation makes a difference in policy outcomes.

Both qualitative and quantitative methods, including a statistical analysis of ten years of environmental data, an examination of 125 disputes and over 100 interviews in China, are used to examine the dominant modes of citizen participation; these include direct citizen protests, the dispute resolution and complaint systems, state-mobilized campaigns, and environmental social organizations.

New political opportunities for citizen activism have opened up because authorities have encouraged participation. Authorities need participation to achieve policy goals, however this need is in constant tension with the desire to control it. While political opportunities have allowed for greater participation, they remain limiting factors to the emergence of traditional movements. Grievances, mobilizational structures, and framing processes, also are factors in determining patterns of participation. The Chinese regime has become more responsive to citizen environmental grievances and since the 1980s, there has been a “sophistication” of state-society relations. This, however, does not represent a significant change in the principals guiding the Chinese state.

This research illustrates how political opportunity structures in reforming, one-party, corporatist countries like China differ from such structures in freer states. It shows how the Chinese State’s approaches have largely worked in containing widespread social unrest. Authorities have encouraged participation in some channels but limited it in others. They utilize the familiar tools of repression and suppression as well as new tools, including regulations, institutions, and processes, through which they shape, channel, and control participation.

On the other hand, citizens have taken advantage of opportunities. In some areas, they have established primarily autonomous environmental groups, practice “civil politics,” and have created a vibrant conservation proto-movement. Proto-movements exhibit many of the attributes of traditional social movements, and can be precursors to them, but remain constrained by limited political opportunities.

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AND THE EMERGENCE OF ENVIRONMENTAL  
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In Memory of  
R. Michael Brettell &  
Robert E. Brettell

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## TABLE OF CONTENTS

Dedication	ii
Acknowledgments	iii
List of Tables	vi
List of Figures	vii
Chapter 1: Introduction: Increasing Political Participation in Environmental Protection and the Associated Political and Policy Implications	1
Chapter 2: Participation and Social Movements: The Importance of Political Opportunities	56
Chapter 3: Environmental Disputes: Contentious Politics and Citizen Access to Justice	125
Chapter 4: Environmental Complaints: Variations in Chinese Society's Response to Rising Pollution Levels 1990-2000	187
Chapter 5: Campaigns (Yundong) Without Struggle: Volunteerism and Participation	256
Chapter 6: Diversity Among Environmental Social Organizations (ESOs): Corporatist Actors and Chinese Activists	323
Chapter 7: Conclusion: Volunteerism, Political Participation, and Environmental Proto-Movements in China	385
Appendices	423
Bibliography	482

## LIST OF TABLES

1. (4.1)	Data on Accidents Aggregated at the National Level	218
2. (4.2)	Top Ten Provinces for Absolute and Per Capita Complaints	228
3. (A.1)	Beijing Pollution Data: Changes Over Time	432
4. (A.2)	Chengdu Pollution Data: Changes Over Time	434
5. (C.1)	National Dispute Data (1990-1999)	456
6. (E.1)	Comparison of Complaints, Emissions, GDP and Environmental Awareness at The Provincial Level	469-470
7. (F.1)	World Environment Day Themes	471
8. (F.2)	PRC Century Environmental Protection Drive Themes	471

## LIST OF FIGURES

1. (4.1)	National Trends in the Numbers of Different Types of Complaints	224
2. (4.2)	National Industrial Effluent and Water Pollution Complaints	226
3. (4.3)	National Industrial SO <sub>2</sub> Emissions and Air Pollution Complaints	227

## LIST OF APPENDICES

### Appendix

A: Description of Case Cities	423
B: Environmental Casebooks: Description and Analysis	452
C: Environmental Dispute Data	456
D: Environmental Dispute Cases	458
E: Comparison of Complaints, Emissions, GDP, and Environmental Awareness at the Provincial Level	469
F: Major Environmental Campaign Themes	471

## Chapter One

### Introduction: Increasing Participation in Environmental Protection and The Associated Political and Policy Implications

In the residential area of xx city there is a branch factory of the xx City Enamel Plant, that since 1973, in the course of production, has been responsible for releasing poisonous gases, emitting soot and ashes, and generating noise pollution, which have been serious enough to disrupt the lives of nearby residents and threaten their health. On March 12<sup>th</sup> of 1983, the conflict came to a head when the residents wrecked the plant causing hundreds of thousand of Yuan in damages.

The factory emitted poisonous gasses including hydrogen fluoride and silicon tetrafluoride among others. Air quality testing revealed that the level of hydrogen fluoride in the atmosphere exceeded national standards by 2.7 to 13.7 percent. The amount of dust and soot in the atmosphere was about five times the national standard. In addition, the vibration and noise pollution was very severe. The workshop's machines produced noise pollution at ninety-five decibels, which greatly exceeds the national standard.

The poisonous gases emitted by the factory caused the trees around the plant to wilt and die. It also caused the windows of resident's houses to corrode making them look like "cut glass." Many residents in the area experienced lowered red blood cell counts, chronic itching, and emotional anxiety. In addition, their nostrils became enflamed, their throats hurt, they developed ulcers in their mouths, their gums bled, and their hair fell out.

Since 1976, area residents have negotiated with the enamel plant representatives and complained to officials at all levels of the government. Some residents even filed class action suits. On several occasions, the residents demanded that the factory mitigate its pollution problems and clean up the surrounding area. In 1980, the Ministry of Light Industry invested 100,000 Yuan to help the plant mitigate its hazardous air pollutant and dust emissions. The investments succeeded in reducing the hazardous gases and particulate pollution by about half. The city and the district environmental protection bureaus directed the plant to build upon these successes and continue to decrease their pollution emissions. In the end, factory leaders did not build upon the base, continued to engage in bad management practices, and in fact, discontinued the operation of the pollution reduction equipment already installed, citing economic hardships as the reason. As a result, pollution problems increased significantly, reaching their previous intensity. Disputes among plant employees and nearby residents occurred frequently.

Finally, in March of 1983, residents who had seen their complaints go unheeded took matters into their own hands and gathered to throw

bricks and rocks at the plant. The plant managers did not report the incidents to the EPB. Instead, they set up spotlights within the factory walls to illuminate the activities of the residents. They also dispatched militia to “guard the safety of the plant.” On March 12<sup>th</sup>, three residents of the xx Match Factory were throwing rocks at the plant. Militia from the branch factory captured them and kept one person as a hostage. They also snagged an assistant division chief from the match factory who had gone to the enamel factory gate to negotiate.

This exacerbated the situation and violence escalated. Residents of the match factory acted as a mob and tore off the roof of the enamel workshop, broke open the door and rushed into the workshop. Their actions disrupted production and forced workers to defend themselves. Their actions damaged about 50 tons of enamelware, worth hundreds of thousands of Yuan, slated for export. In total, the damages to products, equipment, and the buildings equaled about 500,000 Yuan.

After the 1983 incident, the enamel plant was under tremendous pressure, so they wrote a letter to the city Ministry of Light Industry Office to request funding in the amount of nine hundred thousand Yuan in assistance to resolve their noise, particulate, and hazardous gas pollution problems. After an exerted effort, the factory was relocated in 1984.<sup>1</sup>

As this story illustrates, some Chinese citizens have joined the millions of other people around the globe in participating in local environmental protests.<sup>2</sup> Protests of this sort and other forms of political participation, including citizen complaints, expert investigations, and political party demands, have proven to be a challenge to authorities. For example, in the 1980s, environmental activists in Taiwan, Hungary, and other Eastern European nations, were at the forefront of national democratic protest movements demanding more accountability and an end to autocratic policies.<sup>3</sup> Environmental movements were a cause, and not merely the effect, of the greater economic and political reforms initiated by Mikhail Gorbachev, and the eventual fall of the Soviet regime.<sup>4</sup> In Japan, environmental activism was seen as “fundamentally disruptive to the established ways of power.”<sup>5</sup>

Chinese leaders are not blind to these events and have good reason to be concerned that environmental activism in China could contribute to a popular movement demanding more government accountability and add to citizen unrest. Prominent figures in China warn that pollution and environmental degradation have worsened to the point of causing economic damages and of threatening social stability.<sup>6</sup> It is clear that citizen participation and activism regarding environmental issues are important in any discussion of social stability in China.

This dissertation provides new empirical evidence that shows activism and participation, which is defined as acts of citizen interest articulation aimed at influencing authorities and policy outcomes, has been increasing, through a variety of channels, especially since the early 1990s. It provides concrete details regarding how channels of participation work. It answers the questions of why participation has increased, why there is variation across provinces, and if there is one or more environmental movements in China. Finally, it shows how this increasing activism and participation makes a difference in policy processes and environmental outcomes.

It explains how a reforming authoritarian, primarily corporatist<sup>7</sup> state has channeled, even co-opted activism, as well as how citizens have circumvented state controls and taken advantage of political opportunities to expand participation. On one hand, Chinese authorities have been able to avert widespread social unrest by encouraging participation in some channels – by building new institutions and establishing processes through which to shape, channel, and control participation – as well as by limiting political opportunities for participation through other channels. On the other hand, in some areas of the country, citizens have established mostly

autonomous environmental groups, practice “civil politics,” and have created a conservation and wildlife conservation “proto-movement.” Proto-movements exhibit all the attributes of traditional western social movements, and can arguably be called precursors to them, but are constrained by different political opportunity structures.

Both qualitative and quantitative methods are used to examine the dominant modes of citizen activism and participation, which include direct citizen protests, the dispute resolution system, the environmental complaint system, state-mobilized public campaigns, and environmental social organizations (similar to nongovernmental organizations). Emerging channels include environmental impact assessment and public comment processes. It is around these dominant modes of participation that this dissertation is organized.

### **Chapter Overview**

This chapter explores the utility of the social movement framework for examining increased activism and suggests that variables from the social movement literature be used, in conjunction with variables for the general literature on participation, to explain increasing participation more broadly. It provides theoretical and empirical perspectives on political participation within the Chinese context. Then it illustrates the severity of China’s environmental problems, shows how environmental awareness has increased, and introduces the current literature on public participation in China’s environmental policy processes. It outlines the scope and methods of this research and explains why it is important. Finally, it provides a summary of the major findings, and gives an overview of the dissertation.

## **Environmental Activism Equals an Environmental Movement?**

Before it is possible to say there are one or more environmental movements emerging in China, a much closer look at the definition of social movements is in order. A definition of social movements that is by now well established is one crafted by Sidney Tarrow, and others, which asserts that social movements are “collective challenges based on common purposes and social solidarities, in sustained interaction with elite opponents, and authorities.”<sup>8</sup> Tarrow argues that

“People engage in contentious politics when patterns of political opportunities and constraints change and then, by strategically employing a repertoire of collective action, create new opportunities, which are used by others in widening cycles of contention. When their struggles revolve around broad cleavages in society, when they bring people together around inherited cultural symbols, and when they can build on or construct dense social networks and connective structures, then these episodes of contention result in sustained interactions with opponents - specifically, in social movements.”<sup>9</sup>

With this definition in mind, it became clear that there were limitations to utilizing the social movement literature in understanding environmental activism in China. Three main problems exist: there are forms of participation that do not fit within the framework of environmental movements; participation may not be considered contentious by western standards; and it simply is not clear that an environmental movement has emerged in China. Along with these problems, come opportunities. The opportunities arise because social movement theories can provide additional analytic variables to help explain variation in levels of participation more generally. Opportunities also exist to add nuance to social movement theories.

First among the problems is that there are clearly forms of participation in the environmental sector in China that do not fit under the rubric of environmental movements, i.e. participation at the individual level, mobilized campaigns and some group participation. These forms of participation just do not look like social movements. However, these forms are important in showing how the state has constructed institutions and processes through which to channel citizen activism.

In addition, while these forms of participation do not lend themselves to the wholesale application of the social movement framework, the various factors considered important in determining the emergence of social movements still are useful for explaining variation in levels of participation through each of the channels. Therefore, it is possible to borrow variables from the social movement literature to help to explain increasing activism in China. These variables include political opportunity structures,<sup>10</sup> grievances,<sup>11</sup> framing processes,<sup>12</sup> and mobilization structures.<sup>13</sup>

Of primary importance is the variable of opportunity structures because in China, political opportunities come apriori to other factors, such as mobilizational structures and framing. For example, independent social organizations, which now mobilize widespread participation, could not have emerged without the acknowledgement by party and government officials that they were necessary and the encouragement of officials to create such groups. Theoretically, considering China as a reforming authoritarian state, it is logical to assume that political openness can be considered a primary limiting factor in determining levels of participation. Therefore,

in this research more attention has been given to the role of the state and to political opportunity structures.

In China, the role of the state and the methods used by the state to shape the emergence of citizen environmental activism started out as being quite similar to what we have seen in Eastern Europe and East Asia, but have since become quite different. In both Eastern Europe and East Asia, we saw rather rapid political liberalization between 1987 and 1989, during which time environmental activism soared and environmental movements emerged. In China on the other hand, we see slow and methodical opening of political opportunities, making activism increase incrementally, almost deliberately. People who try to step too far outside of the available political opportunities are harshly dealt with, such as when Dai Qing was put in jail when she criticized the construction of the Three Gorges Dam. On one hand, one could argue this is has been a rational response by the state. On the other hand, one could argue it has been due to a process of institutional learning, or more cynically adaptation, on the part of Chinese authorities.

This research illustrates how political opportunity structures in reforming authoritarian, socialist countries like China are different from such structures in freer states and how these structures shape participation and social movements. It shows how a largely corporatist state tries to keep control by adopting a pre-emptive approach. Authorities have been able to encourage participation and frame citizen action by utilizing the familiar tools of repression and suppression, as well as utilizing new tools including establishing new institutions and processes of interest articulation,

regulation, and by taking a pro-active approach in improving environmental protection.

The second reason why utilizing social movement theories directly is problematic is that a good portion of the participation in China would not be considered contentious. Traditionally, scholars of social movements would focus on instances where citizens utilize “repertoires of contention,” i.e. “contentious modes of making claims” to provoke social, political, or policy change to look for movement precursors.<sup>14</sup> However, what is contentious in one society may not be considered contentious in another society. Scholars of social movements in western democratic countries take the possibility of wide repertoires of contention for granted, simply because they study movements in nations with political systems that sanction a high level of political participation and allow for many forms of contention. Contentious political participation is an original condition in western democracies. However, this becomes a problem when attempts are made to examine social movements in non-western, non-democratic countries because overtly contentious participation is sometimes not an original condition of the political landscape. Repertoires of contention vary across nations and are based on available or created forms of participation and their political contexts. Here, this research is simply suggesting that it be recognized that contention is socially constructed and that within the Chinese context, contentious politics is more prevalent than people would imagine.

The third problem with applying social movement theories directly is that it was not clear at the beginning of this research if citizen activism revolved around broad cleavages in society or if interactions with officials were sustained over long

periods. In other words, it was not immediately obvious that one or more environmental movements existed in China.

Social movement research has attempted to explain why social movements emerge at certain points in history and not during others. However, it is difficult to study social movements until they emerge, so in effect researchers have mainly been able to study positive instances of emergence. What phenomena can be examined to offer cases in which movements do *and* do not emerge? One possible answer is to examine existing repertoires of political participation, not just contentious participation, because movements are more than just contentious politics.

Social movements are one form of group political participation. They are a powerful form of political participation that, unlike viable political parties and robust interest groups, may not need a democratic environment in which to emerge. This does not mean that social movements can develop under any political conditions. Sufficient political opportunities must exist. A certain level of political participation must exist. Participation in a social movement is inherently a political act, so studying channels of political participation is one way to study a potential social movement without assuming one has already emerged. This approach views a social movement type phenomenon not as a dichotomous variable, but as a continuous variable along a spectrum, with political participation at one end and a traditional social movement at the other end.

If there is an anti-pollution or other environmental movement in China, it is a nascent one, so this study does not start from the premise that one or more citizen environmental movements have formed in China. Instead, the study seeks to examine

the conditions in China that will help determine if public participation is political and has or can accelerate and develop into a traditional social movement. If there were little political participation in China, then it would be unlikely that a movement would emerge. Consequently, examining political participation at the local level is the starting point of this largely interpretive research.<sup>15</sup>

### **Participation as Political**

To begin to understand what participation is and why it has increased in China, a review of the general literature on participation is useful. Most of the early literature on political participation looked at participation in western democratic countries and primarily examines elections, but some did acknowledge that there are other forms of participation.<sup>16</sup> Since the 1970s, more and more western scholars argued that participation not only includes the selection of officials, but also includes any efforts by citizens to influence policy decisions and policy outcomes. The work of Lester Milbrath,<sup>17</sup> Sidney Verba and Norman Nie,<sup>18</sup> and Margaret Conway<sup>19</sup> argues that there are different styles of participation. They show that political participation in Western countries include other ways of influencing decision-making processes and policy outcomes, such as participating in interest groups, petitioning representatives, protesting, writing critical articles, and public comment processes. Although the right to recall officials through voting is obviously powerful, political participation clearly includes more than just voting. While these scholars acknowledged that political participation should not exclusively refer to voting, it is questionable as to whether they would consider participation in China as political, especially during the Mao period.

### ***Chinese Concepts of Participation***

The modern basis for political participation by the common man in policy processes in China is found in the practice of the “mass line” developed and practiced by Mao.<sup>20</sup> In theory, the mass line practice is informed by the principle of democratic centralism.<sup>21</sup> In mass line processes, leading organizations are responsive to the masses and are to report their work to the masses periodically (through their representatives). They are to listen to the suggestions of lower level organizations and the masses. They are under the supervision of the masses. All decisions regarding directives (*fangzhen*), policies (*zhengce*), laws (*falu*), regulations (*fagui*), and major decisions (*jueding*) are to be based upon democracy and come up from the masses and centralized at the center. Then they are to be carried out through action of the masses. Leading agencies are to realize collective leadership and specialization of individuals. All major decisions are to be decided by discussion among members of the collective.<sup>22</sup> So, in theory, public participation in political processes is supported by party principles.

### ***Political Participation in the Mao Period***

James Townsend argues that some form of participation did occur between 1949 and 1978, although he admits it was largely ceremonial or paternalistic and was designed to support the national interest as defined by the Communist Party.<sup>23</sup> Townsend defines participation in Communist societies as “the execution of party policies” and “popular political action support for a supreme, unified national interest as defined by the Communist Party,” or as “guided involvement in the implementation of political decisions.”<sup>24</sup>

Some scholars would disagree with the assertion that all participation was fundamentally patrimonial and non-political in Mao's China. They argue that a narrow definition of participation is unrealistic and inadequate to study political phenomena in communist societies.<sup>25</sup> Lucien Pye argued that paternalist participation, or participation for the sake of the common good, is still participation.<sup>26</sup> Victor Falkenheim asserted that significant non-ritual participation did exist in China.<sup>27</sup> While some forms of political participation may have existed during the Mao period, they existed alongside other more coerced forms of participation, implemented by a vast party apparatus that extended down into peoples' neighborhoods and work places (*danwei*). While not specifically talking about China, Samuel Huntington and Joan Nelson argue that even mobilized participation can be political in nature.<sup>28</sup>

#### ***Political Participation at the Individual Level in Post-Mao China***

There is more individual freedom in China today and the consequences of nonconformity are not as great as they were during Mao's reign. In today's China, there exist larger "zones of indifference," areas in which "political power on its own volition does not try to penetrate or control."<sup>29</sup> Therefore, individuals today have more freedom of choice, so if a citizen participates, it is likely that the individual agrees with the policy goals of the campaign and supports the current efforts of political actors to achieve those goals. One even could argue that participation not only indicates support for specific policy goals, but also provides and indicates support for the political regime.

Scholars of the post-Mao era, such as Tianjin Shi and Kevin O'Brien, argue that there is political participation at the individual level in China. Some individuals

participate not because they oppose the political regime, but because they are loyal to it and are seeking justice and/or are articulating their interests. Sometimes, this type of participation is thought of as “remonstrance.”<sup>30</sup> Tianjian Shi argues that there is political participation in China and that it is far more common than people realize, especially in the area of low politics which include local-level issues that touch directly on people’s lives.<sup>31</sup> Shi argues there can be political participation in countries that do not have established democratic institutions and procedures. Shi reminds us that political participation occurs not only during the decision-making phase of the policy process, but in the implementation phase as well.

While Shi’s work has been important to point out that political participation may occur in societies without pervasive democratic institutions and procedures, Shi chooses not to examine more paternalistic forms of participation, such as state-mobilized campaigns. Paternalistic forms of participation still exist and the relationships between paternalistic and more autonomous forms of participation are important in understanding the breadth of state society relations in China. Examining the range of participation, from paternalistic to contentious, as this study does, will provide a more well-rounded picture of changing state-society relations in China.

### ***Political Participation Defined***

The definition of political participation, at the individual level, used in this research is: any voluntary action undertaken by ordinary citizens that attempts to change the behavior of political leaders and policy or political outcomes. Participation is the act of interest articulation or the expression of a grievance that attempts to change behavior but need not result in any particular outcome. This means that people

can participate and yet have no effect.<sup>32</sup> A definition of political participation at the group or society level, however, must include the notion of interest aggregation as well as interest articulation. Political participation at the level of society implies group attempts to change the behavior of political actors or policy outcomes.

### *Participation at the Group Level*

A discussion of participation at the group level warrants review of some of Shi's work in Beijing as well as discussing participation in the form of social movements.

Shi's work concludes that the Chinese regime eliminates "the organizational bases for people to articulate their interests collectively."<sup>33</sup> His answer really reflects the structure of his research design; using individual survey responses cannot capture group responses.

This research shows that in the environment sector, the government has not eliminated channels of interest aggregation, but still shapes people's behavior and, to some extent, controls interest aggregation. Instead of eliminating channels of interest aggregation, the government provides channels for group interest articulation and allows some group formation through which citizens may aggregate their interests. Specifically, citizens may file group petitions, submit multiparty complaints, and file class-action suits against polluting enterprises. In addition, citizens can now legally join a variety of non-governmental environmental social organizations.

While these channels limit opportunities, shape group behavior, contain contention, and attempt to channel it in non-disruptive directions, they also create opportunities to bring people together and allow interest aggregation. In a sense,

China's social organizations and class action suits are political opportunities that allow group interest articulation.

Shi posits that without new group-based political activities emerging in China, increasing participation will not lead to regime change or democratization without the introduction of political parties. However, widespread political participation in the environmental sector could contribute to the momentum of democratization by raising citizen expectations of accountability in government.<sup>34</sup> The environment is a less politically charged issue around which citizens could practice group interest articulation, engage in contentious actions with officials, or more likely, other social actors, and learn to deal with contending opinions.

While some evidence indicates that citizens in China tend not to cooperate or to aggregate their common interests, the environmental sector may be different and so is a most likely case to see interest aggregation. Shi finds that "the primary strategy of interest articulation for the urban population in China is exclusion of, rather than cooperation with, people with similar attributes. Group and party-based politics remains not only unnecessary but also irrational for most participants."<sup>35</sup> However, these findings may no longer be valid given the breakdown of the *danwei* system. In any case, the findings do not apply to all circumstances. It only applies when participants are in competition for resources. It does not necessarily apply when a public good, such as environmental quality, is involved (although not quantity as in water shortages). Regime actors cannot parcel out the distribution of a public good, such as clean air in the same manner as other types of resources. Clean air for some participants does not automatically mean other participants will receive less clean air.

In effect, all participants (in a given geographical area) are more or less equally affected when a public good is at stake. Since participants are not in competition for resources, it makes more sense for them to work in cooperation with each other to maintain the supply of the public good in question - here it is environmental quality.

### **China's Pollution Problems**

There are many specific examples of China's environmental pollution and degradation. China's environmental problems include the world's largest population, water pollution, water shortages, air pollution, persistent organic pollutants (POPs), noise pollution, solid and industrial waste, desertification and sandstorms, deforestation and grassland loss, soil erosion, and biodiversity loss.<sup>36</sup>

China's population growth constitutes an environmental problem because it contributes greatly to the depletion of natural resources. Population growth in the late 1990s was 1.7 percent, down 0.4 percent from the rate in the 1980s, when the Chinese census estimated China's population at 1.2 billion, including people living on the island of Taiwan. Many analysts, however, believe this is a gross underestimation, because of the potential high number of "hidden" births. Independent estimates put the total figure closer to 1.5 billion.<sup>37</sup>

Water quality and quantity problems plague every region in China. Forty two percent of the water in the seven major river systems<sup>38</sup> has a water quality index of three or worse, meaning that it is unfit for human consumption. The water in 36 percent of cities across China has reached a quality index of five, and is unusable.<sup>39</sup> Drinking Water meets state standards in only six of China's 27 largest cities. While there has been an overall decline in mortality from infectious diseases, diarrheal

diseases and viral hepatitis, both associated with fecal pollution of water, are still the leading infectious diseases in China.<sup>40</sup> Around 60 million people face daily water shortages and in some areas in the North and West, factories are forced to suspend production because of lack of water.<sup>41</sup>

Air pollution problems are of increasing concern. A 1997 report conducted by the World Bank said chronic obstructive pulmonary disease was considered the leading cause of death in China, accounting for 26 percent of all deaths. According to an unpublished study, at least 3 million Chinese died of pollution related illnesses in a 22-year period in twenty of the nation's largest cities.<sup>42</sup> Fine particulates and sulfur oxides emitted in coal combustion were the major contributors to this high incidence. The same report estimated that economic damage from air pollution in general was about US \$1.5 billion, with US \$15 million alone attributed to respiratory disease. In some northern cities in China, winter levels of SO<sub>2</sub> have approached those found in the air pollution episodes in London in 1952.<sup>43</sup> The London episodes caused an estimated 4,000 fatalities.

China's solid waste and desertification related problems are growing. Chinese cities dump 140 million tons of domestic waste annually, of which only ten percent is disposed of in a harmless way. Desertification currently afflicts 27.3 percent of China's land. This area is increasing at a rate of 2,460 km<sup>2</sup> each year. The desertification of land is so severe in some areas of Inner Mongolia that residents have been forced to abandon their villages.<sup>44</sup> Sandstorms are becoming ever more common, increasing in incidence from five during the 1950s to 23 in the 1990s. The major Asian dust events in 1998 were associated with twelve deaths in the Xinjiang

Autonomous Region of China.<sup>45</sup> In 1999, sand storms caused over US\$3.6 million in economic damages in Inner Mongolia.<sup>46</sup>

Finally, while the state has made great efforts to control biodiversity loss, it remains a huge problem. Of the 640 species listed by CITES (Convention on International Trade in Endangered Species) as critically endangered, 156 are found in China, representing one-quarter of the total.<sup>47</sup> The indiscriminate and excessive hunting of wildlife continues to be extremely serious, and has so far resisted repeated attempts at control.<sup>48</sup>

### **The Need for Public Participation and Rising Environmental Awareness**

Given the severity of China's environmental problems and the lingering environmental policy implementation problems, strong action by both state and non-state actors is necessary. Citizen environmental awareness and public participation are necessary to help to resolve China's lingering implementation problems. While there is a dearth of work examining China's environmental issues, only a few scholars have examined Chinese society's response to pollution and the role of public participation in environmental policy processes.<sup>49</sup> One reason why Chinese citizens' responses to rising pollution were not the subject of much study is that they have not always been visible. Since the late 1980s, however, it has become possible to measure Chinese citizens' attitudes toward and responses to growing pollution problems.

A variety of surveys have shown that public environmental awareness levels have risen; the National Environmental Protection Administration (NEPA)<sup>50</sup> conducted one of the earliest surveys in 1990. It showed that 64 percent of those polled in 28 provinces, autonomous regions, and municipalities across China believed

environmental degradation in China is serious and an additional 35 percent believed it is somewhat serious. Ninety-four percent were worried that their nearby environment posed a danger to their health.<sup>51</sup> Some evidence indicates that since the late 1980s, Chinese citizen environmental awareness levels have risen.<sup>52</sup> In the early 1990s, environmental awareness was measured by polling citizens' concern for the environment.<sup>53</sup> Later, environmental awareness was conceived of in more sophisticated terms and surveys included questions testing environmental knowledge.<sup>54</sup> A survey conducted by SEPA of 31 provinces, autonomous zones, and municipalities in 2000 showed that concern for the environment was still strong. Of the 10,495 households surveyed, 56.7 percent believed environmental problems in China were "very serious" or "relatively serious." Only 22.8 percent believed that environmental problems were "not too serious" or "not a concern." The more sophisticated query regarding environmental knowledge revealed that of the thirteen knowledge questions, people on average only got 2.8 questions correct.<sup>55</sup> This indicates that while concern for the environment is quite high, specific knowledge of environmental processes is still quite low. The surveys do not reveal how citizens translate their awareness into action. While heightened environmental concern does not always mean citizens will act on that concern,<sup>56</sup> participation in the environmental sector and environmental activism has increased.

### **Public Participation in China's Environmental Policy Processes**

Despite recent excellent scholarly endeavors to understand environmental politics, and policy-making and implementation processes in China,<sup>57</sup> very few scholars have examined the role of the public in environmental policy processes since

the days of Mao's mass mobilization campaigns.<sup>58</sup> There have been many changes in the legal, political, economic, and social structures in China since the days of Mao. It is possible to examine new, more autonomous forms of citizen interest articulation in operation alongside older forms of mobilization and corporatist organizations and understand the interaction between them.

To say there are few studies does not mean there are none. There have been both projects designed to expand participation and scholarly research on various channels of participation. One valuable project designed and implemented by the American Bar Association has helped three cities in China establish local regulations to promote public participation in environmental policy processes.<sup>59</sup> There have been a handful of scholarly studies on public participation, especially since 2000. Two very recent studies acknowledge the role of the general public in environmental protection efforts. First, Hua Wang, Jinan Wang, and Genfa Lu examined the impact of publicizing enterprises' environmental performance ratings in the media. They found disclosure of ratings significantly reduced pollution in two tests of the "Green Watch" program in 2000. Authorities have greatly expanded the program.<sup>60</sup> The program does not create or expand channels of public participation; it simply allows publication of information on polluting enterprises.

This alone is significant because public disclosure and information is key in framing citizens' perceptions of pollution and whether or not excessive pollution is seen as infringing upon one's legitimate environmental rights. The sooner an individual in a country gains access to environmental information, the sooner that knowledge will establish an awareness of specific cause and effect relationships

between pollution and the possible health and economic impacts for that individual, thereby shaping his/her identity in relation to his/her environment. Information is an intangible resource and the rate and degree of citizen access to environmental information in part accounted for differences in the timing and nature of environmental non-governmental organization development and citizen demands for a cleaner environment in other states and regions, such as Eastern Europe.<sup>61</sup> Access to information is not the sole determinant of citizen action, but it has historically been one of the first ingredients in forming environmental awareness, or a “green” identity.

Second, Carlos Wing Hung Lo and Sai Wing Leung examined the effect of public opinion on environmental governance in Guangzhou. They found that Guangzhou citizens already have developed an environmental consciousness, although they may not put environmental protection as their top priority. Out of the process of mass mobilization, citizens have been informally incorporated, to some degree, into the policy process as officials respond to their grievances and complaints. EPB officials, however, have been warned not to encourage radical environmentalism by not “instigating critical public opinion or environmental activists,” indicating there is a limit to the public’s voice. Of significance, Lo and Leung point out that environmental protection authorities have used mass support for a cleaner environment to create a “more favorable context” in bureaucratic settings to promote the environmental protection agenda.<sup>62</sup> Lo and Leung, however, do not elaborate upon the relationships between mobilized participation and citizen interest articulation, discuss how public opinion has helped to create a more favorable context for environmental protection, or

link their research to the broader topics of participation and collective action. These gaps are addressed in this research.

Most of the other studies on participation have focused on the emergence of nongovernmental organizations in the environment sector. The case study approach has been popular.<sup>63</sup> Other works report on conferences to promote the development of groups and their interactions.<sup>64</sup> One study examines the Chinese environmental social organizations through a theoretical lens, outlines the legal framework supporting organizations, and discusses the barriers to organization expansion.<sup>65</sup> One study has systematically surveyed student environmental groups.<sup>66</sup> Two other studies focused on environmental complaints and disputes.<sup>67</sup> Each of these studies is discussed in more detail in the following chapters.

Peter Ho has tied discussion of environmental groups into the larger issue of environmentalism. He compares Chinese groups with those in the former Eastern-bloc countries and finds many similarities in the way groups developed in a gradual way. He asserts environmentalism in China, in contrast, lacks opportunities and the urgency to openly confront the government. Two main factors have shaped environmentalism in China: the “greening” of the Chinese state and the strict controls over social organizations.<sup>68</sup> He refrains from discussing social organizations in terms of being social movement organizations. He does not view the interactions these groups have with the state as conflictual and stresses the “female mildness” of the groups.

In contrast, this research argues that select groups have indeed come in contention with state and other social actors, once China’s political and cultural

contexts are considered. Considering the social construction of contention, some actions taken by environmental social organizations have been quite contentious.

This dissertation research builds upon these article-length studies of participation and goes further by undertaking systematic quantitative and qualitative surveys of each of the main channels of participation, explains how channels operate, and examines the relationships between participation in each channel.

## **Research Scope and Methods**

### ***Why Examine Environmental Movements and Participation?***

Beyond the fact that rising participation in the environment sector has proven to be a political challenge to governments in the past and may become an important political challenge to Chinese authorities in the future, there are other reasons for examining participation more broadly.

“Broadening political participation is the hallmark of political modernization.”<sup>69</sup> Participation is also an essential component of democratization. In gradual transitions to democracy, we should see increasing levels of political participation. In practice, as long as political participation is rare, there can be little gradual movement among the continuum of authoritarianism to democratization. This is another reason why the examination of participation in China is vital. Not only is it important to examine participation as a result of a shift toward soft authoritarianism or of democratization, but it also is important to examine the potential influence of participation on any shifts toward a more open system. At the very least, participation is a measure of democratization.

For example, participation could be added to the list of indicators used by Minxin Pei in his assessment that China is experiencing “creeping democratization.” According to Pei, China is moving toward democratization at a creeping pace. Creeping democratization partially is manifest through citizens increasing use of legal remedies to assert their legal rights, including their environmental rights. It also is manifest in decreasing repression of pollution victims since 1979 and in citizens’ access to representatives of the National People’s Congress, which has been growing in political power, albeit slowly and inconsistently.<sup>70</sup> Including a measure of levels of political participation in China, in more autonomous social organizations and through public comment and citizen input processes, would strengthen Pei’s argument.

The policy implications of this research are equally important. The theoretical literature on environmental policy processes, originating from the West, has identified public attitudes and citizen participation as a factor in determining the success of environmental laws and policies in achieving their intended results.<sup>71</sup> This work shows that public participation at the local level in China is just as important in improving implementation of environmental policy and laws as it is elsewhere. As in other nations, public participation helps to raise environmental awareness and puts pressure on enterprises and government actors to adhere to environmental laws.

Increased public participation is timely given that despite significant state action to promote environmental protection, implementation problems still plague China’s efforts to improve environmental quality. Numerous scholarly studies show that the Chinese state has responded to industrial pollution and environmental degradation strongly, albeit gradually, since the 1970s by taking steps to improve

scientific understanding of the problems and by establishing a relatively comprehensive national regulatory framework to manage the problems. This legal framework has increased the legitimacy of local environmental protection bureaus (EPBs) and their efforts to enforce laws and policies. EPBs have expanded their authority and their administrative and scientific capacities considerably in recent years. However, in the 1990s, policy implementation problems were still one of the most formidable barriers facing Chinese leaders in their attempt to achieve their stated environmental protection goals.<sup>72</sup> Part of the reason for spotty implementation has been the paucity of public pressure at the local level. Over time, increased participation should help to resolve enforcement difficulties and eventually to ease some of China's major pollution problems.

### ***Why the Environmental Protection Sector?***

There are several reasons why the environmental protection sector is a good case for examining public and political participation, social movements, and state-society relations in China.

First, although environmental politics is considered an arena of low politics, China has some of the worst population and environmental pollution and degradation problems in the world. This has implications not only at the domestic level, but has the potential to have a huge impact on the regional and global environment, making China's environmental quality an issue of concern for the international community. The domestic dimensions of China's problems were outlined in a previous section; this section concentrates on the international dimensions of China's environmental problems. China is now the second largest emitter of carbon dioxide, the major gas

contributing to global warming, and is expected to become the largest emitter by 2025. It is among the top producers and consumers of ozone-depleting substances, which contribute to the destruction of the earth's ozone layer that protects the planet from harmful ultraviolet radiation.<sup>73</sup> A Japanese report asserted that the density of sulfur oxide (SO<sub>x</sub>) ions originating from China and finding their way to Japan had increased by thirty percent between 1986 and 1991, significantly contributing to Japan's acid rain problems.<sup>74</sup> Japan is not the only nation in East Asia affected by transboundary acid rain. North and South Korea, Taiwan, Vietnam, and Mongolia are also "net importers" of China's SO<sub>x</sub> and NO<sub>x</sub> emissions. It is important to be aware of China's environmental policy processes and outcomes, most notably how well China implements international environmental agreements and domestic environmental laws and policies. If participation is necessary to achieve successful implementation of environmental policy goals, then the breadth and depth of participation in the environmental sector becomes a legitimate concern of the international community.

Second, it has been found in other nations that public participation in environmental policy processes is essential in reaching environmental protection goals.<sup>75</sup> There are policy implications of a general nature for China and other more authoritarian states if it can be shown that participation is necessary to achieve policy goals, no matter what a nation's political system may be.

Third, environmental politics is typically seen as a "low politics" arena in China; according to regime officials, environmental protection is thought of as a sector appropriate for "social development," which indicates that greater opportunities for public interest articulation exist in this sector compared with others such as the foreign

policy sector. In short, the environmental protection case is a “most likely” case for seeing widespread, political participation and an emerging social movement.<sup>76</sup>

Fourth, focusing on the environment sector allows an examination of the wide range of modes of participation available to citizens in China at both the individual and group levels. There are both paternalistic and more autonomous modes of participation in this sector. The tension between the state’s need for participation and the need to control it make environmental protection an ideal case through which to understand state-society relations. The main channels of participation are, disputes and self-help remedies, the complaint system, government mobilized campaigns, and environmental social organizations. In addition, new channels are emerging, including participation in environmental impact assessments and public comment processes.

### ***Methodology***

Each chapter focuses on one specific channel of participation and examines the breadth and depth of participation through that channel at the national, provincial, and city levels, where possible. This approach allows a broad overview of participation across China and provides specific case-study information about participation at the local level. The research has both quantitative and qualitative components

To answer the core question of which specific conditions influence Chinese society’s response to pollution and to provide quantitative evidence of the increase of public participation over time, the research includes a survey examining variations in environmental complaints at the national and provincial levels across China over a ten-year period (1989-1999). It explores the correlations among levels of air pollution, levels of environmental awareness, and per capita GDP with the number of citizen

complaints to environmental authorities at the national level, in all provinces and selected cities.

To understand why participation has increased, how citizens participate in environmental policy processes, how the government encourages and restricts participation, and how participation varies across China, a qualitative component is included in the research. The qualitative component is an in-depth comparative analysis exploring the specific channels of public participation in three cities, Beijing, Chengdu, and Taiyuan.<sup>77</sup> Data for the comparison was obtained from a variety of sources including interviews (with citizens, EPB officials, lawyers, scholars, victims of pollution, NPC representatives and staff, and others) and written materials (newspaper and journal articles, policy documents, reference works and scholarly books, articles and reports).

Three different cities were chosen in order to get an idea of the variation in the types and levels of public participation and political opportunity structures across China. These cities were chosen based on a number of criteria: the existence of serious pollution problems; variance in the level of per capita gross domestic product; similarities in geographical properties; the availability of data regarding pollution levels and environmental complaints for a ten-year period; and the specific administrative and legal status of the cities. The cities chosen are either a provincial capital or an autonomous municipality and are the sites where data on citizen complaints and environmental accidents are collected. In addition, these sites are the focal points for interaction of different levels of political power, such as local, provincial, and national.

Two of these cities, Beijing and Chengdu, are designated as “clean” or model cities, leading one to believe that it would be more likely that participation in the environmental protection sector was encouraged. Taiyuan is not designated as a “clean” city. It has a very high level of pollution, which should trigger a higher public response. Beijing is the political capital of the country, it has a relatively high level of per capita gross domestic product, and it has been at the forefront of China’s environmental protection work since as early as 1981.<sup>78</sup> In addition, Beijing is a cosmopolitan city that has been somewhat westernized. Chengdu has a relatively low level of per capita income and is the political capital of the southwest. Chengdu has some western presence, but not nearly as much as Beijing. Taiyuan has a medium level of per capita income, and pollution levels are relatively high compared to the other top fifteen polluted cities in China. Taiyuan has the lowest level of Western influence and no foreign environmental groups have established themselves in the city, although there have been a handful of air pollution management projects with foreign input.<sup>79</sup>

As with many research projects in China, data availability can shape the way in which a research project is conducted. In this project, problems of data availability constricted analysis at the city level. For example, data on environmental complaints was unobtainable in Chengdu. Comprehensive complaint data, however, was available at the provincial and national levels so a quantitative analysis of all complaints across all of China for a ten-year period could be made at those levels. There are numerous obvious data omissions, such as the number of environmental accidents from certain provinces in select years, and there are likely others that are not so obvious. Overall,

however, the data is still useful for getting a general picture of Chinese society's response to pollution as measured by the numbers of complaints. If anything, the numbers are too low; the actual number of complaints is probably higher.

The channel of dispute resolution can be disaggregated into individual dispute cases. Data on specific dispute cases are available from a variety of sources, but none of these sources is comprehensive. Newspaper articles covering disputes were collected from around the country over time, but the information in the articles is superficial and does not allow systematic quantitative analysis. In addition, data on specific dispute cases are available from casebooks,<sup>80</sup> but the data included in these books also are incomplete. Data on specific disputes that occurred in the three case cities are available from yearbooks, but again the data are superficial and incomplete. Given these conditions it was impossible to collect enough data from dispute cases from specific cities or even provinces to conduct a systematic quantitative national-level survey, so only specific anecdotal evidence can be presented with which to make limited generalizations about contentious politics.

Not all cities or provinces have independent or even quasi-independent environmental social organizations. The lack of such organizations, nevertheless, informs this dissertation's conclusions.

Given these conditions, it was necessary to utilize a variety of research approaches, both qualitative and quantitative, as well as focus on different levels of analysis to examine variation in participation through various channels (units of analysis) across time and location. A number of causal factors contribute to variations

in participation in all channels. However, other factors explain variations in only one or two channels.

### **Findings in Brief**

As pollution levels have risen, society has responded by complaining and demonstrating against pollution problems and the best the state can do is to try to shape, channel, and control the more disruptive forms of participation. Of great importance is that the state needs public participation in order to achieve environmental protection goals, so there is a constant tension between the need to encourage participation and the need to control it.

Currently, the main channels of participation in the environmental sector include the environmental complaint system, the dispute resolution system, direct citizen actions, state-mobilized public campaigns, and environmental social organizations (similar to nongovernmental organizations). In addition, there is some citizen participation in environmental impact assessment processes, in public comment processes, and through informal channels.

As in other countries, the Chinese state prefers certain channels of participation to others. Chinese leaders seek to control participation by channeling it into institutionalized pathways to avoid social disruption and economic setbacks, while seeking benefits for governmental agencies. The most popular of these channels is the environmental complaint system, because it provides benefits to both state actors and to citizens. Citizen environmental complaints are a “tolerated” form of political participation.<sup>81</sup>

Participation in the system has increased overall, but not in every province, and there is wide variation in participation levels across locations. Empirical data gathered on participation through all channels, aggregated at the national level, indicates that participation has measurably increased over the last two decades.

The findings indicate that increases in public participation are primarily due to authorities' recognition of the need for participation and subsequent encouragement of participation. This opened political opportunities for increased activism on the part of citizens. Official encouragement of participation and greater responsiveness to citizens' environmental grievances created a complex interaction of both top-down and bottom-up activism whereby the state and society have entered a positive, mutually reinforcing cycle of increasing participation.

Other factors also have played some role in stimulating participation. First, pollution levels have continued to rise and more people are being affected, so there are more people with environmental grievances. Second, the 1979 Environmental Protection Law (trial), and many more recent laws, legitimized enforcement actions and provided more legal protection to citizens who make complaints or file suits; it is no longer "counterrevolutionary" to take extreme measures to protect one's legal environmental rights. Third, economic development has raised people's standard of living, giving them more disposable income and more free time to engage in activism. This factor is more important in some channels, like establishing and developing environmental social organizations. It is less important in other channels, especially citizen use of the complaint system. Although, when citizens need to take their complaint to higher administrative levels, the need for financial resources increases.

Fourth, in some areas, environmental education efforts and media stories have helped to increase citizen environmental awareness levels, so more people now see the damages caused by pollution not as an “unavoidable by-product” of modernization, but as avoidable and “wrong.”

Public participation in Communist states is just as important in achieving environmental policy objectives as it is in non-communist states. In China, however, the nature of participation is fundamentally different than it is in many western nations; participation is more controlled and occurs at different phases of the policy process. Nearly all channels of participation operate during the course of policy implementation. However, there are signs that this is slowly changing. The relative absence of participation at decision-making stages indicates that Chinese authorities tend to value participation, not because it would help them make better decisions, but because it helps them enforce governmental decisions already made.

To get someone to pay attention to their problem, citizens, as they have done historically, still demonstrate vehemently against polluting enterprises. They may take actions such as kidnap an enterprise owner, destroy property, or surround an electric power plant. These instances of protest add to the growing evidence that contentious politics is alive and well in the PRC.<sup>82</sup>

Environmental protection and public security officials still repress direct citizen action as well as news stories of such action. The role of authorities, however, is much more complex. In many cases, environmental protection and other officials have sided with protesters, helping them to get their grievances addressed. Authorities have tried to avoid disputes by institutionalizing the environmental complaint system,

by accommodating grievances, and by using sophisticated means of social control; however, this does not always work. When petitions and complaints do not work, citizens often take matters into their own hands.

Local contentious micro-environmental movements erupt and fade in response to specific neighborhood pollution problems. But narrow political opportunities and legal remedies, outright repression, the ideology of economic reforms, restricted information flows, and the lack of unifying symbols and mobilizing structures, such as social movement organizations, all serve to isolate these instances of contentious politics from spreading or growing into a unified national anti-pollution movement.

A good portion of organized group participation, the work of environmental social organizations (similar to nongovernmental organizations), is still corporatist in nature; some organizations, however, are working outside of a corporatist structure and are in fact practicing “civic politics.”<sup>83</sup> The corporatist groups, the government-organized non-governmental organizations (GONGOs), are actors in a “civic corporatist” system, i.e. a system of corporatism in the non-profit sector. When discussing the popular, more autonomous environmental social organizations, the concept of “civil society” may not be quite appropriate, because even these groups go through a political vetting when they must get approval from a supervising organization that must be willing to be responsible for them. However, these groups do practice civic politics. These groups work to affect social change in society. Corporatist and popular group initiatives aimed at changing citizen behaviors that affect the environment are building momentum in the effort to spread environmental values in China’s largest cities. Most of these initiatives are non-contentious,

persuasive, and aimed at educating the public, but some organizations have engaged in contentious politics with authorities and other social actors.

Overall, Chinese officials have begun to encourage more participation and have become more responsive. Does this mean, however, that there has been a fundamental shift in state-society relations in China? Are individual interests still considered secondary to collective interests? Is group interest articulation still mainly corporatist in nature?<sup>84</sup> The research shows that while there has been some policy change, there has not been a shift in the fundamental principals guiding state-society relations.<sup>85</sup> Public participation in policy processes still is based on the practice of the “mass line,” derived from the principle of democratic centralism, albeit much more sophisticated than during Mao’s reign.

Since the 1980s, there has been a sophistication of state-society relations. This means that, overall, relations have become more complex, increasingly based on rationality, and informed by experience. This sophistication is apparent in the institutionalization and rationalization of each channel of public participation.

There is no simple answer to the question of whether or not an environmental movement is emerging in China. To argue that a traditional social movement exists in China would be contrary to observable evidence. On the other hand, to say that no environmental movement of any type is emerging in China would also be contrary to observable evidence. It is safe, however, to say that at least one environmental proto-movement is emerging - a nature and wildlife conservation proto-movement. This proto-movement is the closest thing China has to a traditional western social movement.

Proto-movements exhibit the elements of a social movement, to some degree, but are constrained by the lack of political opportunities. The paucity of political opportunities leads the movement type phenomenon to be small, to be nascent, or to be *less* contentious. Some proto -movements may develop into traditional movements, but some may not – it depends upon the configuration of political opportunities shaping it. If there are no changes in the political opportunity structure, then the proto-movement remains in the proto phase.

Unlike China's neighbors, an anti-pollution movement has not emerged in China and instances of protest regarding pollution remain isolated cases of contentious politics.<sup>86</sup> However, there is much activism to promote "green-life" issues, which focus on making one's life greener by recycling, conserving water and energy, and making green consumer choices.

There are significant barriers to the growth of traditional widespread environmental movements. First, social networks and environmental social organizations still are tethered to the state, which limits their activities, and currently available political opportunity structures limit the widespread growth of proto-movements. Second, there is less space for contentious politics in China, therefore citizens involved in collective action tend to shy away from western style highly contentious approaches and instead utilize softer contentious approaches suited to the Chinese context. Third, collective claims or grievances quickly lose resonance in Chinese society because media outlets are controlled by the state, which tends to play down negative events and contention in society. There is less of a chance that events will be sensationalized and replayed repeatedly in public, as they often are in the west.

This inhibits awareness of focusing events that could become symbols to unite individuals and groups and motivate sustained collective action.

### **Overview of the Dissertation**

The dissertation is primarily organized around the distinct channels of participation in environmental policy processes in China: disputes and protests, the complaint system, state-mobilized campaigns, and environmental social organizations. Chapter two discusses participation and social movements in Western and Chinese contexts, from both theoretical and empirical perspectives. It places the environmental proto-movement in China in comparative perspective by examining environmental movements in reforming authoritarian nations in East Asian and Eastern Europe. There is a discussion of specific aspects of China's political opportunity structure, which limits and/or encourages movement emergence. It provides the theoretical foundation for asserting that public participation, including social movements, makes a difference in environmental outcomes.

Chapter three explains changing patterns in the way environmental disputes have been handled in the three case cities and across China over time, specifically between the 1970s and the year 2001. The findings are based on a rough quantitative survey of disputes from four different casebooks,<sup>87</sup> newspaper articles, interviews, and other sources. It shows that the number of environmental disputes has increased over time and that dispute resolution processes have become more sophisticated, rational, and institutionalized. It elucidates the conditions under which disputes are resolved and seem to make a difference in policy processes and outcomes. It also shows that significant deficiencies remain in dispute resolution laws, institutions, and processes.

It shows that not all disputes are resolved in China. While the overall number of disputes has risen, these local instances of collective action and contentious politics remain isolated and relatively unorganized.

Chapter four shows that the state has tried to channel most grievances through the citizen environmental complaint system. It details the structure of the environmental complaint system and examines its deficiencies. It argues that Chinese authorities established the system for several reasons. First, the complaint system is preferred over other channels of participation because it provides benefits to both environmental protection authorities and citizens. Second, the complaint system allows authorities to channel grievances from people who might otherwise choose paths the state considers less desirable to resolve their pollution problems, such as initiating a protest, going on strike, or other such disruptive behavior. Third, in general, the system encourages individuals to act alone to resolve the problem, thus attempting to prevent environmental disputes and uncontrolled collective citizen protests. Fourth, officials utilize the complaint system to help them implement environmental laws and policies. Citizens act as the eyes and the ears of environmental officials and are the “ground troops” in the battle to get enterprises to comply with environmental laws and policies. In addition, the system provides higher-level officials with feedback about what is happening at lower administrative levels.

Citizens prefer the sanctioned complaint system to other less sanctioned, riskier channels of interest articulation such as initiating various forms of protest. While filing complaints is not risk-free, it is less politically risky than taking matters into your own hands. In addition, compared to organizing a collective protest, filing an

individual complaint is easier and is less costly. The complaint system benefits citizens because they can use it to stop behavior that harms them. In addition, citizens get a sense of satisfaction for voicing a grievance and/or fulfilling their civic duty in reporting polluters.

Also, chapter four illustrates that environmental complaints have measurably increased at the national level over the last decade. The story at the provincial level is, however, much more complicated. The research shows that Chinese society's response to rising industrial pollution is shaped by several factors, some intrinsic to the complaint system and others external to it. Based on previous research, it is hypothesized that a number of the factors that shape Chinese society's response to pollution influence public participation more generally, including levels of "pollution density,"<sup>88</sup> levels of economic well being, and levels of citizen environmental awareness. This research tests these assumptions in the China case, where Chinese society's response to pollution is measured as the numbers of citizen environmental complaints. Briefly, the results indicate that the factors mentioned above, when combined into one model, have fair explanatory power. They are significant explanatory variables, but not in all cases.

Chapter five examines state-mobilized campaigns to illustrate the range of participation in China and to offer a comparative look at state "movements" and citizen "movements." The chapter shows that state-mobilized campaigns still exist in China. Today, however, campaigns are depoliticized, institutionalized, routinized, and are somewhat more sophisticated than Maoist strategies of mass mobilization. The instrumental value of campaigns has become paramount. The political value is

secondary which makes them better tools with which to attain policy goals and to guide citizen behavior. They are not as politicized because they no longer involve personal political struggle and do not function to purge individuals and groups on political grounds.

On a more subtle level, government-mobilized campaigns are a means of communication from the state to society. Campaigns signal to the population, which issues are priorities and which issues are acceptable and preferable to address. Campaigns reflect the state's environmental protection agenda and are among the means by which the government transmits that agenda to citizens. Campaigns steer citizen participation toward the achievement of state-defined policy goals. Through campaigns, the state and citizens work together to reach policy goals. In addition, a side effect of state-mobilized campaigns has been to promote public participation in policy processes outside the campaign structure, although with many of the same policy goals. Contrary to earlier beliefs that state-mobilized campaigns displaced other forms of participation, today they are a catalyst of them, especially campaigns to mobilize youth and women's groups, which have inspired individuals to establish their own environmental social organizations.

Chapter six examines environmental social organizations and shows that a good portion of group participation through these organizations is still state corporatist in nature. Some organizations, however, are working outside of a state corporatist structure and are in fact practicing "civic politics."<sup>89</sup> These groups work to effect social change in society. Chinese initiatives aimed at changing citizen behaviors that affect the environment are building momentum in the effort to spread environmental

values in China's largest cities. Select groups act as social movement organizations and mobilize citizen participation in a nature and wildlife conservation proto-movement. Given China's political and cultural context, select groups act more contentiously than previously assumed and have come in conflict with state and other social actors.<sup>90</sup>

Chapter seven, the concluding chapter, examines the few channels of public participation that occur during the decision-making phase of the policy process, including participation in environmental impact assessment processes, in public comment processes, and through informal channels. It brings together the various findings regarding each channel of participation, illuminates conditions under which participation makes a difference, and discusses the political and policy implications of China's proto nature and wildlife conservation movement and the increasing levels of participation through other channels.

## Endnotes to Chapter One

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<sup>1</sup> *Huanjing Jiufen Anjian Shili*, (Representative Environmental Dispute Cases), ed Zong Zhaodu, (Wuhan, PRC: Wuhan Daxue Chubanshe, 1987), pp. 69-71.

<sup>2</sup> Environmental activism is simply defined as enthusiastic action to protect the environment. Resources regarding domestic and global environmental activism include: Pratap Chatterjee and Matthias Finger, *The Earth Brokers: Power, Politics and World Development*, (New York, NY: Routledge, 1994); Matthias Finger, *Research in Social Movements, Conflicts and Change: The Green Movement Worldwide*, (Greenwich: JAI Press Inc., 1992); Matthias Finger, "NGOs and Transformation: Beyond Social Movement Theory," in *Environmental NGOs in World Politics: Linking the Local and the Global*, eds. Thomas Princen and Matthias Finger, (London: Routledge, 1994); Matthias and Jack Manno Finger, "Nongovernmental Organizations in World Environmental Politics," *International Environmental Affairs* 7, no. 1 (1995); Bron Rayond Taylor, *Ecological Resistance Movements: The Global Emergence of Radical and Popular Environmentalism* (Albany, NY: State University of New York Press, 1995); Bron Rayond Taylor, Heidi Hadsell, Lois Lorentzen, and Rik Scarce, "Grass-Roots Resistance: The Emergence of Popular Environmental Movements in Less Affluent Countries," *Environmental Politics in the International Arena: Movements, Parties, Organizations, and Policy*, ed, Sheldon Kamieniecki (New York, NY: State University of New York Press, 1993); Julie Fisher, *The Road From Rio: Sustainable Development and the Nongovernmental Movement in the Third World* (Westport: Greenwood Publishing Group, Inc., 1993).

<sup>3</sup> Todd Lappin, "Can Green Mix with Red," *Nation* 14 (1994), p. 195.

<sup>4</sup> Jane Dawson found evidence to suggest that the anti-nuclear movements in some parts of the Soviet Union, in Lithuania and Armenia, became "powerful springboards for the creation of national movements" which helped to precipitate the downfall of the Soviet Empire. See Jane Dawson, *Eco-Nationalism: Anti-Nuclear Activism and National Identity in Russia, Lithuania, and Ukraine* (Durham and London: Duke University Press, 1996), p. 4. Also see Vladimir Tismaneanu ed., *In Search of Civil Society: Independent Peace Movements in the Soviet Bloc*. (London: Routledge, 1990); Vladimir Tismaneanu and Michael Turner, "Understanding Post-Sovietism: Between Residual Leninism and Uncertain Pluralism," in Vladimir Tismaneanu ed., *Political Culture and Civil Society in Russia and the New States of Eurasia* (Armonk: New York, 1995), p. 5.

<sup>5</sup> Frank K. Upham, *Law and Social Change in Postwar Japan*, (Cambridge, MA: Harvard University Press, 1987). pp. 54-55.

<sup>6</sup> "Dasheng Jihu: Jiaqiang Huanbao," Speech by Liang Congjie at the Fourth National Meeting of the Chinese People's Political Consultative Congress, March 1996.

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<sup>7</sup> Here a corporatist state refers to a state where group interest articulation is somewhat structured by the state. “Social groups are organized into a limited number of singular, compulsory, noncompetitive, hierarchically ordered and functionally differentiated categories, recognized or licensed (if not created) by the state and granted a deliberate representational monopoly within their respective categories in exchange for observing certain controls on their selection of leaders and articulation of demands and supports.” Phillip Schmitter, "Still the Century of Corporatism?" *Review of Politics* 36 (1974), pp. 93-94.

<sup>8</sup> Sidney Tarrow, *Power in Movement*, (New York, NY: Cambridge University Press, 1998), p. 4.

<sup>9</sup> Tarrow, *Power in Movement*, p. 19. Chapter two contains a more comprehensive description of the development of social movement theories.

<sup>10</sup> A nation’s political opportunity structure can be defined as being “comprised of specific configurations of resources, institutional arrangements and historical precedents for social mobilization.” Herbert P Kitschelt, "Political Opportunity Structures and Political Protest: Anti-Nuclear Movements in Four Democracies," *British Journal of Political Science* 16 (1986), p. 76. Specific dimensions of the political opportunity structure include the relative openness or closure of the institutionalized and informal political systems, “the stability of that broad set of elite alignments that typically under gird a polity,” “the presence of elite allies,” “the state’s capacity and propensity for repression;” and other forces in the environment that influence the group’s assertion of its political claims. See Doug McAdam, John D. McCarthy, and Mayer Zald, *Comparative Perspectives on Social Movements*, (New York, NY: Cambridge University Press, 1996), p. 10 and Charles D. Brockett, "The Structure of Political Opportunities and Peasant Mobilization in Central America," *Comparative Politics*, no. 23 (1991).

<sup>11</sup> Grievances can be considered a common interest among individuals in a collective.

<sup>12</sup> Framing focuses on the importance of ideas, sentiments, culture, and socially constructed identity and meaning in moving from the presence of grievances, political opportunity, and mobilization, to movement emergence. McAdam, McCarthy, and Zald, *Comparative Perspectives on Social Movements*, p. 5-6. These concepts will be discussed more fully in chapter two.

<sup>13</sup> Mobilizational structures refer to “the collective vehicles, informal as well as formal, through which people mobilize and engage in collective action.” McAdam, McCarthy, and Zald, *Comparative Perspectives on Social Movements*, p. 3. More information on the development of this concept will be given in chapter two.

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<sup>14</sup> For more information on repertoires of contention see Tarrow, *Power in Movement*, pp. 20-21.

<sup>15</sup> The research is largely “interpretive” in that it is concerned with “meaning,” i.e. explaining the “meaning” of public participation in environmental policy processes in China. This “interpretive” approach is supplemented by causal analysis of the factors influencing variation in participation across time and location. See Ragin Charles C., *The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies*, (Berkeley, CA: University of California Press, 1987), p. 35.

<sup>16</sup> There is a substantial literature on political participation, see: Norman H. Nie and Sidney Verba, “Political Participation,” in Fred Greenstein and Nelson Polsby eds, *Handbook of Political Science, Vol.4, Nongovernmental Politics* (Reading, Mass.: Addison-Wesley, 1974); Sidney Verba and Norman H. Nie, *Participation in America: Political Democracy and Social Equality* (New York: Harper & Row, 1972); Joseph LaPalombara, “Political Participation as an Analytical Concept in Comparative Politics,” in Sidney Verba and Lucian W. Pye, eds., *The Citizen and Politics: A Comparative Perspective*, Lester Milbrath and M. L. Goel, *Political Participation: How and Why Do People Get Involved in Politics?* (Chicago, IL: Rand McNally College Publishing Company 1977); Robert E. Lane, *Political Life: Why People Get Involved in Politics*, (Glencoe, Ill: The Free Press, 1959); Samuel Huntington and Joan Nelson, *No Easy Choice: Political Participation in Developing Countries* (Cambridge, MA: Harvard University Press, 1976), p. 4; Herbert McClosky, “Political Participation,” in David L. Sills, ed., *International Encyclopedia of the Social Sciences*, (1968), vol. 12, pp.252-253; Myron Weiner, “Political Participation: Crisis of the Political Process,” in Leonard Binder, James Coleman, Joseph LaPalombara, Lucian Pye, Sidney Verba, and Myron Weiner, *Crises and Sequences in Political Development*, (1971); Robert S. Sharlet, “Concept Formation in Political Science and Communist Studies: Conceptualizing Political Participation *Canadian Slavic Studies*, 1, 4, Winter (1967), pp. 640-649; Theodore H. Friedgut, *Political Participation in the USSR*, (1979), pp. 13-20; Wayne DiFranceisco and Zvi Gitelman, “Soviet Political Culture and ‘Covert Participation’ in Policy Implementation,” *American Political Science Review*, 78, no. 3 (September 1984): 603-621; Donna Bahrey and Brian D. Silver, “Soviet Citizen Participation on the Eve of Democratization,” *American Political Science Review*, 84, no. 3 (September 1990), pp. 826; Samuel H. Barnes and Max Kaase, *Political Action: Mass Participation in Five Western Democracies*, (1979); Herbert B. Asher, Bradley M. Richardson and Herbert F. Weisberg, *Political Participation: An ISSC Workbook in Comparative Analysis*, (1984), p. 54.

<sup>17</sup> Lester W. and M. L. Goel Milbrath, *Political Participation: How and Why Do People Get Involved in Politics?*, (Chicago, IL: Rand McNally College Publishing Company, 1977).

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<sup>18</sup> Sidney Verba, Norman H. Nie, and Jae-On Kim, *Participation and Political Equality*, (Cambridge, London: Cambridge University Press, 1978).

<sup>19</sup> Margaret M. Conway, *Political Participation in the United States*, 2nd ed. (Washington, D.C.: CQ Press, 1991).

<sup>20</sup> The mass line is the method by which view points flowing from the masses to the center of power informs leaders of the demands and preferences of the masses that are used to formulate policy. Information regarding policies then flows from the center back out to the masses in a dialectic, mutually informed process of two-way communication and action.

<sup>21</sup> The practice of the mass line “has its roots in Lenin’s notion of ‘democratic centralism,’ but Mao added the important feature that the process should apply not only to the party but to society as a whole.” Tony Saich, *Governance and Politics of China*, (New York, NY: Palgrave, 2001), p. 165. Democratic centralism is a principle that guides the structure of state organs in China, including the Chinese Communist Party and the National People’s Congress. According to this principle, individuals in official organizations are democratically elected and can be recalled, but that the group is the leader. The group should lead individuals. It means that the individual is subservient to the majority. Sun p. 36. Some scholars believe that the practice of the mass line is an extension of the principle of democratic centralism into society. See Saich, *Governance and Politics of China.*, chapter six.

<sup>22</sup> Sun Weiben, *People's Republic of China Administrative Management Encyclopedia*, p. 36.

<sup>23</sup> James R. Townsend, *Political Participation in Communist China*, (Berkeley, CA: University of California Press, 1967), pp. 1-6. The argument that all participation during the Mao period was ceremonial or paternalistic, however, ignores participation during the Cultural Revolution. At that time, Red Guard units, while largely loyal to Mao, held varied political opinions. Participants did have political choices to make and there were real consequences associated with those decisions. While the consequences of political participation may have been personal and local, people made choices to join Red Guard units, which espoused a range of political views from extremely radical to very moderate. See Maurice Meisner, *Mao's China and After*, 3rd ed. (New York, NY: The Free Press, 1999), pp. 315-322.

<sup>24</sup> Townsend, *Political Participation in Communist China*.

<sup>25</sup> Robert S. Sharlet, “Concept Formation in Political Science and Communist Studies: Conceptualizing Political Participation,” in Frederic J. Fleron, Jr., ed., *Communist Studies and Social Science: Essays on Methodology and Empirical Theory* (Chicago: Rand McNally, 1969), p. 250.

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<sup>26</sup> Other works discussing participation in China include: John Burns, *Political Participation in Rural China*, (Berkeley: University of California Press, 1988); Stanley Rosen, "Public Opinion and Reform in the People's Republic of China," *Studies in Comparative Communism*, 22(2/3) (Summer/Autumn 1989), pp. 153-170; Ezra F. Vogel, "Voluntarism and Social Control," in Donald W. Treadgold, ed., *Soviet and Chinese Communism: Similarities and Differences*, (1967); Kelliher, Daniel. *Peasant Power in China; The Era of Rural Reform, 1979-1989*, (New Haven: Yale University Press, 1992); Victor C. Falkenheim, ed., *Citizens and Groups in Contemporary China*, Victor C. Falkenheim, "Political Participation in China," *Problem of Communism*, 27 (May-June 1978), pp.18-32.

<sup>27</sup> Victor Falkenheim, "Political Participation in China," *Problems of Communism* 27 (1978), pp. 31-32.

<sup>28</sup> Samuel P. Huntington and Joan M. Nelson, *No Easy Choice: Political Participation in Developing Countries*, (Cambridge, MA: Harvard University Press, 1976), pp. 7-10.

<sup>29</sup> Tang Tsuo introduced the term "zones of indifference" which has been picked up by other scholars, who argue the scope of these zones have expanded. Tang Tsuo, *The Cultural Revolution and Post-Mao Reforms: A Historical Perspective*, (Chicago, IL: University of Chicago Press, 1986), p. xxiv; Vivienne Shue, "State Sprawl: The Regulatory State and Social Life in a Small Chinese City," *Urban Spaces in Contemporary China: The Potential for Autonomy and Community in Post-Mao China*, Deborah S. Davis, Richard Kraus, Barry Naughton, and Elizabeth J. Perry, (New York, NY: Woodrow Wilson Center Press and Cambridge University Press, 1995), p. 93.

<sup>30</sup> Kevin J. O'Brien and Lianjiang Li, "The Politics of Lodging Complaints in Rural China," *The China Quarterly*, no. 143 (1995); Kevin O'Brien, "Rightful Resistance," *World Politics* 49 (1996).

<sup>31</sup> Shi's work was a very methodical analysis of the different forms of participation in Beijing. She concentrated on explaining which factors were most important in determining levels of participation and where in the policy process people participated.

<sup>32</sup> This definition of participation is similar to that introduced by Shi Tianjian in his work on participation in Beijing. For further discussion on the use of the term participation in non-democratic countries see Shi Lihong, "From Greenhorn to Green Earth," *China Daily*, 27 May 1996, pp. 1-8 & 21-25.

<sup>33</sup> Tianjian Shi, *Political Participation In Beijing*, (Cambridge, MA: Harvard College, 1997), p. 269-270.

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<sup>34</sup> For background on democratization in China, see Martin Whyte, "Prospects for Democratization in China." *Problems of Communism* (May-June 1992), pp. 58-70; Andrew J. Nathan and Tianjian Shi, "Cultural Requisites for Democracy in China: Findings from a Survey," *Daedalus*, (spring, 1993), pp. 95-124; Andrew Nathan, *Chinese Democracy*, Berkeley, LA: University of California Press, 1985; Melanie Manion, "The Electoral Connection in the Chinese Countryside," *American Political Science Review*, Vol. 90, No. 4 (December, 1996), pp. 736-748; Kent Jennings, "Political Participation in the Chinese Countryside." *American Political Science Review*, 91, No. 2 (June 1997), pp. 361-389; Vivienne Shue, "State Power and Social Organization in China," in Joel S. Migdal, Atul Kohli, and Vivienne Shue eds., *State Power and Social Forces: Domination and Transformation in the Third World*. New York, NY: Cambridge University Press, 1994; Jonathan Unger, 'Bridges': Private Business, the Chinese Government and the Rise of New Associations," *The China Quarterly*, pp. 795-819; Martin Whyte, "Urban China: A Civil Society in the Making?" in Arthur Lewis Rosenbaum, ed., *State and Society in China: The Consequences of Reform*, (Boulder: Westview Press, 1992); Margaret Pearson, *China's New Business Elite*, (Berkeley, California: University of California Press, 1997); Victor Falkenheim, *Citizens and Groups in Contemporary China*, (Ann Arbor, MI: University of Michigan, Center for Chinese Studies, 1987); Suzanne Ogden, *Inklings of Democracy in China*, (Cambridge, MA: Harvard University Press, Harvard Asia Center, 2002); Bruce Dickson, *Democratization in China and Taiwan*, (New York, NY: Oxford University Press, Inc., 1997); Edwin A. Winckler, *Transition From Communism in China: Institutional and Comparative Analyses*, (Boulder, Colorado: Lynne Rienner Publications, 1999); He Baogang, *The Democratization of China*, (New York, NY: Routledge, 1996).

<sup>35</sup> Shi, *Political Participation In Beijing*, p. 273.

<sup>36</sup> The following data was gleaned from several sources including, Vaclav Smil, *China's Environmental Crisis: An Inquiry into the Limits of National Development*, (Armonk, NY: M.E. Sharpe, 1993); Richard Louis Edmonds, "Patterns of Lost Harmony: A Survey of the Country's Environmental degradation and Protection," (London: Routledge, 1994); Richard Louis Edmonds, *Managing the Chinese Environment*, (Oxford: Oxford University Press, 1998); Xiaoying Ma, Scott Rozelle, and Len Ortolano, *Industrial Wastewater Control in Chinese Cities*, Working Paper Series (Washington, D. C.: Resources for the Future, 1993); Xiaoying Ma and Leonard Ortolano, *Environmental Regulation in China*, (Lanham, MD: Roman & Littlefield Publishers, 2000); World Resources Institute, *World Resources 1994-1995*, (Washington D.C.: World Resources Institute, The United nations Environment Programme, The United Nations Development Programme, The World Bank, 1995).

<sup>37</sup> "China's Population Growth "slowing," BBC News March 28, 2001 (<http://bbc.co.uk/1/hi/world/asia-pacific/1246731.stm>).

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<sup>38</sup> The seven major river systems are: Liao, Hai, Huai, Yellow, Song Hua, Pearl and Yangtze.

<sup>39</sup> <http://www.wwf.com.cn/english/print.php?loca=4> (World Wildlife Fund report form 2001 SEPA 21<sup>st</sup> Century Forum).

<sup>40</sup> World Resources Institute, *World Resources, 1998-1999*, (Washington D.C.: World Resources Institute, UN Environment Program, UN Development Program, World Bank, 1999).

<sup>41</sup> Elizabeth Economy, "Testimony Before the Congressional Executive Commission on China Roundtable on the Environment," 2003.

<sup>42</sup> The study was released by NEPA in 1996. "Record-High Pollution Factor in Premature Deaths," *International Environmental Reporter*, Vol. 21, No. 14, July 1998, p. 684.

<sup>43</sup> United Nations Development Program, *Energy, Coal Combustion and Atmospheric Pollution in NE Asia, Inter-Country Project* (Project Document, RAS/92/461/A/01, July, 1994), p. 2.

<sup>44</sup> <http://www.wwf.com.cn/english/print.php?loca=4>

<sup>45</sup> "Dust Enshrouds Northwest China," *CNN Newscast*, 26 April 1998.

<sup>46</sup> "China Faces High Frequency of Sand Storms," *People's Daily* (English), 18 July 2000.

<sup>47</sup> <http://www.wwf.com.cn/english/print.php?loca=4>

<sup>48</sup> Additional data on environmental quality can be found from numerous resources including the following. Smil, *China's Environmental Crisis: An Inquiry into the Limits of National Development*; Edmonds, "Patterns of Lost Harmony: A Survey of the Country's Environmental degradation and Protection;" Edmonds, *Managing the Chinese Environment*; Ma, Rozelle, and Ortolano, *Industrial Wastewater Control in Chinese Cities*; Ma and Ortolano, *Environmental Regulation in China*; World Resources Institute, *World Resources*, various years), Washington D. C., World Resources Institute et al.

<sup>49</sup> Recent studies include Carlos Wing Hung Lo and Sai Wing Leung, see Carlos Wing-Hung Lo and Wing Leung Sai, "Environmental Agency and Public Opinion in Guangzhou: The Limits of a Popular Approach to Environmental Governance," *China*

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*Quarterly* 163 (2000), which will be discussed shortly. These and other studies of participation are examined in depth later in this chapter.

<sup>50</sup> NEPA was elevated to “near ministerial status” in 1998 and re-named as the State Environmental Protection Administration (SEPA). For the remainder of this dissertation, when I refer to NEPA I am refereeing to the organization prior to its re-organization.

<sup>51</sup> *Zhongguo Huanjing Nianjian, 1991 (China Environment Yearbook)*, (Beijing, China: Zhongguo Huanjing Kexue Chubanshe (China Environmental Sciences Press), 1991), p. 187.

<sup>52</sup> Xi Xiaolin and Xu Qinghua, *Zhongguo Gongzhong Huanjing Yishi Diaocha, (Surveys of Chinese Society's Environmental Awareness)*, (Beijing, China: China Environment Sciences Press, 1998), p. 8.

<sup>53</sup> Xi Xiaolin and Xu Qinghua, *Zhongguo Gongzhong Huanjing Yishi Diaocha*, p. 9.

<sup>54</sup> *Zhongguo Huanjing Nianjian, 2000 (China Environment Yearbook)*, (Beijing, China: China Environment Yearbook Press, 2000), pp. 346-349.

<sup>55</sup> There was some difference between urban and rural awareness. Urban citizens got an average of 4.5 questions correct, while rural inhabitants got 2.4 questions correct. *Zhongguo Huanjing Nianjian, 2000 (China Environment Yearbook)*, p. 347.

<sup>56</sup> Riley E. Dunlap, "Public Opinion and Environmental Policy," *Environmental Politics and Policy*, ed, J. P. Lester, (Durham, NC: Duke University Press) and R. E. Ostman and J. L. Parker, "Impact of Education, Age, Newspapers, and Television on Environmental Knowledge, Concerns, and Behaviors," *Journal of Environmental Education* 19 (1987).

<sup>57</sup> More and more scholars are contributing to research on environmental issues in China including, Edmonds, "Patterns of Lost Harmony: A Survey of the Country's Environmental degradation and Protection;" Edmonds, *Managing the Chinese Environment*; James Harkness, "Recent Trends in Forestry and Conservation of Biodiversity in China," *The China Quarterly*, no. 156 (1998); Abigail Jahiel, "Policy Implementation Through Organizational Learning: The Case of Water Pollution Control in China's Reforming Socialist System," (Ph.D. Dissertation, The University of Michigan, 1994); Ma, Rozelle, and Ortolano, *Industrial Wastewater Control in Chinese Cities*; Ma and Ortolano, *Environmental Regulation in China*; Smil, *China's Environmental Crisis: An Inquiry into the Limits of National Development*; Lester Ross and Mitchell A. Silk, *Environmental Law and Policy in the People's Republic of China*, (New York, NY: Quorum Books, 1987); Lester Ross, *Environmental Policy in China*, (Bloomington, IN: Indiana University Press, 1988); Jahiel, "Policy

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Implementation Through Organizational Learning: The Case of Water Pollution Control in China's Reforming Socialist System;" Abigail Jahiel, "The Organization of Environmental Protection in China," *China Quarterly*, no. 156 (1998); James E. Nickum, "Is China Living on the Water Margin?," *The China Quarterly*, no. 156 (1998); Jennifer Turner, "Authority Flowing Downwards? Local Government Entrepreneurship in the Chinese Water Sector," (Ph.D. Dissertation, Indiana University, 1997); Michel Oksenberg and Elizabeth Economy, "China: Implementation Under Economic Growth and Market Reform," in *Engaging Countries: Strengthening Compliance with International Environmental Accords*, eds. Harold K. Jacobson and Edith Brown Weiss, (Cambridge, MA: MIT Press, 1999); Peter Thompson and Laura A. Strohm, "Trade and Environmental Quality: A Review of the Evidence," *Journal of Environment & Development* 5, no. 4 (1996); Harold K. Jacobson and Edith Brown Weiss, "Strengthening Compliance with International Environmental Accords: Preliminary Observations from a Collaborative Project," *Global Governance: A Review of Multilateralism and International Organization* 1, no. 2 (1995); Edmonds, "Patterns of Lost Harmony: A Survey of the Country's Environmental degradation and Protection;" William Alford and Yuanyuan Shen, "Limits of the Law in Addressing China's Environmental Dilemma," *Stanford Environmental Law Journal* 16 (1997); Robert Bloomquist and Wang Xi, "The Development of Environmental Law and Policy of the People's Republic of China: An Introduction and Appraisal," *The Georgetown International Environmental Law Review* 5, no. 25 (1992); Anna Brettell, "Environmental Non-governmental Organizations in the People's Republic of China: Innocents in a Co-opted Environmental Movement?" *The Journal of Pacific Asia* 6 (2000); Hon S. Chan, Koon-kwai Wong, and K. C. Cheung, "The Implementation Gap in Environmental Management in China: The Case of Guangzhou, Zhengzhou, and Nanjing," *Public Administration Review* 55, no. 4 (1995); Richard J. Jr. Ferris and Hongjun Zhang, "The Challenges of Reforming an Environmental Legal Culture: Assessing the Status Quo and Looking at Post-WTO Admission Challenges for the People's Republic of China," *The Georgetown International Environmental Law Review* 14 (1999); Peter Ho, "Greening Without Conflict? Environmentalism, NGOs and Civil Society in China," *Development and Change* 32 (2001); Jun Jing, "Environmental Protests in Rural China," in *Chinese Society: Change, Conflict and Resistance*, eds. Elizabeth J. Perry and Mark Selden, (London and New York: Routledge, 2000); Judith Shapiro, *Mao's War Against Nature*, (New York, NY: Cambridge University Press, 2001); Barbara J. Sinkule, "Implementation of China's Three Synchronizations Policy: Case Studies of Wastewater Treatment Measures at New and Renovated Factories;" Wang, Xu, and Liu, "A Summary of Policy and Legal Analysis on Dealing with Environmental Disputes in China;" Suli Wang, "Environmental Criminal Justice in China," *Fourth International Conference on Environmental Compliance and Enforcement*; Hua Wang, Jun Bi, David Wheeler, Jianan Wang, Doug Cao, Genfa Lu, and Yuan Wang Environmental Performance Rating and Disclosure: China's Green-Watch Program (Washington D.C.: World Bank, 2002). 2889; Edward B. Vermeer, "Industrial Pollution in China and Remedial Policies," *The China Quarterly*, no. 156

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(1998); Robert P. Weller, *Alternate Civilities: Democracy and Culture in China and Taiwan*, (Boulder, CO: Westview Press, 1999); Bo Wen, "Greening the Chinese Media," no. 2 (1998).; Calros Wing-Hung Lo, "Environmental Management By Law in China: The Guangzhou Experience," *The Journal of Contemporary China* 6 (1994); Michael B. McElroy and Lydon Peter Nielsen, *Energizing China: Reconciling Environmental Protection and Economic Growth*, (Cambridge, MA: Harvard University Press, 1998); Michael Palmer, "Environmental Regulation in the People's Republic of China: The Face of Domestic Law," *The China Quarterly*, no. 156 (1998); Judith Banister, "The China Quarterly," *The China Quarterly*, no. 156 (1998); and Liu Changming, "Environmental Issues and the South-North Water Transfer Scheme," *The China Quarterly*, no. 156 (1998). Other authors include Jonathan Harrington, Keith Florig, Walter Spofford, Victor Teo, Daniel Esty, Dai Qing, Jin Jiamen, Jonathan Schwartz, and last but not least Barbara Finamore. Other bibliographic references can be found in China Environment Series, Woodrow Wilson International Center for Scholars, Environmental Change and Security Project, pp. 228-232. This is not an exhaustive list.

<sup>58</sup> Research on Chinese government efforts at mass mobilization during the Mao period asserted that controlled efforts inhibited autonomous voluntary collective action (public participation), as well as worked to achieve stated policy goals. Theodore W. M. De Bary, Wing-Tsit Chan, and Burton Watson, *Sources of Chinese Tradition*, (New York: NY: Columbia University Press, 1960). I argue that laws and policies outlawing organizations and the threats of violence or the withdrawal of critical resources for transgressions are responsible for the absence of alternative forms of participation. Also see Alan P. L. Liu, *Political Culture and Group Conflict in Communist China* (Santa Barbara, CA: Clio Books, 1976), p. 5.

<sup>59</sup> The American Bar Association (ABA) project, the Environmental Governance in China project, began in 2001 in three case cities, Shenyang, Wuhan, and Chifeng. The project held training seminars for governmental officials, lawyers, academics, social organizations, and industry representatives to promote public participation in environmental initiatives and to support improved policy implementation. In Shenyang, authorities drafted a regulation to encourage public participation. It established several right for citizens including the right to participate in the making of environmental laws and policies, environmental impact assessment processes, and the right to have access to information regarding the environment. "Shenyang Gongzhong Canyu Huanjing Baohu Banfa" (caoan).

<sup>60</sup> Wang, Bi, Wheeler, Wang, Cao, Lu, and Wang, "Environmental Performance Rating and Disclosure: China's Green-Watch Program."

<sup>61</sup> Jane Dawson, *Eco-Nationalism: Anti-Nuclear Activism and National Identity in Russia, Lithuania, and Ukraine*, (Durham and London: Duke University Press, 1996), pp. 13-19.

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<sup>62</sup> Wing-Hung Lo and Wing Leung Sai, "Environmental Agency and Public Opinion in Guangzhou: The Limits of a Popular Approach to Environmental Governance," pp. 702-704.

<sup>63</sup> Ming Wang and Wenan Hu "Zhongguo NGO Yanjiu," Beijing, China: Qinghua University, 21<sup>st</sup> Century Research Center, NGO Research Center; Ho, "Greening Without Conflict? Environmentalism, NGOs and Civil Society in China;" Jiamen Jin, "The Growing Importance of Public Participation in China's Environmental Movement," *Green NGO and Environmental Journalist Forum* (Washington, D.C. and Hong Kong: The Environment in U.S.-China Relations, Environmental Change and Security Project, Woodrow Wilson International Center for Scholars; Center for Asian Studies, Journalism and Media Studies Center, University of Hong Kong, 2001; and Jonathan Schwartz, "Enforcement of Environmental Protection in China: A Role for Civil Society?"

<sup>64</sup> Jennifer Turner and Fengshi Wu, editors and translators, "Green NGO and Environmental Journalist Forum" (Washington D.C.: Working Group on Environment in U.S.-China Relations, The Woodrow Wilson Center, 2001).

<sup>65</sup> Brettell, "Environmental Non-governmental Organizations in the People's Republic of China: Innocents in a Co-opted Environmental Movement?"

<sup>66</sup> Hongyan Lu, "Bamboo Sprouts After the Rain: The History of University Student Environmental Associations in China," *China Environment Series*, no. 6 (2003).

<sup>67</sup> Susmita Dasgupta and David Wheeler "Citizen Complaints As Environmental Indicators: Evidence From China" (Washington, D.C.: The World Bank, Policy Research Department, 1997) and Wang, Xu, and Liu, "A Summary of Policy and Legal Analysis on Dealing with Environmental Disputes in China."

<sup>68</sup> Ho, "Greening Without Conflict? Environmentalism, NGOs and Civil Society in China."

<sup>69</sup> Huntington and Nelson, *No Easy Choice: Political Participation in Developing Countries*, p. 1.

<sup>70</sup> See Michael William Dowdle, "Constructing Citizenship: the NPC as Catalyst for Political Participation," *Changing Meanings of Citizenship*, Merle Goldman and Elizabeth Perry, (Cambridge, MA: Harvard University Press, 2002), p. 330.

<sup>71</sup> Previous research in other regions of the world indicates citizen participation is critical for the successful implementation of environmental law. Duncan Fisher believes that the lack of public participation, feedback, and pressure was the main

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reason why environmental pollution in communist systems (in Eastern Europe) became so horrendous. See Duncan Fisher, "The Emergence of the Environmental Movement in Eastern Europe and Its Role in the Revolutions of 1989," in Barbara Jancar-Webster ed., *Environmental Action in Eastern Europe*, (New York and London: M. E. Sharpe, 1993), p. 90. See analysis of implementation for the "Oakland Project" (a precursor to "capstone" type programs) in Jeffrey L. Pressman and Aaron Wildavsky, *Implementation* (Berkeley, CA: University of California Press, 1973); Daniel A. Mazmanian and Paul Sabatier, *Implementation and Public Policy*, (Chicago, IL: Scott Foresman & Co., 1983); and David Vogel and Timothy Kessler, "Compliance with Environmental Regulation: A Review of the Literature," in Edith Brown Weiss and Harold K. Jacobson eds., *Engaging Countries: Strengthening Compliance with International Environmental Accords*, (Cambridge, MA: MIT Press, 1999).

<sup>72</sup> Jianhua Lu, "Huanjing Yishi Yu Huanjing Yishi Diaocha (Environmental Awareness and Surveys of Environmental Awareness)," in *Zhongguo Gongzhong Huanjing Yishi Diaocha (Surveys of Chinese Society's Environmental Awareness)*, eds. Xiaolin and Xu Qinghua Xi, (Beijing: Zhongguo Huanjing Kexue Chubanshe, 1998); Jacobson and Brown Weiss, "Strengthening Compliance with International Environmental Accords: Preliminary Observations from a Collaborative Project."

<sup>73</sup> World Resources Institute, *World Resources 1994-1995 and World*

<sup>74</sup> FBIS, East Asia, "Acid-rain Ions From China Said Increasing," (1 December 1992).

<sup>75</sup> For information on factors that influence implementation see David A. Mazmanian and Paul A. Sabatier, *Effective Policy Implementation*, (Lexington, MA: Lexington Books, 1981); Daniel A. Mazmanian and Paul A. Sabatier, *Implementation and Public Policy*, (Chicago, IL: Foresman & Co, 1983); Lafferty and Meadowcroft, *Implementing Sustainable Development in high-Consumption Societies*; Goggin, *Implementation Theory and Practice: Towards a Third Generation*; and Jahiel, "Policy Implementation Through Organizational Learning: The Case of Water Pollution Control in China's Reforming Socialist System;" David Vogel and Timothy Kessler, "Compliance with Environmental Regulation: A Review of the Literature;" Pressman and Eildavshy (1973), p. 147; Erwin C. Hargrove, *The Missing Link: The Study of the Implementation of Social Policy* (Washington, D.C.: The Urban Institute, 1975); Elena Petkova, Crescencia Maurer, Norbert Henninger, and Frances Irwin "Closing the Gap: Information, Participation, and Justice in Decision-Making for the Environment" (Washington D.C.: World Resources Institute, 2002); David G. Victor, Kal Raustiala, and Eugene B. Skolnikoff, *The Implementation and Effectiveness of International Environmental Commitments: Theory and Practice*, (Cambridge, MA: MIT Press, 1998).

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<sup>76</sup> For a discussion on “most likely” and “least likely” case approaches see Gary King, Robert O. Keohane, and Sidney Verba, *Designing Social Inquiry: Scientific Inference in Qualitative Research*, (Princeton, NJ: Princeton University Press, 1994).

<sup>77</sup> See Appendix A for descriptions of each of these “case cities”.

<sup>78</sup> *Guowuyuan Guanyu Zai Guomin Jingji Tiaozheng Shiqi Jiaqiang Huanjing Baohu Gongzuo Jueding*, February, 24 1981 in *Zhongguo Huanjing Baohu Fagui Quanshu*, 1997, p. 85.

<sup>79</sup> Taiyuan has been among the trial cities for establishing a pollution permit system.

<sup>80</sup> Please refer to appendix B for information on these casebooks.

<sup>81</sup> The terms “regime proscribed” and “tolerated” political participation were borrowed from Sidney Tarrow, “Silence and Voice in the Study of Contentious Politics: Introduction,” in Ronald R. Aminzade, Jack A. Goldstone, Doug McAdam, Elizabeth J. Perry, William H. Jr. Sewell, Sidney Tarrow, and Charles Tilly, (New York, NY: Cambridge University Press, 2001), p. 7.

<sup>82</sup> A couple of examples of work on contentious politics in China include: O'Brien and Li, “The Politics of Lodging Complaints in Rural China;” O'Brien, “Rightful Resistance;” Elizabeth J. Perry and Mark Selden, “Introduction: Reform and Resistance in Contemporary China,” *Chinese Society: Change, Conflict and Resistance*, ed, Elizabeth J. Perry and Mark Selden, (New York, NY: Routledge, Taylor & Francis Group, 2000); Jeffery Wasserstrom and Elizabeth Perry, *Popular Protest and Political Culture in Modern China*, (Boulder, CO: Westview Press, 1994); Elizabeth J. Perry, *Challenging the Mandate of Heaven: Social Protest and State Power in China*, (Armonk, NY: M.E. Sharpe, 2002).

<sup>83</sup> Paul Wapner, “Politics Beyond the State: Environmental Activism and World Civic Politics,” *World Politics* 47 (1995), p. 5.

<sup>84</sup> The corporatist literature is introduced in chapter six in the context of environmental social organizations.

<sup>85</sup> These basic principles are laid out in the state constitution first written in 1982: “...Under the leadership of the Communist Party of China and the guidance of Marxism-Leninism, Mao Zedong Thought and Deng Xiaoping Theory, the Chinese people of all nationalities will continue to adhere to the people's democratic dictatorship, follow the socialist road, persist in reform and opening-up, steadily improve socialist institutions, develop a socialist market economy, advance socialist democracy, improve the socialist legal system and work hard and self-reliantly to modernize industry, agriculture, national defense and science and technology step by

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step to turn China into a powerful and prosperous socialist country with a high level of culture and democracy." See the preamble of the constitution of the PRC. See also articles thirty-three through fifty-six.

<sup>86</sup> The exact nature of these movements will be discussed in further detail in subsequent chapters.

<sup>87</sup> See Appendix B for a discussion of the four casebooks.

<sup>88</sup> The pollution density is the amount of annual SO<sub>2</sub> emissions divided by the relevant land area. This concept is similar to Jeffery Broadbent's "natural intensity" of pollution. See Jeffery Broadbent, *Environmental Politics in Japan*, (Cambridge, MA: Cambridge University Press, 1999).

<sup>89</sup> Wapner, "Politics Beyond the State: Environmental Activism and World Civic Politics," p. 5.

<sup>90</sup> For instance, Peter Ho talks about environmental social organizations see Ho, "Greening Without Conflict? Environmentalism, NGOs and Civil Society in China."

## Chapter Two

### Participation and Social Movements: The Importance of Political Opportunities

Chapter one asserted that public participation in environmental policy processes has increased in China and that some of this participation was political in nature. This is critical because without political participation, it is unlikely that a sustained environmental movement would emerge. It explained that in the absence of knowing whether or not an environmental movement was taking root in China, this research would focus on the main channels of participation to examine *the potential* for such a movement. Theories used by scholars of social movements are then appropriate to help explain rising levels of participation and to gauge the possibility of the emergence of an environmental movement.

This chapter takes up where the previous chapter leaves off in discussing the scholarly literature on social movements and the theories used by scholars of social movements in the effort to identify the elements most likely to influence movement emergence in China. The hypothesis is that China's political opportunity structure is a crucial factor in accounting for increases in participation and for determining the emergence of an environmental movement.

Since most of the literature on social movements focuses on western democratic countries in North America and Europe, certain political opportunities are taken for granted, such as political parties, autonomous non-governmental organizations, media freedom, and tolerance for high levels of contention in society. The focus then is on changes in the opportunity structure. The China case appears to

be different, because most of the traditional political opportunities may not be present. If China does not have the traditional political opportunities, does it have other structures that open space for movement emergence? To get a better idea of the specific political opportunities that operate in non-democratic, non-western contexts, this chapter includes a discussion of environmental movements under reforming authoritarian regimes in Eastern Europe and East Asia in the late 1980s.

The examination of movements in these countries illustrates that traditional political opportunities, such as political parties and independent non-governmental organizations, and media freedom are just as important for movement emergence in non-western contexts. In Poland, South Korea, the Former Soviet Union (FSU), and Taiwan, the emergence of environmental movements was intimately tied to processes of democratization and new opportunities for non-governmental groups to operate freely. The implication is that this added evidence of the importance of traditional political opportunities does not bode well for the emergence of an environmental movement in China at this time. The lack of most of the traditional political opportunities found in other countries might lead one to expect that one or more movements would not emerge in China.

However, there are other opportunity structures in China that could allow for movement emergence. There is some room for contention in Chinese society and authorities have even sanctioned a certain level of contention by passing the Environmental Protection Law and other laws that give citizens the right to accuse polluters without repercussions. Other opportunities include the development of some autonomous environmental social organizations, the reform of the work unit (*danwei*)

system, the heightened status of the state environmental protection administration, the increasing supervisory power of China's representative bodies, such as the NPC and the CPPCC, the continuing support of international actors, and finally, the need for participation on the part of authorities.

The Social movement framework and factors thought to influence the emergence of movements are useful to evaluate variation in levels of political participation, but they are not the only useful way to examine public participation in environmental policy processes in China. There has been plenty of work showing the corporatist nature of state-society interaction and these concepts are still useful for understanding participation in Chinese society.<sup>1</sup>

The social movement framework does not fit well when examining the more corporatist forms of group participation or citizen involvement with state-mobilized campaigns. However, no one theory or model can explain or describe the huge variation in modes of participation in China. Theories of corporatism are important in discussing group participation in environmental policy processes and are discussed thoroughly in chapter six.

Also discussed in chapter six, is the concept of civil society. Although, the concepts of civil society and social movements may overlap and compliment each other, there are some important distinctions between them. Civil society is typically considered to originate within elite spheres, while social movement organizations typically have their base in grassroots collective action. Social movement organizations are striving for a similar goal, while groups in civil society may not necessarily share a common goal. Social movement organizations tend to be engaged

in contentious politics, while civil society may not. The presence of civil society implies a pluralization or liberalization of policy and political processes. Social movements however, do not. While social movements are more likely to materialize in democratic societies, this is not a necessary condition. The democracy movement in China is one example of a social movement that emerged in China under non-democratic conditions.<sup>2</sup>

### **A Short History of Social Movement Research**

The 1800s ushered in research on social movements. This research began with studies of the “maddened crowd” and ended with studies on the relationship between the structure of society and instances of collective action. Early theorists focused on three factors that were the most feared: extremism, deprivation, and violence.<sup>3</sup> Later on, Karl Marx theorized that social movements were caused by the structure of society.<sup>4</sup> However, Marx could not explain how workers would overcome the problem of collective action, or in other words, how and why should individuals with their own interests cooperate in an organized fashion to achieve a common goal? Lenin supplied the answer with his solution of the “vanguard,” or a committed group of leaders who would organize the workers and sustain the movement. Later, Antonio Gramsci added “identity” to the list of factors determining if and when a social movement would emerge. He argued that the social structure and organizational leaders were sometimes not enough to break through the “false consciousness” of workers, so he concentrated on how intellectuals could build the revolutionary spirit in the minds of workers by helping develop a working class identity for workers to take on as their own.<sup>5</sup>

While, the Marxist theory of social movements could only be applied to the phenomenon of class conflict, collective behavior theories of the 1950s and 1960s could be applied to many different kinds of behavior. Many of these theories focused on how grievances motivated individuals to participate in collective action.<sup>6</sup> However, by the 1960s, scholars acknowledged that individuals with grievances did not always work collectively in groups to find solutions to their problems.

In 1971, Mancur Olson published his work on “collective action” and focused on individuals’ material and personal incentives as motivating factors. A social movement requires political participation at the level of the group or society. A movement requires more than interest articulation at the individual level; it requires interest aggregation, or collective action, at the group level. Therefore, collective action is necessary for the emergence of social movements. Collective action can be defined as “people’s banding together to act on their shared grievances, hopes and interests.”<sup>7</sup>

It was taken largely for granted that individuals with common interests and common identities would work in groups and that these groups would further their “group interest,” just as individuals would further their individual interests, until one scholar pointed out an important problem of collective action. The problem is that “rational, self-interested individuals will not act to achieve their common or group interests” because if some individuals act out of self-interest, then they will become “free riders.”<sup>8</sup> Free riders are people who reap the benefits of group action without having made some kind of contribution. The free-rider problem is common in larger groups because there is no one to make sure that every individual in the group is

actively participating. Along with problems of collective action and the free-rider problem, other scholars pointed out that structural factors, such as resources, organization, and political opportunity might be crucial in determining whether or not a movement would emerge.

Two sociologists John McCarthy and Mayer Zald, agreed with Mancur Olson about the problem of collective action. However, they believed that, at least in industrialized countries, increased personal and external financial resources and increased professionalism helped eliminate the problem of how to support aggregate collective behavior. McCarthy and Zald thought “social movement organizations” would eliminate the problem of scaling up individual resources to the level of the organization. McCarthy and Zald’s resource mobilization theory came under attack because it could not explain the small, grass-roots organizations that proliferated in the U.S. and Europe in the 1960s. Nor was it sufficient to explain why movements emerged at certain times but not at other times.

Another group of scholars sought to understand the organizational dynamics of these smaller-grassroots, “new” social movements by devising a political process model, which focused less on large professional social movement organizations and more on smaller neighborhood, religious, and friendship networks.<sup>9</sup>

Other scholars pointed out that what was missing from work on social movements was attention to cognitive or ideational aspects of collective action. These aspects were collectively called framing processes by scholars such as Erving Goffman and David Snow. These researchers asserted that “shared meanings and definitions” were necessary ingredients for social movement emergence.<sup>10</sup> Todd Gitlin

and Benedict Anderson added a cultural dimension to framing processes. These scholars and others suggested that movements emerged and succeeded when movement leaders were able to manipulate cultural symbols and provide individuals with meaning and identity.<sup>11</sup> However, culturalism and framing processes could not predict why movements appear in some periods, so it was useful only to a point.

Scholars then turned toward politics to find the answers to these questions. Charles Tilly was one of the first to assert that social movements could not be studied apart from politics. The concept of political opportunity structures, borrowed from the literature on institutions, linked the emergence of movements to political processes within the state.<sup>12</sup> By joining the study of politics and movements, it was then possible to create a more powerful explanation as to why movements seemed to arise in certain periods and not others, and why movements take different forms.

Sidney Tarrow recently synthesized the resource mobilization, framing processes, culture and identity, and political opportunity theories into a more holistic explanation for the emergence and continuation of social movements. Tarrow defines social movements as “collective challenges based on common purposes and social solidarities, in sustained interaction with elite opponents, and authorities.”<sup>13</sup> Tarrow combines four components to build this definition: collective challenge (social movements engage in contentious politics<sup>14</sup> or protest<sup>15</sup>), common purposes, solidarity and collective identity, and sustained interaction.

Tarrow’s succinct definition of social movements is a valuable starting point with which to understand movements in western democratic countries and for social movements in general; however, can it be utilized just as well in non-western nations

that have different cultural, economic, and political conditions and specifically with environmental movements?

### **Are Environmental Movements Different?**

Environmental movements are often considered “new social movements.”<sup>16</sup> Several theories have been used in explaining the rise of these new movements in industrialized countries. One such theory, the post-materialist theory, put forth by Inglehart argues environmental movements are linked to a shift in the values of individuals once they have taken care of their physical sustenance. Once these needs have been met, an individual then turns to concerns related to the quality of life, including environmental quality.<sup>17</sup> A later article supports these findings. The results of surveys done in several developed countries confirms that a value shift occurs in “any society that has experienced sufficient economic growth in recent decades so that the pre-adult experiences of younger birth cohorts were significantly more secure than those of older cohorts.”<sup>18</sup>

There are problems with ascribing post-materialist values to citizens in China, given China is still a developing country. Only cities such as Shanghai and Beijing have enjoyed higher levels of per capita GDP throughout the 1990s. A few provinces showed dramatic increases in per capita GDP, such as Guangdong, which went from a per capita GDP of 2,307 Yuan (approx. 268 US dollars) to 11,728 Yuan (1,368 US dollars) in 1999. However, most provinces showed slower growth. For example per capita GDP in Xiaanxi in 1989 was 1,124 Yuan (130 US dollars) and rose to only 4,101 Yuan (476 US dollars) in 1999.<sup>19</sup>

In addition, China's Marxist past complicates the evolution of citizens' values from materialist to post-materialist. Under Mao, citizens tended to play down materialism and humble backgrounds were an asset. It was not until Deng proclaimed, "to get rich is glorious" that materialist values began to be more acceptable. Even in China's richer cities, citizens are still more concerned with their economic well being than other post-materialist values, such as environmental quality. According to an environmental awareness survey conducted by SEPA in 2000, 45 percent of citizens across China would not want to slow economic growth in order to improve environmental quality.<sup>20</sup>

In addition, why have not environmental movements emerged everywhere GDP levels have risen and why do some people become environmentalists while others do not? As Tarrow points out, the post-materialist theory does not explain when a movement will emerge. Finally, the work of Dunlap, Gallup, and others suggests that even citizens in less developed countries are concerned about environmental quality.<sup>21</sup> The post-materialist thesis does not explain why movements emerge at specific times in history and not in others.

### **Movements Under Reforming Authoritarian Regimes**

A great deal of research emerged in the late 1980s and 1990s that examines citizen activism, social protest, and environmental movements in Eastern Europe, Latin America, Asia and Africa.<sup>22</sup> An examination of movements in all of these regions would greatly enhance our understanding of movement emergence from a comparative perspective. For brevity's sake, this section primarily focuses on

movements in Eastern Europe, especially the Former Soviet Union and Poland, and Asia, especially Taiwan and South Korea.

### **Environmental Movements in Asia**

There is not one monolithic “Asian environmental movement,” nor is there one simple environmental movement in each Asian country. For example, three distinct environmental movements can be discerned in Taiwan: the anti-pollution, the nature conservation, and the anti-nuclear movements.<sup>23</sup> Environmental movements in Asia are diverse, some populist,<sup>24</sup> some corporatist,<sup>25</sup> while others have a post-materialist bent.<sup>26</sup> The various movements are socially constructed and are culturally indigenized.<sup>27</sup> In some nations, nongovernmental organizations have played a major role in activism to address local, regional, and national issues, such as in South Korea and the Philippines. In other countries, environmental activism is strongest at the local level, such as Japan.<sup>28</sup> While environmental movements in Asia do not look exactly like movements in western Democratic nations, the researchers quoted here consider them as cases of the universal phenomenon of social movements.

As with environmental movements in the West, Asia’s environmental movements are inherently political because they are concerned with the unequal distribution of the costs and benefits of development.<sup>29</sup> The movements in Asia, however, often look different from their western counterparts. Asian movements look different because original conditions are different, i.e. movements originate in different political, economic, cultural, and religious contexts.<sup>30</sup> Movements in Asia are often less cohesive and alliances are “contingent.”<sup>31</sup>

Scholars of environmental movements in Asia argue those movements did have some impact in the agenda-setting phase of the policy process, although there was limited change in actual policy outcomes. Lee and So argue that environmental movements in Asia forced regimes and elites to “adopt a pro-environment discourse.” In spite of this discourse, however, pro-growth ideologies were hardly challenged.<sup>32</sup> In Taiwan, even after the opposition party, the Democratic Progressive Party (DPP), won an overwhelming victory in the 2000 elections, pro-growth strategies dominated. Environmental movements in Taiwan and South Korea did not make much of a difference in changing the views of the majority of citizens regarding state development strategies, which runs counter to experiences in other countries. In the U.S., Japan, and Germany, because of environmental movement-induced value shifts, a large enough number of citizens questioned the sustainability of pro-growth policies to make a difference in policy outcomes.<sup>33</sup> The survival of pro-growth sentiments through the firestorm of an environmental movement may be unique to developing countries in general, simply because a large enough number of citizens may not yet be satisfied with their level of economic achievement and therefore side with pro-development sentiment. This phenomenon is very evident in Taiwan.

### **Taiwan’s Environmental Movements**

Three distinct environmental movements emerged in Taiwan, the anti-pollution, the anti-nuclear, and the conservation movements. Of these, the anti-pollution movement emerged first. There were only a handful of anti-pollution demonstrations before the mid-1980s, which can be partially attributed to Taiwan’s then authoritarian political system. However, by the late 1970s and early 1980s, there

was wide public concern regarding environmental issues. In a 1983 poll, citizens considered the environment as the island's sixth worst problem. In the late 1980s, more people were acting on this concern by protesting against polluting enterprises and nuclear facilities.

One such protest occurred in Lukang in 1986, one of Taiwan's primary agricultural areas. Residents strongly protested against a proposed new Du Pont titanium dioxide plant and were able to prevent its construction.<sup>34</sup> Another such protest occurred in Linyuan. Residents claimed that a number of livestock deaths in the area were due to water pollution from eighteen petrochemical plants and two naphtha crackers in a nearby industrial zone. Early protests were met with indifference, so some residents broke into the plant itself and began pressing buttons. Luckily, there were no major repercussions of the break-in. The Ministry of Economic Affairs agreed to pay 10 million Taiwan dollars to the affected residents. These are just two examples of anti-pollution protests that were becoming common around the island.

In addition to an anti-pollution movement, a distinct anti-nuclear movement emerged in Taiwan. Citizen anti-nuclear sentiment started as a trickle and grew into a flood by the 1990s. Even prior to the construction of nuclear power plants on the island, some scientists and intellectuals raised objections in the 1960s to the nuclearization of energy resources. Taiwan built its first two nuclear power plants, in Chinshan on the island's northern tip, in the late 1970s, during the global energy crisis, and in response to heightened concern over Taiwan's energy security.<sup>35</sup> The third and fourth nuclear power plants were built near Kaohsiung in the early 1980s. The fifth and sixth plants were built in Manshan, on the Southern tip of the island near Kenting

National Park in the mid 1980s. The rapid “nuclearization” of Taiwan created a public backlash that was heightened by the nuclear accident at Three Mile Island in the U.S. in 1979.<sup>36</sup>

Two minor accidents at Taiwan’s nuclear power plants in the early and mid-1980s became “focusing events”<sup>37</sup> and fueled anti-nuclear concerns. Intense public debate arose regarding nuclear power and an organized movement developed.<sup>38</sup> The horrific nuclear accident at Chernobyl in the Ukraine in 1986 jelled the movement and protests marking the one-year anniversary of the Chernobyl accident in 1987 illustrated how widespread the movement had become.

#### ***Factors Contributing to Movement Emergence and Growth in Taiwan***

Theories regarding environmental and social movement emergence are relevant to the Taiwan case. The objective presence of pollution and resulting citizen grievances is adequate to explain rising anti-pollution protests in the late 1970s and early 1980s, but it is not enough to explain the rise of Taiwan’s anti-pollution and anti-nuclear movements in the late 1980s. Political opportunities were crucial to movement emergence, especially freedom of the press, democratization and the legalization of opposition political parties, and the development of the island’s environmental protection apparatus. Powerful mobilizational structures also contributed to movement emergence. Finally, a shift in values, a shift to post-materialist values, partially adopted from environmental movements in the West, enriched the anti-pollution and anti-nuclear movements and a nature conservation movement.

Democratization and greater political accountability in Taiwan led to several changes in Taiwan’s political opportunity structure, which in turn allowed more space

for environmental movements to grow. The number of environmental protests increased dramatically after martial law was lifted in 1986, which reduced the costs of participating in such protests as well as the threat of prosecution.<sup>39</sup>

The dramatic growth of Taiwan's anti-pollution and anti-nuclear movements in the late 1980s can partially be attributed to a freer press. Even before Chiang Ching-kuo, the then president of Taiwan, lifted martial law in 1987, newspapers and television stations began to expand their operations and produce bolder stories.<sup>40</sup> Freedom of the press allowed for "focusing events," to become widely known. For example, nuclear accidents at home and abroad, fueled Taiwan citizen anti-nuclear sentiment and spurred protests against future development of nuclear power on the island.

Public support for environmental protection was given voice through the press and through the opposition political party, the DPP, which became legal in 1986. The DPP forced entrenched KMT government authorities to give greater attention to environmental issues and to some degree spurred institutional change in the environmental protection sector. The DPP took up the nuclear and other environmental issues in its platform, which forced the ruling party, the KMT, to re-evaluate its position toward environmental problems and provided political opportunities to strengthen the anti-nuclear movement.

In 1987, the once ineffectual Bureau of Environmental Protection under the Department of Health was elevated to a cabinet level Environmental Protection Agency (EPA). The following year, the provincial and local government administrations established their own environmental protection departments. The

government set up a couple of corporatist NGOs and authorities stepped up environmental education programs and increased the budget for environmental protection. The 1990 budget was twenty times larger than that of 1987.<sup>41</sup> The stronger environmental protection apparatus became a government ally of citizens demanding a cleaner environment.

Several social groups and organizations were crucial to movement emergence in Taiwan including academics, local activists, and religious ties and temple networks. Academics have been a main driving force behind Taiwan's environmental movements, creating and operating various social movement organizations, i.e. environmental non-governmental organizations.<sup>42</sup>

Also important were local networks of activists. Some organizations had academics at the center, but have many local branches coordinated by local activists, such as the Taiwan Environmental Protection Union (TEPU). Branches of TEPU grew out of specific demonstrations.

Crucial to some micro-movements in rural areas were religious ties, temple networks, and temple funds. When temples could be won over to the environmentalists' side, they were a great source of legitimacy and became powerful allies in contentious politics. Deities provided legitimacy and stood as a common symbol bringing movement members together. Temples and political factions have been a main channel for movement leaders to mobilize citizens.<sup>43</sup> Also prevalent in Taiwanese environmental protests is the role of funeral rituals, symbols, and language. Often the polluted river, lake, or land area is referred to as a "dead parent," for which

one should grieve. These symbols conjure up “images of the discarded Confucian responsibility to the welfare of future generations.”<sup>44</sup>

Another contributing factor to the rise of Taiwan’s environmental movements has been the shift in the way nature is perceived stemming from a new awareness and appreciation of nature.<sup>45</sup> This new awareness is partially due to the increase in information regarding environmental pollution and degradation and their impacts. Others have posited that this new appreciation of nature has resulted from the processes of modernization. As Taiwan has modernized, life has become more industrialized, fast-paced, impersonal, and the cities have become louder, more congested, and foul-smelling, citizens have increasingly sought refuge in nature. As a result, there has been an increase in nature tourism, nature publishing, and a surge in geomancy.<sup>46</sup>

Many of the members of the various groups upheld a distinctly western view regarding the progression of Taiwan’s environmental movements, comparing Taiwan’s movement with those in the west. There is borrowing from the west in the philosophical roots of the organizations. “The academics in particular have drawn directly on western green thinking, which values the environment over economy, nature over culture, and equilibrium over transformation.”<sup>47</sup> Most of the national-level organizations and local branches that engage in contentious politics are men. Organizations led by women, however, do not engage in radically contentious activities. Instead, they frame their environmentalism within issues of household and motherhood.

As the previous paragraphs suggest, several factors contributed to the rise of environmental movements in Taiwan including the presence of grievances, increasing political opportunities, mobilizational structures, and shifts toward post-materialist values. However, increasing political opportunities, due to democratization, have the most explanatory power regarding the timing of movement emergence. A similar claim could be made regarding environmental movements in South Korea.

### **South Korea's Environmental Movements**

There were two main branches to Korea's environmental movement, an anti-pollution and an anti-nuclear. Prior to the 1980s, environmental education and environmental activism were extremely localized and local churches and universities took the lead in such activism. In the early 1980s, some scientists, however, became concerned about the effects of rapid economic development on the Korean environment and formed the Study Group on Pollution. The group, however, did not get involved in environmental protests. As in Taiwan, South Korea's environmental movements took off in the politically liberalizing atmosphere of the late 1980s.

Korea's anti-pollution movement started slowly in the early 1980s. The first group to become active in environmental protests, the Korea Pollution Research Institute (KPRI) was established in 1982. Interestingly, its founders were church leaders. The group was a uniting force for small isolated groups of individuals who were concerned about the environment. KPRI personnel conducted fieldwork in polluted neighborhoods to teach locals how to reduce pollution. It also conducted education programs and published reports. The group was a major actor in Korea's first major pollution victim case, the "Onsan illness" case. Onsan illness was caused

by heavy metal contamination and affected over 1,000 as of the 1990s. In the late 1980s, KPRI reports and citizen protests forced the government to conduct its own epidemiological survey and to relocate residents. In addition to KPRI, a number of other environmental groups emerged in the late 1980s and early 1990s.<sup>48</sup>

Korea's anti-nuclear movement emerged nearly twenty years after the nation's initial development of nuclear energy; protests did not arise earlier primarily because of the authoritarian nature of Korea's political system. In the late 1960s, South Korea embarked on an ambitious nuclear energy development program. By the 1980s, nuclear sources provided more than fifty percent of Korea's energy needs. In 1988, there were nine power plants in operation and two more in construction. Debate stalled the projects still under construction, but not for long. Debate revolved around the efficiency of nuclear power and the safety of nuclear plants. Other issues of great concern were nuclear waste disposal and nuclear weapons. Citizens did not trust the government. Debate on nuclear power did not arise until the 1980s, partly because of numerous domestic accidents and because of accidents in other countries. In Korea, there were 193 accidents reported before 1990. However, talk regarding improving safety dominated the debate, which left little room for talk regarding abandoning nuclear power.

Large protests and other tactics were used by anti-nuclear activists yet, by 1996, Korea had eleven commercial nuclear power plants in operation, with five other plants under various stages of construction. In the late 1990s, South Korea still relied on nuclear plants for about 33 percent of its power needs and plans for fourteen power

plants to be built by 2000 were on schedule. In addition, 50 more plants are planned by the year 2031.<sup>49</sup>

Does Korea's continued and planned reliance on nuclear power mean that its anti-nuclear movement has failed? If the only goal of the movement was to end the nation's use of nuclear power, then it has failed. If, however, there are other goals, such as ensuring human safety and achieving efficient power generation, then perhaps the movement has not totally failed.

In South Korea, the main factor contributing to the rise of the anti-pollution and anti-nuclear movements was expanding political opportunities, including a general wave of contention in the late 1980s, democratization, and expanded media freedom. Also crucial to the rise of these movements were "focusing events" and positive media "resonance." Among the focusing events were a number of accidents at nuclear power plants in Korea and abroad in the mid-to-late 1980s, and a series of tap water contamination incidents in Seoul in 1989 and 1990. Once it was reported that Seoul's tap water was contaminated with cadmium, mercury, and other heavy metals, citizens suddenly realized that pollution was their problem and it was happening in their backyards.

From 1987 on, the Korean press was much freer and the number of articles on the environment increased dramatically, and environmental protests were given positive coverage. The positive and sustained coverage made the emerging environmental movement positively resonate with the public. Again, as in Taiwan, changes in the political opportunity structure greatly facilitated the development of environmental movements in South Korea.

## **Environmental Movements in Eastern Europe**

In Taiwan and South Korea, the rise of environmental movements were intimately linked to broader political and social changes and to strong networks of individuals and groups that were able to mobilize resources in support of those movements. These factors in combination with an underlying partial shift toward post-materialist values explain why environmental movements arose when they did. Is the story similar in Eastern Europe? A closer look at two countries, Poland and the FSU provides an answer to this question.

Poland and the FSU shared similar conditions in the 1970s in that most if not all social organizations were corporatist in nature, the media is highly controlled so information on environmental harms is suppressed, citizens largely accept pollution as an inevitable byproduct of economic development, and any protests are repressed. It is not until the 1980s that we see some variance in the factors that eventually give rise to environmental movements in each country.

The best explanatory factors for the differences in the timing of the rise of environmental movements in the FSU and Poland in the late 1980s are: one, variance in the level of access to resources, especially information and the actors who popularized information on environmental harms; and two, differences in the timing and scope of new political opportunities.

In Poland, demands for a cleaner environment were linked to workers demands for collective bargaining, representational rights, and greater accountability in government, which were voiced by members of Solidarity, an independent trade union federation that mobilized protests across Poland in the early 1980s. The political

atmosphere was free enough in Poland for Solidarity to exist legally in 1980 and 1981.<sup>50</sup> Solidarity worked to increase information on environmental harms, which in turn helped to create a value shift among the population. Even after Solidarity had become illegal, its influence lingered. It had forced the state and elite actors to pay more attention to environmental protection.

In the FSU, demands for a cleaner environment were linked to the scientific political elite, which became more vocal during the ideological thaw in 1983. Also important in the FSU was the proliferation of environmental groups after Gorbachev initiated Perestroika and Glasnost in 1985 and lifted the ban on social organizations in 1987. Some scholars view the emergence of these grassroots organizations as a cause, and not merely the effect of the greater economic and political reforms initiated by Gorbachev, and the eventual fall of the Soviet regime.<sup>51</sup> While the exact role of grassroots environmental organizations in the fall of the FSU and its communist satellites is still in debate, it is clear that the associations did proliferate and had some impact on the structure of society just before, during, and after 1989.

## **Poland**

In Poland in the 1970s, governmental leaders controlled social behavior regarding the environment in two ways. One, Polish censors were to take out any information regarding environmental degradation because it would threaten the “facade of order” on which the ruling regime based its legitimacy. “Information on direct threats to life or health caused by industry or chemical agents used in agriculture, or threats to the natural environment in Poland, should be eliminated from works on environmental protection.”<sup>52</sup> Fisher asserts the main reason for the facade

was to confuse. Information on environmental degradation undermined the regime's promise of a good quality of life and hinted that the ideology of unlimited growth had its pitfalls. When people did protest pollution or environmental degradation, their activities were considered a threat to the system.<sup>53</sup> Two, the Polish propaganda machine had citizens convinced that "environmental degradation had to be taken in stride as the price to be paid for accelerated industrialization if one wanted to reap the various benefits of civilization."<sup>54</sup>

There were a few quasi-governmental environmental organizations, such as The League for the Protection of Nature, the Polish Hunters Association, and the Polish Anglers Association, but these organizations merely played lip service to protecting the environment; they did not engage in any substantive activities to promote environmental protection values.<sup>55</sup>

During the period from 1980-1981, the situation in Poland began to drastically change. In the mid-1980s, workers involved in industrial protests, that spread from the Northern industrial cities to the entire country, eventually created an independent trade union federation, Solidarity. These workers demanded collective bargaining and representational rights. These workers also sought reforms in censorship, environmental protection and qualification requirements for officials.<sup>56</sup> The fact that environmental protection had somehow made it onto the political agenda of the Solidarity movement was the key event in accelerating a rise in environmental consciousness in the general public and in politicizing pollution problems.

From 1980 to 1981 Solidarity operated legally. This period was marked by heightened political participation, a relaxation of censorship, and an increase in

underground publications. During this period, Solidarity investigated, compiled information and reported on environmental problems and most citizens became aware of the environmental problems that plagued Poland. Pro-environmental demands were included in Solidarity programs and citizens also started to organize grass-roots “unofficial” organizations that later procured legal status.<sup>57</sup> A newly formed Polish Ecological Club (PKE) was successful in closing down part of the Skawina aluminum plant, because its fluoride pollution posed a serious health hazard to plant workers and neighborhood residents.

The imposition of martial law in 1981 drove environmental and political opposition groups underground, but Pandora’s box had already been opened by the release of information on environmental problems. Environmental issues became a focal point of social dissatisfaction with government institutions. Specialists and scientists that became involved in research on the environment during the heyday of Solidarity remained active and increased their influence in political policy making processes after 1981.

Even after Solidarity and other opposition groups went underground in 1981, government institutions, scientists, and the public gradually took environmental problems more seriously. The Ministry of Environmental Protection and Natural Resources was elevated to cabinet-level status in 1985.<sup>58</sup> The government also established quasi-governmental environmental organizations and attempted to co-opt the emerging environmental movement.<sup>59</sup> In 1987, the Polish Academy of Sciences cautioned, “that continued decline of quality of life in Poland brought about by acute ecological stress could lead to increasing an unmanageable social discontent.”<sup>60</sup> The

Communist Party went so far as to declare Poland's environmental problem as one of the country's most important social problems. The public also took environmental problems more seriously. Small, local environmental groups became a fact of life.<sup>61</sup>

Finally, in 1989, at the "Round Table Talks" between the government and Solidarity, a set of guidelines was agreed upon, which opened the way to a more sustainable development path. Included in these guidelines was a system whereby citizens would have access to information about the environment and would have a greater say in decisions regarding the economic development of their area. Following the Round Table, many new associations, clubs, and parties were organized, including those with an interest in environmental protection.<sup>62</sup>

The fall of the Soviet Union and rapid political change brought an economic recession, which had a dampening effect on the activities of new environmental groups. In the past, groups had been distrustful of each other. Unfortunately, this distrust lingered during and after Poland's transition to democracy and had the overall effect of weakening the environmental movement.<sup>63</sup>

### **The FSU (Russia)**

As in Poland, environmental awareness in Russia was very low in the 1970s and early 1980s due in part to tight government control over the dissemination of information and there were few avenues of public participation in environmental policy processes. Unlike Poland, Russia's scientific organizations played a stronger role in making demands for improved environmental quality in the 1980s. New political opportunities brought about by Perestroika and Glasnost reforms in the mid to

late 1980s paved the way for a plethora of environmental organizations which mobilized citizens in anti-pollution and anti-nuclear movements.

In the 1970s, the Soviet government had a variety of ways to ensure ideological and political conformity. It controlled information flows. It had a virtual monopoly over the development of the education system and mass organizations. It had the power to censor publications and the media. The security apparatus was used to weed out “different ideas” and often did so by using terror tactics.<sup>64</sup> Information about environmental problems was restricted, or tightly controlled, for both scientists and the general public. Despite tight control over the dissemination of information regarding the environment, the Russian government put forth some effort to provide environmental education to the public, although its content was superficial.

These efforts focused on environmental education programs in schools. By the end of the 1970s, environmental subject matter had been incorporated into elementary and high school curricula. It was also already required in all institutions of higher learning. Environmental education programs were also necessary so that the government could cultivate a group of future environmental experts. Environmental education programs at the elementary school level focused on trash clean up and news reports focused on cultivating public awareness of nature. Education programs did not tell the whole story, and the general public remained ignorant of the most serious environmental problems.<sup>65</sup>

In the 1970s, the general public became involved in environmental affairs in two ways. First, mobilization of the public to take action in environmental matters was limited to three highly controlled areas, the workplace, government-sponsored youth

organizations, and the local community.<sup>66</sup> Citizens could be active in environmental mass organizations at work, in their neighborhood, or at school. In residential communities, there were various municipal environmental protection subcommittees, which organized community activities and recruited citizens to participate in community clean-ups or other similar types of activities.

Under Khrushchev and Brezhnev, in the 1960s, 1970s and 1980s, there were all sorts of officially sponsored and registered mass activities and organizations, sometimes labeled as being “corporatist,”<sup>67</sup> that catered to citizens intellectual interests.<sup>68</sup> Corporatist organizations were the most active under Khrushchev and Brezhnev, but there is some evidence that it persisted in the USSR even after Gorbachev’s reforms. The role of mass public organizations was to institutionalize channels of interest articulation for the benefit of the state.<sup>69</sup> Members of state corporatist environmental organizations (CEOs) were not allowed to undertake their own projects, every activity had to be authorized by the proper authorities. In many instances, the members of the group were “volunteered” to be involved.<sup>70</sup> Barbara Jancar’s research in the early 1980s revealed that any environmental group that was not registered was illegal. Any individuals involved in activities counter to governmental interests, even by those in legal groups, were subject to losing their job.<sup>71</sup>

Second, citizens could express their desires through “voter’s requests,” which were “write-in petitions addressed to deputies at election time.” A review of these requests for Leningrad in 1974 indicated that a high percentage of the requests expressed concern with environmental issues.<sup>72</sup> The outcome of these requests is not

detailed. Jancar asserts there was a large increase in the numbers of environmental reports and requests during the 1980s, which shows increased public awareness and concern over environmental issues.

A third non-official channel for citizen involvement in environmental issues also existed. This channel was the media. Citizens utilized the media by writing letters of complaint directly to newspapers, or by writing letters praising citizen's environmental activism. However, usually only letters written by local government officials or scientists would be published.<sup>73</sup> Citizens could make complaints directly to their local government officials.<sup>74</sup> More often, citizens could take their complaints to the mass environmental organizations, which would then synthesize requests and re-channel them to governmental policy making bodies. The mass environmental organizations were a useful link between the government and Russian citizens.

In the 1970s, professional research organizations were corporatist just like the organizations mentioned above, but scientific organizations probably had much more influence in solving environmental problems than did the mass organizations.<sup>75</sup> In the 1980s, some research organizations took a leading role in challenging the government on environmental issues. Public knowledge of environmental problems increased dramatically under Khrushchev during the "ideological thaw," which began in 1983. People were prompted to offer "constructive criticism." Intellectuals, writers and scientists, were the main source of criticism of the manner in which the Soviet leaders handled environmental affairs.<sup>76</sup>

The mid to late 1980s was a turning point for environmental activists who had greater political opportunities to mobilize an environmental movement. Accurate

information on environmental problems, major environmental accidents, elite reforms enacted in the mid-to-late 1980s, and increased political openness caused by those reforms were necessary ingredients to build the environmental movement in the FSU.<sup>77</sup>

The nuclear tragedy at Chernobyl added momentum to the movement by providing a focus for discontent. The accident made the average citizen aware of environmental hazards whether they wanted to be or not. It served as a unifying factor by helping to create a “green” identity, or at least an “anti-nuclear” identity among citizens that might otherwise not have gotten involved. Nationalism was another factor that gave meaning to the environmental movement for people in many of the non-Russian Soviet Republics. It is argued by some scholars that the environmental movement was a “safer” vehicle for protest against the government.

After Gorbachev initiated Perestroika and glasnost in 1985, political opportunities for new civil organizations expanded and information regarding environmental degradation filtered out into the public domain. Newspapers reported the health effects of radiation poisoning, chemical smog, water pollution and overuse of pesticides and herbicides in agriculture.

Authorities began to lose control of media coverage of environmental issues. The landslide of information added fuel to the fire of the “green movement.”<sup>78</sup> According to a survey conducted in 1989, 83.5 percent of those polled were either “very strongly” or “rather strongly disturbed” by the state of the environment in their area. Concern regarding health effects of environmental pollution was foremost in people’s minds.<sup>79</sup>

Political opportunities for more aggressive citizen action expanded even further after Gorbachev initiated glasnost.<sup>80</sup> When the ban on unauthorized organizations was lifted, it dramatically changed the face of soviet politics. In 1987, hundreds of citizens demonstrated outside the pulp mill whose wastes were threats to Lake Baikal.<sup>81</sup> The fact that official channels for dealing with environmental complaints were not well developed also contributed to the numbers of citizens that resorted to more destabilizing methods of protest.

The economic and political reforms created the political opportunities for the development of increasing numbers of autonomous grassroots environmental organizations. These groups challenged authority and by doing so, further expanded political opportunities. Overall, there were strong signs of increasing governmental acceptance of nongovernmental organizations devoted to improving environmental quality.<sup>82</sup>

### ***Nationalist Forces: Linking the Ecology and Peace Movements***

One popular explanation for the rapid proliferation of environmental organizations and the subsequent rise of environmental movements in the FSU in the late 1980s was that the environmental movement served as a surrogate for a nationalist movement. According to this reasoning, it was safer for people to indirectly protest against Soviet-backed governments, by complaining about environmental problems, than it was to directly attack it.

In the non-Russian Soviet Republics, before *glasnost*, complaints against environmental degradation were couched in terms of the biosphere or improved energy efficiency. After 1986, in many of the Soviet Republics including Lithuania

and Ukraine, environmental protests were linked to nationalist sentiments. Citizens would no longer couch their complaints in terms of damage to the biosphere; they would couch protests in terms of “our people” or “our republic.” Common complaints included claims that Moscow was dumping “dirty industry” into non-Russian areas or exploiting local resources for use in other territories.<sup>83</sup>

Citizens in non-Russian Republics expanded their political opportunities by seizing upon nationalist sentiments and using nationalist frames in mobilizing support for environmental protests. Citizens joined environmental organizations as an outlet for their anti-Soviet, nationalist leanings, making the environmental movement a surrogate for a nationalist movement. The influx of these nationalists-as-environmentalists effectively swelled the environmental movement to a larger size than would have otherwise occurred and provided conditions for the development of stronger, more cohesive citizen’s groups.

Jane Dawson asserts that the anti-nuclear movements in Lithuania, and Ukraine were more politically than environmentally motivated.<sup>84</sup> Evidence that suggests this may be true includes the nationalistic overtones of movement actions and the fact that the anti-nuclear movements largely disappeared once the Soviets lost control. “With independence, the symbolic function of the anti-nuclear movement evaporated, and popular interest in the issue plummeted.<sup>85</sup> In other words, this theory also explains why the environmental movement diminished after the breakup of the Soviet Union and many East-Central European states gained their independence from Moscow.

However, this theory cannot explain events in Russia as well as it explains events in the non-Russian Republics. In Russia, the situation was a little different. No “nationalist” movement ever really developed. Instead, the anti-nuclear movement more closely resembled a NIMBY movement (not in my backyard), where individuals fight the decision to site environmentally damaging facilities in their own neighborhoods. Every nuclear plant became the focal point for local protest, but communications between people involved in these protests were loose and infrequent. Other types of industrial facilities that were perceived to be hazardous to human health also became focal points for protests.<sup>86</sup> The Russian anti-nuclear movement did not have nationalist overtones, but the movement fueled sentiments in favor of greater local control and led to struggles between competing levels of authority.<sup>87</sup>

Dawson theorizes this is because of the unique position of Russia within the USSR. It was the “Russian revolution” that brought the communist party to power in the USSR and the Russian and Soviet identities were too intertwined for Russian citizens to consider the USSR as an outside enemy. Therefore, the movement became a vehicle for local self-rule demands.<sup>88</sup>

In summary, In the FSU, an environmental movement developed quickly, in the span of six years. Citizen demands for a cleaner environment first surfaced from within elite-led scientific research organizations. Then the Chernobyl nuclear accident provoked fear of environmental hazards and sparked local citizen anti-nuclear protests in all of the Russian Republics. Also, nationalists used the environmental movement as a surrogate for a nationalist movement in some of the non-Russian Republics. However, this explanation does not have much validity in Russia. Finally,

Gorbachev's Perestroika and Glasnost reforms paved the way for rapid expansion of the numbers of civic organizations concerned with the environment, which were important drivers of environmental movements.

### **Synthesis: Experience and Theory**

Examination of Asian and Eastern European environmental movements contributes to ongoing debates regarding definitions of social movements, reasons for the emergence of environmental movements, and discussions of the relative importance of grievances, resources, and political opportunities in this process. We can gain a comparative perspective of movement strategies, the importance of leadership, and international alliances for movement success. In addition, we gain an expanded perspective of the influence of movements on social, political, and policy change.<sup>89</sup>

#### ***What is in a Definition?***

Most of the research on environmental movements in Asia and Eastern Europe took place before or at the same time as research done by scholars of social movements such as Sidney Tarrow, Charles Tilly, Doug McAdam, John McCarthy, and Meyer Zald who were undertaking intensive studies on social-movement phenomena around the world. As a result, much of the early work on environmental movements in Asia and Eastern Europe appears to utilize a different definition of social movements than are typically utilized today. One early definition written by Rudolf Heberle reads: "social movements are collective, organized attempts to bring about change in society and in individuals."<sup>90</sup> Rudolf Heberle distinguishes protest movements from social movements, the former having more limited goals.<sup>91</sup>

Movements were seen as being “more enduring than mobs or crowds but less institutionalized than political parties, interest groups, or bureaucracies.”<sup>92</sup> Krauss and Simcock recognize that early movements were often primarily concerned with financial compensation and that later movements seemed to also have an interest in forwarding a broader set of environmental goals and policies. Krauss and Simcock use protest movements and social movements interchangeably without drawing a clear distinction between them. They argue:

“Despite differences in the immediate target or problem they protested against, most of these local movements and their participants shared the general overarching aims of improving the quality of life, protecting the environment, changing government priorities, and increasing citizen input into local decisions. Thus, if citizens’ movements qualify as a social movement, we no longer need to treat them as unique aberrations of Japanese culture but can view them as a Japanese variant of a universal sociological phenomenon.”

While there are some advantages to treating citizens’ movements, or small neighborhood and resident protests as social movements,<sup>93</sup> there are also disadvantages. For one thing, it threatens to erase the distinctiveness of a social movement. If small, short-term protests can be a social movement, then nearly anything can. What are the exact boundaries of a “social movement”? Are these boundaries the same under different political, social, economic, and cultural circumstances? It seems reasonable to allow some leeway in defining a social movement to allow for variation among original conditions, but what aspects of a definition should be “soft”? There is no “right” answer to these questions, but they need to be answered. Krauss and Simcock’s answer was to expand the definition of a social movement to include the phenomena they studied.

For this dissertation, my answer is to maintain the rather rigid boundaries of the social movement definition. My definition of social movements adheres closely to Sidney Tarrow's established definition as stated at the beginning of this chapter. However, the social construction of contention should be emphasized.

The concept of political opportunities is a residual category that could be disaggregated. Specifically, the concept of legal opportunities should be included as a sub-variable because laws frame behavior. While political and legal opportunities are closely linked, there may be conditions where they are not. For example social organizations in China, theoretically, have enough political space to work with victims of pollution, but laws in China dictate that citizens who bring environmental suits must be directly harmed by the pollution in question. This limits social organizations' involvement with groups of pollution victims. Another reason to pay special attention to legal opportunities is that they seem to be neglected in the literature on environmental and social movements in general.

Social movements involve collective action, although not always overtly contentious, which reflect "broad cleavages in society." When people identify with an environmental issue and with each other, wish to bring widespread change, have ample political and legal opportunities, and can build "dense social networks and connective structures" then these instances of collective action "result in sustained interactions with opponents, specifically, in social movements."

Part of the reason for maintaining a more rigid definition of a social movement is that other forms of contentious politics require a lower level of political opportunity than a social movement would. Therefore, claiming the existence of a social

movement implies a certain level of political opportunity in society. When in reality, only a lower level of political opportunity exists.

By adhering to a fairly strict definition of social movements, then it makes more sense to view environmental activism in China primarily, although not solely through the lens of participation. However, the social movement literature does provide useful variables for understanding variation in participation levels across location and through time. These variables include political opportunity structures, grievances, framing, and mobilization structures.

### **Political Opportunities, Participation, and Movement Emergence**

The concept of political opportunity structures is alluded to in the work examining the factors that influence participation and was later developed by social movement theorists. Milbrath divides the factors correlated with variations in participation levels into four categories of sub-variables. These four categories are: the larger environment, the immediate environment, life position factors, and the personal system.

Typically, the variables included in the larger environment category include the social system and the political setting (including levels of economic and political modernization, rules of the game in politics, political institutions, local government characteristics, geographical factors, social composition, and social interaction patterns). The variables included in the immediate environment include stimuli present in the environment including messages from the mass media, campaign literature, from meetings, or personal communication. The variables included in the life position

category include education, age race, and sex among others. The factors included in the personal system category include attitudes, beliefs, and personality traits.<sup>94</sup>

A lot of the literature examining why people participate focused on behavior related to elections and tend to emphasize what Lester Milbrath and M.L. Goel label “life position variables” and personal system variables.<sup>95</sup> However, there are other possible variables and underlying conditions that influence variance. Verba, Nie, and Kim allude to this in their discussion of the multidimensionality of political participation.<sup>96</sup> Later, researchers turned to examining the impact of local governmental institutional arrangements on participation.<sup>97</sup>

Tianjin Shi’s work on participation in Beijing focuses on environmental variables, as well as life position variables. He operationalizes the environmental condition variable as the influence of institutional settings. She found the institutional setting has influence over the stage of the policy process at which people participate, on the choice of participation strategies, and on the allocation and mobilization of resources.<sup>98</sup> He provides a broad overview of the institutional setting in Beijing through a discussion of the ways in which the Chinese state communicates with citizens, the mechanisms for conflict resolution (purview of the executive branch), and work units (which help determine participation strategies and shape the type of resources that can be mobilized).<sup>99</sup>

The specific term political opportunity structure in the context of social movements has its origin with the work of Charles Tilly.<sup>100</sup> In the 1970s, he looked at the conditions that provide opportunities to or threaten potential collective action and the factors that facilitate or repress collective action. The basic idea behind the concept

is that there is a link between institutional politics and movement emergence and development. Since then, the concept has been clarified, expanded, stretched, and shrunk by various scholars who applied it to divergent cases of successful and unsuccessful instances and periods of collective action to try to understand how political constraints and opportunities shape social movements across time and location.<sup>101</sup> Researchers in the U.S. wanted to explain the emergence of movements based on changes in the “institutional structure or informal power relations of a given national political system.” Other researches in Europe have sought to explain the “cross-national differences in the structure, extent, and success of comparable movements on the basis of differences in the political characteristics of the nation states in which they are embedded.”<sup>102</sup>

### ***Political Opportunity Structure: A Definition***

A nation’s political opportunity structure can be defined as being “comprised of specific configurations of resources, institutional arrangements and historical precedents for social mobilization.”<sup>103</sup> Political opportunity structures have both formal and informal dimensions and vary across time and location. Some elements of an overarching structure are “political opportunities” while others are “political threats.”

Political opportunities exist outside of the groups involved in contentious politics or “social movement organizations.” Political opportunities lower the costs of collective action, reveal potential allies, show where political opponents are vulnerable, or change the overall context of an issue in a direction favorable to movement emergence. Examples of political opportunities include adoption of a

concern by political parties, dissention among state actors, access to information and wide media coverage, preferences of leaders, regulatory changes, or major perception-shifting events, such as Chernobyl.

Political opportunities alone are only part of the overall political opportunity structure; the other part includes “threats.”<sup>104</sup> Typically, but not always, threats raise the costs of collective action, split allies, make would-be social movement participants vulnerable, or change the overall context in a negative way. Examples of political threats include repression by authorities, violent action by opponents, unity of authorities, and constricting regulatory changes.

In short, the sum of political opportunities and threats creates a political opportunity structure within which a movement may or may not emerge and flourish. As Sidney Tarrow points out, however, political opportunity structures are not a model for predicting when contentious politics will emerge, but simply are a set of clues. Changes in opportunities are important for providing openings for resource-poor groups to act collectively for a common purpose. What determines if contentious action will expand into a social movement is “how people act collectively and how consensus is mobilized around common claims, and the strength and location of mobilizing structures.”<sup>105</sup>

### ***The Importance of the Political Opportunity Structures***

In Asia and Eastern Europe, political opportunity structures have been an important factor, if not the most important factor, in shaping the emergence of environmental movements. Specific political opportunities have included the existence of opposition political parties and elections, the presence of democracy or other

movements, freedom of the press and specific focusing events, and space for social movement organization development.

Political parties and elections opened political opportunities for movement emergence and development in several nations. In Poland, Taiwan, and South Korea political parties provided opportunities to disseminate information about environmental issues, to politicize environmental protection, and to channel grievances about environmental pollution and degradation. In some instances, specific candidates in local elections arose through support of environmental movement participants.

In some countries, political opportunities for environmental movements were greatly enhanced by democracy and other movements occurring of the 1980s, especially in Taiwan, Poland, and the FSU. For example, in Taiwan, the end of martial law and social demands for democratization created significant opportunities for environmental NGOs to flourish which then linked up previously isolated instances of anti-pollution protest and fueled a larger environmental movement.<sup>106</sup> In addition, to forward other political goals, such as democratization, activists sometimes used environmental movements. For example, in the Philippines anti-dam activists hoped to use the construction of the Chico River Dam to discredit the Marcos regime's cozy relationship with construction and business interests.<sup>107</sup> Resistance organizations have emerged from oppositional political movements concerned with democratization, anti-colonial, national independence, religious, and Marxist or feminist aspirations and have contributed to environmental movements.<sup>108</sup>

In other words, environmental movements in these cases are part of larger social movements opposing authoritarianism and advocating democratization. This does not mean that there were no politically neutral groups, because there were some groups that tried to stay out of politics.<sup>109</sup> It is logical that there was interplay among environmental movements with democratization movements because they emerged simultaneously in some states. Often, the same actors or organizations participated in both types of movements. At least in Poland, Taiwan and South Korea, the opposition parties that finally came into power kept the progressive environmental positions in their political platforms, furthering the environmental protection agenda and widening the scope of environmental movements.

Critical to the emergence of environmental movements in Taiwan, and South Korea were freedom of the press and several focusing events. In Taiwan, the lifting of martial law and greater freedom of the press were crucial to movement emergence and development.<sup>110</sup> Freedom of the press allowed for extensive reporting of several focusing events that opened political opportunities, maintained the public's attention on environmental issues, and generated anti-pollution and anti-nuclear sentiment. As unfortunate as it was, without several horrific pollution and nuclear accidents in the 1980s, the environmental movements in these countries would not have expanded as they did. The plight of victims of environmental accidents resonated with the public, stirred up emotions, and brought fears of a similar accident occurring in their neighborhood. A relatively free media was able to keep anti-pollution and anti-nuclear sentiment alive in the public's eye and frame them in such a way as to mobilize support for environmental movements.

## **Grievances, Mobilizing Structures, Movement Strategies, Framing,<sup>111</sup> Identity, Culture, and Domestic-International Linkages**

Political opportunity structures were of primary importance, but other factors played a role in movement emergence in Asian and Eastern European nations. Citizen environmental grievances and a victim's consciousness prompted citizens to take action against polluters. Other reasons for the increases in citizen activism include increases in the objective levels of pollution, strong social movement organizations, effective movement strategies and successful "issue framing," and substantial assistance from international actors.

Some evidence indicates that grievances over environmental degradation spawned environmental movements in Asia.<sup>112</sup> Research on Taiwan's environmental movements supports the thesis that grievances regarding rising pollution levels were a necessary trigger to citizen activism.

Some authors argue that environmentalism and environmental movements arose in Asia due to the efforts of an emerging middle class. It is assumed that more educated citizens, growing concern for quality of life, and increased leisure time have led to environmental movements in Hong Kong, Thailand, and other Asian countries.<sup>113</sup>

Of critical importance to environmental movements in many Asian nations have been strong social movement organizations. For example, crucial to the emergence of Taiwan's environmental movements was the marriage between grassroots enthusiasm with NGO organizational and leadership resources.<sup>114</sup> Also, important were kinship and community religious social networks.

Movement strategies are critical to success. Strategies of activists and environmental groups include such things as methods and approaches to the state and to society. Modes of engaging the state as well as society are important. Examples of modes of engaging the state include bypassing, challenging, pressuring, and supporting the state.<sup>115</sup> Some of these modes also may be utilized, except for support, to engage non-government actors that are targets of a movement, such as poachers. Also important is the relationship between activist groups and the general public. Hong Kong's experience shows this. Environmental activists there concentrated on building up linkages with government actors and neglected to build ties with smaller grassroots groups. This strategy weakened the movement in the long run. The focus on government lobbying and post-materialist values alienated Hong Kong citizens to the point that environmentalists were seen as the "enemy" of the public.<sup>116</sup> There is a danger that activists in China will focus their energy on establishing linkages with the government and neglect to build grassroots support on their own, so Chinese environmental groups would be wise to learn from Hong Kong's experience.

One of the ways issue framing works it to help build a citizen's identity in relation to pollution and environmental degradation. This framing process became one of factors in the rise of environmental movements in Asia. Research on Taiwan's environmental movements indicates that modernization, and collective shift toward post-modern values, and an accompanying shift in the way nature is perceived were crucial ingredients in the making of Taiwan's conservation movement. The anti-pollution movements in Asia were spurred on because citizens' perceptions of their relationship to pollution changed. Originally, pollution was viewed as an inevitable

byproduct of development and so was tolerated. Eventually, citizens came to view pollution as avoidable. As a result, anti-pollution and anti-nuclear sentiments often were framed as being necessary to protect human health. The anti-nuclear theme was found to be one of the most potent in Asia's environmental movements.<sup>117</sup> In Taiwan, the fact that environmental claims were viewed as apolitical meant there was more space for protest.<sup>118</sup>

This examination of environmental movements in Asia can provide clues regarding important factors in movement emergence in China. How important is the political opportunity structure compared to other factors? What is the political opportunity structure in China that facilitates or hinders the development of environmental movements? What political opportunities and threats shape the degree and intensity of contention in environmental politics? Are certain political opportunities necessary and/or sufficient to enable an environmental movement?

### **Movement Emergence in China**

In theory, grievances, political opportunities, mobilizing structures, movement strategies, issue framing and identity formation, culture, and domestic-international linkages are all important factors shaping environmental movements. But how will these factors manifest themselves in the China case? Which of these factors will be the most important?

This research argues that in the Chinese case, political opportunities, both local and national, have been necessary to explain the variation in public participation in environmental policy processes. Throughout the 1970s and 1980s, state actors largely controlled framing processes and resource mobilization by controlling the media, by

only slowly recognizing and admitting that environmental protection a fundamental policy goal of China, which they did in the mid 1990s, by controlling access to mobilizational structures, including the work unit, Street Offices, residence committees, and social organizations, and by gradually releasing information regarding environmental quality and degradation – thereby structuring citizens’ identity in relation to pollution.

In addition, political opportunities have been important limiting factors in the emergence of traditional environmental movements, even in the 1990s. Increases in levels of pollution and resulting grievances, increased access to financial and other tangible and intangible resources, strong mobilizational structures, and citizen control over framing processes are also necessary for movement emergence, but often come as the result of openings in political opportunities in China.

### ***China’s Political Opportunity Structure or Lack Thereof***

In building a picture of the political opportunity structure in China at the national level, within which an environmental movement may or may not emerge, the most striking feature is the lack of political opportunities often found in other countries. In addition, China has many political threats that are not present in other countries. The list of missing political opportunities includes opposition political parties, the existence of other political movements, access to information and the media, and an environment that fosters social movement organization development.

One of the most important political opportunities missing in China is the existence of one or more opposition political parties and elections. When a political party takes up a movement’s cause this is a political opportunity for the movement.

Once that issue has been included in the political party's platform, the party becomes a mobilizing structure. Political parties lower the costs of collective action and link political actors. For example, the Democratic Party in the U.S. provided one important platform for the women's movement.<sup>119</sup> China lacks an opposition party or a green party that could take up anti-pollution or conservation issues and propel related movements forward.

There are no sustained social movements with which an environmental movement could align. While occasionally a group of individuals will attempt to register a democratic party, there has not been a sustained democracy movement since the late 1980s. During the democracy movement of the 1980s that culminated in the Tiananmen massacre, nongovernmental environmental groups were non-existent and democracy movement activists did not forward environmental grievances, except for one group that protested the presence of nuclear waste in Tibet.

Currently, while some environmental activists may support greater human rights for China and prefer democratization, these sentiments are typically conjoined with some faith in the existing political regime, at least in terms of environmental protection. For example, student environmental groups pledge to remain apolitical. Many environmental activists believe the government is doing a good job in the environmental protection sector.<sup>120</sup> The language of environmental activism usually spoken in China does not focus on criticizing governmental efforts to promote environmental quality and does not include references to regime change. Instead, conversations largely focus on what social organizations can do to help the government to achieve environmental protection goals.

Mass media are very important for social movements.<sup>121</sup> Typically, the media is talked about in terms of “framing” a movement, but this discussion takes place in countries that have a high level of freedom of the press. In countries with relatively less freedom of the press, the media is not an independent agent in the framing process. Nor can nongovernmental actors interact with the press to a very high degree to influence the framing process. When a change to a freer press occurs in a country, this is a political opportunity. As previously mentioned, lifting media restrictions after the lifting of martial law in Taiwan provided significant political opportunities for the emergence of environmental movements.

The Chinese media is primarily controlled by the ruling regime, which potentially limits opportunities to mobilize citizens by creating “issue resonance” regarding “focusing events,” i.e. environmental accidents that could lead to public protests. According to one person in the media in Nanjing, reporters are not allowed to bring to light matters involving authorities at the city level or above because it is believed it would bring too much public discontent. “Revealing too much of society’s underbelly can be a factor in increasing social instability.”<sup>122</sup>

While there have been between 1,400 and 3,400 environmental accidents in China annually since 1989, none of these accidents has become a symbol to unite environmental groups or citizen grassroots activists. A sample survey of students in environmental groups showed that none of them could name a single specific environmental accident or pollution case in China.

The timing is important. An anti-nuclear movement may be less likely in China given the absence of international “focusing events,” such as Chernobyl. In other

words, state control of the media does not allow for widespread awareness of focusing events that could unite individuals and small groups with environmental grievances into larger groups. State control of the media is a factor that isolates incidences of contentious politics and does not allow for the generalization, the spread, of specific grievances or “resonant claims”<sup>123</sup> to the degree needed for widespread movement emergence. None of the environmental accidents has been sensationalized in the national media to the point at which they would become “household names” and recognized by most people who read newspapers. There have been cases where local newspapers, or newspapers connected with the environmental protection apparatus have conducted in-depth investigative reporting of environmental accidents. One example is the coverage of the horrible pollution problems along the Huai River in 1994 in the China Environment News. However, the coverage was not meant to reach the average citizen and was designed more to motivate environmental protection officials at the local level to strengthen enforcement activities.

Newspapers and television stations are owned by the state. Chinese leaders control the “boundaries” of press coverage by issuing guidelines for reporting, which suggest that reporters focus on positive events and outcomes.<sup>124</sup> In China’s case, citizens do not have as much access to information outside official channels, although this is changing as more people have access to the internet and environmental social organizations have access to the resources to print and distribute their own literature. The state-owned press dominates the framing of environmental issues. Media stories help to perpetuate the idea that pollution is an unavoidable byproduct of economic development and so should be tolerated, despite the costs. The paucity of media

freedom and low level of coverage of pollution may very well be the most important limiting factor in the spread of environmental movements at the grassroots level in China.

Typically, a social movement will depend upon social movement organizations, usually environmental NGOs, to act as mobilizing structures to forward a movement. The absence of a strong civil society in China's past works against the development of strong NGOs, or social organizations now. The political culture in China, heavily influenced by Confucian and Marxist-Leninist traditions, also inhibits strong, independent social organizations. Both traditions support the supreme position of the state over society. The environmental social organizations that could take on the role of social movement organizations are generally quite weak, shy away from publicly protesting against governmental authorities, and view themselves more as having an apolitical educational mandate. "Organized dependence," which makes individuals and social organizations dependent upon the state, fostered through socioeconomic structures such as the work unit (*danwei*) systems, is a strong inhibitor of autonomous social organization growth.<sup>125</sup> Additionally, there are strict laws that limit the establishment and growth of social organizations. Until laws are enacted that guarantee the rights of independent organizations, any group can be shut down at any time.

The lack of "conventional" political opportunities would seem to indicate an environmental movement would not emerge in China. However, we must take a deeper look to uncover political opportunities in the China case.

### *Political Opportunities Past and Present*

China is not completely devoid of political opportunities for movement emergence, and there have been several changes in the opportunity structure since the 1980s. Opportunities that presently exist include increasing legal protection for citizens, institutional changes in government resulting in more broader representation, changes in elite attitudes toward environmental protection, more openness in press coverage and a governmental mandate to cover environmental issues, an increase in the numbers of environmental social organizations, and more opportunities for alliances with international actors.

An extremely important political opportunity that lowered the costs of protesting against pollution and environmental degradation has been the development of China's environmental regulatory structure, especially the 1979 Environmental Protection Law. Prior to 1979, citizens that took matters into their own hands and protested against pollution were most likely arrested and labeled as "counter-revolutionaries." The 1979 law offered citizens some measure of legal protection for protesting against pollution to secure their legal environmental rights. Unlike Taiwan, new environmental laws provided the space for people to take necessary measures to protect their environmental rights in China. In Taiwan, anti-pollution and anti-nuclear demonstrations occurred before or simultaneously with the rapid development of environmental legislation. In China, citizens directly affected by pollution are allowed to file class action suits, which could prove to diminish the possibility that citizens would use collective protest to obtain relief. On the other hand, the very process of mobilizing support for a class action suit could be a vehicle for mobilizing a more

contentious approach, especially if the group lost a previous suit and found no relief through the court or administrative system.

Institutional changes that may enhance political opportunities include the elevation of the State Environmental Protection Administration (SEPA) up a notch in administrative rank in 1998 and the expanded supervisory role of the Chinese People's Political Consultative Congress (CPPCC) in the environmental sector. The higher ranking for SEPA and expansion of the CPPCC's role should aid environmental protection officials' efforts in enforcing environmental laws and policies, signal top leaders' intention to make environmental protection a higher priority, and give governmental allies of an environmental movement more stature.

The role of the press in the emergence of environmental movements in China has been limited for the reasons discussed in the previous section. The media, however, in the 1990s has begun to print more stories of environmental accidents than it did in the 1980s and has begun to engage in more "investigative" reporting. This trend may continue and serve to "frame" environmental activism in such a way as to allow for focusing events to generate issue salience with the public.

While environmental social organizations in China are relatively weaker than their NGO counterparts in other nations, their numbers have been increasing since their emergence in the early 1990s. Despite their limitations, social organizations in China still work to mobilize collective action to protect the environment, spread environmental values, and sometimes engage in contentious politics with certain groups, although not directly with governmental authorities.

International factors are likely to play an increasingly important role in the emergence of environmental movements in China. International actors interested in China's impact on the global environment and concern with the relative low level of citizen input into China's domestic and international policymaking processes, may work to put pressure on China's government to be more environmentally progressive. International actors are potential allies to environmental activists and social organizations in China. There are already international environmental organizations, both governmental and nongovernmental that have provided, among other things, education materials, financial resources, and mobilization training to environmental social organizations in China. Foreign groups have consulted with social organizations in China about how to mobilize environmental campaigns and have provided funding for operational and campaign expenses. A few foreign nongovernmental environmental organizations have been able to establish an office and a consistent presence in China including the World Wildlife Fund, the Energy Foundation, The Nature Conservancy, Friends of the Earth, and The Television Trust for the Environment. Other groups, such as Greenpeace, are based outside of China, but engage in projects inside the country. There is growing concern on the part of the international community over China's environmental problems and international actors are increasingly likely to take action to allay those concerns.

#### ***Other Limiting/Supporting Factors***

The focus on political opportunity structures does not mean that other factors will not be important for movement emergence in China. Other factors that will be important are the availability of tangible and intangible resources, the strength of

mobilizational structures, the success of “issue framing,” and of course cultural and identity factors.

As the discussion on the history of social movements illustrated, mobilization of resources is a major factor in determining levels of participation and if a social movement will emerge and whether or not it will be successful. The China case is no different. Typically, social movement organizations are strong mobilizers of resources. Previous research showed that mobilization of resources and “organized dependence” were limiting factors in the development of China’s environmental social organizations.<sup>126</sup> If these organizations cannot garner enough resources to establish themselves, they will be less likely to be able to mobilize resources to forward an environmental movement. Over the last ten years, the structures of “organized dependence,” such as the work unit system, have been partially dismantled in most large cities. This will undoubtedly have some positive impact on social movement organizations and their ability to mobilize resource, but it will take time.

The ability of environmental activists to determine the “framing” of environmental issues, environmental accidents, and to sustain a movement is very limited in China, because of the regime’s hold on the media and on publishing. The ruling regime can frame environmental and related issues in ways it deems most appropriate for its own goals.<sup>127</sup> Since the mid 1990s, environmental social organizations, however, do have the opportunity to frame environmental issues in their own literature and in their own activities, which will undoubtedly become more important in the future.

China's political culture will most likely inhibit movement emergence. While the concept of political culture is highly contested and defining China's political culture is fraught with contradictions, the less tangible influence of China's culture needs to be considered. Mao Zedong felt that the Chinese people were too passive and promoted "struggle" both to break down class barriers, but also to force Chinese citizens to engage in contention. The pinnacle of mobilized struggle occurred during the Great Proletariat Cultural Revolution. During the Cultural Revolution, Mao encouraged contention against "rightists" and certain party members; however, contention against the party as China's ruling body was still off limits. Questioning the government too deeply has always been taboo in China, except when Mao Zedong directed protest against certain political actors, which has translated into a reluctance to engage in contentious action against governmental and party actors.

If contentious politics were at the heart of a social movement, then Chinese citizens' predisposition toward compliance would make it more likely that citizens' will be satisfied with limited, yet perceptible, government responsiveness to their environmental grievances. In addition, part of China's political culture has been citizens' focus on the family or other social groupings, such as the danwei, and relatively less concern for humanity as a whole. People seem more willing to go out on a limb for a family member or a co-worker at a danwei than they would for the good of humanity as a whole. This seems to be in contradiction with communism's focus on the collective, until one realizes that the term collective does not necessarily mean humanity as a whole, but is used more in reference to the local collective, i.e. the family or danwei. As a result, citizens are less likely to embark on a quest to secure the

betterment of humanity as a whole, as in the case of improving the collective good of environmental quality for persons outside their circle. While these barriers may prevent a widespread environmental movement from developing, we should not be so certain that a movement will not emerge in China.

## **Conclusion**

In conclusion, if there is an environmental movement in China, it should conform to the general definition of a social movement. In this dissertation, social movements involve collective action, although not always overtly contentious, which reflect “broad cleavages in society.” When people identify with an environmental issue and with each other, wish to bring widespread change, have ample political and legal opportunities, and can build “dense social networks and connective structures” then these instances of collective action “result in sustained interactions with opponents, specifically, in social movements.” This definition is very similar to Sidney Tarrow’s, but it places more emphasis on the social construction of contention and adds legal opportunities as a necessary component for movement emergence and development. The examination of environmental movements in Asia and in Eastern Europe shows that political opportunities were the most important variable in determining when an environmental movement emerged, especially the presence of political parties and the space for autonomous environmental organizations to develop. Given the relative lack of these specific political opportunities in China, one would assume that it was unlikely that an environmental movement would emerge.

However, a closer look at China’s unique political opportunity structure reveals that there may be some space for movement type phenomena to arise.

Specifically, legal changes, such as the Environmental Protection Law passed in 1979, have opened space for higher levels of contention in society. In addition, political structures, such as the NPC and the CPPCC, have worked to advance the environmental protection agenda and been a conduit for citizen interest articulation in environmental affairs. While, this chapter laid out some of the potential political opportunity structures that may influence the emergence of one or more environmental movements, the following chapters illustrate that while they have encouraged public participation more generally, the currently available opportunities fall short in being sufficient for the emergence of a traditional environmental movement.

## Footnotes to Chapter Two

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<sup>1</sup>A few scholars have applied the concept of corporatism to organizations in China, including Margaret Pearson and Jonathan Unger. See Margaret Pearson, "The Janus Face of Business Associations in China: Socialist Corporatism in Foreign Enterprises," *The Australian Journal of Chinese Affairs*, No. 31, (January 1994), p. 44; Jonathan Unger and Barrett L. McCormick, "Corporatism in China: A Developmental State in an East Asian Context", in *China After Socialism: In the Footsteps of Eastern Europe or East Asia?* (New York: M.E. Sharpe, 1996), pp. 94, 104-107; Scott Kennedy, "In the Company of Markets: the Transformation of China's Political Economy," (Ph.D. Dissertation, The George Washington University, 2002).

<sup>2</sup> Here the democracy movement in China includes the Democracy Wall movement and other activities through Tiananmen.

<sup>3</sup> See Sidney Tarrow, *Power in Movement*, pp. 3-4.

<sup>4</sup> Marx argued that people became involved in collective action when their class fully developed contradictions with other social classes. Therefore it was the structure of society and class conflicts that gave rise to collective action. See Tarrow, *Power in Movement*, p. 11.

<sup>5</sup> Tarrow, *Power in Movement*, p. 13.

<sup>6</sup> See William Kornhauser, *The Politics of Mass Society* (Glencoe, IL: Free Press, 1959; Emile Durkheim, *Suicide: A Study in Sociological Interpretation* (Glencoe, IL: Free Press, 1951); and Eric Hoffer, *The True Believer: Thoughts on the Nature of Mass Movements* (New York: Harper and Row).

<sup>7</sup> Charles Tilly, *The Contentious French* (Cambridge: Harvard University Press, 1986), p. 3.

<sup>8</sup> The free rider problem will occur unless the number of individuals in a group is small or coercive means are used to make individuals act in the common interest. See Mancur Olson, *The Logic of Collective Action: Public Goods and the Theory of Groups* (Cambridge and Massachusetts: Harvard University Press, 1971), pp. 2, 3-16.

<sup>9</sup> Charles Tilly, *From Mobilization to Revolution*, (Menlo Park, CA: Addison-Wesley Publishing Co, 1978); Aldon Morris, *The Origins of the Civil Rights Movement: Black Communities Organizing for Change*, (New York: Free Press, 1984); Sara Evans, *Personal Politics*, (New York: Vintage Books, 1980); David A. Snow, Louis A. Zurcher, and Sheldon Ekland-Olsen, "Social Networks and Social Movements: A Microstructural Approach to Differential Recruitment," *American Sociological Review*, no. 45 (1980).

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<sup>10</sup> Erving Goffman, *Frame Analysis: An Essay on the Organization of Experience*, (New York: Harper Colophon, 1974).

<sup>11</sup> The cultural perspective was born of several different conceptual parents including: “thick description” Clifford Geertz, *The Interpretation of Culture: Selected Essays*, (New York: Basic Books, 1973); “ideological packages” - William Gamson, "The Social Psychology of Collective Action," *Frontiers in Social Movement theory*, eds. Aldon D. Morris and Carol McClurg Mueller, (New Haven: Yale University Press, 1992); “identity politics” Todd Gitlin, *The Twilight of Common Dreams: Why America Is Wracked by Culture Wars*, (New York: Metropolitan Books, 1995); and “imagined” communities - Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, (London: Verso, 1991).

<sup>12</sup> Thinking in this direction led scholars to ask the question of whether or not threats would stimulate or deflate a movement and “how different political structures provide greater or lesser degrees of opportunity to insurgent groups.” See Tarrow, *Power in Movement*, pp. 18-19 (Early scholars who studied opportunities included: Edwin Amenta, Bruce G. Caruthers and Yvonne Zylan 1992; and Kitschelt 1986)

<sup>13</sup> Tarrow, *Power in Movement*, p. 4.

<sup>14</sup> Tarrow sharpens the concept of social movements by stating that at the base of social movements is contentious collective action, which then becomes the “collective challenges” in his formal definition. Contentious collective action can be defined as action, “used by people who lack regular access to institutions, who act in the name of new or unacceptable claims, and who behave in ways that fundamentally challenge others or authorities.” Tarrow, *Power in Movement*, p. 3.

<sup>15</sup> Sidney Tarrow’s definition of protest is based on Charles Tilly’s use of “contention.” Contention can be defined as “discontinuous, contentious collective action in which people not only band together to act on their interests but also act in ways that directly, visibly, and significantly affect other people’s realization of their interests.” Similarly, Tarrow defines protest “disruptive collective action that is aimed at institutions, elites, authorities, or other groups on behalf of the collective goals of the actors or of those they claim to represent.” See Tarrow, *Struggle, Politics, and Reform*, pp. 11-12.

<sup>16</sup> Jurgen Habermas, "New Social Movements," *Telos*, no. 49 (1981).

<sup>17</sup> Ronald Inglehart, *The Silent Revolution: Changing Values and Political Styles Among Western Publics*, (Princeton, NJ: Princeton University Press, 1977).

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<sup>18</sup> Ronald Inglehart and Paul R. Abramson, "Economic Security and Value Change," *American Political Science Review* 88, no. 2 (1994).

<sup>19</sup> Zhongguo Huanjing Nianjian, (China Environment Yearbook), various years.

<sup>20</sup> *Zhongguo Huanjing Nianjian, 2000 (China Environment Yearbook)*, p. 347.

<sup>21</sup> This issue is discussed extensively in chapter two. See Riley E. Dunlap, George H. Jr. Gallup, and Alec M. Gallup, "Of Global Concern: Results of the Health of the Planet Survey," *Environment* 35, no. 9 (1993).

<sup>22</sup> Yok-shiu F. and So Alvin Y. Lee, *Asia's Environmental Movements: Comparative Perspectives*, (Armonk, NY: M.E. Sharpe, 1999); Jack Williams, "Environmentalism in Taiwan," *In Taiwan, Beyond the Economic Miracle*, eds. Denis and Kau Michael Simon, (Armonk, NY: M.E. Sharpe, 1992); James Reardon-Anderson, *Pollution, Politics and Foreign Investment in Taiwan*, (Armonk, NY: M. E. Sharpe, 1992); Upham, *Law and Social Change in Postwar Japan*; and Dawson, *Eco-Nationalism: Anti-Nuclear Activism and National Identity in Russia, Lithuania, and Ukraine*.

<sup>23</sup> Lee, *Asia's Environmental Movements: Comparative Perspectives*, p. 288.

<sup>24</sup> Some movements in Taiwan, South Korea, and the Philippines are characterized as being "populist" in nature. Populist movements are "people-oriented, driven by "victim" consciousness, fueled by grassroots mobilization, and involve contention." The main actors involved include local pollution victims, people's organizations, and non-government organizations. Lee, *Asia's Environmental Movements: Comparative Perspectives*, pp. 292-294.

<sup>25</sup> They characterize the environmental movements in Thailand as corporatist. Corporatist movements are those that seek to contain radical environmental protests, promote a green image for corporations, and rely on cooperative strategies. The main actors include businesses and government. Grassroots activists and popular organizations are marginalized. Intermediate organizations are seen as a bridge among businesses, government, NGOs, and the general public. Lee, *Asia's Environmental Movements: Comparative Perspectives*, pp. 294-295.

<sup>26</sup> Hong Kong's movement is characterized as having a post-materialist bent. Hong Kong's movement is similar to Thailand's in some respects, however, Hong Kong's green groups promote the adoption of a "green life-style". Businesses and government cooperate with NGOs as they do in Thailand, but the range of issues addressed in Hong Kong is much broader. The main actors are middle-class, young, professionals and internationally connected NGOs. Lee, *Asia's Environmental Movements: Comparative Perspectives*, pp. 296-297.

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<sup>27</sup> While some aspects of environmental movements were adopted from the West, many of the characteristics of Asia's environmental movements are distinctly "Asian." Lee, *Asia's Environmental Movements: Comparative Perspectives*, pp. 288-298.

<sup>28</sup> Steven Hoffman, "The Influence of Citizen/Environment Groups Upon Local Environmental Policy Processes in Japan," (Ph.D. Dissertation, University of Wisconsin, 1996).

<sup>29</sup> Yok-shiu F. and So Alvin Y. Lee, "Conclusion," *Asia's Environmental Movements: Comparative Perspectives*, eds. Yok-shiu F. and So Alvin Y. Lee, (Armonk, NY: M. E. Sharpe, 1999).

<sup>30</sup> Lee, *Asia's Environmental Movements: Comparative Perspectives*.

<sup>31</sup> This often results from having smaller environmental groups that focus on one or two specific issues, and having such a wide variety of such groups in society. This brings groups together in alliances that are "issue specific" and shorter term. Lee, "Conclusion."

<sup>32</sup> Lee, *Asia's Environmental Movements: Comparative Perspectives*, p. 301.

<sup>33</sup> Miranda Schreurs, *Environmental Politics in Japan, Germany, and the United States*, (Cambridge, England: Cambridge University Press, 2002), p. 32.

<sup>34</sup> At the time, demonstrations were banned under martial law, but that did not stop hundreds of people from breaking through a police cordon and marching through the town to oppose the construction of Du Pont's chemical factory. Two months later, protestors took their march to Taipei. Lukang is one of Taiwan's oldest towns and its historical and religious significance were important factors in the protests. See David W. Chen, "The Emergence of an Environmental Consciousness in Taiwan," *The Other Taiwan: 1945 to the Present*, ed, Murray A. Rubinstein, (Armonk, NY: M.E. Sharpe, 1994), p. 261.

<sup>35</sup> Taiwan does not have the natural resource base to provide for its own energy needs, so it is dependent upon foreign supplies of coal, oil, and gas. The energy crisis in the 1970s provided incentive to Taiwan's leaders to come up with alternative energy sources. Leaders determined the island should look to nuclear energy to provide more of its energy. In the 1980s, Taiwan was ranked third in the world for its dependence on nuclear power. Jack F. Williams and Chang Ch'ang-yi, "Paying the Price of Economic Development in Taiwan: Environmental Degradation," *The Other Taiwan*, ed, Murray A. Rubinstein, (Armonk, NY: M.E. Sharpe, 1994), p. 251.

<sup>36</sup> Taiwan's anti-nuclear activists had two main arguments. First, people doubted the economic efficiency of relying heavily on expensive nuclear energy. Second, people

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grew increasingly concerned about nuclear accidents and the problem of disposing of nuclear waste. Williams and Chang Ch'ang-yi, "Paying the Price of Economic Development in Taiwan: Environmental Degradation."

<sup>37</sup> Focusing events are events that draw and maintain the public's attention on specific issues or problems for an extended period of time.

<sup>38</sup> Chen, "The Emergence of an Environmental Consciousness in Taiwan," pp. 259-261.

<sup>39</sup> Shui-Yan Tang and Tang Ching-Ping, "Democratization and the Environment: Entrepreneurial Politics and Interest Representation in Taiwan," *The China Quarterly*, no. 158 (1999), p. 353.

<sup>40</sup> Chen, "The Emergence of an Environmental Consciousness in Taiwan," p. 263.

<sup>41</sup> Chen, "The Emergence of an Environmental Consciousness in Taiwan," p. 264. Despite increased governmental efforts, large obstacles to a cleaner environment loomed in Taiwan. Some considered Taiwan's legal system to be ineffectual, saying there are too few laws and even those are not implemented consistently. Government officials acknowledged Taiwan suffered from weak environmental regulations and said the legal system needs to be strengthened. Another main deterrent was the belief that any environmental protection efforts will necessarily mean a decrease in the island's economic growth. One activist decried Taiwan's private enterprise investment of 3% in environmental protection comparing it to the 15% spent by Japanese private businessmen. Chen, "The Emergence of an Environmental Consciousness in Taiwan," p. 270.

<sup>42</sup> Robert P. Weller and Michael Hisin-Huang Hsiao, "Culture, Gender and Community in Taiwan's Environmental Movement," *Environmental Movements in Asia*, eds. Kalland Arne and Gerard Persoon, (Surrey, England: Curzon Press, 1998), pp. 88-89.

<sup>43</sup> Weller and Hsiao, "Culture, Gender and Community in Taiwan's Environmental Movement," pp. 93-97.

<sup>44</sup> Weller and Hsiao, "Culture, Gender and Community in Taiwan's Environmental Movement," pp. 100-102.

<sup>45</sup> Weller, *Alternate Civilities: Democracy and Culture in China and Taiwan*, p. 111.

<sup>46</sup> Weller, *Alternate Civilities: Democracy and Culture in China and Taiwan*, p. 112.

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<sup>47</sup> Weller and Hsiao, "Culture, Gender and Community in Taiwan's Environmental Movement," pp. 88-91.

<sup>48</sup> Some of these groups are: The Korea Anti-Pollution Movement Council, the Korea Anti-Pollution Movement Youth Council, the Korea Environment and Pollution Studies Association, the Korea Anti-Pollution Civilian Movement Council, the Mokpo Green Movement Council, Pusan Anti-Pollution Civilian Movement Council, the Mokpo Youth Association Against Pollution and Nuclear Plants, the Nuclear Power Eradication Movement, the Korea Federation for Environment Movement (KFEM), and Green Korea. Korea can even boast the existence of a green party, the Green Party of Korea.

<sup>49</sup> Su-Hoon Lee, "Environmental Movements in South Korea," *Asia's Environmental Movements: Comparative Perspectives*, Yok-shiu F. and So Alvin Y. Lee, (Armonk, New York: M. E. Sharpe, 1999), pp. 95-102.

<sup>50</sup> Duncan Fisher's research found that Albania and Romania were the most restrictive regimes, and therefore had more illegal environmental demonstrations. Then came Bulgaria and Czechoslovakia. Then came Yugoslavia and Hungary. Finally, Poland was the most open. See Duncan Fisher, "The Emergence of the Environmental Movement in Eastern Europe and Its Role in the Revolutions of 1989," in Jancar-Webster, Barbara, ed. *Environmental Action in Eastern Europe: Responses to Crisis*. (Armonk NY: M. E. Sharpe, Inc. 1993), pp. 94-99.

<sup>51</sup> Jane Dawson found evidence to suggest that the anti-nuclear movements in some parts of the Soviet Union, in Lithuania and Armenia, became "powerful springboards for the creation of national movements" which helped to precipitate the downfall of the Soviet Empire. See Jane Dawson, *Eco-Nationalism: Anti-Nuclear Activism and National Identity in Russia, Lithuania, and Ukraine* (Durham and London: Duke University Press, 1996), p. 4. Also see Vladimir Tismaneanu ed., *In Search of Civil Society: Independent Peace Movements in the Soviet Bloc*. (London: Routledge, 1990); Vladimir Tismaneanu and Michael Turner, "Understanding Post-Sovietism: Between Residual Leninism and Uncertain Pluralism," in Vladimir Tismaneanu ed., *Political Culture and Civil Society in Russia and the New States of Eurasia* (Armonk: New York, 1995), p.5.

<sup>52</sup> See Fisher, "The Emergence of the Environmental Movement..." p. 93. The quote is from J. L. Curry, *The Black Book of Polish Censorship* (New York: Random House, 1984), pp. 21-22.

<sup>53</sup> Szacki, "Political and Social Changes in Poland," pp. 12-13.

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- <sup>54</sup> See Jakub Szacki, Irmira Glowacka, Anna Liro, and Barbara Szulczewska, "Political and Social Changes in Poland," in Barbara Jancar-Webster ed., *Environmental Action in Eastern Europe: Responses to Crisis*, p. 13.
- <sup>55</sup> Szacki, "Political and Social Changes in Poland," pp. 12-13.
- <sup>56</sup> Sidney Tarrow, *Struggle, Politics, and Reform: Collective Action, Social Movements, and Cycles of Protest*, Western Societies Program, Occasional Paper no. 21, 2nd edition, (Center for International Studies, Cornell University, 1991), p. 42.
- <sup>57</sup> Szacki, "Political and Social Changes in Poland," pp. 13-14.
- <sup>58</sup> See Stanley J. Kabala, "The History of Environmental Protection in Poland and the Growth of Awareness and Activism," in Barbara Jancar-Webster ed., *Environmental Action in Eastern Europe: Responses to Crisis*, pp. 123-124.
- <sup>59</sup> A couple of these groups were: Ekologiczny Ruch Społeczny or the Social Movement for Ecology (ERS) under the pro-government organization Patriotic Movement for National Salvation (PRON) and the Polish Academy of Sciences. Stanley J. Kabala, "The History of Environmental Protection in Poland and the Growth of Awareness and Activism," in Barbara Jancar-Webster ed., *Environmental Action in Eastern Europe: Responses to Crisis*, p. 125.
- <sup>60</sup> See Stanley J. Kabala, "The History of Environmental Protection in Poland and the Growth of Awareness and Activism," in Barbara Jancar-Webster ed., *Environmental Action in Eastern Europe: Responses to Crisis*, p. 127.
- <sup>61</sup> One of these groups, The Polish Ecological Club spread around the country, creating a network of citizens, scientists, and local municipal officials who worked through various channels to improve environmental quality. The Chernobyl nuclear power plant accident in Ukraine in 1986 prompted the emergence of several anti-nuclear groups.
- <sup>62</sup> Szacki, "Political and Social Changes in Poland," p. 15.
- <sup>63</sup> Szacki, "Political and Social Changes in Poland," p. 19.
- <sup>64</sup> See Ronald J. Hill, *The Soviet Union: Politics, Economics and Society: From Lenin to Gorbachev* (Boulder, CO: Lynne Rienner Publishers, Inc., 1985), pp. 132-133.
- <sup>65</sup> Jancar, *Environmental Management*, pp. 262-268.
- <sup>66</sup> Jancar, *Environmental Management*, p. 171

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<sup>67</sup> Bunce and Echols saw soviet state-society relations as being a combination of both “state” and “social corporatism.” Ruble also believes that party-union relations exhibit components of both types of corporatism, but in addition, he includes a distinction introduced by Alfred Stepan, that of inclusive and exclusive corporatism. See Alfred Stepan, *The State and Society: Peru in Comparative Perspective* (Princeton: Princeton University Press, 1978).

<sup>68</sup> The largest permanent ecological group was the Society for the Protection of Nature, which was established in 1924. Its primary duties were educational, to organize activities through schools and museums to educate the public on environmental issues. The society also played an advisory role over the Moscow State University Young People’s Council on Environmental Protection (MGU). The MGU was one of the only environmental groups that appeared not to be hierarchically organized. The group’s size would grow and diminish according to the number of students who were interested in environmental issues would participate. MGU leaders were often also members of the Society for the Protection of Nature, so the group was not entirely unsupervised. The Council members would participate in poaching and illegal logging control. In 1977, for example the group was reported as having arrested 236 poachers, 626 woodcutters, and 499 illegal fishermen. In 1974, MGU obtained its first funds from the Communist Youth League. While technically being organizationally independent of the League, MGU had to have its activities approved by the League. See Jancar, *Environmental Management*, pp. 276-277. Sometime in the late 1980s, the government expanded its charter to include factory inspection visits, although it had to report its finding to the proper authorities. It could not initiate lawsuits on its own. See Philip R. Pryde, *Environmental Management in the Soviet Union* (Cambridge: Cambridge University Press, 1991), p. 248.

<sup>69</sup> See Ronald J. Hill, *The Soviet Union: Politics, Economics and Society: From Lenin to Gorbachev* (Boulder, CO: Lynne Rienner Publishers, Inc., 1985), pp. 129-132.

<sup>70</sup> The Society for the Protection of Nature boasted about having 19 million “volunteer” members in the Russian republic alone. However, at least some of the society’s so called “volunteers,” were not really “volunteers” at all. Employees would find a receipt for contributions to that society and the appropriate deduction made from their paycheck without their knowledge or consent. See Marshall I. Goldman, “Environmentalism and Nationalism: an Unlikely Twist in an Unlikely Direction, in John Massey Stewart ed., *The Soviet Environment: Problems, Policies and Politics* (Cambridge, New York: Cambridge University Press, 1990), p. 3.

<sup>71</sup> In Russia, people become tied to their work units because of the structure of housing policy. Despite efforts since 1957, enterprises own half the urban housing units nation wide and 90 percent in the new towns. For details regarding the development of housing policy and its consequences see Gregory Andrusz, “The Market as Distributor of Housing Under Socialism: Its Virtues and Vices,” in Walter Joyce ed., *Social*

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*Change and Social Issues in the Former USSR* (New York, NY: St. Martin's Press, 1992), pp.-17.

<sup>72</sup> Out of about three hundred requests, one hundred and twenty five, or 42 percent, concerned environmental issues. Jancar, *Environmental Management*, p. 178.

<sup>73</sup> Jancar, *Environmental Management*, pp. 302-303.

<sup>74</sup> Jancar, *Environmental Management*, pp. 300-301.

<sup>75</sup> Some scholars believe that some of these “corporatist” mass organizations may have had some impact on the policy process, others do not. Some scholars believe elite groups of specialists, whose work brings them in contact with environmental protection issues, within established mass organizations have an impact during the early stages of policy formulation. Ziegler, Charles, *Environmental Policy in the USSR* (Amherst, MA: The University of Massachusetts Press, 1987), pp. 66. Other scholars see little evidence of a direct link between specialist input in the policy process and the rising public awareness of environmental issues. Hill, *The Soviet Union*, p. 131; Thane Gustafson, *Reform in Soviet Politics: Lessons of Recent Policies on Land and Water* (Cambridge, Cambridge University Press, 1981).

<sup>76</sup> It was during this time that a Moscow State University group established in the 1960s, the Volunteer Environment Protection Squad made up of intellectuals who studied ecology and was largely unknown to the general public, grew rapidly. The group did start the one of the most influential public ecological organizations in Russia, the Socio-Ecological Union. During the Squad's early years, it was an apolitical group, unwilling to become engaged in contentious politics with government leaders and did not seek to promote a public environmental movement. Lev Perepjolking and Yuri Figatner, “Environmental Movements in Moscow,” in Katy Lang-Pickvance, et al eds., *Environmental and Housing Movements: Grassroots Experience in Hungary, Russia and Estonia* (England and Vermont: Ashgate Publishing Company, 1997), pp. 203-206.

<sup>77</sup> For example, prominent scientists had written about the environmental deterioration at Lake Baikal since the 1970s, but the political opportunities for citizens to do anything about it besides write letters to newspaper editorials did not exist.

<sup>78</sup> Perepjolking and Figatner, “Environmental Movements in Moscow,” p. 205.

<sup>79</sup> Charles Ziegler, “Environmental Politics and Policy Under Perestroika,” in Judith B. Sedaitis and Jim Butterfield eds., *Perestroika From Below: Social Movements in the Soviet Union* (Boulder, CO: Westview Press, 1991), p. 114-115.

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<sup>80</sup> Gorbachev conceived of glasnost as a way to weed out “political corruption and abuse and industrial inefficiency and incompetence.” See Marshall I. Goldman, “Environmentalism and Nationalism: an Unlikely Twist in an Unlikely Direction, in John Massey Stewart ed., *The Soviet Environment: Problems, Policies and Politics* (Cambridge, New York: Cambridge University Press, 1990), pp. 4-5.

<sup>81</sup> Pryde, *Environmental Management*, p. 250 [from V Sbitnev and V Khody, “Timber Cutting Near Lake Baikal,” *Izvestiya*, Nov. 26, p. 6, translated in CDSP, 39 (1987), no. 47, pp. 8-9.]

<sup>82</sup> However, Jane Dawson found that the Communist Parties’ dissemination of critical resources during the early phase of Perestroika (1985-1989) shaped mobilization patterns. The groups with more politically agreeable agendas had greater opportunities, while those more radical groups did not have as many opportunities to act due to a lack of financial and human resources. She also found after 1991, those groups that received funding from foreign sources were more likely to survive than those that did not have such funding sources. See Dawson, *Eco-Nationalism*, pp. 5-7.

<sup>83</sup> Pryde, *Environmental Management*, p. 156.

<sup>84</sup> Dawson, *Eco-Nationalism*, p. 9.

<sup>85</sup> Dawson, *Eco-Nationalism*, p. 8.

<sup>86</sup> Dawson, *Eco-Nationalism*, p. 100.

<sup>87</sup> Dawson, *Eco-Nationalism*, pp. 99-101.

<sup>88</sup> In the FSU, there was little decentralized control over local projects that may impact the environment, while in states like Yugoslavia, local citizens had more of a say in local environmental affairs. One example of this is when a high school principle initiated the successful drive to drain a lake, install a water treatment system, and then stock the clean lake with fish. This type of project probably would not have happened in the FSU. Jancar, *Environmental Management*, p. 286.

<sup>89</sup> See Yok-shiu F. and So Alvin Y. Lee, "Introduction," *Asia's Environmental Movements: Comparative Perspectives*, eds. Yok-shiu F. and So Alvin Y. Lee, (Armonk, NY: M.E. Sharpe, 1999), pp. 8-15.

<sup>90</sup> Rudolf Heberle, "Types and Functions of Social Movements," *International Encyclopedia of the Social Sciences*, ed. David Sills, (New York: Macmillan and Co, 1968).

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<sup>91</sup> Ellis Krauss and Bradford Simcock, "Citizens' Movements: The Growth and Impact of Environmental Protest in Japan," *Political Opposition and Local Politics in Japan*, eds. Kurt Steiner, Ellis S. Krauss, and Scott C. Flanagan, (Princeton, NJ: Princeton University Press, 1980), p. 203.

<sup>92</sup> Krauss and Simcock, "Citizens' Movements: The Growth and Impact of Environmental Protest in Japan," p. 203.

<sup>93</sup> One of the advantages of this approach is that theories of universal phenomenon can be applied "right off the shelf."

<sup>94</sup> A good early summary of the numerous variables to influence political participation can be found in Milbrath, *Political Participation: How and Why Do People Get Involved in Politics?*, pp.24-34. For studies that look specifically at environmental factors see John W. Brooks and Charles L. Prysby, *Political Behavior and the Local Context*, (New York: Praeger Publishers, 1991); Gregory A. Caldeira and Samuel C. Patterson, "Contextual Influences on Participation in U.S. State Legislative Elections," *Legislative Studies Quarterly*, no. 7 (1982); Phillips Cutright, "Measuring the Impact of Local Party Activity on the General Election Vote," *Public Opinion Quarterly*, no. 27 (1963); Phillips Cutright and Peter H. Rossi, "Grass Roots Politicians and the Vote," *American Sociological Review*, no. 23 (1958); Robert Huckfeldt, "Political Participation and Neighborhood Social Context," *American Journal of Political Science*, no. 23 (1974); Robert Huckfeldt and John Sprague, "Citizens, Contexts, and Politics," *Political Science: The State of the Discipline II*, ed. A. Finifter, (Washington D.C: American Political Science Association, 1993); Peter K. Eisinger, "The Conditions of Protest Behavior in American Cities," *American Political Science Review*, no. 67 (1973); Gregg Lee Carter, "The 1960s Black Riots Revisited: City Level Explanations of Their Severity," *Sociological Inquiry*, no. 56 (1986).

<sup>95</sup> Just a few examples of the available literature include: David Butler and Donald Stokes, *Political Change in Britain: The Evolution of Electoral Choice*, (New York: St. Martin's Press, 1974); Gerald C. Jr. Wright, "Contextual Models of Electoral Behavior: The Southern Wallace Vote," *American Political Science Review*, no. 71; Lawrence Bobo and Frank Gilliam, "Race, Sociopolitical Participation and Black Empowerment," *American Political Science Review*, (1990); Robert Edwards Lane, "Political Life: Why People Get Involved in Politics," (Glencoe: The Free Press; Sidney Verba and Norman Nie, *Participation in America: Social Equality and Political Democracy*, (New York: Harper & Row, 1972); and Gabriel A. Almond and Sidney Verba, *The Civic Culture*, (California and London: Sage Publications, 1989).

<sup>96</sup> Verba, Norman H. Nie, and Jae-On Kim, *Participation and Political Equality*, p. 52.

<sup>97</sup> Eisinger, "The Conditions of Protest Behavior in American Cities." and Carter, "The 1960s Black Riots Revisited: City Level Explanations of Their Severity."

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<sup>98</sup> Shi, *Political Participation In Beijing*, pp. 8-21.

<sup>99</sup> Shi, *Political Participation In Beijing*, pp. 8-21.

<sup>100</sup> Tilly, *From Mobilization to Revolution*.

<sup>101</sup> Doug McAdam, *Political Process and the Development of Black Insurgency 1930-1970*, (Chicago: University of Chicago Press, 1982); Kitschelt, "Political Opportunity Structures and Political Protest: Anti-Nuclear Movements in Four Democracies;" and McAdam, McCarthy, and Zald, *Comparative Perspectives on Social Movements*.

<sup>102</sup> McAdam, McCarthy, and Zald, *Comparative Perspectives on Social Movements*. p. 3.

<sup>103</sup> Kitschelt, "Political Opportunity Structures and Political Protest: Anti-Nuclear Movements in Four Democracies," p. 76. Specific dimensions of the political opportunity structure include the relative openness or closure of the institutionalized and informal political system, "the stability of that broad set of elite alignments that typically undergird a polity," "the presence of elite allies," "the state's capacity and propensity for repression;" and other forces in the environment that influence the group's assertion of its political claims. See McAdam, McCarthy, and Zald, *Comparative Perspectives on Social Movements*, p. 10 and Brockett, "The Structure of Political Opportunities and Peasant Mobilization in Central America."

<sup>104</sup> Jack A. Goldstone and Charles Tilly, "Threat (and Opportunity): Popular Action and State Response in the Dynamics of Contentious Action," *Silence and Voice in the Study of Contentious Politics*, Ronald R. Aminzade, Jack A. Goldstone, Doug McAdam, Elizabeth J. Perry, William H. Jr. Sewell, Sidney Tarrow, and Charles Tilly, (Cambridge and New York: Cambridge University Press, 2001), pp. 179-180.

<sup>105</sup> Tarrow, *Power in Movement*, p. 20.

<sup>106</sup> For a detailed discussion on the relationship between democratization and the development of Taiwan's environmental movement, see Tang and Tang Ching-Ping, "Democratization and the Environment: Entrepreneurial Politics and Interest Representation in Taiwan," pp. 350-366.

<sup>107</sup> Lee, "Conclusion," p. 290.

<sup>108</sup> Lee, "Introduction," p. 13.

<sup>109</sup> Lee, "Introduction," p. 5.

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<sup>110</sup> However, as Robert Weller points out, environmental protests were occurring during more repressive periods in Taiwan's history.

<sup>111</sup> Again, framing an issue refers to the process of interpreting an issue, making it meaningful, which enables individuals to identify with that issue; frames work to "organize experience and guide action" of individuals and collectives. For more on issue framing see David A. Snow and Robert D. Benford, "Ideology, Frame Resonance, and Participant Mobilization," *International Social Movement Research*, Bert Klandermans, Hanspeter Kriesi, and Sidney Tarrow, (Greenwich, Connecticut: Jai Press, 1988), pp. 197-204.

<sup>112</sup> David Kaimowitz, "Social Pressure for Environmental Reform," *Green Guerrillas*, ed. Helen Collinson, (New York: Monthly Review Press, 1996) and Steven R. Brechin and Willett Kempton, "Global Environmentalism: A Challenge to the Postmaterialism Thesis?," *Social Science Quarterly* 75, no. 2 (1994).

<sup>113</sup> Douglas Webster "The Rise of the Urban Middle Income Group: Implications for Reversal of Urban Environmental Degradation in ASEAN Cities" (Bangkok: Natural Resources Program, Asian Institute of Technology; Philip Hirsch, "Where are the Roots of Thai Environmentalism?," *TEI Quarterly Environment Journal* 2.

<sup>114</sup> Lee, "Conclusion," p. 293.

<sup>115</sup> Steve Breyman, "Knowledge as Power: Ecology Movements and Global Environmental Problems," *The State and Social Power in Global Environmental Politics*, eds. Ronnie Lipschutz and Ken Conca, (New York: Columbia University Press, 1993), p. 147.

<sup>116</sup> Lee, "Introduction," p. 12.

<sup>117</sup> Lee, "Introduction," p. 24.

<sup>118</sup> Weller, *Alternate Civilities: Democracy and Culture in China and Taiwan*, p. 115, 121.

<sup>119</sup> Tarrow, *Power in Movement*, p. 174 (from Costain and Freeman).

<sup>120</sup> Interview #4, Fall 1999.

<sup>121</sup> Dieter Rucht, "The Quadruple "A": Media Strategies of Protest Movements Since the 1960s," *New Media, Citizens and Social Movements*, eds. Wim van den Donk, Brian D. Loader, Paul G. Nixon, and Dieter Rucht, (London: Routledge , (forthcoming).

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<sup>122</sup> “Li Chun Fayangao Zai 6.5 Huanbao Yu Gongzhong Canyu Yantaohui,” Ziran Zhiyou Tongxun No. 2, February 2001, p. 23.

<sup>123</sup> Snow and Benford, "Ideology, Frame Resonance, and Participant Mobilization."

<sup>124</sup> Wen, "Greening the Chinese Media."

<sup>125</sup> Andrew Walder, *Communist Neo-Traditionalism*, (Berkeley, LA: University of California Press, 1986).

<sup>126</sup> One's work unit, or *danwei*, usually refers to the place where a person works, studies, conducts research etc. A unit is not an independent organization, it is the lowest level of the state apparatus (in state companies or organizations) A person receives a salary, obtains housing, health care, schooling for children, and coupons for cloths, food, and furniture through the work unit. The *danwei* administers the birth-control program, mediates marriage disputes, and provides pensions and burial funds. When a person wants to get married, get a divorce, move, or change jobs they must get the *danwei*'s permission. People also look to their unit for recreation opportunities. Andrew Walder beautifully outlines the concept of “organized dependence,” which refers to the “extent to which, and ways in which, workers are dependent economically on their enterprises, politically on the party and management, and personally on supervisors.” These dependency structures make it very difficult for citizens to work full time at an autonomous social organization, unless it is also their work unit. Even if funding is obtained from a foundation from abroad for a couple of projects not sanctioned by the work unit, other survival needs would not be met, such as a housing allotment. A person would have to quit their work unit, to be available to work at an “unofficial” social organization full time, but in doing so, they would have to give up their housing and all of the other benefits. Brettell, "Environmental Non-governmental Organizations in the People's Republic of China: Innocents in a Co-opted Environmental Movement?"

<sup>127</sup> This is not to imply that one individual or group determines the framing of environmental issues in the media. How environmental issues make into the media limelight is undoubtedly a political process, but the fact that the government still owns most media sources limits the opportunities of nongovernmental actors to frame environmental issues in the media.

## Chapter Three

### Environmental Disputes: Contentious Politics and Citizen Access to Justice

Environmental disputes over industrial pollution have been a fact of life in China since industrial factories were hastily built during the Great Leap Forward in 1958 and cities and towns became industrial centers in the late 1960s and early 1970s.<sup>1</sup> However, citizen protests against environmental harms occurred even before widespread industrialization took place.<sup>2</sup> Since the 1970s, the numbers of disputes have been increasing.<sup>3</sup> Some disputes reach high-levels of violence; others involve simpler low-level clashes or fist fights, while others are not violent at all.<sup>4</sup> Chinese authorities have reason to be concerned about rising citizen anti-pollution protests. Such protests formed the supporting pillars of environmental movements in Japan, China, and South Korea. Chinese leaders recognize that left unmanaged, this rising tide of contention represents a threat to social stability.<sup>5</sup>

However, while the overall number of disputes has risen in China, these local instances of collective action and protest remain isolated and relatively unorganized. Added together, these anti-pollution disputes could be construed as an anti-pollution movement, but this would be pushing the definition of a social movement.<sup>6</sup> Sid Tarrow points out that many subjects in contentious politics do not reduce to classical social movements. In China, citizen protests may be better understood as instances of protest and contentious politics. Contentious politics is defined as “public, collective, episodic interactions among makers of claims when a) at least some of the interaction adopts non-institutional forms, b) at least one government is a claimant, an object or

claims, or a party to the claims, and c) the claims would, if realized, affect the interests of at least one of the claimants.”<sup>7</sup>

The primary reasons why a traditional anti pollution movement, similar to Taiwan’s or South Korea’s, has not yet developed include clear political openings, legal barriers; the “ideology” of economic reforms;<sup>8</sup> the strict nature of state social controls, especially the limitations on media coverage in the state-run media; the paucity of linkages between victims of pollution and potential “social movement organizations,” such as Chinese environmental social organizations; and the state’s efforts to contain and prevent disputes.

This chapter will show that disputes are handled with more sophistication now than they were in the late 1970s<sup>9</sup> and that the evolution of pollution dispute resolution processes are due to broader legal, social, and political changes in China. While authorities have become more responsive to citizen grievances and dispute resolution has improved over time, there are still many problems with relevant laws, institutions, and processes.

The chapter begins with an illustrative case of environmental disputes in the late 1970s. It then outlines the sources of environmental rights, the laws and institutions involved in dispute resolution and well as some of the important legal details of dispute resolution.

Then the chapter provides the results of a rough quantitative analysis of one hundred and forty five air and water pollution disputes. Data on the disputes was found in four casebooks which are described in appendix B. Data collected on each dispute includes the type of case, the year the dispute started and the year it ended; the

industry involve; whether it took place in a rural or urban setting; if it involved an accident or not; the number of channels the victims of pollution utilized to resolve their problem; whether there was violence involved; the losses caused by the pollution; the amount of compensation paid to the victims; and the amount of fines paid to the authorities.

Throughout the chapter, specific stories of environmental dispute cases that occurred at different times in the PRC are illustrated as examples. Some of these cases suggest dispute resolution processes have become more sophisticated and institutionalized, primarily because of the development of China's legal system and the establishment of legislation, such as the Administrative Litigation Law in 1990, the Civil Litigation Law in 1991, and the Criminal Law in 1997. In addition, resolution processes have become more rational because of the use of scientific principles in understanding cause and effect relationships between pollution and alleged harms. Science, however, has not become the objective harbinger of truth to these processes. Science has been "politicized" in environmental policy and court processes in China, just as it has in other countries.<sup>10</sup>

Other cases illustrate problems in the dispute resolution systems and the wide gap between "ideal" dispute resolution and the "nightmare" of non-resolution. Simply put, not all disputes are resolved and China has some way to go before its citizens have unfettered access to justice. While dispute resolution in China is not perfect, disputes do sometimes have a positive impact on policy and project outcomes. This chapter concludes with a discussion of the conditions under which disputes, and different dispute methods, make a difference in case and environmental outcomes.

## Protecting one's Environmental Rights as a Counterrevolutionary Crime

In the spring of 1973, a phosphate fertilizer factory located in XX County went into operation. The factory did not operate in accordance with the “three simultaneous” policy and therefore, in the course of production, the factory emitted large amounts of hazardous air pollutants and effluent. Pollutants emitted included hydrogen sulfide and excessive amounts of sulfur dioxide. Nearby farm fields of a Production Brigade of Dalian Commune were seriously polluted. That autumn, 200 mu<sup>11</sup> farmed by the Brigade were un-harvestable. Yields on an additional 300 mu were decreased by more than seven percent; and different levels of decreased yields were reported for other fields. In addition, the pollution was harmful to the health of the workers. The XX Production Brigade sent people to the factory, the commune, and the county to report the harmful situation, but each time they were turned away. Numerous attempts by the brigade cadres to report the matter to higher authorities had no effect.

In response, members of the commune roused the public's anger toward the factory. On the evening of April 8, 1978, a crowd slowly gathered at the brigade's gate and demanded that the brigade take action. That night, at the urging of the crowd, certain individuals went to the phosphate fertilizer plant and disconnected its electricity breaker in protest.

A Special Case Group of the County Party Commission apparatus announced that the actions constitute a “counter revolutionary” act of sabotage. They proceeded to capture all of the brigade militia's weapons. Two people, xx Liu, Secretary of the Brigade Party Branch and xx Zhang, Deputy Secretary and Captain of the militia, were expelled from the party. They were taken into custody and paraded around the entire county for seven days. They were separately given prison terms of three and seven years respectively. Citizens were extremely angry at the County Party Commission's decision. People from the brigade made numerous appeals and demanded redress in this wrongful case. The brigade felt that this happened because of problems between workers and farmers, which constituted a contradiction among the people. The fact that XX County Commission managed this incident as a contradiction between enemies was just not right.

The Environmental Leading Group of the State Council issued a letter to the Hebei Provincial Environmental Bureau on March 2, 1979, requesting the bureau promptly handle the XX Brigade air pollution case problem. The letter read “There is an outstanding appeal made by the Production Brigade of the Dalian Commune in XX County regarding the inappropriate ruling in a case of ‘counter revolutionary sabotage.’ In this 1973 case, protesters cut the electricity of a phosphate

fertilizer factory. In light of the current situation (post 1976), it merits rectification. We are forwarding the relevant materials about the appeal to your office. Please take this case to the proper agency to be re-investigated and appropriately ruled. Without fail, inform us of the investigation results.” The provincial environmental bureau thought it would be best to conduct an investigation of the XX brigade case as the Leading Group Suggested. Personnel from the Heibei Provincial Environmental Bureau and the Provincial Court worked jointly with the county environmental officials and the county court to organize an investigative group.

After an investigation, they found the “counter revolutionary sabotage” ruling in the case against Zhang XX and Liu XX was not appropriate. The group decided to recant the ruling and make a public announcement that Mr. Zhang and Mr. Liu had committed no crime. Both men were reinstated in the party. Because Mr. Zhang and Mr. Liu were given work points by the Production Brigade during their incarceration, Mr. Zhang was only given 300 yuan and Mr. Liu was only given 100 Yuan as compensation for their hardship. However, the group highlighted the fact that the methods used to shut down production at the factory were wrong. Thus after six years, the wrongful case of “counter revolutionary sabotage” was rectified.<sup>12</sup>

The above story is by no means unique to China in the 1970s. At the time, there were numerous environmental disputes where citizens who, after exhausting official remedies, took self-help measures to find relief. In some of the cases where citizens disrupted production, they were then imprisoned for the crimes of “disturbing social order,” “sabotaging production,” or “counterrevolutionary acts.”<sup>13</sup> Party and governmental authorities at the local level had little sympathy toward people with environmental grievances. More often than not, citizens were afraid to voice their grievances because the political climate at the time prohibited such protest, especially since industries were state owned and industrialization was for the good of the whole.<sup>14</sup> Since 1979, however, it is no longer a “counterrevolutionary crime” to defend one’s legal environmental rights in China and the plight of pollution victims has been improving ever since.

## **Sources of Environmental Rights and Development of China's Dispute Resolution Systems**

Citizens' rights and state duties toward environmental protection first emerged in the late 1970s and authorities strengthened those rights and duties in subsequent laws and regulations. The state's duty to protect the environment first appears in the 1978 version of the PRC Constitution.<sup>15</sup> While the constitution outlined the state's duties, it did not elaborate upon citizens' rights. The real breakthrough for citizens came with the 1979 Environmental Protection Law.

This law created the right to a clean environment for Chinese citizens. Provision two reads "The PRC Environmental Protection Law undertakes to rationally utilize the natural environment and control and prevent pollution and damage to the ecology so as to create a clean salubrious environment for people's life and work, protect people's health, and promote economic growth in the interest of socialist modernization." Provision five states "the State Council and its subordinate departments as well as local peoples' governments at all levels must effectively protect the environment." Provision eight gives citizens the right to legal remedies: "All citizens have the right to supervise, inform against, and accuse any departments or individuals who pollute or damage the environment; the said departments and individuals shall not resort to any retaliation." Article 17 stipulates, "no enterprise or institution that may pollute the environment may be built near living quarters in cities and towns...." While the 1979 law did not outline specific procedures to ensure environmental rights, many governmental authorities responded differently to citizen environmental grievances after the 1979 law became popularized.

One case in Wuhan illustrates the significance of the 1979 Trial Environmental Protection Law.<sup>16</sup>

This case involved a company responsible for loading coal from a pier dock onto ships in the Yangtze River. In this short transport process, the company routinely created black soot which polluted the air around the pier and beyond with dense, black smog. Local residents found the air pollution resulting from the coal dust so severe that they could not go outside nor could they open their windows, even on the hottest of Wuhan's notoriously hot days. As a result, on one unusually oppressive summer day, several residents stormed the pier and destroyed the company's loading equipment. The police responded by seizing the people involved and charging them as counterrevolutionaries for destroying production equipment. However, the local residents resisted, saying that their actions were justified under the new 1979 Environmental Protection Law. Politburo member Wan Li and then Party Chairman Hu Yaobang intervened and upheld the citizens' rights to protest against pollution-related damages and suffering.

This was one of the first cases where China's highest officials supported the right of citizens to protect their environmental rights.

Why did regime leaders write into law citizens' environmental rights and begin to treat victims of pollution differently at this time? There are a number of different contributing factors. First, Chinese scientists and leaders were just beginning to realize and accept that China was experiencing environmental pollution and degradation just like western nations and that environmental harms were real. As a result, they began to see citizen grievances in a new light. Second, the death of Mao and subsequent de-politicization of Chinese society allowed for broader participation in the law making process giving those with expertise in environmental protection a chance to be heard. People put in prison were freed thanks to the "rectification" campaigns initiated by Deng Xiaoping that helped to right the wrongs perpetuated during the Cultural

Revolution.<sup>17</sup> Third, environmental movements in Japan and America in the late 1960s and early 1970s displayed the power of citizen protests, which drew leaders attention to the possibilities of similar events in China in the future and provided another reason to become more responsive.

Thanks to the promulgation of the Trial Environmental Protection Law, by 1980, the courts in some areas were accepting environmental dispute cases and information regarding environmental harms became more widespread. For example, during the “National Environmental Protection Month” (April) the procurator, the courts, in conjunction with the EPB investigated environmental cases and released information on environmental accidents.<sup>18</sup>

From the beginning, the complex, technical nature of environmental disputes was a challenge for non-specialist judicial and mediation personnel. In the early 1980s, a Chinese scholar wrote an article in a legal journal urging the government “to establish an arbitration agency for environmental protection as quickly as possible...” This scholar’s plea for urgency was based on increasing number of clashes between “the masses” and factory owners in the late 1970s and early 1980s.<sup>19</sup> The author preferred an arbitration agency be established within the environmental protection departments, precisely because of the complex nature of environmental issues. Other scholars in China at the time argued that an independent branch of environmental law should be set up, just as there are special criminal and civil law branches. Again, the argument for establishing a specialized independent branch is that environmental disputes are inherently complex, technical, and require specialized knowledge.<sup>20</sup>

While an independent branch of environmental law was never established, authorities continued to strengthen environmental legislation and to steer dispute resolution toward administrative or other form of mediation. The 1982 Marine Environmental Protection Act suggests that people resolve environmental disputes through civil procedures: “groups and individuals who suffer from marine environmental pollution have the right to demand compensation from polluters. Affected agencies will handle the disputes as to responsibility and determine amounts of compensation. If defendants are not happy with the decision, they can resolve the issue according to the Law of Civil Procedure of the PRC, or they can bring the case directly before the People’s Court.”

In addition, in 1984 a provision was added regarding damages: “anyone who causes water pollution damage will assume the burden of damages and eliminate the damage to those groups or individuals who directly suffered the loss...”<sup>21</sup>

The 1989 Environmental Protection Law further detailed citizens’ environmental rights. Article six states “all work units and individuals have environmental protection duties and rights. They have the right to make a report, a complaint, an accusation, or charge against work units and individuals that pollute or degrade the environment.” Article 41 gives citizens the right to compensation for harm and further specifies legal remedies citizens may pursue, “units that generate a pollution hazard, are responsible for eliminating the hazard and for compensating work units or individuals who are directly harmed...” “Victims of pollution can ask environmental protection administrative organs and other supervisory organs with authority over the environment to handle disputes involving compensation. If the

accuser is not satisfied with the outcome, he/she can then file a suit in court. Citizens also may directly file a court suit.<sup>22</sup>

It is important to note that this statute also placed a statute of limitations on toxic torts. “The statute of limitations on a lawsuit on environmental pollution damages is three years, and it begins from the time that the party knows or should know about pollution damage.”<sup>23</sup>

In 1990, the State Council passed the “Regulation Regarding Administrative Reviews.” Before this law passed, enterprises would sometimes file a civil suit against the party who had won a compensation award from an EPB in order to lower the award.

The PRC Civil Law, promulgated in 1991, provides a framework of civil liability for environmental harms. Provisions 80 and 81 state that “the units which use (the land) are under a duty to manage, protect and make reasonable use (of this resource).” Article 83 provides that “...all neighbors must ... correctly conduct neighborhood relationships with respect to water supply, drainage, passage, air, and light. A person who with respect to his neighbor causes an obstruction or damage, must cease any infringement, eliminate any obstruction, and/or pay damages.” Article 98 provides that “a citizen enjoys right to life and health.” Article 124 provides that “where there is a violation of state provisions for the protection of the environment from pollution, and the pollution of the environment causes loss to another, there must be civil liability according to law.”<sup>24</sup>

The category of “environmental crimes” was not firmly established until the passage of the Solid Waste Pollution Prevention Law in 1995, and the Criminal Code

was revised in 1996. However, under the 1979 PRC Criminal Litigation Law (*Xingshi Susongfa*) a person could be found guilty of “dereliction of duty” or “criminal negligence” if that person’s action or inaction led to an accident under articles 114 and 115. The revised PRC Criminal Code (1997), Article 31, provides that if criminal behavior brings about economic losses to victims, then the criminal, in addition to serving time for the crime, is also liable to compensate the victim’s losses. Article 32 further provides that even in cases where a criminal does not serve time, he is still liable to pay compensation to victims.<sup>25</sup> Compensation, however, is not always forthcoming as will be described later in this chapter. Each of the laws mentioned codified three main types of disputes, civil, criminal, and administrative for which there are distinct channels and procedures of dispute resolution.

### **Channels of Dispute Resolution**

Despite early pleas for “specialized” channels to resolve disputes and strengthened legal protection, environmental disputes continued to be resolved by conventional means. Lester Ross found that in China in the 1980s, most environmental disputes were still handled by informal mechanisms and solutions were more likely to be determined by economic practices, social custom, and law rather than by strict definitions of liability, damages, and rights. It was not until the 1990s that channels of dispute resolution became standardized. Civil disputes are the most common form of dispute.

#### ***Civil Dispute Resolution Procedures***

“Civil disputes” occur when one “unit” or individual infringes on the environmental rights of another “unit” or individual. In civil cases, there are several

ways to resolve the problem. One, the problem can be resolved among the parties involved. Two, sometimes it is resolved when pollution victims utilize other means on their own to protect their legal rights. Three, the problem can be resolved through mediation. Four, it can be resolved by administrative measures. Five, it can be resolved by arbitration. Six, it can be resolved by filing a lawsuit.

Most disputes were and still are resolved through mediation. China developed a system of mediation very early on and mediation is typically the “first stop” for disputes. The party began to develop regulations regarding dispute mediation in the 1940s and 1950s, but the mediation system got a boost with the promulgation of the Regulations Regarding People’s Mediation Committee Organizations (*Renmin Tiaojie Weiyuanhui Zhuzhi Tiaoli*). In relation to environmental disputes, the party sees mediation system as lessening citizens’ hardships, building social unity, and ensuring social stability. It is seen to improve the relationship between factories and citizens as well as promoting both industrial and agricultural production. Finally, it is seen as a vehicle to educate citizens about environmental protection and the legal system.<sup>26</sup>

Dispute mediation occurs when both parties agree to allow a third party to become involved in the mediation process. Mediation can be divided into four broad categories, popular mediation, administrative mediation, judicial mediation, and mixed mediation.

The first category is popular mediation. In popular dispute mediation, the third party is anyone or any organization that has the right to resolve disputes, excluding organizations with administrative or judicial status. This form of mediation is used for

disputes at the village, township, and street level, private *zuofang*, disputes among individuals, and street vendors. There are three subcategories of popular dispute resolution, self-mediation, mediation through a lawyer, or people's mediation committee. In the 1970s and 1980s, a popular channel to resolve other types of disputes was also employed in environmental disputes, the peoples mediation committees. However, EPB officials complained to me in interviews that mediation through these committees rarely works. Committee members sometimes do not want to get involved in this type of dispute because of the complex and technical nature of environmental disputes.<sup>27</sup>

The second category is administrative mediation. During the late 1980s and 1990s, most environmental disputes were mediated by EPBs.<sup>28</sup> Mediation services can be requested from the Environmental Protection Bureau, the enterprises supervisory government department, or another administrative governmental bureau. EPB personnel have the specialized knowledge needed to understand the complex nature of environmental cause and effect relationships, so are in a natural position to become the main vehicle of environmental dispute resolution.

The third category is judicial mediation, which has legal authority, unlike administrative mediation. If a party files a suit, it becomes an environmental case and the People's Court may mediate the suit according to the Civil Litigation Law (*Minshi Susongfa*). Some judicial mediation cases are settled in civil court and others are settled in economic court. Disputes among individuals, between individuals and work units are settled in civil court. The main difference between judicial mediation and other types of mediation is the legal status of the document.

The fourth category is mixed mediation. This type of mediation is when two or more different work bureaus or unit organizations work together to bring about an agreement through a variety of mediation channels.

Even in the late 1980s, the environmental mediation system had several shortcomings. The system was incomplete, mediators were sometimes unprofessional, and the laws and regulations guiding mediation were meager. Three areas were targeted for improvement. 1) Buildup mediation structures at the city and county levels and provide more training and oversight from basic level People's Courts, Procurator, and environmental protection authorities. 2) Provide more training to mediators regarding environmental science, environmental law, and law in general. 3) Establish a more comprehensive regulatory framework for mediation.<sup>29</sup> Despite these deficiencies, in theory, mediation is an effective, cheap, peaceful way to resolve disputes and contributes to social unity.

While arbitration is an option, mediation is more common. Like mediation, arbitration is voluntary; all the parties need to do is find a respected third party to act as an arbitrator. The 1994 China Arbitration Law stipulates that individuals or legal persons of equal rank can use arbitration. There are few references to arbitration in environmental protection laws. An exception is the Ocean Pollution Prevention Law. The law set up a specific Ocean Affairs Arbitration Committee to which citizens may request assistance.

Evidence indicates that after failed mediation efforts, some cases did end up in the courts in the 1980s, although only a small number. Only two or three-dozen cases out of 1,600 were resolved through the courts.<sup>30</sup> Most cases involved parties who were

not happy with the compensation award or some other civil matter. It is significant that these cases helped to determine the principles of conflict resolution to be used in the future, “such as rules governing the admissibility of evidence regarding emissions.”<sup>31</sup>

In China, individuals and legal persons, such as work units, can file civil suits in court. The person or organization that files a suit must be directly harmed by the defendant’s actions (or inactions). China allows class action suits, which greatly facilitates the legal process. Plaintiffs (complaints) typically have one or more of the following demands. 1) Halting polluting activities that are causing harm; 2) entirely eliminating the harm (but not necessarily halting pollution emission; 3) diminishing the danger; 4) restoring the environment to its original condition; and 5) compensating victims for harm and losses. Victims need to be sure to file suit within the statute of limitations, which is three years as stated in the 1989 Environmental Protection Law. According to the General Principles of Civil Law (passed in 1987), a court case can last for up to twenty years, from the time that pollution was discovered. In environmental legislation, this can be important because suits sometimes take a long time to be resolved. In ordinary civil law cases, it is up to the plaintiff to prove that the defendant broke the law. The plaintiff also has to prove damages as well as prove the cause and effect between the defendant’s acts and the damages suffered by the plaintiff. In the 1980s, scholars argued that in environmental disputes, the rules of evidence should be loosened.<sup>32</sup> Finally, In 1991, the Supreme Court in the Suggestions on Several Problems in Applying the “Law of Civil Procedure of the People’s Republic of China,” Article 74, stipulated a system that assigned the burden of proof to the defendant, but only under specific conditions, should be enacted for

environmental disputes. On occasion, a single pollution incident will give rise to both criminal and civil suits. There are different procedures and rules of evidence for criminal cases.<sup>33</sup>

### ***Criminal Cases***

Criminal cases usually involve a dispute between individuals or work units and one or more enterprises, but only state judiciary bodies, such as the public security authorities, the People's Procuratorate, or the People's court, can file criminal charges. Common types of criminal cases involve land disputes, environmental accidents, and poaching. In each type of case, perpetrators must break one or more provisions of a variety of relevant laws and regulations. Criminal cases are typically more serious and often involve a pollution problem that has been causing problems for many years. Before 1997, the original PRC Criminal Code was silent regarding victim compensation. While, the court sometimes mandated that the defendant had to pay compensation to victims of pollution, most of the time, citizens had to file a separate civil suit or request mediation in order to obtain compensation. After 1997, individuals that have been harmed by the criminal acts of others are dependent upon the criminal court to assess compensation. If the court fails to do so, or if victims of pollution are not satisfied with the amount, then again, they must file a civil suit or request mediation in order to obtain compensation.<sup>34</sup>

### ***Administrative Disputes***

There are three types of administrative cases, administrative penalties, administrative reviews, and administrative court cases. Administrative penalties are one avenue for EPBs and other government bodies to enforce environmental laws and

policies. Penalties include warnings, criticism, fines, and restrictions on activities, among others. EPBs and other administrative organs may only bring a penalty against an enterprise or organization of a lower administrative level. Meaning, a city level EPB may only fine enterprises at the district and county level or below. EPBs often impose administrative penalties after routine inspections or when investigating citizen complaints.

Of special note is that until the passage of the 1989 EPL, environmental protection bureaus or offices could only fine units in violation of specific environmental laws, regulations, and standards, after it had been approved by the People's Government at the same administrative level.<sup>35</sup>

Administrative reviews and court cases occur when citizens, legal entities, or other organizations believe specific behavior of environmental protection or other governmental departments with regard to an environmental question is illegal or negligent. The party bringing up the case files a request for an administrative review with the administrative organ one level above the offender's. If the party bringing up the case is not satisfied with the administrative review, they have fifteen days to file an appeal to the court.

These three main types of disputes and related channels for resolution only came about in the 1990s. In the 1980s, disputes were divided into two categories, those resolved through administrative means and those resolved in court. Some scholars say China's provisions for managing environmental disputes are still very simple. "There are no special provisions on plaintiff qualification, evidence collection,

confirming causality, calculating damages, determining measures to stop environmental damage, and the legal assistance for poor victims of pollution.”<sup>36</sup>

While it is true that measures for dealing specifically with environmental disputes and compensation issues have not developed as fast as basic environmental legislation designed to prevent pollution, but there has been some sophistication since the 1970s. As Chinese leaders developed the legal system and created legislation, environmental dispute resolution methods became more standardized and citizens’ legal rights were strengthened. Some advancement has been made to clarify the legalities involved in disputes such as the burden of proof and the legality of utilizing self-help measures.

### **Essential Legal Details in Dispute Resolution Processes**

#### ***The Right to Environmental “Self-Defense”***

Legal scholars in China recognize that in some cases, victims of pollution can take action on their own to protect their legal rights. This occurs when the victims of pollution do not have access to the other forms of justice. This type of behavior is sometimes called “exercising one’s right to environmental self-defense.” The right to one’s “environmental self-defense” is not directly protected in Environmental Protection Laws, but “environmental self-defense can be considered an extension of the “right of self-defense” protected by the Civil and Criminal codes of law. Basically, the right of self-defense means that when one’s own, another person’s, or society’s interests and rights are violated, appropriate means may be used to defend those interests and rights.<sup>37</sup> A plea of “environmental self-defense allows individuals to take “emergency action in order to prevent a worse act from taking place.”<sup>38</sup>

To invoke the “right of self-defense” in environmental cases, several conditions must be met. One, there must be polluting behavior or environmental damage that is in violation of legal environmental laws. Two, the influence of the pollution or damages must be beyond what is considered tolerable. Three, the pollution or damaging behavior must be occurring at the time of citizen action. Four, it can only be invoked when the party in violation cannot be dissuaded from stopping the behavior and is unwilling to utilize normal channels of dispute resolution. When exercising one’s right to “environmental self-defense,” certain guidelines should be respected. One, exercising this right should be a last resort when all other channels of stopping the polluting or damaging behavior have been tried. Two, the actions taken cannot harm a third party or be directed toward anything that has nothing to do with the violator. Third, the actions taken cannot be in excess of what is absolutely necessary or cause other damages.<sup>39</sup>

### ***Burden of Proof***

Environmental disputes involve immensely technical issues, so under the best of circumstances, it is difficult to prove causality and to determine which party should be responsible for providing proof of causality. It is expensive and requires technical knowledge to undertake the needed research to discover the cause and affect relationship between pollution and economic damages or physical harm. In China, the responsibility for the burden of proof varies in criminal, administrative, and civil suits. For example, in criminal suits, the plaintiff is responsible for the burden of proof.<sup>40</sup> In civil suits, the responsibility for the burden of proof is assigned in a more complex manner.

In civil suits, assigning the burden of proof to the plaintiffs (victims of pollution) or to the defendants (polluters) was not undertaken until 1991 and since then the system is not always adhered to. In 1991, the Supreme Court in the Suggestions on Several Problems in Applying the “Law of Civil Procedure of the People’s Republic of China,” Article 74, stipulated a system that assigned the burden of proof to the defendant, but only under a specific condition; “if the defendant denies the tort claimed by the plaintiff, then it is the defendant that should assume the burden of proof.”<sup>41</sup> This means that it is then up to the defendant to prove the damages resulted from other causes than their pollution discharges. This is sometimes referred to as a “constructive” method to confirm causation. One example of a case where the defendant was asked to provide evidence that an environmental harm was caused by other sources was a water pollution case in Pizhou, Jiangsu Province.<sup>42</sup> In reality, many judges do not use the system and do not believe enterprises (usually the defendants), are able to provide proof. Therefore, in actual cases, the judge sitting on the bench decides who should be responsible for the burden of proof. It also is common for the judge or the defendant to request that the plaintiff provide evidence of causality.<sup>43</sup>

### ***Strict Liability***

The notion of “strict liability” and the rights of citizens to bring suits against governmental organizations received quite a bit of support among legal scholars in the late 1980s. The doctrine of “strict liability” or “no-fault liability” dictates that if a person is not found liable or negligent, he is still liable to pay compensation to pollution victims. Cheng Zhengkang, a Chinese legal scholar, wrote a paper exploring

an individual's rights to sue in foreign countries and advocated broader rights to sue in China. He also supported the practice of strict liability and looser evidentiary procedures. Cheng understood that the expansion of the right to sue increases the probability that polluters will abide by environmental regulations.<sup>44</sup> He called for clarification of procedures for citizens to sue government bodies for violations of environmental laws.<sup>45</sup> Cheng also called for separate laws regarding presumption of cause (in fact) for environmental suits because of the special difficulties in discerning causal pathways in environmental processes.<sup>46</sup> To some degree, Cheng got what he wished for. As described above, the burden of proof in environmental cases is partially transferred to the defendant. In addition, the principle of no-fault liability has become more widely used.

In theory, the doctrine of no-fault liability can be applied in civil cases of environmental harm. This doctrine applies to environmental disputes because of the complexities of establishing cause and effect relationships between pollution and objective harms, especially considering the level of technological development in China. In addition, the doctrine applies because there is a direct link between polluting behavior and harm to victims. Some harm is done when people have not take pollution control measures or were unaware of the possible damages that could result. Enterprises that pollute are engaged in "for profit" activities and should therefore they should be liable for the social costs of their behavior. In China, several conditions should be met in order to utilize the doctrine of no-fault liability. 1) There must be some sort of pollution or environmental degradation. 2) The objective reality of harm

should be established. 3) There should be objective evidence of the cause and effect relationship between the pollution and the alleged harms.<sup>47</sup>

Despite the development of these legal principles in practice in environmental disputes in China, each of the channels of dispute resolution still suffers from numerous problems that impede citizen access to justice.

### **Dispute Survey Results**

This section discusses the results of a rough quantitative analysis of over 125 disputes over about a thirty-year period. The results of the analysis are not generalizable to China as a whole primarily because of the nature of the data sources and because it is not clear if all information on each case was included in the case reports.

As mentioned in appendix D, which discusses the four casebooks from which most of the cases were taken, the disputes were chosen as a teaching tool for students of environmental policy. This could mean that the cases chosen were biased to show the involved EPB in a favorable light.

It is unclear if all the data on a case is included in its record. For instance, it seemed that in some cases citizens might have reacted violently but the report did not say explicitly what action they took; it only implied violence. There were many times when citizens involved in a dispute “reacted strongly” (*qianlie fanying*) or the “contradictions among the people was intense” (*chunzhong maodun feichang jianrui*) in a case or that “citizens had strong opinions” (*chunzhong yijian hendu*), or that they “made a fuss and a fight” (*dajia, chaonao*). Therefore, it is very difficult to say with any certainty the percentage of cases that involved violence.

Other categories of analysis also suffer from incomplete information. One area relates to the specific losses cataloged for a case. The reports often just say “some crops were destroyed” or “crop yields decreased” or “many fish were killed” or “people were poisoned.” Therefore it was difficult to analyze the ratio of losses to compensation given to victims of pollution. Another area relates to the number of channels citizens used to get their problem solved. Sometimes the report indicated that citizens complained to authorities at a higher administrative level without telling us if they had tried to get their problem solved at the local level first.

Overall, administrative penalty disputes were resolved within one or two years, while administrative mediation and civil suits took three or more years. A few cases took more than ten years to resolve. The industries involved in disputes are the usual suspects with the highest numbers of disputes occurring in the following industries: chemical, steel smelters and rolling plants, shipping, fertilizer, paper, power plants, mining, electroplating, gas & oil, alcohol, plastic, solvent, and pesticide industries.

The number of channels used by citizens to get their problem resolved varied from one to four, with the average being two channels. It counted as two channels if the citizens went to the EPB and to governmental, ministry, or party organizations, but only one if the EPB brought in the other actors. Most of the administrative penalty disputes involved only one or two channels, but the EPB always brought in other actors until the late 1980s. Throughout the 1980s, the government at the administrative level decided if a company should pay a fine or if other action should be taken, but upon the suggestion of EPB personnel (if such an office existed). The media did not become involved in many cases until the 1990s, although a handful of the reports

mentioned that one to two stories had run in the media or that the enterprise had been criticized in the media.

About eighty percent of the cases occurred in urban areas. Nearly all the disputes involved an accident of some type and approximately fifteen percent of those cases involved multiple accidents.

### *Administrative Resolution vs. Court Suits*

When do citizens take their complaints and administrative suits to the next level, i.e. when do they file a court suit? In reviewing cases, a number of trends become clear. Many cases appear to be instances wherein victims of pollution are awarded compensation after going through an administrative mediation process, but who are not paid by enterprises, so they turn to the courts to enforce an administrative decision. In addition, some court cases are instances when citizens are not satisfied with a government or EPB mandated compensation award, so they take the next step and gamble that they will receive a higher award through the courts. In most all cases listed in the casebooks, the compensation award citizens received was lower than the amount they requested. Many civil cases involve a polluting enterprise that signs an agreement to clean-up pollution and take steps to prevent further pollution, but fails to implement these measures. Court cases are more likely to involve situations when an environmental accident is clearly the responsibility of one or more persons, but is not severe enough to be considered a criminal case. Even in the mid-1980s one starts to see cases where the polluting enterprise that is fined or ordered to pay a certain amount of compensation, files a court suit contesting the amount it should pay. The

court began to accept these types of cases before the State Council passed the “Regulation Regarding Administrative Reviews” in 1990.

### **Problems With Dispute Resolution Systems**

While laws and regulations increasingly offer citizens legal protection against polluting behavior and have clarified dispute resolution systems, there still are numerous problems with environmental dispute resolution systems in China, problems that are not easily resolved. One of the most important problems is the lack of systematic methods to determine compensation to victims of pollution. Government intervention in court cases is still a nuisance and usually has a negative impact on victims. Courts have the power to decide if they will accept a lawsuit and have the power to split class-action suits, which provides benefits to the court, but is a tremendous burden for plaintiffs. There are numerous problems associated with the administrative mediation of civil cases. Finally, court, government, and enterprise inaction regarding citizen environmental grievances has been and continues to be a problem that can have disastrous consequences.

### ***Compensation Issues***

Systems of compensation to victims of pollution are critical to the satisfactory resolution of environmental disputes, to strengthening enforcement of environmental protection laws and politics, and to encourage social consciousness; unfortunately, however, China has not yet institutionalized such systems. Examples of victim compensation schemes in other countries demonstrate their necessity and serve as examples for China.

When polluting enterprises are liable for paying compensation to victims of pollution, it encourages them to abide by environmental laws because the costs of illegal activity become higher. Financial compensation to victims of pollution represents an acknowledgment of the negative externalities caused by pollution. Compensation internalizes these negative externalities or social costs and clarifies the true costs associated with pollution. Compensation represents the effort to bring fairness to an otherwise inequitable situation. Without compensation, the costs and benefits of economic development are out of balance. Specific individuals or units reap most of the benefits of production while others absorb most of the costs; this is a transfer of risk. When enterprise owners pay compensation to victims of pollution, it is an acknowledgement of the damages their pollution can cause to citizens and the willingness to re-introduce equity into society. This increases social cohesion and social consciousness.

Japan has one of the most institutionalized compensation systems and Chinese scholars and officials could use its system as a model for a Chinese system. In 1968, the Japanese government formally admitted that industrial pollution was causing damages to human health and in 1969, the government passed the Law for Special Measures for the Relief of the Pollution-related Patients.<sup>48</sup> A few years later, the government took even stronger steps to ensure victims of pollution were compensated. The Japanese Cabinet passed the Pollution-Related Health Damage Compensation Law in 1973, which pooled monies for polluting industries to provide for a national compensation system for certified victims of pollution.<sup>49</sup> In addition, in 1975, Japan passed the Pollution Control Public Works Cost Allocation Law, which was applied to

instances of agricultural pollution and established the framework for paying for restoration of contaminated land. Costs for restoration projects are borne by polluting enterprises according to their contribution to pollution. Through these laws, Japan has instituted the “polluter pays” principle. Payouts for compensation have been significant. By 1980, the government had certified more than 80,000 victims and paid out over eighty five billion yen (about four hundred and twenty five million U.S. dollars).<sup>50</sup>

Japanese scholars found that it would have been more economical for the government to take preventative measures toward pollution than it was to pollute first and clean up later.<sup>51</sup> However, the idea that prevention would be the least expensive option only came after the fact. While it was acknowledged that financial compensation would not bring back people’s health, which is invaluable, Japan’s compensation systems did help to ease the pain of victims of pollution and their families.

China has few formal laws and regulations guiding victim compensation. China has yet to formally codify the “polluter pays” principle, although the “spirit” of the principle was included in the 1979 Environmental Protection Law, “*shei wuran shei zhili de yuanzi*” (whom ever pollutes shall be responsible for cleanup). The 1989 EPL is more explicit about the polluter pays and compensation to victims of pollution. As previous mentioned, it stipulates: “those that cause harm to the environment are responsible for eliminating that harm and for compensating those individuals or units that are directly harmed”<sup>52</sup> There are, however, no regulations stipulating how to determine compensation to victims of pollution or that lay out how much

compensation should be forthcoming.<sup>53</sup> The EPL only stipulates that compensation should be given in accordance with the wishes of the parties involved and can be managed by the relevant environmental protection or other agency.<sup>54</sup> Indeed, in practice, the relevant EPB typically manages issues of compensation in environmental accidents and disputes, except for those that end up in formal litigation.<sup>55</sup> The revised PRC Criminal Law (1997) does stipulate that those causing economic or other losses should compensate victims, but the law does not set out a compensation scheme. In addition, criminal court judges sometimes suggest that plaintiffs take their compensation requests to civil court. In China, compensation for victims of pollution is generally considered a civil matter.<sup>56</sup> In administrative reviews and lawsuits, the National Compensation Law stipulates that when a governmental agency causes harm to individuals or legal persons, then the government is liable for compensation. The National Compensation Law is very explicit regarding when and how to calculate compensation in administrative suits.<sup>57</sup> If it is so clear in administrative law, why does civil law lag so far behind, especially considering administrative law is a much more recent development in China?

In practice, in some areas of China, there are informal guidelines available for determining compensation amounts to victims of pollution in civil mediation cases. A manual regarding administrative enforcement of environmental law edited by officials from Shanxi outlines some specific guidelines. The manual states that compensation should be given in cases of economic harm and in cases where human health was harmed. It should cover direct and indirect losses. In cases of harm to a person's health, compensation should be given to cover the costs of medicine, hospital stays,

funds to compensate for the loss of time at work, living costs, and transportation costs. In cases of death, compensation should cover any medical costs incurred before death, funeral expenses, and the cost of taking care of the decedent's family. The manual goes into more elaborate compensation schemes for determining compensation for economic losses and uses the example of fish killed by polluted effluent. In general, it suggests compensation for dead fish for 40 to 60 percent of the worth of the adult fish.<sup>58</sup> Citizens rarely ask for or receive compensation equivalent to the losses they have suffered because of pollution.<sup>59</sup>

It is important to note that, over time, the amount of compensation paid out to victims of pollution has decreased when aggregated annually at the national level. This is paradoxical because the number of disputes has increased each year (see appendix C). In 1986, polluters paid out 52,650,000 Yuan (for 128,823 disputes) in compensation and in 1990, they paid out 97,430,000 (for 131,851 disputes). In contrast, they paid out only 21,160,000 Yuan in 1999 (for 252,398 disputes). It appears as though victims of pollution are being paid less compensation over time. However, another explanation could be that the severity of the disputes has decreased which would mean that the damages caused by pollution in each dispute decreased over time, so the amount of compensation also decreased. Without a detailed analysis of damages vs. compensation for each dispute over the last ten years, it will be difficult to assess why compensation amounts have been decreasing.

One problem with the data on compensation for disputes is that it matches exactly the data on compensation for environmental accidents each year.<sup>60</sup> In theory, it is difficult to understand how these amounts could be the same. Not all disputes arise

because of environmental accidents. The amount of compensation for disputes should total more than the amount for accidents. However, the fact that the data matches may explain why the amount of compensation decreases over time. The number of accidents each year has decreased over time and numerous provinces failed to provide data on accidents after 1995.<sup>61</sup>

If absolute amounts of compensation are decreasing, despite similar damages, then citizen disputes and court cases are less likely to act as a deterrent for polluting enterprises to operate within the law. Also, disputes are less likely to influence siting choices for polluting enterprises because amounts paid out in compensation are so small that enterprises may continue to establish plants in residential areas.

A few Chinese scholars support a more stringent victims compensation system and are working to get a better system written into law. Wang Canfa, of the Center for Legal Assistance to Pollution Victims at the China University of Political Science and Law, is one such scholar. He works closely with the State Environmental Protection Administration and is currently gathering information regarding compensation laws in a large variety of countries in Asia, Europe, and North America. Wang Canfa became interested in fighting for victims' rights after he witnessed the abysmal compensation awarded to victims of pollution. It is his intention to draft workable legislation that will improve victim compensation. It will probably be some time, however, before China enacts regulations guiding victim compensation that are stringent enough to influence the implementation of environmental laws and to justly compensate victims of pollution.

### ***Government Intervention in Court Cases***

Early on in a dispute, sometimes the intervention of specific high level government or party leaders helps victims of pollution in getting attention to their problem, but once a case reaches the courts, government intervention tends to hurt the plaintiff. Often, such intervention puts a cap on compensation amounts paid out to victims of pollution.<sup>62</sup> Chinese scholars have found that the local government has a tendency to interfere in environmental lawsuits.<sup>63</sup> According to Wang Canfa, the way the court is set up in relation to local governments enables government leaders to intervene. Since local government and party leaders appoint court presidents and judges, judges are more likely to rule in such a way as to ensure their reappointment. In addition, the government controls the budgets of local courts, so the court is held hostage. Officials have been known to prohibit an EPB from divulging pollution data to lawyers and to courts. Another major reason why local governmental and party officials will interfere in pollution cases is that officials are judged primarily on if they can bring economic development and growth to an administrative area. Environmental protection achievements are secondary. In addition, polluting enterprises provide a large portion of the tax and other revenue for local governments, so officials are loath to close off these sources of revenue because of pollution.<sup>64</sup> Another possible reason for government intervention is clientelist ties between enterprises and governmental officials.

### ***Greed of the Courts: Splitting Class-Action Suits***

While Chinese law allows for class action suits, the court has the power to not accept such suits and to demand that each individual claimant file a separate suit.

Chinese scholars have found that this occurs in a large number of cases.<sup>65</sup> Wang Canfa provides several reasons why the courts have chosen to do this. First, the court can increase its revenue by requiring each individual file a separate suit with a separate filing fee. Second, judges are assessed partially by the number of suits they try, so by splitting one class action suit into many, a judge looks better on paper. Third, breaking up large groups involved in class actions suits can theoretically prevent social disruption.<sup>66</sup> Another reason why the courts divide class actions suits is to deter lawyers from taking on such suits. Splitting a class action suit into many requires a whole lot more paperwork on the part of the lawyer representing the cases.

#### ***Problems with Administrative Mediation in Civil Cases***

There are other problems specific to the administrative mediation of civil disputes. One is that administrative agencies like the EPB do not have the authority or power to enforce mediation decisions. EPB decisions do not carry the weight of law. If for example, an EPB mediated a dispute and suggested that the polluting enterprise pay compensation to victims of pollution, but the enterprise refused to pay, then the EPB could do little to compel the enterprise to fork over the award for damages. Second, from a cynical point of view, EPBs are vulnerable and highly susceptible to corruption. Victims of pollution have little recourse if the local EPB personnel in charge of mediating disputes are persuaded to rule against the complainant because they were offered a fat red envelope. In addition, an EPB does not have to accept a mediation case. Again, this puts the victim of pollution at the mercy of the particular individual or individuals in charge of mediation at a particular EPB. Alternatively, because the EPB is not completely independent from the government, the government

may pressure an EPB not to mediate a certain dispute or interfere by refusing to allow the EPB to make data on pollution available. Finally, because of the voluntary nature of administrative mediation and the difficulty in reconciling claims by victims of pollution and enterprises, the success rate of administrative mediation is relatively low and the enforcement rate is low.<sup>67</sup>

### ***Enterprise and Governmental Inaction in All Types of Cases***

In many cases, enterprise and government inaction caused victims of pollution to repeatedly voice their complaints, to take matters into their own hands, and made some pollution cases drag on for a decade or more. Government and enterprise inaction can often force citizens to take matter into their own hands. While citizens are no longer charged with counterrevolution crimes, however, it is important to note that in the 21<sup>st</sup> century, citizens still are sometimes imprisoned for protecting their environmental rights through self-help measures.<sup>68</sup> There are countless examples of pollution problems that went on for a decade or more, despite citizen pleas to the enterprise in question and relevant governmental bodies, before being resolved. One such case, the “Long-Term Pollution Problem Exacerbates A Conflict Between an Enterprise and the Community” case can be found in Appendix D. It is important to note that many disputes are never really settled and victims of pollution suffer in silence.<sup>69</sup>

### **“Ideal” Resolution vs. “Nightmare” Non-resolution**

Pursuing the resolution of a dispute using the complaint system and each of the dispute resolution channels to the utmost are expensive, time consuming, and emotionally taxing, which is why many victims suffer in silence. If citizens are willing

to fight for their rights and can somehow find the resources to pursue their grievances, then they can gain some measure of satisfaction. There are, however, cases that “fall through the cracks” and are never resolved.<sup>70</sup> In other words, some cases are resolved, but others are not. Below is just one example of a pair of cases that are similar, but one ends “ideally” and the other one ends in a “nightmare.”

### **Pollution from Old Power Plants: Similar Stories, Two Different Outcomes**

#### *The “Ideal Outcome”*

The dispute that illustrates the “ideal” case came from a casebook used to train environmental protection officials. The narrative describes in detail the events leading up to, the investigation of, and the resolution of a dispute in Pixin City of Liaoning province where water and air pollution from an old coal-fired power plant built in the 1960s proved to be harmful to the health of nearby residents and destroyed their crops.

In May of 1989, Mr. Xie, the head of a Village Committee in Pinxin city, made a formal request of the city EPB to mediate the dispute over the continuing water and air pollution problems. The plant, built in 1969, a dinosaur that should have already been decommissioned, was spewing effluent thick with ash into underwater aquifers that had long been used by nearby residents for drinking water. The residents suffered serious health problems because of the water pollution. In addition, coal ash from the huge mounds of coal used by the plant blackened everything within a certain radius. Citizens could not open their windows, even in the spring and summer, could not hang their clothes outside, or avoid ash-covered crops. Citizens suffered from silicosis and other respiratory diseases. Citizens asked for compensation for health problems (1,829,952 Yuan), and for decreased crop yields (1,167,488 Yuan) to cover the period from 1969 to 1989.

Officials from the EPB observed that residents in the nearby village used plastic sheets to cover their windows, but a thick layer of dust still formed on the panes. There was soot everywhere. The fields were nearly dry with a thick layer of soot. The EPB officials approved an investigation by officials from the Environmental Monitoring Station, who collected relevant samples of air and water pollution. Officials gathered 297 samples from 11 different wells used by

residents. Results indicated that the quality of drinking water was far below standard and contained various pollutants in excess of relevant standards. Analysis of air samples indicated that air quality was far below standard with concentrations of particles in excess of air pollution standards.

Officials gathered other types of relevant evidence from historical records regarding effluent and emissions and previous governmental decisions regarding the plant. Officials also worked with relevant personnel from various fields including agriculture, forestry, water management, and judicial organs to fully understand the economic and technical evidence.

After a thorough investigation, EPB officials worked with both parties to draft a compensation agreement. According to the agreement, it was agreed that 1,059 people had been affected by pollution as well as a total of 724 mu of orchards and crops had been harmed. Both parties agreed that the power plant should pay the village residents compensation in the amount of 195,005.48 Yuan (about 10% of the total economic losses).

Even though both parties signed the agreement, the power plant later did not pay compensation to the villagers. The EPB then issued a “Decision Disposition” stating the same contents as the earlier compensation agreement. In addition, the disposition provided that if the power plant did not wish to comply, it would have to file a suit in the People’s Court within 15 days to fight the matter.<sup>71</sup>

### *The “Nightmare”<sup>72</sup>*

A case in Taiyuan, Shanxi province has a similar beginning as the dispute in Liaoning, but it has a different outcome. A large group of farmers in Taiyuan City, Shanxi Province have been involved in an environmental dispute since the mid-1980s over air and water pollution from coal dust generated by the Number Two Thermal Power Plant, just north of the inner city.

The Taiyuan farmers claim that piles of coal dumped by power plant workers end up in a river, which eventually contaminates their crop fields. In addition, they claim that air pollution emissions have killed or damaged hundreds of mu of crops. The plant was built in the early 1960s and has been the source of pollution for decades. Since the 1970s, the farmers complained about the pollution to the city EPB and other government organizations. At one point, the authorities cleaned up the river, but the plant did not pay any compensation to the farmers.

Continuing air pollution problems raised tensions over the plant and in 1998, the farmers requested that the provincial EPB mediate the dispute. The provincial EPB tried to mediate the dispute, but the effort fell apart after the power plant refused to pay compensation to the farmers. The plant claimed it did not have the money to pay compensation. To this day, the Taiyuan Number Two Thermal Power Plant dispute remains unresolved, but the farmers continue to request help from the provincial EPB. The EPB representative says there is “*meiyou banfa*” (nothing that can be done), particularly since the plant is not a “*zhongdian*” (a priority) with the provincial government. The farmers have few options left to settle the problem through mediation or administrative means. The next step would be for them to complain to the provincial level People’s Congress or to the State Environmental Protection Bureau in Beijing. The courts offer another option, but the farmers say they do not have enough money to file a lawsuit.<sup>73</sup>

To this day, the farmers in Taiyuan have not gotten their demands met and have not mustered the resources to take their case to court. The area around the power plant continues to look like a war zone where nothing can grow and where no one has made any effort to clean up.

Given the continued rise of pollution problems in China and the numerous problems with dispute resolution processes discussed above, why do citizens rarely organize environmental protests on a wide scale to forward their common interests? One explanation could be that the authoritarian nature of the Chinese regime may prohibit widespread collective action. While it may be convenient to simply say it is the political system in China to blame, the explanation for the unorganized citizen response to pollution is more complicated. It is therefore useful to discuss the possible emergence of an anti-pollution movement in China in terms of political constraints and opportunities.

## **Citizen Disputes as the Foundation for an Anti-Pollution Movement?**

In this chapter, we are more concerned with political constraints, although the opportunities for an environmental movement to emerge in China have changed over the last twenty years. The political constraints to a wider anti-pollution movement in China are numerous.

Legal barriers exist and work to limit widespread collective action. Eligibility criteria for bringing civil suits constitute a major barrier in widening the scope of actors in China's "would be" anti-pollution movement. The eligibility criteria for bringing civil suits restricts wider public participation in asserting environmental rights. According to China's Civil Litigation Law (Article 108), only those individuals or units directly harmed are able to file suit. Individuals and organizations may only file suits to protect their own environmental rights, not the rights of citizens in general. In other words, an environmental social organization in Beijing could not file a suit on behalf of pollution victims in Guizhou. One legal scholar argues this restricts the ability of civil law to protect citizens' environmental rights.<sup>74</sup> Of note however, is that the Environmental Protection Law (EPL) provides the right of anyone to "make accusations" (*konggao*) against polluters and that the right to file suit (*qisu*) could be covered by this provision. In addition, there are provisions in the Civil Litigation Law that allow class action and "representation" suits (one legal entity can represent another in bringing suit) allow more leeway in the criteria. However, instances whereby interested third parties sue a polluting enterprise or a government agency based on the general provisions in the EPL or the Civil Litigation Law have not occurred.

Another factor that inhibits a wider anti-pollution movement is the “ideology of economic development.” Abigail Jahiel found that the economic reforms in China create a policy context prone to cripple environmental policy implementation efforts. Both the ideology and the structural characteristics of the economic reform setting have shaped the way in which environmental policy is enforced.<sup>75</sup> The belief that economic development is primary and that China should pollute first and clean up later is pervasive among the population as well as some environmental protection officials. This belief has also shaped public education toward the environment. In the early 1990s, when officials stepped up efforts to educate the general public, the content of education programs did not include information on the hazards of industrial pollution. School children are taught to pick up trash and to care about cute animals, not about the health hazards of mercury, which may be in the effluent of a nearby factory. The belief that economic development is primary inhibits collective action to halt pollution. Citizens that file a suit must first overcome this belief and the attending guilt for not supporting unfettered economic development.

The most important barrier to a “would-be” anti-pollution movement in China is state control of the media and the media’s treatment of environmental accidents and disputes. In the 1970s and 1980s, there were stories in the state run media about environmental issues, but coverage focused on tree planting and trash cleanup campaigns. There was little coverage of China’s multiple environmental ills. In the mid-1980s, the media carried stories about Greenpeace,<sup>76</sup> not because the government approved of its views toward the environment, but because Greenpeace often protested against the activities of the U.S. and other Western countries. The government wanted

to show that even U.S. citizens disapproved of the U.S. government's activities.<sup>77</sup>

State run media outlets occasionally ran stories of environmental accidents in foreign countries and educational materials highlighted the world's largest environmental accidents in other countries. News stories on environmental accidents in China, however, were rarely seen in the provincial or national media during the 1980s. Starting in the 1990s, some newspapers did cover pollution accidents, but the coverage was extremely superficial. Even into the 21<sup>st</sup> century, newspaper articles on pollution accidents are superficial. They mainly just describe how an accident occurred. They rarely follow up with stories about why the accident occurred and what was done about it. Although rare, there are some stories about pollution victims' efforts to obtain justice, but again the stories are still superficial and reporters rarely follow up on them.

A survey of university students in environmental groups showed that students could name large environmental accidents in foreign countries, but not any in China.<sup>78</sup> China's environmental accidents and disputes do not "stick in people's psyche." Part of the reason for this is the superficial exposure they receive in the media. Therefore, people cannot sympathize with victims of pollution and environmental accidents have not become unifying symbols around which collective action against pollution develops.

Another barrier to a traditional widespread anti-pollution movement in China is the paucity of linkages between victims of pollution and potential "social movement organizations," such as Chinese environmental social organizations. While The Center for Legal Assistance to Pollution Victims offers free legal advice and even takes on a

few dispute cases a year, it does not organize citizens. Its leaders do not consider the organization as a social movement organization. Another environmental social organization, Friends of Nature, occasionally publishes stories of pollution and the people that it harms, but the organization does not follow up on the stories nor does it organize citizens to support victims of pollution.

Student groups in China have not become involved in anti pollution protests for a number of reasons. They consider it a politically dangerous activity, given the state's primary goal is economic development. In addition, students would rather escape the trappings of modernity by retreating to nature, hence these groups focus on nature and biodiversity conservation.

Without the support of social movement organizations, the isolated instances of contentious politics in China will remain isolated. In Japan and Taiwan, dense social networks organized people to support victims of pollution and to support improved environmental legislation to prevent industrial pollution thereby creating an anti-pollution movement. While these instances represent the building blocks of an anti-pollution movement, they will remain as single ingredients in a proto-anti pollution movement until someone can stir them together.

The final barrier to a traditional anti-pollution movement is the fact that the Chinese state has moved to head off disputes by being more responsive to environmental grievances early on through the complaint system and by passing legislation to prevent pollution. The state has cultivated an image of a regime that is doing its best to fight the inevitable pollution associated with economic development and citizens have accepted this image.

Because of all of these barriers, it is hard to say that a traditional anti-pollution movement has emerged in China. On the other hand, it is hard to deny that the number of disputes has been increasing and that authorities have been challenged to come up with ways to manage them. Authorities have done their best to prevent disputes by establishing environmental hot lines in the major cities and by institutionalizing measures to deal with environmental complaints early on.<sup>79</sup>

### **The Sophistication and The Rationalization of Environmental Dispute Resolution Processes**

In addition to the state's efforts to create legislation to prevent pollution, and to head off disputes early through the complaint system, one of the ways in which the state has become more sophisticated in managing disputes has been the "rationalization" of dispute processes. In the late 1970s and the 1980s, science and "liability" did not play a huge role in determining the outcome of environmental disputes. The case of the phosphate fertilizer factory in Heibei, related at the beginning, of this chapter makes no mention of an investigation into the claims of environmental harm by the farmers. Nor did it outline the basis for the "burden of proof."

Questions regarding the use of scientific knowledge in dispute cases are intimately tied with the assignment of the "burden of proof" in such cases. In accordance with general understanding, typically the complainant has the responsibility to "prove" the damages suffered, the cause and effect relationship of pollution and the damages. One legal scholar points out that there are several reasons why it was more difficult to come up with the "proof" that damages were caused by

specific pollution incidents in the 1970s and 1980s. One, Chinese enterprise owners and managers may not have been aware of the potential for pollution from new advanced technology to cause harm, much less, ordinary citizens. In China in the late 1970s and 1980s, new advanced technology was used in China for the first time, mainly in china's coastal Special Economic Zones. Knowledge of the ill effects of some of this industrial technology was unknown to Chinese at the time, precluding the possibility of an ordinary citizen "proving" the cause an effect of pollution created by this technology and their physical or economic damages.<sup>80</sup> Two, specific production techniques are often protected by patents, so it is difficult for the public, which has no access to the details of production techniques, to completely understand such processes and if pollution is an effect of such processes.<sup>81</sup>

The approach taken by Chinese courts in the 1980s to alleviate problem of establishing cause and effect was to loosen ever so slightly the 'burden of proof' rules. The proof that the factory in question was indeed producing pollution as measured by the Environmental protection monitoring station and other relevant personnel and the proof of harm on the part of the complainant together were sufficient. However, the court was the entity to engage relevant "expert" personnel, not the plaintiff and the defendant. In the 1970s and 1980s, the court would typically request help from expert organizations, which would then form a single "investigative team" to examine conditions at the enterprise. The team would then come to some agreement as to the presence of pollution and the cause and effect relationship between the pollution and the harm claimed.

Civil suits that go through the courts are more likely to see a variety of “experts” weigh in on establishing “burden of proof” than those that are resolved through popular or administrative mitigation or arbitration. The 1991 Law Regarding Civil Lawsuits, Article 63 stipulates that “When The People’s Court needs to make decisions regarding specialized questions, related departments have the duty to heed the People’s Court notice to send people with professional knowledge to conduct an examination and an expert determination.”

When disputes are resolved through EPBs, authorities must act in accordance with the National Environmental Protection Administration Regulation Regarding Environmental Protection Administrative Penalties (*Guojia Huanjing Baohuju Guanyu Huanjing Baohu Xingzheng Chufa Banfa*). While potential administrative penalty cases must be investigated and then undergo a process of review and approval before a fine is levied, typically, outside experts are not engaged. However, the EPB personnel must prove the dispute meets specific conditions: that there was illegal behavior and/or harmful results, that an administrative penalty is the appropriate response, and that the EPB has the authority to impose a penalty.<sup>82</sup>

### ***Use of “Experts” and the “Politicization” of Science in Environmental Disputes***

With Deng Xiaoping’s support of Zhou Enlai’s “Four Modernizations” policy in the late 1970s, science and technology became a much more important part of China’s policy goals.<sup>83</sup> Scientists could once again practice their art. However, even during the Deng period in China, the state assumed that scientists would work according to the goals of the state, and there was a conflict between the scientific

community and the state over autonomy and intellectual pluralism in science and society. A few months after the Tiananmen incident in 1989, the party attacked the idea of pluralism in science and asserted the need for Marxism's "guiding role" over all intellectual inquiry.<sup>84</sup> Does the state's "guiding role" extend to the use of scientific knowledge? Since the court is the actor to call on "experts" to weigh in on environmental disputes heard in court, does the state's "guiding role" extend to cover scientific evidence used in court cases?

According to an examination of environmental dispute cases in the late 1970s and early 1980s, it was typical to have the court form an investigative group of representatives of relevant ministries, universities, and research institutes, which then conducts a joint investigation and makes a report to the court. As the number of more quasi-governmental research institutes begins to increase in the late 1980s, these institutes are seen increasingly often as part of these investigative groups.

By the 1990s, you begin to see a more "competitive" approach to the use of scientific evidence in court cases. Instead of one investigative team called in by the court, you begin to see other actors, such as the media, calling on "experts" to give their opinion regarding alleged damages due to pollution. One current case, which now is going through the first appeals process, involves an orchard farmer from Inner Mongolia illustrates the "politicization" of scientific evidence in the courtroom.

### **Copper Smelter Pollution in Inner Mongolia**

The farmer, Mr. Han, first called the Center for Legal Assistance for Pollution Victims (CLAPV), a relatively autonomous "social organization" (*shetuan*) that provides free legal assistance to victims of pollution, complaining that his apple and pear trees had been killed in June of 1998 because of an air pollution accident at an upwind copper refinery in Kalaxin Qi in Chifeng, Inner Mongolia. The

desulfurization equipment at the refinery broke down, but the enterprise continued production for several days, which allowed a large amount of smoke and ash emissions containing extremely high levels of sulfur dioxide, as much as 46 times the regulatory standard, to disperse over several farms and orchards in the area. The local city government ordered an investigation into the accident. The environmental monitoring station confirmed that the levels of sulfur dioxide in the refinery's emissions exceeded standards, even when the desulfurization equipment was functioning properly. The investigators confirmed acute sulfur dioxide pollution damage at two of the closest orchards. However, investigators could not confirm that the trees in Mr. Han's orchard died because of the pollution. Mr. Zhang, the managing director of the polluting enterprise, therefore refused to take responsibility for the death of Mr. Han's trees or to pay him any compensation because Mr. Han's orchard was three kilometers away from the refinery, further than any of the other affected orchards.

In December of 1998, the copper refinery restarted operations, but another sulfur dioxide pollution incident promptly closed it down again. This second accident compelled Mr. Han to contact the China Forestry Science Institute and ask resident experts to examine the orchard to find out what had really killed his trees. The resulting report supported the theory that sulfur dioxide, arsenic, and lead had caused Mr. Han's trees to die. However, Mr. Zhang still refused to take responsibility or pay compensation. Therefore, Mr. Han, with the assistance of the Center for Legal Assistance to Pollution Victims filed a lawsuit in his city's Middle People's Court.

The ensuing court battle grew in scope and became more complicated as time went on. By the time court actually convened in August of 2000, four different "expert examinations" of the damages to Mr. Han's orchard had been conducted. Two of the evaluations concluded that there was a cause and effect relationship between the pollution and the death of Mr. Han's trees.

The other two evaluations concluded that the refinery was not responsible for the damage and therefore under no obligation to compensate Mr. Han. The last evaluation, which took place two years after the initial pollution accident in July of 2000, was requested by the city's Middle People's Court and concluded that pollution had not caused the death and other damages to Mr. Han's trees. This last evaluation, conducted by the Center for Fruit and Nursery Stock Quality Supervision Tests (of the Agricultural Dept.) attributed the death of the trees to bad management, fertilizer and water deficiencies, weak trees, insect infestations, dry rot and other diseases. Largely because of this evaluation, the court ruled in favor of the defendant, Mr. Zhang. In an unusual judgment, the court ruled that Mr. Han had to pay all of the court and expert evaluation costs.

Mr. Han, with the help of CLAPV, appealed this case to the Inner Mongolian Autonomous Prefecture People's High Court. Mr. Han's lawyer claims that the middle court acted improperly by dismissing the Forestry Science Institute's expert evaluation, which held that there was a cause and effect relationship between the pollution accidents and the death of Mr. Han's trees. Also, he claims that the evaluation requested by the Middle Court, completed by the Center for Fruit and Nursery Stock Quality Supervision Tests was full of inconsistencies and that the Middle Court is biased in favor of the defendant. Among other problems, Wang Canfa pointed out that the investigators signed the report before it had been completed, that the investigators did not conduct any quantitative analysis, nor did they make inquiries into the management practices of Mr. Han. The High People's Court of Inner Mongolia accepted the case and heard it in public in January of 2001. Unfortunately, the court could not make a decision. The court initiated conciliation proceedings, but the two parties could not reach an agreement, so the court adjourned.<sup>85</sup>

In the end, the residents lost this case.<sup>86</sup>

The case does illustrate several interesting facets of Chinese environmental dispute resolution processes more generally. It is important that both parties were compelled to back up their claims with scientific evidence. Each party provided the court with scientific evidence in equal amounts. Specifically, each provided two expert evaluations. The case, however, also illustrates that science is not always the objective bringer of truth. Scientific evidence provided by each party led to different conclusions used by each "side" to bolster their positions; their power in the courtroom. Despite the "messiness" the politicization of science brings to environmental legal cases, it will force the sophistication of scientific methods at the local level. The case illustrates the expanding "monitoring" role of the media. Also important in this case, is the fact that a non-profit organization located in Beijing is involved in a local case in Inner Mongolia. It signals a strengthening of non-governmental participation in Chinese society and non-governmental oversight of

local governments; it also marks the birth of public service environmental law in China.

### **Conclusion**

To get someone to pay attention to their problem, citizens still do demonstrate against polluting enterprises, they may kidnap an enterprise owner, or cut electrical lines into the factory. These instances of protest attest to the fact that contentious politics is alive and well in the PRC.

However, a review of dispute cases at different periods indicates that citizens resorted to disruptive tactics to get their demands met only after exhausting authorized channels of complaint resolution.<sup>87</sup> While laws and regulations increasingly offer citizens legal protection against polluting behavior and have clarified dispute resolution systems, there are still numerous problems with environmental dispute resolution systems in China, which forces citizens to resort to more contentious methods.

What problems with the authorized channels of complaint resolution push citizens to utilize extra-institutional and more disruptive methods to remedy their plight? There are numerous problems. Dispute resolution processes lack systematic methods to determine compensation to victims. Government intervention in court cases is still rampant and usually has a negative impact on victims. Courts have the power to decide if they will accept a lawsuit and have the power to split class-action suits, which provides benefits to the court, but is a tremendous burden for plaintiffs. There are numerous problems associated with the administrative mediation of civil

cases. Finally, court, government, and enterprise inaction regarding citizen environmental grievances has been and continues to be a major problem.

The role of governmental officials in disputes is not always clear-cut and one sided. At times, government and party officials are guilty of inaction, which drags out pollution disputes. In addition, environmental protection and public security officials still represses direct citizen action and suppresses news stories of such action. On occasion, citizens still are imprisoned for protecting their environmental rights through self-help measures and must file an administrative suit to get out of jail. On the other hand, environmental protection and other authorities often do all they can to assist victims of pollution in getting compensation and in stopping polluting behavior. Sometimes authorities have ended up in jail for their actions to assist pollution victims.<sup>88</sup>

In China, we do see increasing numbers of isolated instances of contentious politics, but unlike China's neighbors, Japan, Taiwan, and Korea, we have not seen the emergence of an anti-pollution movement. There are several reasons for this. China's pollution victims focus not on environmental pollution per se, but on how it threatens their material interests. Citizens protest against the immediate circumstances in which they find themselves when pollution has harmed their health or their livelihood, and seek remedies for their problems. The isolated instances of contentious politics do not focus so much on the moral significance of pollution. They do not complain from a sense of unfairness or of being victimized by powerful interests. People do not complain or act in the name of social equity or environmental justice. They complain, protest, and/or sue because their personal health or material interests have been

directly harmed. Thus, victims of pollution frame pollution problems as local, isolated and in terms of their own personal interests.

Framing pollution problems in terms of personal inhibits collective action that would focus more generally on policies that affect the population as a whole. As a result, we do not see victims of pollution banding together to fight for pollution victims' rights everywhere. What we see in China are building blocks to an anti-pollution movement, but they remain isolated instances of contentious politics.

There is no guarantee that these instances of contentious politics will develop into a traditional environmental movement, because of political threats, citizens frame their actions primarily at the personal level, mobilizing structures are not "movement oriented," and the geographical distances between victims decrease communication and action opportunities. The threat of a prison term for those who band together, take matters into their own hands, and behave in a disruptive manner, even though the likelihood of such an occurrence has decreased since the early 1980s. This political threat increases the costs of collective, disruptive action. As mentioned in the previous paragraph, citizens frame pollution problems to be local, isolated problems and are not as concerned with changing the system as a whole. The mobilizing structures that sometimes help individual citizens to band together to collectively contend with enterprises or officials are often the affected work unit, residents committees or other local party organizations, and local EPBs. These structures are all linked to the state or party to some degree and must deal with the dual goals of representing victims' interests while protecting themselves from the wrath of higher-level organs or retribution from enterprises or officials on the defensive. Work unit leaders and part

secretaries at the local level might help to get residents' legal environmental demands heard, but one would not typically view them as being "movement oriented." Finally, geographical distance and the lack of communication among pollution victims from different cities make collective action difficult to mobilize. While the Internet is increasingly becoming available to most people in large cities, fewer rural dwellers have access to this tool that breaks down geographical and communication barriers.

If a movement were to emerge, it would likely speed up the progress toward establishing environmental rights and a more rational system of victim compensation. A movement would create momentum toward desired environmental protection policy goals. A movement would put pressure on authorities to expand citizen access to justice.

In the absence of the momentum a movement could potentially create, Chinese legal and environmental scholars will continue to make incremental advances in resolving the problems inherent in dispute resolution laws, institutions, and processes. At the forefront of these efforts are the scholars that work with Wang Canfa at the China University of Political Science and Law. The suggestions they have made in scholarly writings include the following. 1) Promulgate clear regulations regarding the administrative resolution of civil disputes. 2) Establish standardized procedures for administrative resolution of civil disputes for EPBs to follow. 3) Establish a high-level committee that would have the authority to hear, investigate, and mediate environmental disputes. This committee would have legal authority. It could be modeled after the Japanese national committee established in 1970. 4) Strengthen China's existing complaint process, so people to deal with their grievances at the

lowest possible level and keep them out of court, especially grievances dealing with noise pollution.<sup>89</sup>

Despite existing problems in dispute resolution laws, institutions, and procedures, sometimes, environmental disputes do make a difference. What does making a difference mean? Utilizing this channel, citizens' can make a difference through dispute outcomes. Some of these outcomes include getting a polluting enterprise moved, getting an enterprise to install pollution prevention equipment that will reduce pollution levels, getting residents moved away from a pollution problem, getting an enterprise to produce different products, and getting adequate compensation for harms. Under what conditions can citizen participation make a difference by taking matters into their hands or by utilizing environmental dispute resolution channels?

Following is a list of these conditions.

1) When the pollution problem in question is clearly illegal. When the pollution is not considered illegal by decision-makers, then victims of pollution are less likely to get their demands met.<sup>90</sup>

2) When the pollution problem is acute and visible, i.e. when there is an environmental accident. When a pollution problem is less visible and the consequences of that pollution are slow to appear, such as cancers or other diseases that only appear years after prolonged exposure, then authorities are less concerned and react more slowly.<sup>91</sup>

3) When victims of pollution are willing to go to court, authorities take their problems more seriously.<sup>92</sup>

4) When a large number of victims of pollution are involved in a dispute it makes it harder for authorities to ignore it.

5) When environmental protection and other authorities are not involved in corruption and are not on the take, citizen grievances are more likely to be resolved.

6) When activist environmental protection officials go to bat for citizens, their grievances are more likely to be addressed. When representatives of the local or National People's Congress, Chinese People's Political Consultative Congress, or State Council become involved in a dispute, it is more likely to be resolved in the favor of complainants.<sup>93</sup>

7) In some cases, moral suasion and shame tactics have made the difference in getting a pollution problem resolved. A well-placed media story has more than once been the straw that breaks the camels back, or in these cases, the polluter's back.<sup>94</sup>

8) Some evidence indicates that when victims of pollution take matters into their own hands and utilize self-help measures, which are disruptive, they can make a difference in the outcome of a dispute.<sup>95</sup>

9) When citizens are willing to accept lower rates of compensation, a dispute will be more easily resolved.<sup>96</sup>

10) The attitudes of polluting enterprise managers and owners are of critical importance.

None of these results is surprising and they are generally true everywhere, i.e. China is not unique. Despite the problems remaining in dispute processes, it is clear that when compared to the 1970s, dispute resolution processes are more rational. Dispute resolution processes have become more "rational" and institutionalized,

primarily because of the greater understanding of cause and effect relationship between pollution and apparent harms, and the increasingly “contentious” nature of the use of science in environmental court cases. Science, however, has by no means become the objective harbinger of truth to these processes. Science has been ‘politicized” in China, just as it has in other countries.

Over time, authorities have become more sophisticated in preventing and managing environmental disputes. The constitution and various environmental laws promulgated by Chinese authorities have, in theory at least, provided citizens with the right to complain about pollution, to act in their “environmental self-defense,” to file civil suits through the court system, and to receive compensation for demonstrable harms. In addition, Chinese authorities have become more sophisticated in managing disputes by trying to prevent them before they occur by instituting a complaint system.

## Endnotes to Chapter Three

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<sup>1</sup> In 1979 in Shanghai alone, 4,000 people became involved in 339 disputes with local factories and plants. These disputes caused partial shutdowns of production with a resulting 30.1 million Yuan loss in output value.

<sup>2</sup> For some examples see Mark Elvin and Ts'ui-jing Liu, *Sediments of Time: Environment and Society in Chinese History*, (Cambridge, UK: Cambridge University Press, 1998); Mark Elvin, "The Environmental Legacy of Imperial China," *Managing the Chinese Environment*, ed, Richard Louis Edmonds, (New York: Oxford University Press Inc., 1998).

<sup>3</sup> Since 1986, the National Environmental Protection Administration has recorded the number of environmental disputes. See appendix D for these statistics. However, as will be discussed in the appendix, these figures are the same as the number of complaints.

<sup>4</sup> One example of a very violent dispute occurred in Lanzhou in 1993 where two people were killed and several others were hurt. See Appendix C. Examples of disputes where citizens engaged in fistfights with other actors, usually representatives from the polluting enterprise, are "Smoke, Dust, and Noise Pollution Impact Citizens' Lives in a City in Jiangsu" and "Strange Sickness Besets Village Due to New Waste Dump in Chengdu." See appendix D for both of these dispute stories.

<sup>5</sup> *Huanjing Jiufen Fangfan Yu Chuli Shiwu Quanshu*, (*Environmental Disputes: A Practical Guide for Prevention and Management*), ed Wang Manzhuang, (Beijing, China: Zhongguo Yanshi Chubanshe, 1999).

<sup>6</sup> Again, Sidney Tarrow's definition of a social movement is used. He defines social movements as "collective challenges based on common purposes and social solidarities, in sustained interaction with elite opponents, and authorities." Tarrow, *Power in Movement*, pp. 3-4.

<sup>7</sup> Sidney Tarrow. "Silence and Voice in the Study of Contentious Politics: Introduction," in: Aminzade, Ronald R.; Goldstone, Jack A.; McAdam, Doug; Perry, Elizabeth J.; Sewell, William H. Jr.; Sidney Tarrow and Charles Tilly ed., *Silence and Voice in the Study of contentious Politics* (New York, NY: Cambridge University Press, 2001), p. 6.

<sup>8</sup> Abigail Jahiel argues that the primacy of economic development has created conditions, which can impede the implementation of environmental laws. Similarly, I believe this "ideology" of economic development also influences the consciousness of citizens in such a way as to lead people to accept the inevitability of pollution and therefore do little to stop it. Jahiel, "Policy Implementation Through Organizational

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Learning: The Case of Water Pollution Control in China's Reforming Socialist System."

<sup>9</sup> This chapter focuses on industrial pollution disputes and so does not directly address land use disputes.

<sup>10</sup> Examples include the work of Sheila Jasanoff "Concepts of Risk and Safety in Toxic Substances Regulation: A Comparison of France and the United States" (with R. Brickman), *Policy Studies Journal*, Vol. 9, pp. 394-403 (1980), reprinted in D.E. Mann, ed., *Environmental Policy Formation* (Lexington, MA: Lexington Books, 1981); "Is Science Socially Constructed -- And Can It Still Inform Public Policy?", *Science and Engineering Ethics*, Vol. 2, No. 3 (1996), pp. 263-276.

<sup>11</sup> One mu equals 1/6<sup>th</sup> of an acre (6 mu = 1 acre).

<sup>12</sup> *Huanjing Jiufen Anjian Shili*.

<sup>13</sup> *Huanjing Jiufen Anjian Shili*; Xie Zhenhua, *Zhongguo Huanjing Dianxing Anjian Yu Zhifa Tiyaoyao*, (*Survey of Enforcement and Classic Environmental Cases in China*), (Beijing, China: Zhongguo Huanjing Kexue Chubanshe; Zhao Yongkang, *Huanjing Jiufen Anli*, (*Environmental Dispute Cases*), (Beijing, China: Zhongguo Huanjing Kexue Chubanshe, 1989).

<sup>14</sup> Wang, Xu, and Liu, "A Summary of Policy and Legal Analysis on Dealing with Environmental Disputes in China," p. 3.

<sup>15</sup> Article 11 reads "The state protects the environment and natural resources, and prevents and mitigates pollution and other public harms." *Huanjing Jiufen Fangfan Yu Chuli Shiwu Quanshu*, p. 20. This statement is sometimes interpreted to mean that the sole right and responsibility for environmental protection lies with the state. Ross and Silk, *Environmental Law and Policy in the People's Republic of China*, p. 67. The 1982 PRC Constitution, article 26 provides that the "state protects and improves the environmental and ecological conditions for life, and prevents pollution and other public harms." *Zhonghua Renmin Gongheguo Xianfa*, Beijing, PRC: *Falu Chubanshe*, 1999.

<sup>16</sup> This case was reported in Jahiel, "Policy Implementation Through Organizational Learning: The Case of Water Pollution Control in China's Reforming Socialist System," pp. 355-356.

<sup>17</sup> For more information on the rectification campaign see Meisner, *Mao's China and After*.

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- <sup>18</sup> State Council Environmental Protection Leading Small Group (Guowuyuan Huanjing Baohu Lingdao Xiaozu Bangongshi) *Environmental Education in China (Zhongguo De Huanjing Xuanchuan)* (Beijing, China: China Environmental Science Publishing (Zhongguo Huanjing Kexue Chubanshe), 1992). p. 122.
- <sup>19</sup> Ross and Silk, *Environmental Law and Policy*, 1987, pp. 235-236.
- <sup>20</sup> Ross and Silk, *Environmental Law and Policy*, Ross and Silk, *Environmental Law and Policy in the People's Republic of China*, p. 239.
- <sup>21</sup> Wang, Xu, and Liu, "A Summary of Policy and Legal Analysis on Dealing with Environmental Disputes in China," p. 10.
- <sup>22</sup> Zhonghua Renmin Gongheguo Huanjing Baohufa (China Environmental Protection Law).
- <sup>23</sup> Wang, Xu, and Liu, "A Summary of Policy and Legal Analysis on Dealing with Environmental Disputes in China," p. 10.
- <sup>24</sup> Xi Wang and Robert F. Blomquist, "The Developing Environmental Law and Policy of the People's Republic of China: An Introduction and Appraisal," *Georgetown International Law Review* 5, no. 25 (1992), p. 45.
- <sup>25</sup> "Ruhe Chuli Huanjing Jiufen Zhong de Sunhai Peichang," *Zhongguo Huanjing Bao*, 7/9/85, p. 3.
- <sup>26</sup> Wang Canfa, *Huanjing Faxue Jiaocheng*, (Lectures on Environmental Law), (Beijing, China: Zhongguo Zhengfa Daxue Chubanshe, 1997), p. 153.
- <sup>27</sup> Interview #49, spring 2000.
- <sup>28</sup> Xie Zhenhua, *Zhongguo Huanjing Dianxing Anjian Yu Zhifa Tiyaoyao*, p. 181.
- <sup>29</sup> *Zhongguo Huanjing Bao*, 11/22/88, p. 3.
- <sup>30</sup> Ross and Silk, *Environmental Law and Policy*, p. 7.
- <sup>31</sup> Ross and Silk, *Environmental Law and Policy*, 1987, p. 7.
- <sup>32</sup> Ross and Silk, *Environmental Law and Policy*, 1987, p. 100-103.
- <sup>33</sup> Wang Canfa, *Huanjing Faxue Jiaocheng*.
- <sup>34</sup> Wang, "Environmental Criminal Justice in China," p. 2.

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<sup>35</sup> "Environmental Protection Law of the People's Republic of China (for Trial Implementation)," Article 32.

<sup>36</sup> Wang, Xu, and Liu, "A Summary of Policy and Legal Analysis on Dealing with Environmental Disputes in China," p. 11.

<sup>37</sup> Wang, *Huanjing Faxue Jiaocheng*, p. 159-160.

<sup>38</sup> Ross and Silk, *Environmental Law and Policy*, pp. 9-10. Ross sites the case involving the discharge of coal dust and fumes from Dock No. 41 in Wuhan as an early example of this type of case. Residents around the dock complained to wharf management and municipal port authorities about the pollution and fumes, saying they could not even hang their clothes out to dry or open their windows. Management did nothing to alleviate the problem so; the residents took matters into their own hands and sabotaged the dock. The leaders were arrested. Politburo member, Party Secretary, and Senior Vice-Premier Wan Li read an account of the incident and began an investigation. Action was taken against the polluter and the charges against the residents were dropped. Policy then enunciated "a limited right to self-defense even in cases involving the destruction of state property, an act often otherwise treated as counterrevolutionary." (From the Ministry of Urban and Rural Construction and Environmental Protection, *Environmental Work Bulletin Compendium*, Beijing: *Zhongguo Huanjing Kexue Chubanshe*, 1984, pp. 133-138.)

<sup>39</sup> Wang Canfa, *Huanjing Faxue Jiaocai*, 1997, p. 160.

<sup>40</sup> Wang Canfa, *Huanjing Faxue Jiaocheng*, p. 170.

<sup>41</sup> Wang, Xu, and Liu, "A Summary of Policy and Legal Analysis on Dealing with Environmental Disputes in China," p. 17.

<sup>42</sup> See Appendix D for this story

<sup>43</sup> Wang, Xu, and Liu, "A Summary of Policy and Legal Analysis on Dealing with Environmental Disputes in China," p. 17.

<sup>44</sup> Ross and Silk, *Environmental Law and Policy*, 1987, p. 100-103.

<sup>45</sup> Cheng said "Our environmental law has long provided that any citizen can bring an action against any governmental unit or individual for the pollution or destruction of the environment. However, because of the underdevelopment of administrative behavior, and the ill-defined responsibilities among various organizations, the question of whether citizens may sue government units for nonperformance of their duties or violation of laws with regard to environmental protection remains unresolved. Because

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this will eventually affect our country's environmental protection work, it is essential that we consider supplementing the body of administrative and environmental laws and adding corresponding regulations." See Ross and Silk, *Environmental Law and Policy*, p. 103.

<sup>46</sup> Ross and Silk, *Environmental Law and Policy*, p. 105

<sup>47</sup> "Ruhe Chuli Huanjing Jiufen Zhong de Sunhai Peichang," *Zhongguo Huanjing Bao*, 7/9/85, p. 3-4.

<sup>48</sup> This law was the result of an investigation conducted by the Ministry of Health and Welfare advisory committee that began in 1966. Originally the committee recommended that legislation establish strict liability for pollution injury and that compensation should be sought through the traditional tort system. In the end, due to political pressure from business groups and other actors, the law contained no provision for strict liability and established a separate mediation system to deal with environmental disputes. See Upham for more details regarding the mediation system. Upham, *Law and Social Change in Postwar Japan*, pp. 57-58.

<sup>49</sup> The 1973 law voided the 1969 law. The new law stipulated that to qualify for compensation, a person had to meet specific criteria and had to be certified by local medical and legal experts. See the following sources for more information on the law and its impacts. Upham, *Law and Social Change in Postwar Japan*, p. 58-59; Schreurs, *Environmental Politics in Japan, Germany, and the United States*, p. 47; Helmut Weidner, "An Administrative Compensation System for Pollution-Related Health damages," *Environmental Policy in Japan*, eds. Shigeto Tsuru and Helmut Weidner, (Berlin, Germany: Edition Sigma Rainer Bohn, 1989), p. 139.

<sup>50</sup> Upham, *Law and Social Change in Japan*, Upham, *Law and Social Change in Postwar Japan*, p. 59.

<sup>51</sup> Kazuhiro Ueta, "Some Economic Implications of Pollution Control Policy in Japan," *Brain Trust Program: Japanese Experience in Environmental Management* (Washington, D.C.: World Bank Institute and Development Bank of Japan, 2002), p. 2.

<sup>52</sup> (Zaocheng huanjing wuran weihai de, you zeren paichu weihai, bing dui zhijie shoudao de sunhai de danwei huozhe geren peichang sunshi). Also see article 41 of the Environmental Protection Law. In addition, in 1990, the State Council issued a decision that included the spirit of the "polluter pays" principle. The decision, "Guowuyuan Guanyu Jin Yi Bu Jiaqiang Huangjing Baohu Gongzuo de Jueding" (State Council Decision Concerning Strengthening Environmental Protection) states that "sheikaifa sheibaohu, sheipohuai sheihuifu, sheliyong sheibuchong." However,

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the decision mainly addresses natural resource use. Wang Canfa, *Huanjing Faxue Jiaocheng*, p. 84.

<sup>53</sup> Wang, Xu, and Liu, "A Summary of Policy and Legal Analysis on Dealing with Environmental Disputes in China," p. 11.

<sup>54</sup> Article 41 of the 1989 Environmental Protection Law.

<sup>55</sup> Wang Canfa, *Huanjing Faxue Jiaocheng*, p. 156.

<sup>56</sup> Zhiping Li, "Xingzheng Jiguan Diaochu Wuran Peichang Jiufen Shi Dui Wucuoquo Zeren Yuanzi de Shiyong," *Huanjing Jiufen Chuli*, ed, Wang Canfa, (Beijing: Zhongguo Zhengfa Daxue Chubanshe, 2002), p. 129.

<sup>57</sup> Wang Manzhan, *Huanjing Jiufen Fangfan Yu Chuli Shiwu Quanshu*, p. 722.

<sup>58</sup> Tenglu Chai and Yixian Li, *Shanxi Huanjing Xingzheng Zhifa Shouce*, (A Shanxi Environmental Administrative Enforcement Handbook), (Shanxi province, China: Shanxi Jingji Chubanshe, 1998), pp. 174—183.

<sup>59</sup> Wang, Xu, and Liu, "A Summary of Policy and Legal Analysis on Dealing with Environmental Disputes in China," p. 19.

<sup>60</sup> This really throws into question the veracity of the data on compensation for disputes, hence not much will be said about it.

<sup>61</sup> See *Huanjing Nianjian* (Environmental Yearbook) various years.

<sup>62</sup> See Wang Canfa, "A Case of Water Pollution in Pizhou, Jiangsu Province," *Studies on Environmental Pollution Disputes in East Asia: Cases From Mainland China and Taiwan*, Canfa Wang and Kezhu and Liu Min. Xu, (Tokyo: Institute of Developing Economies IDE-JETRO, 2001), p. 78.

<sup>63</sup> Wang, Xu, and Liu, "A Summary of Policy and Legal Analysis on Dealing with Environmental Disputes in China," p. 21. See Appendix D, water pollution case in Pizhou, Jiangsu Province as an example of governmental interference.

<sup>64</sup> Wang, Xu, and Liu, "A Summary of Policy and Legal Analysis on Dealing with Environmental Disputes in China," pp. 21-22.

<sup>65</sup> Wang, Xu, and Liu, "A Summary of Policy and Legal Analysis on Dealing with Environmental Disputes in China," pp. 20-21.

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<sup>66</sup> Wang, Xu, and Liu, "A Summary of Policy and Legal Analysis on Dealing with Environmental Disputes in China," pp. 20-21.

<sup>67</sup> Zheng Li, "Zhongri Gonghai Jiufen de Xingzheng Chuli Chengxu Zhi Bijiao," *Huanjing Jiufen Chuli*, ed, Wang Canfa, (Beijing: Zhongguo Zhengfa Daxue Chubanshe, 2001), p. 323.

<sup>68</sup> Wang, Xu, and Liu, "A Summary of Policy and Legal Analysis on Dealing with Environmental Disputes in China," p. 14. One example of a case in which citizens were charged with a criminal offense, which was later overturned, is the case of "Inappropriate Ruling and Rectification in the Xiang Xi Case." See Appendix D for this story.

<sup>69</sup> Wang, et al, "Environmental Performance Rating and Disclosure: China's Green-Watch Program," p. 12.

<sup>70</sup> Interview # 7, Fall 1999.

<sup>71</sup> Xie Zhenhua. *Zhongguo Huanjing Dianxing Anjian Yu Zhifa Tiyaoyao*, Xie Zhenhua, *Zhongguo Huanjing Dianxing Anjian Yu Zhifa Tiyaoyao*, pp. 185-189.

<sup>72</sup> Information regarding this case was provided in a personal interview and exact details about the investigative results regarding water and air pollution levels were not included. It could be then that the cases are not as similar as they should be to make a direct comparison. However, the author has visited the power plant in question and witnessed first hand the level of pollution in the crop fields and everything else within about a mile radius.

<sup>73</sup> Interview #47, Spring 2000

<sup>74</sup> Wang Canfa, Wang Canfa, *Huanjing Faxue Jiaocheng*, pp. 164-165.

<sup>75</sup> Jahiel, "Policy Implementation Through Organizational Learning: The Case of Water Pollution Control in China's Reforming Socialist System," pp. 351-353.

<sup>76</sup> Greenpeace is an international environmental nongovernmental organization that originated in the U.S. and is known for its aggressive investigative reporting about taboo environmental problems and sometimes-radical pro-environmental activities.

<sup>77</sup> See Wen Bo, "Greening the Chinese Media," p. 39.

<sup>78</sup> Brettell, "Environmental Non-governmental Organizations in the People's Republic of China."

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<sup>79</sup> Brettell, "Environmental Non-governmental Organizations in the People's Republic of China," pp. 27-56.

<sup>80</sup> Chinese legal scholars were aware of this in the 1980s. See Ross and Silk, *Environmental Law and Policy in the People's Republic of China*, p. 265.

<sup>81</sup> Ross and Silk, *Environmental Law and Policy*, Ross and Silk, *Environmental Law and Policy in the People's Republic of China*, p. 265.

<sup>82</sup> Wang Manzhuang, *Huanjing Jiufen Fangfan Yu Chuli Shiwu Quanshu*, p. 1556.

<sup>83</sup> Richard Suttmeier, *Science, Technology and China's Drive for Modernization*, (Stanford, CA: Hoover Institution Press, Stanford University, 1980), p. 1.

<sup>84</sup> Lyman H. Miller, *Science and Dissent in Post-Mao China*, (Seattle, OR: University of Washington Press, 1996), pp. 186-192, 236.

<sup>85</sup> Wang Canfa, "Air Pollution Damage: The Case of a Copper Smelter in Chifeng Inner Mongolia Autonomous Region," *Studies on Environmental Pollution Disputes in East Asia: Cases From Mainland China and Taiwan*, ed, Canfa Wang and Kezhu and Liu Min. Xu, (Tokyo: Institute of Developing Economies IDE-JETRO, 2001), pp. 109-125.

<sup>86</sup> Personal communication with Wang Canfa.

<sup>87</sup> Brettell, "Environmental Non-governmental Organizations in the People's Republic of China."

<sup>88</sup> The "Inappropriate Ruling and Rectification of the Xiangxi Case" is one example. See Appendix D.

<sup>89</sup> Li, "Zhongri Gonghai Jiufen de Xingzheng Chuli Chengxu Zhi Bijiao," pp. 323-325.

<sup>90</sup> As an example of this, refer to the case "A Tuoli Coal Sifting Facility is a Constant Nuisance" in appendix D.

<sup>91</sup> See the story "Cancer-Stricken Chinese Village Tries To Pierce a Wall of Silence in appendix D.

<sup>92</sup> "bu gao, bu li" (if they don't sue then ignore the case), is a common sentiment among officials. Interview # 6, Fall 1999.

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<sup>93</sup> This is especially true if national level authorities become involved in a local dispute. There are many examples of local representative or party officials taking an interest in dispute cases that go on to be resolved. One example is “Chemical Waste in Lin County.” See Appendix D.

<sup>94</sup> See the case “Lion’s Head Concrete Factory” that took place in Taiyuan in Appendix D.

<sup>95</sup> One early example of this is a case in Shanghai when dismantling phosphate removal equipment caused a pollution accident. See Appendix D for this story.

<sup>96</sup> See the case of Water Pollution in Pizhou, Jiangsu Province in Appendix D.

## Chapter Four

### Environmental Complaints: Variations in Chinese Society's Response to Rising Pollution Levels 1990-2000

The Chinese state prefers certain channels of participation to others and one such channel is the environmental complaint system (*huanjing baohu xinfang zhidu*).<sup>1</sup> Citizens file complaints (*xinfang*) for simple problems like a neighbor's smoky coal furnace to the most complex of problems, some of which have defied resolution in the courts and may involve death or total destruction of livelihoods. The complaint system is preferred over other channels of participation because it provides benefits to the state. The complaint system allows party and government leaders to channel grievances by people who might otherwise choose other less desirable paths to resolve their pollution problem such as initiating a dispute, protesting, going on strike, or other such disruptive behavior. In other words, the complaint system is used by the state to prevent environmental disputes and uncontrolled citizen protests.

It also benefits the state because it reinforces the continuation of "top-down" supervision of governmental activities. Officials utilize the complaint system to help them implement environmental laws and policies. Citizens act as the eyes and the ears of environmental officials and are the "ground troops" in the battle to get enterprises to comply with environmental laws and policies.

Citizens also prefer the complaint system compared to other less sanctioned channels of interest articulation such as initiating various forms of protest. There are specific benefits from utilizing the complaint system. As Tianjian Shi points out there are both expressive and instrumental benefits associated with making complaints.<sup>2</sup>

From an instrumental perspective, the complaint system benefits citizens because they can utilize it to try to avoid environmental harms. Expressive benefits include the satisfaction of voicing a grievance and/or the fulfillment of doing their civic duty in reporting polluters.

In addition, relatively less initiative is required of people who file complaints,<sup>3</sup> so it is easy to do, at least at the administrative level where the citizen lives. Making complaints requires relatively fewer resources than mustering a collective protest of some sort. However, the economic calculus becomes more complicated when citizens must take their complaint to higher-level authorities.

Complaining, is a relatively safe activity because the right to complain is sanctioned by authorities. While complaining is not risk free, it is less politically dangerous than confronting enterprises and authorities through more contentious means, such as striking, surrounding a factory, or disrupting production.

There is increasing evidence that local authorities are becoming responsive to complaints, leading to increased efficacy of the complaint system and increasing confidence of residents in the system. In Guangzhou, as early as 1991, local government officials addressed residents' complaints regarding street food stalls through stricter regulations. Citizen complaints regarding noise and air pollution were also addressed through strengthened enforcement efforts.<sup>4</sup> One district level official declared "higher management cares about complaints now more than they used to, so they are easier to resolve."<sup>5</sup>

There are several reasons why officials have become more responsive. First, there is greater understanding on the part of officials about the hazards and unintended

consequences of industrial pollution. Second, officials have realized the benefits that the citizen complaint system can bring to their *danwei* and environmental protection efforts. Third, there is political pressure from the top to become more responsive to citizens.

While there is greater accountability in the complaint system than in the past, it does not mean that the state as a whole is accountable to its citizens.<sup>6</sup> The state is merely becoming more responsive to citizens regarding environmental pollution. Over time, however, citizens may come to expect officials to be more responsive, even regarding other issues, and therefore demand greater and greater accountability.

The evolution of the complaint system represents a “sophistication” of state-society relations in China. Briefly, the “sophistication” of state-society relations means that they are more complex, increasingly based on rationality, and informed by experience. However, this sophistication does not mean that there has been a fundamental change in the cardinal principles guiding politics and policy in China. Deng Xiaoping established these principles in the 1982 constitution and they are 1) adherence to Marxist-Leninist-Maoist thought, 2) adherence to socialism, 3) adherence to the people’s democratic dictatorship, and 4) adherence to Communist Party (CCP) leadership.<sup>7</sup>

While the results of the quantitative survey included in this chapter show that participation in the environmental complaint system has increased at the national level over time, they also show that there is wide variation in the use of the complaint system by citizens from different provinces.

What explains the variations in citizen use of the system across location and time? This research examines two of the four main categories of variables thought to affect participation,<sup>8</sup> stimuli present in the “immediate environment,” such as catalysts in the microenvironment that can be specific to the type of participation and the type of policy in question, and “life position factors” including education, age, race, sex, etc...

Other variables, which may have an influence on variations in the numbers of complaints, including those variables related to the psychological characteristics of individuals and those of the “larger environment” including the social and political settings, or contexts, will not be examined in this research. As the quantitative element of this research seeks to get a broad overview at the national and provincial levels, the national and provincial political and legal contexts are assumed constant.<sup>9</sup>

Previous research suggests that the three most important factors to shape the public’s response to increasing pollution, given constant political and legal contexts, include two immediate or “micro” environmental variables and one “life position variable.” The micro environmental variables are the levels of “pollution density”<sup>10</sup> and the levels of citizen environmental awareness. An important “life position factor” to shape participation in general is the socioeconomic status, i.e. level of education and economic development, of citizens.<sup>11</sup>

Tianjian Shi found that levels of education are more important than economic development in determining the participation of citizens in Beijing in both voting and in making appeals. Evidence from the western literature on participation indicates that economic levels are influential factors in determining participation levels, however,

some evidence indicates that “personalized contacting” does not follow this pattern.<sup>12</sup> This research tests these patterns in the environment sector.

This chapter examines the correlation of levels of pollution, economic development, and environmental education with levels of participation in the China case. Briefly, the quantitative survey results indicate that when combined in a model, levels of pollution, economic development, and environmental awareness are significant in explaining variations in the numbers of environmental complaints across provinces and across time. The most important variable in determining participation is the level of pollution, which lends credence to grievance based models predicting higher levels of participation or the emergence of social movements occurs when citizens have a genuine grievance.<sup>13</sup> The “social density of pollution” measure is the best predictor of variations in complaints compared with several other ways to measure pollution levels.

The chapter begins by describing the development and the nature of the environmental complaint system in China, highlighting structural aspects of the system that enhance or restrict accountability. It then outlines the results of a quantitative survey that seeks to answer the core question of why there is wide variation in citizen participation in the complaint system across location and time.

### **The Development of China’s Complaint System**

The practice of filing complaints with local authorities has existed in China since ancient history. Since the founding of the People’s Republic, the complaint system, in theory, has ideally functioned to enhance relations among the party, the

government, and the people.<sup>14</sup> However, the right to complain was not enshrined in law until the passage of the 1982 constitution.

According to the Chinese constitution of 1982, “Chinese citizens have the right to criticize and make suggestions to any state organ or functionary. Citizens have the right to make to relevant state organ complaints or charges against, or exposures of, any state organ or functionary for violation of the law or dereliction of duty; but fabrication or distortion of facts for purposes of libel or false incrimination is prohibited. The state organ concerned must deal with complaints, charges or exposures made by citizens in a responsible manner after ascertaining the facts. No one may suppress such complaints, charges and exposures or retaliate against the citizens making them. Citizens who have suffered losses as a result of infringement of their civic rights by any state organ or functionary have the right to compensation in accordance with the law.”<sup>15</sup> Some ministries began to collect complaints starting in 1983, but it was more in an ad hoc manner. It was not until the 1990s, that the complaint system was seriously institutionalized.

In 1992, Chinese leaders held the first “National Complaint Working Meeting” (*diyì chuānguó xīnfāng gōngzuò huìyì*). Even by that time, however, besides the constitution, there were no major laws or regulations guiding the complaint process. The State Council “*xīnfāng tiāoli*” did not go into effect until 1996. In the early 1990s, the guiding policy principles for the complaint process were the “three services” (*sāngè fúwù*; 1) *wei dāng de zhōngxīn gōngzōu fúwù*, 2) *wei chūnzhōng fúwù*, 3) *wei língdǎo gōngzōu fúwù*).<sup>16</sup>

By 1992, Chinese bureaucrats had laid out a general framework for managing citizen complaints in all sectors, which was disseminated through literature on administrative management.<sup>17</sup> However, there were no national level laws or regulations guiding the process.

By 1992, it was stressed that each party, government, and enterprise organ should have procedures for managing citizen complaints. All of the following from the highest levels to the lowest levels are required to establish the appropriate level office to manage complaints: Central Committee of the Communist Party (Zhonggong Zhongyang); Standing Committee of the National People Congress (*Chuanguo Renda Changweihui*); the State Council (*Guowuyuan*);<sup>18</sup> Central Commission for Discipline Inspection (*Zhongyang Jilu Jiancha Wei Yuanhui*); and The Supreme People's Procuratorate (*Zuigao Renmin Jianchayuan*).

Accordingly, all party and government bodies at the national level, below these top echelon bodies, must also establish complaint offices or bureaus (or assign responsible personnel) including all of the Party, People's Congress, and State Council offices/departments, ministries, committees/commissions, banks, and administrations (*Guowuyuan bangongting, bu, wei, hang, shu*),<sup>19</sup> and directly affiliated organizations (*zhishujigou*), and units (*zhishu shiye danwei*). Finally, all Party, People's Congress and governmental bodies at the provincial, municipal, autonomous region, city, prefecture,<sup>20</sup> and county levels are to establish offices (or assign personnel) to manage complaints. It is interesting that even county party and government bodies are to have people responsible for complaints.<sup>21</sup>

Most often, the complaint office (section or personnel) is associated with the general affairs or the secretary's office of an organization. An administrative management manual from the early 1990s clearly designates which ministries are responsible for which type of complaints. Responsibility for managing complaints was clearly categorized as "professional" work.<sup>22</sup>

According to a handbook on administrative procedures published in 1992, filing complaints is a type of "mass political work" (*chunzhongxing zhengzhi gongzuo*), and so serves the party. It is an important channel of communication between citizens and party and government leaders at all levels, and so serves administrative officials. Finally, it is one way that citizens can exercise their democratic rights and supervise the work of leading officials, and so serves citizens.<sup>23</sup>

This cursory examination of the national complaint system suggests that officials developed the system slowly but, at certain periods, stronger measures were enacted to standardize, institutionalize, and regulate the system. The foundation for the right of citizens to complain was explicitly stated in the 1982 constitution, and basic policy guidelines were established by 1992, but regulations guiding the complaint process were not enacted until 1996. Officials boosted the system at these times in response to different stimuli.

In the 1980s, officials sanctioned citizen complaints to avoid the re-occurrence of policy failures such as the Great Leap Forward. In the early 1990s, institutionalization of the complaint system was a response to citizen demands for reform that culminated in the Tiananmen massacre in 1989. In the 1990s, the state

established regulatory guidelines for the complaint process and conducted location-specific surveys to assess the state of complaints.<sup>24</sup>

Of importance is that environmental protection officials developed, institutionalized, and issued regulations guiding the environmental complaint system before the national system was developed. This suggests that the environmental complaint system became a “test case” in the process of learning how to develop a national complaint system.

### **Development of the Environmental Complaint System: Laws and Regulations**

In the environmental sector, evidence indicates that nearly every province and major city has seen an increase in the numbers of complaints since the 1980s. Even relatively smaller cities, like Xuzhou, have experienced a rise. A Xuzhou Environmental Protection Bureau (EPB) official remarked that in 1980, there were about 100 complaints made annually to his office, but by 1994, there were 300.<sup>25</sup>

Several locations kept records of the numbers of environmental complaints starting in 1983, including EPBs in Beijing, Shanghai, Tianjin, Guangzhou, Chongqing, and Changchun) and one province (Sichuan).<sup>26</sup> However, there were no regulations guiding the process.

In 1988, after national administrative reforms took place and SEPA became independent of the Ministry of Construction, and under the direct jurisdiction of the State Council, it began to directly address environmental cases and complaints raised by the National People’s Congress and the Chinese People’s Consultative Congress. Before 1988, the Ministry of Construction was responsible for managing complaints.

In the late 1980s, some lower level EPBs faced with complaints drew up in-house procedures to deal with them, even though there had not yet been a directive from a higher-level authority to do so.<sup>27</sup>

In 1989, a few EPBs at the provincial and city levels established offices or “lead working groups” to handle citizen environmental complaints and establish complaint systems as “test cases.”<sup>28</sup> The responsibilities of these offices or groups were to analyze, judge, and manage environmental complaints and disputes within and among work units, within and among enterprises, between enterprises and administrative departments, between individuals and corporations, and between provinces.

In addition, in 1989, officials from the State Environmental Protection Office and other relevant personnel began drafting a regulation designed to standardize and institutionalize the environmental complaint system on a national scale. In December of 1990, the National Environmental Protection Administration (NEPA) passed the “*Huanjing Baohu Xinfang Guanli Banfa*” (Regulation Concerning the Management of Environmental Protection Complaints), which went into effect in February of 1991.

The administrative regulation outlines the bare framework of the system and stipulates the duties of EPBs at each administrative level. It includes requirements to set up a system for managing complaints and calls for each EPB to establish relevant training and exchange programs. EPBs are responsible for handling all complaints from citizens in the EPB’s administrative area and either have the EPB staff respond to the complaint or for directing citizens to the appropriate authority. In addition, EPBs must investigate cases passed on to them from higher level EPBs. EPBs are

required to cooperate with other governmental ministries to manage complaints that involve more than one agency.

Each EPB is responsible for reporting certain types of complaints to their immediate supervisory agency including those that involve more than one administrative area or have the potential to disrupt society. Officials are required to take citizen complaints seriously. If a complaint is not easily resolved or is unreasonable, officials are required to be patient and educate citizens. If citizens file an administrative or civil suit, and the court accepts the case, and the citizens continue to file complaints with the EPB, then EPB officials are no longer required to deal with the complaints.

As with the national complaint system, the environmental complaint system is a tool used to educate citizens about environmental protection and to teach citizens how to correctly utilize their “democratic rights,” to aid sector officials, and the party.<sup>29</sup> In addition, it can be inferred that Chinese leaders made these initial efforts to institutionalize the environmental complaint system in order to protect public stability and order, and maintain “social unity” by avoiding environmental disputes.

There were several problems with the complaint system in 1991. One, there were too few personnel available. Many who worked in the complaint managing offices were holding two positions concurrently, so the structural organization and mechanisms for handling complaints was incomplete. Two, the regulatory framework guiding the complaint processes was incomplete. Three, there was no provincial or national level forums within which experiences could be shared or learning could take place regarding managing complaints. Four, many officials did not take complaints

seriously, so it was difficult to bring worthwhile disputes to the attention of leaders and decision-making departments in a timely manner.<sup>30</sup> Despite the etchings of a basic regulatory framework and central level support, in the early 1990s, citizen complaints were not a priority for most EPBs. Personnel who managed complaints often had difficulty in garnering the support of office or bureau leaders for victims of pollution and it took time and pressure from above and below to compel local authorities to make them a higher priority.<sup>31</sup>

Over time, NEPA and other governmental agencies strengthened the complaint system regulatory framework. In 1992, NEPA implemented the “*Huanjing Xinfang Gongzuo Youguan Guiding*” (Rules Regarding Environment Complaint Work) to strengthen and clarify the administrative regulation passed in 1990. It also began to convene an annual National Complaint Working Meeting in 1992 so officials could share their experiences managing complaints.<sup>32</sup> These annual working meetings also served as forums to train and criticize officials on their management of environmental complaints and enforcement practices. In 1994, representatives from 10 provinces, autonomous zones, and municipalities attended the working meeting including Hebei, Jiangsu, Zhejiang, Fujian, Hubei, Hunan, Guangdong, Shandong, Sichuan, and Yunnan.<sup>33</sup>

The standardization of the complaint system proceeded haltingly and unevenly across China, but got a definite boost in 1994 when Chinese leaders drafted China’s version of Agenda 21. In 1994, in the Chinese Agenda 21,<sup>34</sup> Chinese leaders declared their commitment “to improve the system for making and investigating (environmental) complaints, and expand the public’s role in the enforcement of

sustainable development laws so as to ensure that individuals, groups and organizations with legal standing have reliable channels for participating in the enforcement process to protect their legal rights and public interests.”

Throughout the 1990s, officials have continued to standardize and improve the environmental complaint system, as well as the complaint systems in other sectors. In 1995, the State Council issued the “*Xinfang Tiaoli*” (Regulation Regarding Complaints), which went into effect in January of 1996. This regulation was relevant to all types of complaints, including environmental complaints. The State Council regulation outlined the basic rights and responsibilities of citizens as well as governmental authorities responsible for managing complaints.<sup>35</sup>

In the late 1990s, NEPA further strengthened the environmental complaint system. In 1997, NEPA passed the revised “*Huanjing Xinfang Banfa*,” (Regulation Regarding Environmental Complaints), which replaced the 1990 regulation of the same name. The regulation mirrored the State Council’s 1995 regulations in that it outlined similar rights and responsibilities both of citizens who complain and of government authorities charged with managing complaints. It mandated concrete time limits for resolving various types of complaints. It further stipulated that if a citizen “skipped” an administrative level by going over the heads of the authorities charged with managing complaints in that particular administrative area, then officials at the higher level could send the citizen back down to the lower level agency. The authorities at the higher level could also agree to manage directly the complaint if they so desired (provision 18).<sup>36</sup>

By 2001, Chinese leaders and environmental officials had strengthened the environmental complaint system by clearly indicating the rights and responsibilities of citizens who complain and the authorities charged with managing complaints. The regulations are intended to protect both the citizens that complain and the authorities that manage the complaints by outlining restricted behaviors. In theory, even local-level EPBs in remote areas should have established regulations and procedures guiding complaint processes.

Complaint regulations allow for group complaints, but seek to control collective action by the group. The regulations do this by only allowing for five people at a time to represent a group when visiting the complaint office.<sup>37</sup> While it frequently happens that more than one person files a complaint regarding one specific incident, not all of these are “group” complaints. A group complaint is when individuals get together and decide to file a complaint as a group. It is not when a number of people individually decide to call the EPB to complain. Because of this distinction, given the statistical data available, it is impossible to know just how many group complaints there are.

In conclusion, the environmental complaint system was established before the national complaint system and may have been a “test case” for development of the larger system. In 1996, the NEPA complaint office was recognized by the central government for its “outstanding” complaint work and heralded as a model for other sectors.<sup>38</sup>

The environmental complaint system is tied to the national complaint system as are systems in other sectors, but statistics on environmental complaints are kept

separately. In the *Zhongguo Tongji Nianjian* (China Statistical Yearbook), environmental complaints are either not included in the totals or are included, but belong to a larger category of complaints. There is not a separate category for environmental complaints. National, provincial, municipal, and some city EPBs must send representatives to the national annual meeting on complaints held by central level authorities and are now bound by the same laws and regulations as complaint management in other sectors.

The various regulations regarding complaints forced government ministries and other agencies to respond to citizen's environmental complaints, but they left loopholes large enough to allow arbitrary decisions on the part of authorities. Therefore, while regulations did structure some accountability into the complaint system, they also left open the possibility for arbitrary "rule by authority." Environmental protection officials took complaints more seriously than they did in 1991, but the system itself still had faults. The regulations allow officials the option to decline to investigate a complaint, which was first filed at a lower level administrative authority.

### **The Complaint System and Procedures**

The procedures for filing environmental complaints and for managing them are straightforward. If a citizen has a complaint, suggestion, criticism, or request that has anything to do with pollution or the behavior of environmental protection officials, they can write, call, or visit the environmental protection bureau in charge of that administrative area. They also may take their complaint to a number of other government or party organizations. The other authorities to which people often direct

complaints include local party organizations (resident's committees, unit representatives, or the relevant level of the party secretary's office); community leaders; local government; local People's Congress members; local People's Consultative Congress members; unit leaders; the polluting enterprise or the enterprise's supervisory agency; and newspapers, television, or other media organizations. However, these various organizations rarely directly handle environmental complaints. It is more likely that the citizen will be directed to take their complaint to the environmental protection authorities at the appropriate administrative level.

An EPB will respond to those complaints within its jurisdiction, but it can be confusing as to which bureau has jurisdiction. For example, noise pollution problems are the responsibility of the EPBs, except if the noise pollution is occurring in "public areas" in which case, the Public Security Bureau must respond to the complaint. One district-level EPB official had underlined those sentences in copies of environmental laws that enabled her to determine which bureau had jurisdiction. Determining who is responsible for a complaint can be a complex issue, and can lead to certain cases "falling through the cracks."<sup>39</sup> If there is any confusion regarding jurisdiction, a complaint is more likely to fall through the cracks and citizens' voices will be left unheard.

The status of the enterprise can make a difference in who has authority to investigate a complaint. If a complaint is against a provincial level state-owned enterprise, then a provincial level or higher EPB must investigate the complaint and assess any penalties. The city or district EPB does not really have jurisdiction over the

enterprise. A person who complains to a city EPB about a provincial enterprise will be directed to seek out the provincial level EPB.<sup>40</sup>

Citizens sometimes take complaints to authorities at a higher administrative level. There are numerous reasons why they do this. The enterprise that is the target of the complaint could be a higher-level enterprise. They could be dissatisfied with the action taken by a lower level EPB or they believe the lower level EPB is corrupt. They could decide to take their complaint to the highest level possible because they believe it will be more effective; or they could have personal connections. However, EPBs rarely handle complaints in lower level administrative areas directly. In most cases, the higher-level EPB will not look into a complaint at a lower level and will direct citizens to take their complaints to the EPB in their district or city. This can lead citizens on a wild goose chase to find the appropriate level authorities to whom to complain.

Most EPBs have similar procedures for managing complaints, although there is some variation from place to place and from one administrative level to the next.<sup>41</sup> EPB officials charged with managing complaints are usually part of the Administrative Affairs Division/Section of an EPB, but various other divisions/sections become involved in handling complaints. EPBs are equipped to take complaints 24 hours a day. Typically, during the day, staff in the Administrative Affairs Division takes care of phone calls, letters, and visitors. At night, specified EPB staff answer the phones. Many EPBs instituted a “rotation system” whereby the entire staff of an EPB would rotate taking night shifts to answer phone calls. In EPBs that instituted the rotation system, an official may have to work overtime (*zhiban*) once a

month or more. Other EPBs hired workers specifically to stay at the EPB all night to answer phones and record complaints.

After “registering” the complaint, personnel in the General Affairs Division pass the complaint on to the appropriate division, which then investigates the complaint and reports the results to the citizens who complained. For example, the Pollution Control Division or the Division of Science, Technology and Industry will investigate air and water pollution complaints. The Development and Construction Project Management Division (*kaifa ke*) investigates complaints about construction projects. The exact title of each division and the exact division of labor vary from place to place and from one administrative level to the next. In general, the higher level of the EPB, the more specialized the divisions become, meaning at the district level, a division will have a broader range of responsibilities than the corresponding division at the city level. The division that investigates the complaint also is responsible for contacting the citizens who complained if there is no immediate resolution to the problem. In some administrative areas in the late 1980s and early 1990s, the director of the EPB signed off on the complaints and assigned their management to specific divisions.

Currently, the director is only notified about problems that involve other administrative areas, are extremely serious, or are likely to cause social unrest.<sup>42</sup> Thus, one of the conditions under which complaints make officials take notice is when there is the threat of social instability.

Occasionally, the citizens who complain will wait at the polluting enterprise for the EPB investigator and will accompany them into the enterprise. Sometimes, the

resident's committee representative also will tag along. Typically, the investigator will not notify the main person responsible for complaints in the General Affairs Division regarding the outcome of a complaint, unless it cannot be resolved or there are other special conditions.

Starting around 1997, SEPA, and subsequently lower level EPBs, instituted procedural changes in order to reduce the opportunities for corruption in the complaint process. Two or more investigators are supposed to check out the complaint and if the enterprise is in violation of an environmental regulation, then the investigators must contact the Policy and Law Division at the EPB to request legal recourse or assess fines against the enterprise. It has not always been that way. Before 1997, in most areas, one person could investigate a complaint. It was not always necessary for investigators to go through the Policy and Law Division to assess fines against an enterprise. In addition, enterprises no longer pay fines or compensation directly to EPB officials. They must send such payments directly to the EPB's bank account.<sup>43</sup>

In general, complaints to EPBs from members of the media, governmental officials, NPC and CPCC representatives, and other VIPs are taken more seriously and the main person responsible for complaints in an EPB will handle these as "special cases." EPBs keep separate records for complaints they receive from the NPC and CPCC members, but do not do this for complaints they receive from local government or party agencies, work units, or ministries or offices under the State Council. Each year, the Steering Committee of the People's Congress and the Chinese People's Consultative Congress review the complaints they receive and deliberate to decide on which complaints they will follow up.<sup>44</sup> Complaints by NPC and members of the

Chinese People's Consultative Congress to EPBs are often complex and involve more than one incident. An NPC representative may ask the EPB to resolve large-scale problems or multiple problems.<sup>45</sup> It should be kept in mind that not all administrative areas are eligible to have their own People's Congress or CPCC organizations.

The timeline for investigating and resolving complaints varies according to the type and severity of the grievance. If a complaint is extremely serious and acute, say someone reports an explosion at a chemical plant, and then the person manning the phones is responsible for sending a team out to investigate the problem immediately, no matter the time of day. Otherwise, complaints are recorded and dealt with when possible, usually within one or two days. Regulations stipulate that EPB staff members must complete an initial investigation of every complaint within two days. One of the central districts in Beijing even set out a regulation that required EPB officials to go out to investigate within three hours of receiving a complaint.<sup>46</sup> Usually, a complaint is resolved within 15 days. The regulations stipulate that complaints must be resolved within 30 days and the person who complained must be notified of the results. The time limit for more complex problems is flexible. Complaints passed down from a higher administrative level do not have to be resolved for 90 days.<sup>47</sup>

Upper-level EPBs and other relevant governmental agencies supervise the complaint management work of lower-level EPBs in a variety of ways. Lower-level EPBs must file brief reports regarding complaints every three months and reports that are more detailed once a year. If lower-level EPBs do not submit required reports, then part of their funding could be withheld.<sup>48</sup> In recent years, there has been considerable emphasis placed on managing complaints at the lowest possible administrative level.

Upper-level EPBs hold training programs for complaint system staff from lower-level EPBs. Typically, if a higher-level EPB receives a large number of complaints from citizens from a lower level administrative area, the EPB will call in representatives from the lower-level EPB for “training.” The EPBs that are unable to resolve complaints at their own administrative level are often “criticized.” However, the lack of authority of EPBs impedes the hierarchical supervisory process. In some cases, provincial EPBs may not have the authority to require city EPB officials to attend training.<sup>49</sup>

At the national level, there is little or no oversight, because there is no higher-level environmental protection authority than SEPA. There was only one official working in the complaint office full time until late in the 1990s. The SEPA complaint office in Beijing receives complaint letters from all over the country. These complaints are typically those that have not been resolved at the local level, and are therefore extremely serious. However, the number of complaints directly received at the national level was not included in the total number of complaints reported in the China Environment Yearbook until the 1999 edition, making them impervious to oversight until 1998.<sup>50</sup> One official who spent time in the national level complaint office reported that no one kept track of the complaints coming in and there were “complaint letters all over the floor.” Not all complaints fell through the cracks at the national level, however; many were resolved, but usually only after a long period of time.<sup>51</sup>

Citizen access to complaint data and other information is determined by who you are. There were times that I was denied access to data at the city level and below, because I was a foreigner.<sup>52</sup> Other times, the data was freely available. Sometimes,

data from previous years was unavailable because at the time in question, the EPB was not completely independent of the *Chengjianju* or the *Chengjianwei* (Ministry or Commission of Construction, previously known as the Ministry or Commission of Urban and Rural Construction and Environmental Protection.)<sup>53</sup> Apparently, when a local EPB became independent of the *Chengjianju*, not all records were handed over or the *Chengjianju* did not keep records of environmental complaints. Sometimes, data was “lost” when a new person became responsible for complaints. Complaint data for consecutive years at the city level is difficult to find. Data can be found in the China Environment Yearbook, for selected cities, but not every year is listed. There are enormous gaps in the data from year to year. The SEPA complaint office director indicated that I would need approval from the international office of SEPA before he could talk to me; I was unable to get approval.<sup>54</sup>

### ***Topics of Citizen Grievances***

Citizens from the general population call the EPB to complain about a wide variety of issues, some of which are more easily resolved than others. In recent years, noise pollution has been the subject of the greatest number of complaints, both at the national and local levels. The complaints about air pollution have increased continually at the national and provincial levels. In contrast, the number of complaints about water pollution has declined, at least at the national level. In general, people complain about everything from annoying issues, such as their neighbor’s air conditioner being too loud, to more serious issues, such the death of livestock or crops that appears to be a result of pollution. People complain most frequently about the cement, paper, power, steel, aluminum, chemical, and fertilizer industries.<sup>55</sup>

Some complaints are resolved easily, while others are extremely difficult to resolve. Often, the inspector from the EPB will be able to immediately figure out and resolve the problem on the spot, such as varying the rate at which coal is fed into a boiler. The hardest type of complaint to resolve are those in which an enterprise is polluting within the set limits of the law, but citizens still feel as though they are being wronged and continue to complain. One official said that in these cases, after citizens contact him a couple of times, he ceases to pay attention to complaints.<sup>56</sup>

Some complaints are never resolved. For example, there is a large group of farmers in Taiyuan City, Shanxi Province that have been involved in an environmental dispute since the mid-1980s over air and water pollution from coal dust generated by the Number 2 Thermal Power Plant.<sup>57</sup> The Taiyuan farmers claim that the power plant dumped piles of coal dust next to a river, which eventually contaminated the river water and subsequently their crop fields. They also claim that air pollution emissions have killed or damaged scores of crops. For years, the farmers complained about the pollution to the city EPB and other government organizations. The authorities cleaned up the river, but the plant leaders did not pay any compensation to the farmers. Continuing air pollution problems raised tensions over the plant and in 1998, the farmers requested that the provincial EPB mediate the dispute. The provincial EPB tried to mediate the dispute, but the effort fell apart after the power plant refused to pay compensation to the farmers. The plant claimed it did not have the money to pay compensation. To this day, the Taiyuan Number 2 thermal power plant dispute remains unresolved, but the farmers continue to request help from the provincial EPB. The EPB representative says there is “*meiyou banfa*” (nothing that can be done),

particularly since the plant is not a “*zhongdian*” (a priority) with the provincial government.

For the farmers, there are few administrative options left with which to settle the problem. The next step would be for them to complain to the provincial level People’s Congress or to the State Environmental Protection Bureau in Beijing. The courts offer another option, but the farmers say they do not have enough money to file a lawsuit. As this case demonstrates, citizens often lack the understanding of the court system, hesitate to utilize the courts for cultural reasons, or lack the financial resources to sue an offending industry, so the courts are not always a feasible last resort.

### ***Weaknesses in the Complaint System***

In practice, the complaint system is far from perfect. The Taiyuan story illustrates the barriers governmental economic priorities pose for environmental protection efforts. At the local level, citizens and EPB authorities often do not have the resources or the authority to compel polluting enterprises to adhere to the “polluter pays” principle. Sometimes the only way a local area will be cleaned up is if the central government “plans” and helps to fund such a cleanup.

Beyond not being a key concern of officials, there are other factors contributing to the quandary of the Taiyuan case. Two other factors that act as barriers are the economic hardship that would be faced by the power plant if it were to compensate the citizens and the importance of the industry to the area. Economic hardship is often used as an excuse for failing to implement environmental protection measures or for refusing to provide compensation to victims of pollution. Nor could the power plant simply shut down. It provides an essential service to the community

and it would be more expensive to the city as a whole to withdraw the electricity source for other factories and homes. These and other factors will be further discussed in the chapter on environmental disputes.

One official said the common attitude was that if the citizen does not sue, it is not necessary to take the complaint seriously (“bugao, buli”).<sup>58</sup> The fact that EPB officials have dismissed citizen complaints because they do not think the citizens will sue indicates that either there is a lack of concern among EPB officials for legal infractions and/or they feel that they have no authority to resolve problems that involve other sectors of government or industry. Either way, adopting an attitude of “bugao, buli” indicates that there is not enough accountability built into the complaint system at the local level. Citizens must be willing to take their complaint to a higher level of government, which usually requires a great deal of effort on the part of the citizen. It often will take days to reach a location where the next highest level of government agency can be found. Citizens may write letters, but they have to be convincing enough to motivate higher-level authorities to take action directly, otherwise the complaint will be transferred to the EPB or other governmental organ at the lower administrative level.

The citizen complaint system can only work if citizens utilize it to its fullest and the structure of the system itself may hinder its effective use. At this point, the complaint system has insufficient citizen oversight “built in” at the local level and the oversight coming from higher-level authorities is spotty and inconsistent.

What factors explain variations in the numbers of citizen environmental complaints from one location to another? Some of the factors are specific to the sector

in question, whether it is within the environmental sector or the tax revenue sector.

Other factors consistently influence participation across sectors.

### **Participation in the Citizen Environmental Complaint System**

The sector specific and the non-sector specific factors that have some power in explaining the rise and variations in the number of environmental complaints include the following. One, pollution levels have continued to increase in most locations and more people are being affected by pollution. Two, citizen levels of environmental awareness have increased and more citizens have come to believe that pollution damages are wrong and avoidable. Three, China has experienced high levels of economic growth since the late 1970s, so in general, people have higher income levels and can turn their attention from survival needs to other issues of well-being. Four, the national level legal and political contexts<sup>59</sup> have improved. The 1979 Environmental Protection Law, and many more recent laws in the environmental and other sectors, have legitimized enforcement actions and provided more legal protection to citizens who make complaints or file law suits. The party standardized and institutionalized the complaint system and created complaint departments in both party and governmental organs, making public access to the complaint system more widespread. In addition, attitudes of many officials have changed making it more feasible for citizens to complain to authorities. This opened up more political opportunities for citizens to act and lessened citizen's fear of reprisal by the state and enterprises.

Each of these factors is thought to be associated with variations in the number of citizen environmental complaints, or use of the complaint system in general, but

there has been scant empirical evidence to support or deny these assumptions, or to tease out which of these factors is more important.

This research includes a quantitative survey exploring the correlations between the pollution density, the social density of pollution,<sup>60</sup> the annual amount of pollution times the population density, and the level of environmental awareness with the number of citizen complaints to environmental authorities in all provinces and selected cities in China for a ten-year period. For the purposes of this research, the legal and political contexts are assumed equivalent throughout China. This analysis will focus on indicators for both air and water pollution and will answer the core question of which specific factors are driving Chinese society's response to pollution.

The numbers of complaints listed in the environmental yearbook only reflect the environmental complaints that were handled by various levels of the environmental protection apparatus. All the "environmental" complaints that are made to other ministries, local governments and NPCs are not included.

### ***Pollution Problems as a Necessary Trigger***

Without a pollution problem, there is no concrete grievance about which to complain. There is evidence that environmental grievances trigger citizen action to protect the environment.<sup>61</sup> However, is it the "pollution density,"<sup>62</sup> i.e. the objective levels of increasingly severe pollution that prompts a society's response to pollution? Alternatively, is it the "social density of pollution," i.e. the sheer number of people affected by pollution that is more important in shaping a society's response? Research has shown that the social density of pollution was more important in triggering Japanese society's response to its air pollution problems.<sup>63</sup> This research will test these

assumptions in the China case. The answers to these questions should help policy-makers to determine which pollution problems are the highest priority, those with the absolute highest pollution levels or those in more densely populated areas.

The indicators for pollution levels include emissions of industrial sulfur dioxide and industrial water pollution effluent.<sup>64</sup> Because complaints are specific to a certain type of pollution, sulfur dioxide levels will be paired with citizen's complaints about air pollution, and wastewater discharge data will be paired with citizen complaints regarding water pollution. This pairing gives a more accurate measurement of the association between pollution levels and citizen complaints.

### *Do Only the Well-off Make Environmental Complaints?*

There are really two questions related to the relationship between economic well-being and filing complaints: is the demand for environmental quality depended upon income and does the practice of filing a complaint in general depend upon income levels? The former question will be addressed first. Evidence is mixed as to whether environmental quality is a luxury good and only sought after by those who have reached a certain level of economic development.<sup>65</sup>

One explanation asserts that environmental quality is a luxury good and will not be of concern to citizens who are worried about food, shelter, and economic survival. People will only begin to make environmental complaints once a certain level of economic development is reached.<sup>66</sup> In contrast, some research has found that citizens of both poor and rich nations are concerned about environmental quality.<sup>67</sup>

The evidence exploring the relationship between income levels and filing complaints more generally is also mixed. Previous research suggests that levels of

economic development will be correlated with variations in citizen participation - in this case - the demand for environmental quality.<sup>68</sup> One explanation asserts that economic development changes patterns of socialization and collective action leading to greater participation. Another explanation asserts that economic development increases the contacts between citizens and the government, which leads to greater participation - in this case, to increasing numbers of environmental complaints.

On the other hand, some scholars argue that theoretically, lower-income citizens will turn to contacting officials because it requires fewer resources and because it represents the “most clear, direct, and immediate link between action and results.”<sup>69</sup> In addition, previous research in Beijing suggests that economic status is not a significant factor in determining participation in China’s complaint system.<sup>70</sup>

There are many ways to measure economic development, but per capita gross domestic product is an appropriate measure in this research because it reflects economic differences at the level of the individual. Therefore, in this research, the indicator of economic development is per capita gross domestic product (GDP). If levels of development are correlated with a social response to pollution, then, in those provinces of China that are more developed, we should see higher numbers of complaints than in those provinces that are less developed (when controlling for pollution levels). In other words, if the decision to complain is partly based upon a citizen’s per capita GDP, and a citizen would not complain if he/she had other concerns, then only those citizens with higher per capita GDP would complain.

### *Environmental Awareness and Participation in the Complaint System*

It is logical to attribute the rise in the numbers of citizen environmental complaints to higher levels of citizen environmental awareness.<sup>71</sup> Many environmental protection officials in China believe that as environmental education programs expanded in China, citizens developed higher environmental awareness and began to participate in the environmental complaint system. Officials and many citizens believe the lack of environmental awareness is one of the main reasons for China's pollution problems. A survey conducted by SEPA in 2000 found that 67 percent of those polled thought awareness was the main problem.<sup>72</sup> While there is some logic to this reasoning, the correlation between changes in the levels of environmental awareness and changes in environmental complaints is far from clear. Primary among these is the evidence that environmental awareness and concern for the environmental do not necessarily translate into action to protect the environment.<sup>73</sup>

There are instances when citizens have a high level of environmental awareness, but will refrain from making complaints.<sup>74</sup> One study in Guangzhou showed that despite high levels of environmental concern, only 7.8 percent of those surveyed submitted an environmental complaint on one occasion and only 4.3 percent did more than once.<sup>75</sup> In addition, there are instances wherein citizens complain about a pollution problem, but may not have a high level of "environmental awareness."<sup>76</sup>

There are many ways to measure environmental awareness. Surveys at the local level that poll the population within a restricted administrative area are probably the most accurate indicator.<sup>77</sup> However, conducting this type of research on a national or provincial scale in a nation of over a billion people, where information is not easy

to obtain, is impractical given the restrictions of this study. Sufficient data on public environmental awareness within specified administrative boundaries does not yet exist. Therefore, this research uses a proxy measure of environmental awareness, exposure to environmental information through various forms of mass media including television and radio programs in a specific administrative area. Mass media is one of the major ways people in China are exposed to environmental issues.<sup>78</sup> Until the mid 1990s, there were few “unofficial” channels through which people could hear about environmental issues, except word of mouth.<sup>79</sup> The drawback of using the number of media programs as the indicator is that it does not directly measure environmental awareness; instead, it measures the *potential* of environmental awareness. An even better indicator than just a simple count of media programs is the three-year cumulative total of media programs regarding the environment. The cumulative total is a better indicator than the number of programs in just one year because it reflects the cumulative nature of knowledge acquisition and knowledge retention over time.

### **Survey Results**

The analysis of the variance in environmental complaints across China over a ten-year period revealed some very interesting patterns and relationships. This section will explore these patterns. First, it gives a general description of the overall variations in the national and provincial level data regarding environmental accidents, pollution levels, education programs and complaints. This is followed by a discussion of the correlations among the number of environmental complaints, per capita GDP,

industrial effluent and SO<sub>2</sub>, and the cumulative number of state environmental media programs in China.

### *Accidents*

There is wide variation in the data associated with environmental accidents. The total number of environmental accidents peaked somewhere between 1985 and 1990.<sup>80</sup> In 1985, there were 2,716 accidents and in 1990, there were 3,462 environmental accidents, approximately 120 of these were *teda* or *zhongda*. Each year at the national level, the number of water pollution accidents was greater than the number of air pollution accidents. Data on accidents can be seen in the table below.

**Table 4.1 Data on Accidents Aggregated at the National Level**

<b>Year</b>	<b>Accidents</b>	<b>H2O Accidents</b>	<b>Air Accidents</b>	<b>People Injured in Accidents</b>	<b>Deaths Due to Accidents</b>
<b>1989</b>					
<b>1990</b>	3,462			10,000	4
<b>1991</b>	3,038				
<b>1992</b>	2,667				
<b>1993</b>	2,761	1,431	888	1,436	12
<b>1994</b>	3,001	1,617	986	4,668	3
<b>1995</b>	1,966	1,022	732	42,765	5
<b>1996</b>	1,446	677	585	33	1
<b>1997</b>	1,992	986	752	188	1
<b>1998</b>	1,422	788	464	152	6
<b>1999</b>	1,614	888	582	261	2

The data shows a gradual decline in the number of total accidents from 1990 to 1992 and a slight increase from 1992 to 1994. The number of *zhongda* and *teda*<sup>81</sup> accidents is one of the 13 indicators used to rank the environmental performance of the 32 primary cities in China, which was first instituted in 1990.<sup>82</sup> This policy creates

an incentive for local governments to undercount the number of *zhongda* and *teda* accidents within its administrative area. However, the decrease in the number of accidents between 1990 and 1992 was not necessarily the result of policy incentives or underreporting of accidents by environmental officials. The data indicates that while there was a 40 percent drop in the number of *teda* accidents between 1990 and 1991 there was a 77 percent increase in the number of *zhongda* accidents. There is not an obvious indication that this policy is correlated with the overall drop in the total number of accidents. There could be a number of other reasons for the decline in accidents, such as changes in safety regulations that triggered more enterprise responsibility, hence fewer accidents; changes in industrial practices due to technological innovations, and omission of data.

Until 1995, trends in the number of complaints seemed to mirror trends in the number of environmental accidents. After that year, the number of accidents began to decrease while the number of complaints continued to rise. An examination of the data reveals that it is the number of accidents that dropped dramatically between 1994 and 1995 that accounts for the uncoupling. We are left with the puzzle of why environmental accidents decreased dramatically between 1994 and 1995.

The answer to this puzzle can only be found by examining the provincial-level data. The provincial-level data shows that an extraordinary number of provinces did not submit data on accidents in 1995. That year, nine provinces failed to submit data including Shanxi, Liaoning, Zhejiang, Fujian, Guangxi, Hainan, Yunnan, Gansu, and Ningxia. Similarly, eight provinces failed to submit data in 1996 and six did not in 1998. The omission of data alone could account for the dramatic decrease in the total

number of accidents between 1994 and 1995, and subsequent years. This is an interesting question that could be addressed in future research.

Of note should be that if environmental officials were working off the same data that is made public then all the omissions would make it hard for them to tell the impacts of specific technologies or policies on the number of accidents. This severely limits their ability to decide which measures or technologies have been successful.

The state keeps records of financial consequences of accidents including the amounts of economic losses from accidents, compensation, and fines that were paid because of environmental accidents. Economic losses from air pollution accidents totaled more than the losses due to water pollution accidents, except in 1998. The total amount paid out to citizens annually decreased dramatically over time. In 1990, the state recorded payments of 97,430,000 Yuan in compensation to victims of pollution, while in 1998, only 18,520,000 was paid out.

There was wide variance over the ten-year period in the number of people injured in environmental accidents annually. In 1990, 10,000 people sustained injuries, but only 33 people sustained injuries in 1996 and 152 in 1998. One dramatic finding was that 42,765 people were injured in 1995 in a national total of only 1,966 accidents. There were a few accidents in Inner Mongolia that accounted for a large portion of the injured that year. The highest number of deaths associated with accidents occurred in 1993. That year 12 people died. In comparison, there were four deaths in 1990 and six deaths in 1998.

### *Pollution Levels*

Pollution can be measured in a number of ways, and how it is measured in relation to the population and the size of a province significantly influences the results of which provinces are the “most polluted.” In this research, sulfur dioxide emissions were measured in four different ways: one, total industrial SO<sub>2</sub> emissions for the province; two, per capita industrial emissions; three, the natural density of industrial emissions (total emissions / land area); and three, the social density of industrial emissions (total emissions X population density). It makes a difference how emissions are measured in relation to the province’s size and population. For example, in 1991, Shandong had the highest total industrial SO<sub>2</sub> emissions, but it was 5<sup>th</sup> for per capita emissions. That same year, Ningxia had the highest per capita emissions, but it was not even in the top five if measured in any of the other three ways. Liaoning is the only province that consistently appears in the top five regardless of the method of measurement.

The provinces with the highest per capita SO<sub>2</sub> emissions are Ningxia, Liaoning, Neimenggu, Shandong, Shanxi, Xiaanxi, and Guizhou. At some point in time between 1991 and 1999, they all appear on the list of the top five for per capita emissions. Why are per capita emissions in these provinces higher than in other provinces? One reason is that the climate in these provinces is generally colder than in other provinces, except for Guizhou. However, if this were the sole reason, why are not Heilongjiang, Xinjiang, Xizang, and Qinghai provinces on the list? Another factor that contributes to the higher levels of per capita SO<sub>2</sub> emissions is the inefficient use of

energy. Climate and energy efficiency are factors determining which provinces have higher per capita emissions.

Are there any other factors? If China still clung to some form of central planning, would not this also have a role in determining emissions levels? If a province was a “low environmental priority” or a province was slated for the development of those industries, which have higher SO<sub>2</sub> emissions, then it would have higher emissions. The problem then becomes determining if a province’s development and environmental protection development paths were “caused” by central planning or by other factors, such as climate, historical industrial trends or the type of natural resources found in that province. In reality, it is probably some combination of these factors. Take Shanxi for example, which is a primary coal-producing province in China, so the abundance of coal and coal-related industries would contribute to higher SO<sub>2</sub> emissions. However, if it were high on the environmental protection priority list, then maybe its per capita emissions would not be so high. The interesting case is Guizhou. It is in southern China, so it does not have a cold climate. It is however, one of the provinces that receives the least number of sunny days in a year. It does not have much coal, oil, or other fossil fuels, nor is it an industrial center. It is generally one of the poorest provinces. It is not a province that has higher levels of overall emissions, natural or social density of SO<sub>2</sub> emissions. We can deduce then, that it either has a very low level of energy efficiency and/or is not an area of priority in environmental protection.

The provinces with the highest levels of per capita industrial effluent include Liaoning, Jiangsu, Heilongjiang, Hubei, Jilin, Hunan, and Zhejiang. All of these are on

the list of the top five provinces with the highest levels of industrial effluent for one or more years from 1989 to 1999. Liaoning, Jiangsu, and Hubei tie for being on the list for the most years. Jilin only appears on the list for one year. Liaoning, Jiangsu, and Hubei all appear on the list of those provinces that higher overall levels of effluent, as well on the list of those with higher natural densities of effluent. However, Liaoning and Hubei are not on the list of those with high social densities of effluent while Jiangsu is.

Bivariate regression analysis of the complaint data as the dependent variable with the various measures of pollution as independent variables shows that the variable “social density of air pollution” is the most correlated with air pollution complaints, while the variable “total industrial effluent” is the most correlated with water pollution complaints. More accurately, the log of each of the above variables yields the highest correlations.

In summary, the way effluent and emissions are measured could definitely make a difference in determining the relationship between pollution levels and environmental complaints. At the most fundamental level, each method of measurement leads to somewhat different lists of the most polluted provinces. To some degree, this is obvious, but what is important is that when comparing locations within China or locations around the world, the way pollution is measured leads to different conclusions about which locations are most polluted. This is sometimes overlooked. In addition, these findings provide clues about efficient strategies of environmental management, given specific goals

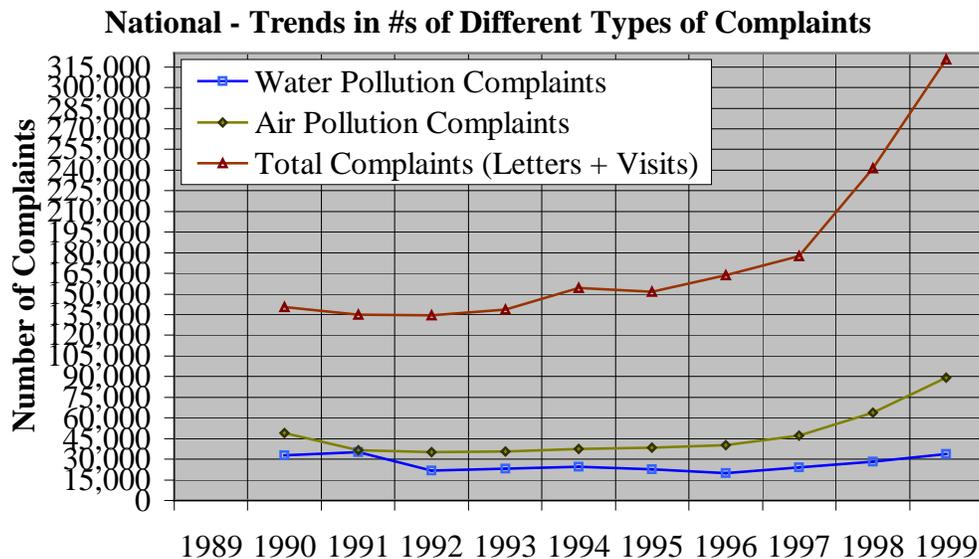
### ***Media Programs***

The number of media programs on the environment increased slowly in certain periods, and rapidly in others. There were 15,482 environmental programs (sponsored by the state) in the media in 1992, but by 1997, there were 61,622 programs. The number of programs did not grow steadily, instead, there was a rapid increase in the number of programs in 1995, and i.e. there were nearly twice as many programs in 1995 than there were in 1994.<sup>83</sup>

### ***Complaints***

As for environmental complaints, overall, at the national level, the number of complaints increased over time for all types of pollution. Air pollution complaints steadily increased. While the number of water pollution complaints in 1999 was higher than the number in 1990, complaints decreased significantly during the mid 1990s. However, they began to increase slowly in 1997.

**Fig. 4.1**



Complaints are counted in two different ways: by the number of people that complain and by the number of incidents people complain about. For example, 20 people may go to the EPB to complain about one single incident and the two different counting methods captures both realities.<sup>84</sup> At the national level, the total number of complainants went from 140,681 in 1990 to 241,321 in 1998, or nearly double. The total number of incidents also rose annually. Of significant note, there was a 36% increase in the number of complaints (people) from 1997 to 1998, which was the single largest increase in the number of complaints in a one-year period. In 1996, there was a large jump in the number of incidents about which people complained (1995-109,650 incidents; 1996-162,696 incidents, or a 48% jump). That year, officials only resolved 66 percent of the total number of complaints they received. Comparatively, they resolved 88 percent in 1992 and 95 percent in 1998. The sudden 48% increase in the number of incidents may have posed a challenge for EPB officials, resulting in a dramatic drop in the number of incidents they could resolve that year.

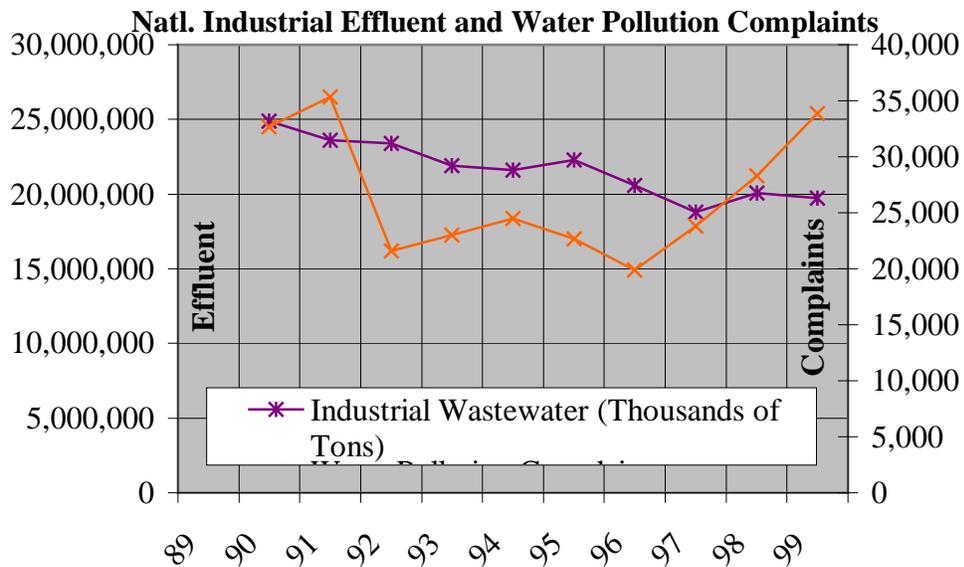
The percentage of newspaper articles regarding citizen complaints (sent to the newspaper) increased during the 1990s. The following list outlines the year-to-year percent change of articles in newspaper around the whole nation.<sup>85</sup>

- 1995 - 3.2 percent
- 1996 - 3.7 percent
- 1997 - 6.3 percent
- 1998 - 2.79 percent
- 1999 - 5.1 percent

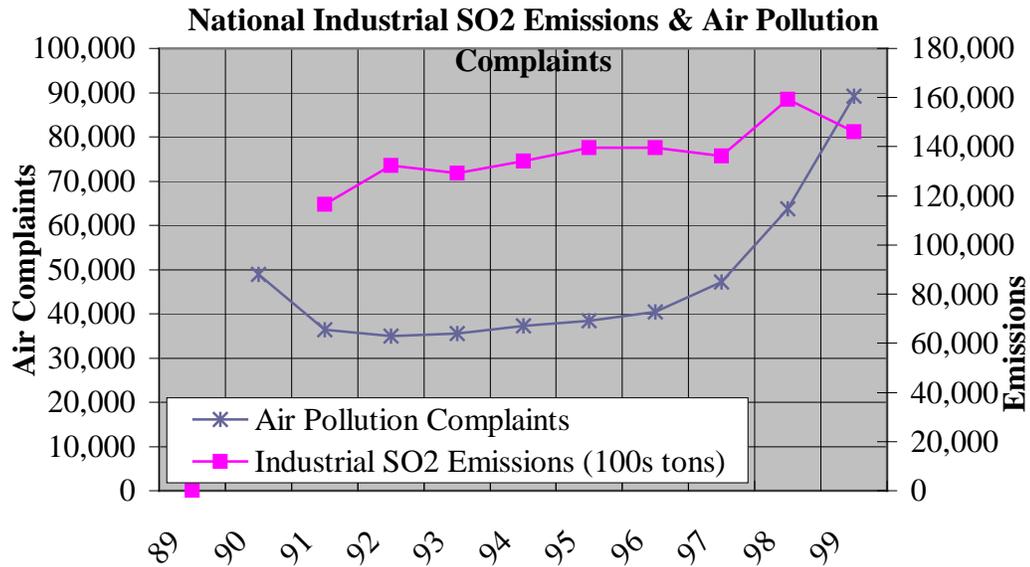
There were consistently more articles based on citizen complaint letters in local, evening, city, and special area newspapers. There were fewer articles in national and youth papers.

At the national level, the number of complaints regarding water pollution actually decreased during the mid 1990s, but then began to increase in 1997.<sup>86</sup> In contrast, over the ten-year period, air pollution complaints steadily increased from 48,878 in 1990 to 63,739 in 1998 (or about 30%), which corresponds to about a 37 percent increase in industrial SO<sub>2</sub> emissions.

**Fig. 4.2**



**Fig. 4.3**



To put the number of environmental complaints in better perspective, we can figure out how many people out of 10,000 made complaints. In 1992, approximately 1.23 people out of 10,000 made a complaint. In 1998, about 1.93 people out of 10,000 made a complaint. This indicates that the rising number of complaints is not merely a result of the increase in the population.

When the total number of complaints is adjusted to account for differences in population among provinces, we find that those provinces with the absolute highest number of complaints do not always correspond to those that have the highest number of per capita complaints. In some instances, provinces with relatively lower number of total complaints actually have a higher number of per capita complaints, meaning more people complained relative to the province’s population.

Several provinces are consistently in the top ten for both absolute number of complaints and for complaints per capita. The top ten are as follows:

**Table 4.2 Top Ten Provinces for Absolute and Per Capita Total Complaints**

1. Guangdong, Zhejiang, and Jiangsu	6. Jilin, Henan
2. Liaoning, Guangxi	7. Shanxi, Hainan
3. Shandong	8. Ningxia
4. Hunan, Sichuan	9. Fujian, Hubei
5. Heilongjiang, Hebei	10. Qinghai

If the data were not adjusted to count those provinces with higher per capita complaint rates, then several provinces would not even get on the radar for having a large number of complaints in relation to the population including Jilin, Hainan, Ningxia, and Qinghai.

The provincial level data reveals the complexity in assessing changes in number of complaints at a more detailed level. The national level data indicates that there was a gradual increase in the number of complaints. However, the provincial-level data indicates that this gradual increase did not occur in every province.

In some provinces, the total number of complaints decreased as time went on or rose and then fell. For example, in Liaoning province, the total number of complaints in 1989 was 7,845 while it was only 1,852 in 1999. However, in Liaoning, the number of complaints increased before they decreased; the number of complaints peaked in 1997 at 16,216. Hunan is another province that showed an overall decline in the number of complaints (1989 – 8,671; 1999 – 3,338). One strange pattern is that in 1993 almost all provinces showed a double-digit percentage drop in the total number of complaints. That year only three of the 28 provinces showed increases.

In other provinces, there are dramatic increases or decreases from year to year. For example, in Yunnan in 1998, there were 56 complaints, while in 1999 there were 4,191 (an increase of over 7,000%). In Ningxia, there were 75 complaints in 1989, while in 1990 there were 841 (an increase of over 1,000%). In Shanxi in 1998 there were 6,031 complaints, while in 1999, there were 24,409 complaints (an increase of over 300%). In Qinghai, there were 2,139 complaints in 1990, while there were only 64 in 1991 (a decrease of 97%). There are a number of these inconsistencies or “outliers.” There were many more dramatic increases than there were sudden decreases; there were 21 dramatic increases *of over 100%* from one year to the next. What explains the data from individual provinces that run counter to overall trends? What explains the dramatic increases and decreases from year to year in a single province?<sup>87</sup>

There are a number of explanations that come to mind immediately, which explain inconsistencies, outliers, and dramatic changes from year to year in the provincial level data. The reasons fall into three categories: clerical errors, data availability, and changes in substantive causal factors. One type of clerical error could be that the data published in the Environment Yearbook is a misprint. One type of data availability explanation is that the data from one or more specific cities could have been left out of a provincial total for one or more years.

The last reason for dramatic changes in the number of complaints is related to variations in causal or correlated factors and not just administrative error or negligence.<sup>88</sup> One type of substantive causal factor explanation could be that there was a dramatic rise in the amount of pollution (or other correlated factor) in a specific

province that would explain the higher number of complaints. To understand the substantive reasons for variations in the number of complaints we have to disaggregate the data by province, by type of complaint, either water, air, solid waste, noise pollution, and “suggestions.”<sup>89</sup> In addition, we would have to have disaggregated data for cities and counties within each province.

However, it is not worth examining each outlier unless we have complete knowledge of which cities did or did not submit data. This is true even if we know the one or more specific categories in which the number of complaints rose. It would be interesting if variations in the number of complaints were due to changes in only one category of complaints, such as water pollution complaints. We can work out one example to see where the differences could potentially be. Liaoning is one specific example of a case that had rising complaints that suddenly dropped off in 1998 and 1999. In Liaoning, there was a rapid decrease in the number of total complaints from 1998 to 1999 (10,594 to 1,852). Data for Liaoning indicates that the largest decrease in the number of complaints from 1997 to 1998 was primarily due to the decrease in the number of air pollution complaints. The second largest decrease came in the noise pollution category. From 1998 to 1999, relatively large decreases came in several categories including water, air, solid waste, and noise pollution. However, this is all we can learn by further disaggregating the data, unless we know if certain administrative areas did not submit data. Without data disaggregated at the city or lower levels, we cannot tell if the variations in the data are the result of one or more cities failing to submit data.

### *Eyeballing the Correlations*

In appendix F there is a table that lists the provinces with the highest levels of air- pollution complaints to those with the highest pollution levels, those with higher per capita GDP, and those with higher numbers of cumulative media programs. While eyeballing the associations is not as scientific as regression analysis, it can give some idea of the relationships among SO<sub>2</sub> emissions, per capita GDP, cumulative media programs with the number of air pollution complaints.

The five provinces that have the highest SO<sub>2</sub> emissions are often the provinces with the most air pollution complaints. There is *some* relationship because of the overlap. Along the same vein, a number of provinces that have the highest levels of per capita income also have a higher number of complaints. In contrast, those provinces with the highest number of cumulative media programs do not often have a higher number of complaints; while there is some overlap, there is less than in the other categories. While eyeballing the correlations is useful, it can only go so far in telling us if the relationships between the dependent and independent variables are significant. To see definitively if the relationships are significant, more stringent statistical methods need to be used.

### **Multiple Regression Analysis: Putting it all Together**

The purpose of doing regression analysis of the complaint data is to determine if there really is some association between the dependent variable, variations in the number of different types of environmental complaints and the independent variables, levels of pollution, economic development, and environmental awareness. We can discover if there is a positive or negative relationship between the dependent and

independent variables. In addition, statistical analysis can provide some information about how well the independent variables account for values of the dependent variables. It can help to establish which of the independent variables is most important in explaining variations in the number of complaints. Finally, it can help to tell us how much the dependent variable changes if there are changes in the values of the independent variables. However, predicting the magnitude of changes in the dependent variable based on changes in the independent variables can be tricky.<sup>90</sup>

Regression analysis was done separately on the data aggregated at the national level and the data aggregated at the provincial level and each analysis yielded divergent results. Overall, the data aggregated at the national level showed very little significance between the number of complaints with variations in levels of pollution, economic development, and environmental awareness. In contrast, the data aggregated at the provincial level showed much stronger correlations. Analysis at both levels is valuable and each will be discussed in the paragraphs below.<sup>91</sup>

In the end, the results based on the data aggregated at the provincial level are more reliable and useful. It showed that there were significant relationships between the dependent variables, variations in number of environmental complaints, and three independent variables, levels of pollution, economic development, and environmental awareness.

### *National Level Data*

The results of the regression analysis on the national level data are somewhat ambiguous and are not particularly reliable because of the limited number of cases, i.e. years.<sup>92</sup> In general, the independent variables (levels of pollution, per capita GDP, and

cumulative number of media programs) appear to have some relation to the variation in the number of complaints, but they are not significantly correlated, except when they are considered together in a model that tries to explain variations in the *total* number of complaints. Taken together, they are not significant in explaining variations in the number of pollution stream specific complaints, i.e. water pollution complaints and air pollution complaints.

The statistical analysis of the water pollution case shows that the model including the independent variables water pollution levels, per capita GDP, and number of cumulative media programs, is not particularly good at explaining variance in the number of water pollution complaints. The model is not a significant predictor and cannot explain even half the variance in the dependent variable. In the bivariate analysis, none of the independent variables taken separately has a statistically significant relationship.

With the data regarding air pollution, we see some slight significance between the independent and dependent variables when taken individually. When the variables are taken together in one model, however, they are not significant at the 0.05 level. The model is fairly weak in trying to explain variance in the number of air pollution complaints. The data indicates that all three variables in one model can explain about 45% of the variance in the dependent variable - the number of air pollution complaints. However, because of the relatively low  $R^2$  (.45 or 45%) and because the  $t$  ratios and the  $F$  statistics are not significant at the .05 level, we can conclude that the model may not be as good as it appears in providing an explanation for the variation in the number of air pollution complaints. However, it must be noted that the national-

level data had an uncorrectable multicollinearity problem, which would increase the likelihood that we would mistakenly conclude that there was no significant correlation when there really was.

### ***Provincial Level Data***

The analysis of the provincial level data shows very different results. The provincial level data indicate that there are very significant relationships between the dependent and independent variables. It shows that pollution levels are the most important factor in determining the variance in the number of complaints when taken alone. Per capita GDP is the least important variable. Per capita GDP was the only variable found to be not significant in bivariate regressions with water pollution complaints. It also yielded very low  $r^2$  in regressions with both air pollution complaints and with total complaints. This means that per capita GDP is probably not as important a factor in determining when citizens will or will not make environmental complaints. It means that citizens with lower incomes also make environmental complaints, and/or that citizens with higher income levels may not be more prone to make environmental complaints.

The results tell us that the model with three independent variables is better at explaining variations in the number of complaints than any single variable taken alone. In addition, to use models with variables that measure air pollution differently influences the results. The bivariate results indicate that the social density of SO<sub>2</sub> is the measurement of pollution that is most correlated with the number of air pollution complaints when taken alone. This means that the best single predictor of variations in air pollution complaints is the social density of SO<sub>2</sub> i.e. it can “explain” 66% of the

variation. However, this does not necessarily mean that more complaints will *always* be more likely in densely populated areas. Alternatively, if there are two identical land areas, with the same levels of pollution, there will *always* be more complaints in the area with the higher population density.

It is more valuable to use a model with three variables to explain variations in both air and water pollution complaints. In the air pollution case, the multiple regression results show that the model containing the variables log total industrial SO<sub>2</sub> emissions, log cumulative media programs, and log per capita GDP is the preferred model. It can explain the most variation in the number of air pollution complaints, i.e. it explains over 79% of the variation. In the water pollution case, the model with the variables log industrial wastewater effluent, log media programs, and log GDP explain about 82% of the variation. These results, if taken alone, show that the model is reasonably good at explaining variations in the number of complaints.

However, the problems of data omissions probably have some effect on this result. Do the data omission problems inflate the explanatory value of the model or do they deflate the value? Logically, it could be either way, depending upon the values of the missing data. Unless we know the values of the missing data, we will be unable to determine the actual impact of data omission.

While the research answers some questions regarding the conditions under which citizens make environmental complaints, it also raises other questions. Why were there many instances that ran counter to the general trend? If these results are correct, does this mean that the number of air pollution complaints should begin to

decrease in those areas of China that have recently seen a decrease in levels of air pollution, such as Beijing?

While the model explains more than three-fourths of the variation in the number of complaints, what can account for the rest of the variation? What factors are not included in the model? In this research, legal and political contexts were assumed constant, but given the importance of location-specific variables the statistical explanation for the variation in number of complaints may be overly optimistic. The national legal and political contexts are naturally equivalent and changes in these contexts are taken into consideration over time, the variations across location are not taken into consideration. The local legal and political contexts may be radically different across location and influencing variations in the number of complaints. Another unanswered question is the overall effect of omitted data; it could increase or decrease the explanatory power of the model. Given the nature of the data and the level of analysis, some questions must remain unanswered.

It is difficult to answer such broad questions in just one chapter, so there are several areas of potential future research. One avenue of future research might examine the local legal and political contexts (local laws, attitudes of officials, historical experiences with pollution etc...) in a limited geographic area to lend an even greater understanding into why and when people complain about pollution and other social ills. No matter at which analysis is undertaken, every effort should be made to resolve issues related to omitted data, or to discover the overall effect of omitted data.

## **Conclusion**

There are factors external to the structure and effectiveness of the complaint system itself that influence levels of citizen participation in the system, specifically levels of pollution, economic development, and environmental awareness (measured by looking at the cumulative number of media programs about the environment). However, the relative importance of these factors varies depending upon the level of analysis, national or provincial.

At the national level, the model with the independent variables (levels of pollution, per capita GDP, and cumulative number of media programs) is significantly correlated to the variations in the *total* number of complaints. However, the model is not significantly correlated to variations in the number of pollution stream specific complaints, i.e. water pollution complaints and air pollution complaints. It must be noted that the national level data has an uncorrectable multicollinearity problem, which would increase the likelihood that we would mistakenly conclude that there was no significant correlation when there really was. The national level data also has an autocorrelation problem because dummy variables could not be included. If they had been, then the number of independent variables would have exceeded the number of cases (years), which would invalidate the calculation. Therefore, overall, the national level data is not that helpful. It is a different story with the provincial level data, which is much more reliable.

The provincial level data supports the assertion that when taken together, the social density of pollution affecting citizens, the level of economic development attained by those citizens, and the level of environmental awareness of those citizens

are all significantly correlated with the number of citizen complaints. The most important of these independent variables, in both the air and water pollution cases, is the level of pollution, which was significantly correlated in bivariate analysis when controlled for levels of GDP, lending credibility to theories that grievances are important in determining participation levels. In bivariate analysis, the independent variables of per capita GDP and number of media programs were not significantly correlated with variations in complaints. This indicates that income levels are not a good indicator of when people participate. This finding is consistent with some previous evidence that in the US, that contacting officials has little to do with socio-economic status.<sup>93</sup>

How levels of pollution are measured makes a difference in the degree of association between pollution levels and complaints. The data shows that in the water pollution case, the total amount of industrial effluent is more correlated with the number of citizen complaints about water pollution than the social intensity of effluent. The data shows that in the air pollution case, the social density of SO<sub>2</sub> is more correlated with the number of air pollution complaints if taken alone, but in the three-variable model, total SO<sub>2</sub> is more correlated.

While some level of environmental awareness, or environmental education, appears related to participation in the complaint system, levels of pollution in relation to the population density in an area are more important in determining when people will participate. The fact that per capita GDP is not correlated with the number of complaints confirm that participation in the complaint system is a relatively “easy” channel of participation in China and that it does not require high levels of income.

One downside to the use of the simple measure of per capita GDP is that it does not capture the complex nature of tangible and intangible resources, which may influence a citizen's capacity and proclivity to participate. Tangible resources include such things as scientific expertise, meeting space, funds, and communication technology. Intangible resources include such as, information, social networks, political connections, organizational skills, and legal protection.<sup>94</sup> An individual or group's access to a resources differs according to the resources in question, the individuals or groups involved, the time period, and the other resources one already has access to. An interesting question to explore is if the relationship between complaining and level of income still hold true for instances when citizens must take their complaint to authorities at higher administrative levels.

While income levels and number of media programs are not highly correlated with the probability that a citizen will complain (articulate his/her interest), the fact that individual complainants or groups filing petitions have not acted collectively in a sustained manner to try to mobilize broad support for wide-reaching policy changes indicates that there may be other types of resources needed to transform citizens' perception of their pollution problems from a personal problem to a societal problem – one toward which they can make a difference, and to aggregate interests through mobilizational structures. In other words, there are missing catalysts to an anti-pollution movement in China.

Using complaints as a means of interest articulation and expressing grievances is not new in China. However, the way complaints are framed and dealt with has changed significantly. In imperial times, citizens tried to resolve their complaints

through their *guanxi* ties, their relationships with those of higher moral or political authority. During the Mao period, complaining to those in authority or even to friends took on new risks. Citizens who complained faced the risk of being persecuted if their complaints were not in line with Communist Party policy. In other words, during the Mao period, complaining was a political act. After Deng Xiaoping took power and began to rectify the wrongs perpetrated during the Great Leap Forward and the Cultural Revolution, citizen complaints were viewed differently. Deng instituted measures to “de-politicize” relationships in China, and as a result, the act of complaining also became less political. Citizen complaints were “re-framed,” they became more permissible, and environmental protection officials viewed them as a way to expand their monitoring capabilities. Finally, in 1982 the revised constitution granted citizens the right to criticize and make suggestions to authorities, without reprisal. However, it was not until the early 1990s, that the national complaint system became institutionalized.

The environmental complaint system was institutionalized and regulated before the efforts were made to standardize, institutionalize, and regulate the nationwide and sector-wide system of managing complaints. Chinese officials began the process of standardizing and institutionalizing the environmental complaint system in 1989, while the first national level complaint working meeting was not held until the early 1990s. It is critical to note that an informal environmental complaint system had already evolved in certain administrative areas in response to increasing number of complaints before officials initiated formal institutionalization measures. The environmental complaint system has been showcased as a “model” for other sectors.

Environmental complaints are rife with technical complexities and uncertainties and “traditional” channels of complaint resolution, party committees and residents committees were not very helpful in resolving environmental complaints. Technical administration control over the complaint process made more sense.

In general, the environmental system is becoming more-well established at all administrative levels across China. Provincial EPBs around the country are acquiring the authority to directly “bring in” local EPB officials for criticism and training regarding excessive complaints that must be resolved at a higher level. In urban areas, EPBs are equipped to accept citizen complaints 24 hrs a day and there are well-publicized time limits for resolving complaints.

The complaint process includes some “checks and balances,” but the system is very hierarchical and still contains structural loopholes that allow for random abuses of power and arbitrary rule by authority. There is some indication that a lower number of complaints are reported by EPBs to their superiors than actually occur. Anecdotal evidence indicates that while most complaints are relatively easy to fix, some are extremely difficult or take a long time to resolve. Others are never resolved. In addition, the exclusion of national level complaints in the reports, until very recently, indicates that some extremely serious complaints have probably fallen through the cracks in the system.

The complaint system is far from perfect. The system still allows individual authorities wide discretion in how to follow up on certain types of complaints, so there is the potential for abuses of power. The complaint system addresses problems after they have already occurred and rarely is used in a preventive manner, which means

harms are not avoided.

While the system itself has structural loopholes, it is overall, a product of and conducive to increased state responsiveness to citizen grievances. The complaint system allows the controlled venting of citizen grievances. On one hand, citizen environmental complaints have become one form of regime “proscribed” political participation, because authorities want people to report pollution problems. On the other hand, it also remains a “tolerated” form of political participation.<sup>95</sup> It becomes a tolerated form of participation when authorities are challenged to respond to large groups of citizens, when official capacity to manage the number of complaints is stretched, and when higher-level officials apply pressure to become more responsive to citizens’ grievances. Through the complaint process, citizens have a channel through which to voice their grievances, and to articulate their interests, which may otherwise be articulated in a more disruptive manner such as initiating a dispute or participating in some form of protest. When citizens file complaints, they are helping environmental officials do their jobs; citizens act as the eyes and the ears of environmental officials in the community and help them to locate problems. To this end, officials have presented the complaint system to citizens as a sanctioned channel of participation that turns citizens and officials into partners in environmental protection efforts.

The complaint system links citizen interest articulation with environmental policy outcomes. Authorities consider citizen complaints when they determine priority enterprises to clean up as well as utilize citizen complaints as a mechanism for finding polluting and illegal enterprises. Of course, government officials must care about

environmental protection and have some concern for citizens to act upon citizen complaints. As more officials are trained to understand the negative externalities of pollution and it has become clearer that central level party and governmental leaders consider environmental protection a basic national policy, they have become more responsive to citizen grievances. It has helped that there is pressure from higher-level officials on those at lower levels to respond to citizen complaints and to resolve potential disputes at the lowest level possible. Over time, citizen complaints have become a form of public pressure on environmental protection officials to crack down on polluters. In turn, citizen complaints justify official enforcement efforts to those in the relevant polluting enterprises.

## Footnotes to Chapter Four

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<sup>1</sup> The term *xingfang* is extremely broad. Tianjian Shi makes the distinction between “appeals” and “adversarial activities,” in his discussion of participation as “contacting authorities.” The difference being the attitude of the citizen in their approach to authorities and the level of government, or other organization, to which a citizen appeals. The formal Chinese term *xingfang* includes both the less risky appeal and the more risky adversarial activities. This is what makes the term *xingfang* so complex. *Xingfang* is therefore an extremely broad term that encompasses conciliatory and more adversarial appeals.

<sup>2</sup> Shi, *Political Participation In Beijing*, pp. 229-230.

<sup>3</sup> Shi found that people made appeals through the bureaucratic hierarchy more often than they used personal connections (*guanxi*) to get what they wanted. Shi, *Political Participation In Beijing*, p. 94.

<sup>4</sup> Wing-Hung Lo and Wing Leung Sai, "Environmental Agency and Public Opinion in Guangzhou: The Limits of a Popular Approach to Environmental Governance," p. 699.

<sup>5</sup> Interview #21, Fall 1999.

<sup>6</sup> It is assumed that an accountable state is one in which officials are elected and can be removed from office by the vote of the people.

<sup>7</sup> These principles are strikingly familiar to those cardinal principles set by Mao Zedong. James Townsend points out that during the Mao period, the concept of participation was based on the following principles: the dictatorship of the proletariat; the supremacy of the collective interest; Party leadership; the mass line; activism and political consciousness; and socialist democracy. Townsend, *Political Participation in Communist China*, p. 65.

<sup>8</sup> Lester Milbrath and M. L. Goel provide a map of the categories of factors that affect participation in general. The categories are 1) variables in the larger environment, such as the social system, the political system, political culture, etc... 2) variables in the immediate environment, i.e. stimuli in the microenvironment that can be specific to the type of participation and the type of policy in question. 3) “life position factor” including education, age, race, sex, etc.... 4) variables internal to an individual, including attitudes, beliefs, personality traits etc.... See Milbrath, *Political Participation: How and Why Do People Get Involved in Politics?* pp. 24-34.

<sup>9</sup> The level of analysis for the quantitative survey analysis in this research is the macro level, the national and provincial levels in China. Because of this approach, it is more

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realistic and logical to focus on factors affecting participation that are external to individuals, and those “known” variables specific to the immediate environment in an administrative area.

<sup>10</sup> The pollution density is the amount of annual SO<sub>2</sub> emissions divided by the relevant land area. This concept is similar to Jeffery Broadbent’s “natural intensity” of pollution. The “social Density” of pollution is similar to Broadbent’s concept of “social intensity” of pollution. See Broadbent, *Environmental Politics in Japan*.

<sup>11</sup> Other ‘life position variables’ may also influence participation as is shown by Shi Tianjian in his work on participation in Beijing (some of these variables include education, age, sex etc...). Tianjian Shi found that there was little relationship between survey respondents “subjective evaluation of their economic status” and participation in the appeals process in Beijing. He found that the relationship between participation in voting and “educational achievements” in Beijing was curvilinear. He also found a curvilinear relationship between levels of education and participation in the complaint system. People with ten to twelve years of education were more likely to participate. Shi, *Political Participation In Beijing*, pp. 145, 213-214.

<sup>12</sup> Verba, Nie and Kim, as well as a number of other researchers, found that the relationship between higher levels of participation and socioeconomic status were the strongest influencing variable in shaping participation, especially in the U.S. see Verba, Norman H. Nie, and Jae-On Kim, *Participation and Political Equality*, p. 63. Although, they do point out that engaging in particularized contacts, activities aimed at benefiting one’s private interests, do not conform to these assumptions. They conclude that “not only does particularized contacting produce different benefits, it derives from a process quite different from the one that leads to other activities.” See Verba and Nie, *Participation in America: Social Equality and Political Democracy*. Also, other research points out “socioeconomic status and political activity show different levels of correlation from nation to nation.” Milbrath, *Political Participation: How and Why Do People Get Involved in Politics?* p. 92.

<sup>13</sup> See the following resources regarding grievance-based models in the social movement literature. William Kornhauser, *The Politics of Mass Society*, (Glencoe, IL: Free Press, 1959); Emile Durkheim, *Suicide: A Study in Sociological Interpretation*, (Glencoe, IL: Free Press, 1951); Eric Hoffer, *The True Believer: Thoughts on the Nature of Mass Movements*, (New York, NY: Harper and Row, 1951), p. 195.

<sup>14</sup> Sun Weiben, *People's Republic of China Administrative Management Encyclopedia*, p. 329.

<sup>15</sup> Article 41 Constitution of the People’s Republic of China.

<sup>16</sup> Sun Weiben, *People's Republic of China Administrative Management Encyclopedia*.

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<sup>17</sup> Citizens primarily use letters and in person visits to communicate complaints, but there also are other methods including telegrams, pictures, phone calls, tapes, and videos. “*Xinfang*” translated here as “complaint” is a general category that includes: *shenqing* (file a petition (a formal request for something from authorities)); *shensu* (appeal); *xunwen* (inquiry); *fanying* (response, reaction); *konggao* (file charges, accuse); *jiefa* (expose, unmask, bring to light); *piping* (criticize); *biaoyang* (praise, commend); and *jianyi* (suggestion).

<sup>18</sup> The State Council Administrative Office (Guowuyuan Bangongting) is the body within the State Council that manages citizen complaints. Within this Office, there is a special department devoted to managing complaints called the “Zhong Ban Guo Ban Xinfangju” It answers to the Chinese Communist Party Central Committee General (Administrative) Affairs Office (Zhongguo Gongchandang Zhongyang Weiyuanhui Bangongting or Zhong Gong Zhong Yang Bangongting) and the State Council General (Administrative) Affairs Office. It manages citizen letters and visits. It passes on important information about citizen contacts to the Party Central Committee and the leaders of the State Council. It takes care of any complaint affairs requested by the leaders of the Central Committee or leaders of the State council. It offers guidance (*zhidao*) regarding the complaint work of ministries and locations. It is responsible for managing difficult inner-ministerial or cross boundary complaints. This organization is then the “last stop” for complaints within the formal government and party structures. It is interesting to note that an essentially “State” (government) body also manages the affairs of the “party.” This contradicts the general trend of the separation of the “Party” and “State” which was initiated by Deng Xiaoping in the early 1980s. *Guowuyuan Jigou Gaige Gailan*, (General Reader on the Restructuring of the State Council), (Beijing, China: China News Publishing, 1998), pp. 26-28.

<sup>19</sup> The bureaus under the control of State Council departments, ministries, commissions/committees, banks, and administrations also must establish complaint offices. After 1998, this would include such organizations as the State Coal Industry Bureau (*Guojia Meitan Gongyeju*) and the State Metallurgy Industry Bureau (*Guojia Zhijin Gongye Bu*).

<sup>20</sup> Prefectures generally do not have independent People’s Congresses.

<sup>21</sup> Sun Weiben, *People's Republic of China Administrative Management Encyclopedia*, p. 257.

<sup>22</sup> Sun Weiben, *People's Republic of China Administrative Management Encyclopedia*, p. 256-266.

<sup>23</sup> Sun Weiben, *People's Republic of China Administrative Management Encyclopedia*, p. 256-266.

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<sup>24</sup> The surveys were probably conducted by local People's Congresses. It is unclear if the central government mandated these survey and if they were conducted in every location. There is simply anecdotal evidence that one such survey was conducted in Taiyuan in the early 1990s. *Taiyuan Nianjian, 1994*, (*Taiyuan Yearbook*), (Taiyuan, China: Shanxi People's Press (Shanxi Renmin Chubanshe, 1995), p. 80.

<sup>25</sup> Jahiel, "Policy Implementation Through Organizational Learning: The Case of Water Pollution Control in China's Reforming Socialist System," p. 357.

<sup>26</sup> According to available records, from 1983-1989, there were 6,108 complaints in Beijing, 22,913 in Shanghai, 13,504 in Tianjin, 456,339 in Sichuan province, 5,893 in Guangzhou, 4,453 in Chongqing, and 3,515 in Changchun; *Zhongguo Huanjing Nianjian, 1990* (*China Environment Yearbook*), (Beijing, China: Zhongguo Huanjing Kexue Chubanshe (China Environmental Sciences Press, 1990), p. 216.

<sup>27</sup> Interview 21, Fall 1999.

<sup>28</sup> These include Henan and Heilongjiang provinces, and the cities of Shanghai, Chongqing, Qingdao, Zhangtaikuo, and Mapishan. The fact that offices or working groups were only established in a limited number of cities is consistent with the traditional Chinese practice of creating "test cases" for policies and organizations before implementing them on a large scale. However, it could also be that these locations were the first to have to deal with a large number of complaints. Or it could be these locations were the only ones that could afford to establish a special "group" at the time

<sup>29</sup> *Zhongguo Huanjing Nianjian, 1992* (*China Environment Yearbook*), (Beijing, China: Zhongguo Huanjing Kexue Chubanshe, 1992), p. 246.

<sup>30</sup> *Zhongguo Huanjing Nianjian, 1991* (*China Environment Yearbook*), Beijing, China: China Environmental Science Publishing, p. 215.

<sup>31</sup> Interview #21, fall, 1999.

<sup>32</sup> 14 provinces, municipalities, or autonomous zones sent representatives to the 1<sup>st</sup> annual meeting.

<sup>33</sup> *Zhongguo Huanjing Nianjian, 1995* (*China Environment Yearbook*), (Beijing, China: China Environment Yearbook Press, 1995), p. 411.

<sup>34</sup> China's Agenda 21 is the White Paper on China's Population, Environment, and Development in the 21<sup>st</sup> Century the Chinese created to implement the commitments to which China agreed to when representatives signed the Rio Declaration and Agenda

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21 at the United Nations Conference on Environment and Development in 1992. Agenda 21 and the Rio Declaration call for all nations to develop and put into effect their own national strategies, plans and policies for sustainable development. China's Agenda 21: White Paper on China's Population, Environment, and Development in the 21st Century (Adopted at the 16th Executive Meeting of the State Council of the People's Republic of China), Beijing, China: Zhongguo Huanjing Kexue Chubanshe, 1994), p. 20.

<sup>35</sup> "Xinfang Tiaoli (Regulation Regarding Complaints)," *Zhonghua Renmin Gongheguo Guowuyuan* (State Council), Order #185.

<sup>36</sup> In accordance with the State Council Regulation, in cases of group environmental complaints, no more than five representatives from the group should travel to complaint authority offices (provision 12). Citizens complaining are not allowed to disrupt the work of the offices or otherwise harm authorities charged with managing complaints (provision 14). Officials must investigate and otherwise deal with complaints within their jurisdiction within 30 days and must deal with complaints passed onto them from other governmental bodies within 90 days (provisions 30-32). If a citizen is not satisfied with the result, they may request a re-investigation within 30 days. The complaint office then has 30 days to re-investigate (provision 33). If a citizen is not satisfied with the original result or the result of a re-investigation, then they may take their complaint to the appropriate governmental agency at the next highest administrative level (provision 34). The complaint authority can criticize and re-educate any complainant who obstructs the complaint process or can request that the relevant work unit criticize, re-educate, or discipline the citizen. If a person disrupts social stability, then the Public Security Bureau has the authority to punish them accordingly (provision 41). See "Huanjing Baohu Xinfang Guanli Banfa" (Regulation Regarding the Management of Environmental Protection Complaints), *Guojia Huanjing Baohuju* (Environmental Protection Administration) Order #19.

<sup>37</sup> Provision 2.5 *Huanjing Baohu Xinfang Guanli Banfa* (Regulation Regarding the Management of Environmental Protection Complaints), "Huanjing Baohu Xinfang Guanli Banfa" (Regulation Regarding the Management of Environmental Protection Complaints).

<sup>38</sup> *Zhongguo Huanjing Nianjian, 1996* (*China Environment Yearbook*), p. 252.

<sup>39</sup> Interview 21, Fall 1999.

<sup>40</sup> Interview 49, Spring 2000.

<sup>41</sup> Procedures for managing complaints are similar across all sectors of society and are clearly laid out in an administrative management manual from the early 1990s. Complaint work procedures follow a particular order as follows: 1) *junbeijieduan*

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(preparation stage); 2) *yuexin* (reading period); and 3) *banli guocheng* (management process). Similar procedures are outlined for managing in person complaints.

<sup>42</sup> Interview #45, Spring 2000.

<sup>43</sup> Interview # 47, Spring 2000.

<sup>44</sup> Interview #53, Fall 2001.

<sup>45</sup> Interview #21, Fall 1999.

<sup>46</sup> *Xuanwuchu Huanjing Baohuju Xinfang Gongzuo Mubiao Guanli Banfa*, provision 4.2.

<sup>47</sup> *Huanjing Baohu Xinfang Guanli Banfa* (Regulation Regarding the Management of Environmental Protection Complaints), "Huanjing Baohu Xinfang Guanli Banfa" (Regulation Regarding the Management of Environmental Protection Complaints),

<sup>48</sup> Interview #21, fall 1999.

<sup>49</sup> In Sichuan province, the EPB is struggling to get legislation passed that would enable them to require "lax" lower level EPBs to participate in special training about managing environmental complaints. Interview #31, Spring 2000.

<sup>50</sup> In 1998, SEPA received over 1,200 complaint letters and 110 visits directly. *Zhongguo Huanjing Nianjian 1999 (China Environment Yearbook)*, (Beijing, China: China Environment Yearbook Press, 1999), p. 91.

<sup>51</sup> Interview # 7, Fall 1999. This official related one story about a family living in a farming village in another province, downstream from a ceramics factory. The family had a fishpond that became polluted by the wastewater from the factory. The daughter loved to eat fish, so she ate it quite often. She was the first person in the family to get sick. The son later got sick. The little girl lost all the strength in her limbs. The mother thought it might have something to do with the wastewater getting into the pond. The doctor at the local hospital even made some kind of certification to that fact. The mother's complaints to the local EPB had no impact, supposedly because the ceramics factory owner had "gotten to them." The factory owner also "took revenge" on the family for complaining and beat up the mother. Eventually the daughter died. Finally, the women came to Beijing to complain to SEPA. Nothing was done. The mother lived on the streets of Beijing for sometime. Later, she got sick and returned home. The woman and her husband remained sick and the son eventually died.

<sup>52</sup> Interview # 33, Spring 2000.

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<sup>53</sup> Interview # 36, Spring 2000.

<sup>54</sup> I asked the U.S. Embassy representative to request the interview through the Department of International Cooperation at SEPA. Apparently, after reviewing my resume, the Department representative determined that because of my background, I was better suited to contacting someone from an academic institution.

<sup>55</sup> Interviews # 31, 45, and 49, Fall 1999 and Winter 2000.

<sup>56</sup> Interview # 21, Fall 1999. EPB officials were generally unwilling to disclose those specific enterprises that were the targets of most complaints unless there had previously been disputes or media reports.

<sup>57</sup> The author learned about the continuing dispute in Taiyuan from newspaper articles and interviews with environmental protection officials in Taiyuan in the year 2000; notes are on file with the author.

<sup>58</sup> Interview, #47, Spring 2000.

<sup>59</sup> The political and legal contexts are lumped together because the legal system is not independent of the political system. Alford and Shen, "Limits of the Law in Addressing China's Environmental Dilemma;" Hongjun Zhang and Richard J. Jr. Ferris, "Shaping an Environmental Protection Regime for the New Century: Environmental Law and Policy in the People's Republic of China," *Asian Journal of Environmental Management* 6, no. 1 (1998).

<sup>60</sup> To get the social density per km, you can take the per capita pollution times the population density in a given area.

<sup>61</sup> Brechin and Kempton, "Global Environmentalism: A Challenge to the Postmaterialism Thesis?" and Kaimowitz, "Social Pressure for Environmental Reform."

<sup>62</sup> The pollution density of air pollution in this paper is calculated by dividing the total amount of annual sulfur dioxide emissions (or other pollutant) by the land area of a specific administrative area, in this case the land area of a particular province or municipality. The social density of pollution is calculated by multiplying the amount of the annual industrial emissions by the population density. Or again, you can get the social density of pollution per kilometer by taking the per capita pollution times the population density.

<sup>63</sup> Jeffery Broadbent measured Japanese society's response to its air pollution problems as the rapidity of the response (indicated by the percentage of reduction in

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sulfur dioxide), and the thoroughness of the response (indicated by its percentage reduction at the twenty-year mark).

<sup>64</sup> The nature of available data dictated that levels of industrial pollution needed to be used because the Chinese stopped reported total levels of sulfur dioxide emissions in 1996 and only supplied industrial emissions.

<sup>65</sup> For an excellent discussion of the relationship between the demand for environmental quality and trade see Thompson and Strohm, "Trade and Environmental Quality: A Review of the Evidence." Some scholars argue that the rise of a middle class spurred the environmental movements in Thailand and other Southeast Asian countries. See Hirsch, "Where are the Roots of Thai Environmentalism?"

<sup>66</sup> W. J. Baumol and W. E. Oats, *Economics, Environmental Policy, and the Quality of Life*, Englewood Cliffs, N.J.: Prentice-Hall, (1979), Chapters 12 and 13. Many other early studies looked at the relationship of per capita GDP and levels of pollution and measured the demand for environmental quality as actual decreases in pollution levels. See P. A. G van Bergeijk, "International Trade and the Environmental Challenge," *Journal of World Trade* 25, no. 6 (1991); and G. M. Grossman and Krueger A. B., "Environmental Impacts of a North American Free Trade Agreement," in *The Mexico-U.S. Free Trade Agreement*, ed, P. M. Garbier, (Cambridge, MA: MIT Press, 1993).; G. M. Grossman and A. B. Krueger, "Economic Growth and the Environment," *Quarterly Journal of Economics* 112 (1995). As summarized in the Thompson & Strohm article, these economics argue that environmental deterioration is not an inevitable product of economic development. They argue that the relationship is better described as an inverted U, meaning there is a positive correlation until a certain level of development is reached, then pollution levels begin to be negatively correlated (pollution levels decline).

<sup>67</sup> Dunlap, Gallup, and Gallup, "Of Global Concern: Results of the Health of the Planet Survey."

<sup>68</sup> From the economic literature see V. W. Ruttan, "Technology and the Environment," *Journal of Agricultural Economics* 53 (1971); I Walter, "International Economic Repercussions of Environmental Policy: An Economist's Perspective," in *Environment and Trade*, ed, S. Rubin, (Totowa, NJ: Allanheld, Osmum, 1982). For a discussion of income and political participation see Shi, *Political Participation In Beijing*, pp. 3-4.

<sup>69</sup> Huntington and Nelson, *No Easy Choice: Political Participation in Developing Countries*, p. 132.

<sup>70</sup> Shi, *Political Participation In Beijing*, p. 213.

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<sup>71</sup> *Zhongguo Huanjing Nianjian, 1998 (China Environment Yearbook)*, (Beijing: China Environment Yearbook Press, 1999). p. 336.

<sup>72</sup> *Huanjing Nianjian, 2000 (Environmental Yearbook)*, p. 347.

<sup>73</sup> Dunlap, "Public Opinion and Environmental Policy." and Ostman and Parker, "Impact of Education, Age, Newspapers, and Television on Environmental Protection Target Responsibility Systemmental Knowledge, Concerns, and Behaviors."

<sup>74</sup> Reasons for this include the non-acknowledgment of one's own impact on the environment, rising environmental awareness without the simultaneous commitment to acting on that awareness, and the lack of awareness about how to translate one's concern into action, i.e. they do not know where to turn or what to do about their concern. Wing Hung Lo and Wing Leung Sai from D. Scott and F. K. Willits, "Environmental Attitudes and Behavior: A Pennsylvania Survey," *Environment and Behavior* 26, no. 2 (1994).

<sup>75</sup> Wing-Hung Lo and Wing Leung Sai, "Environmental Agency and Public Opinion in Guangzhou: The Limits of a Popular Approach to Environmental Governance," p. 689.

<sup>76</sup> Interview #8, fall 1999.

<sup>77</sup> There have been over a dozen environmental awareness surveys conducted in various areas in China over the last five to seven years. See Xi Xiaolin and Xu Qinghua, *Zhongguo Gongzhong Huanjing Yishi Diaocha*, (Beijing, China: Zhongguo Huanjing Kexue Chubanshe [China Environmental Sciences Press], 1999); Wing-Hung Lo and Wing Leung Sai, "Environmental Agency and Public Opinion in Guangzhou: The Limits of a Popular Approach to Environmental Governance."

<sup>78</sup> In 1995, The Environmental Social Organization, Friends of Nature, began to conduct an annual survey of environmental reporting in China's newspapers and self published their results in a survey report.

<sup>79</sup> Tianjin Shi has shown that unofficial channels of information are more significant in explaining citizen participation in Beijing. See Shi, *Political Participation In Beijing*.

<sup>80</sup> It is unclear exactly when the number of accidents reached a peak because the data for 1986 through 1989 is not available.

<sup>81</sup> There are several categories of accidents: common, large, severe, and extremely severe. Common environmental accidents include those where there are economic losses of over 1,000, but less than 10,000 Yuan. Large environmental accidents are

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those that include at least one of the following: 1) economic damages of over 10,000 but less than 50,000 Yuan; 2) people are poisoned; 3) when the accident causes a dispute between the enterprise and the people; 4) when the surrounding environment is harmed. Severe environmental accidents are those that include any of the following: 1) economic losses of over 50,000 but less than 100,000 Yuan; 2) people find evidence of poisoning, radiation injuries, or anything else that could lead to deformities or handicaps; 3) people are poisoned; 4) when environmental pollution threatens the peace and stability of society; and 5) when there is significant environmental damages. Extremely severe environmental accidents are those that include any of the following: 1) economic losses of over 100,000 Yuan; 2) there is obvious evidence of poisoning or radiation exposure; 3) if anyone dies as a result of the accident; 4) if the economic or social life of the local is severely affected; and 5) if the environment is seriously harmed. “*Baogao Huanjing Wuran yu Pohuai Shigu de Zhanxing Banfa*” (Provisional Regulation regarding Notification of Environmental Pollution and Accidents), National Environmental Protection Administration, September 10, 1987.

<sup>82</sup> *Zhongguo Huanjing Nianjian, 1990 (China Environment Yearbook)*, (Beijing: China Environment Yearbook Press, 1991), p. 136.

<sup>83</sup> This data is available in various years of the China Environment Yearbook.

<sup>84</sup> The first method would count the 20 people (*ren-ci*), while the second method would count 1 incident (*pi-ci*). However, the dual method of counting is only used for visits; it is not used for letters to the EPB, so the total number of incidents is unknown. This may be a way to camouflage the number of incidents or it could mean that officials put more importance on complaints if people come to the EPB in person. It could also be that people who write letters to complain send “joint” letters or a petition that is signed by all those with the same grievance.

<sup>85</sup> *Zhongguo Baozhi de Huanjing Yishi, 1999 (Survey on Environmental Reporting in Chinese Newspapers)*, Beijing, China, Friends of Nature.

<sup>86</sup> In 1990, at the national level, there were a total number of 32,654 water pollution complaints and by 1998 this number had decreased to 28,279. The amount of effluent discharged in 1990 was 249,000,000,000 tons and by 1998 the amount of effluent had decreased to 200,500,000,000 tons. See China Environmental Yearbook, various years.

<sup>87</sup> To find the answer to these puzzles, one must take each “outlier” individually to find out what happened in that province. The disaggregated data should be available at the provincial level EPB because it is responsible for collecting data from each city. City level data is available at city level EPBs, but access to the data is not always possible. A native Chinese person may have better luck in obtaining disaggregated data.

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<sup>88</sup> However, that is not to say that administrative errors are insignificant, they are, but they are easier to correct.

<sup>89</sup> The categories of “*xinfang*” have changed over time. See the appendix regarding data problems for a full description and analysis of these problems.

<sup>90</sup> The correlation coefficients tell us whether the variables have a positive correlation or a negative correlation, so it does not matter which variable is a function of the other. The coefficients of determination  $r^2$  and  $R^2$  tells us a little bit more information; it tells us how much the dependent variable changes as the independent variable values change, under the assumption that the dependent variable is a function of the independent variable. The  $r^2$  is used in bivariate regressions, while the  $R^2$  is used in multiple regressions. The  $R^2$  is the coefficient of multiple correlations. The t test (or t ratio) is used to test the overall significance of each individual factor in relation to the number of complaints, but the t test cannot tell us the overall significance of the multiple regression models that contains all of the variables. This is because we cannot test that the variance of each variable equals zero at the same time. The t statistic cannot measure multiple variances for multiple variables at the same time. To test the overall significance of the multiple regression models, the F statistic (analysis of variance –ANOVA technique) must be used. See Larry Schroeder, David Sjoquist, and Paula Stephan, *Understanding Regression Analysis: An Introductory Guide*, (Newbury Park, CA: Sage Publications, Inc., 1986); Damadar Gujarati, *Basic Econometrics*, 3rd ed. (New York: McGraw-Hill Inc., 1995), pp. 244-246.

<sup>91</sup> Both bivariate and multivariate regressions were run in order to better understand the various relationships among all the variables and to find the model containing the independent variables that were best able to account for variations in the dependent variables. Four different multiple regressions, plus variations, were done with both the national and provincial level data. The four main multiple regressions are as follows: 1) air pollution complaints w/measures of SO<sub>2</sub>, cumulative media programs, and per capita GDP; 2) water pollution complaints w/ measures of effluent, cumulative media programs, and per capita GDP; 3) total complaints w/ measures of SO<sub>2</sub>, cumulative media programs, and per capita GDP; and 4) total complaints w/ measure of effluent, cumulative media programs, and per capita GDP.

<sup>92</sup> There is an uncorrectable problem with autocorrelation in the national level data. The problem arises because of the time-series nature of the data. It cannot be resolved because of the limited number of cases. If dummy variables for each year were added, then there would be more independent variables than there are cases, which would cause more harm than leaving the autocorrelation. The regression in the presence of autocorrelation is more likely to have a type II error, i.e. the possibility of considering the variable statistically insignificant when in fact it is significant.

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<sup>93</sup> Huntington and Nelson, *No Easy Choice: Political Participation in Developing Countries*. p. 132.

<sup>94</sup> Dawson, *Eco-nationalism*, pp. 13-19.

<sup>95</sup> The terms “regime proscribed” and “tolerated” political participation were borrowed from Tarrow, "Silence and Voice in the Study of Contentious Politics: Introduction." p. 7.

## Chapter Five

### Campaigns Without Struggle: Volunteerism and Public Participation in The Environmental Sector

“Without mass voluntarism, nothing can achieve results, or, if achieving results, cannot be consolidated....”The key to inducing ‘volunteerism’ among the masses is to have them motivated by some degree of acceptance of Communist ideology.<sup>1</sup>

“We need to expand environmental education and strengthen the environmental awareness of the broader population. To date, we have already come a long way in raising environmental awareness by mobilizing and educating the passive public and by citizen activists taking the initiative to participate in environmental protection activities. Raising the public’s environmental values requires active participation. To be the most effective, citizens must consciously and actively participate in environmental protection activities.” (Xie Zhenhua, speech on Earth Day, April 22, 1995)

During the Mao era in China, campaigns (*yundong*) were a “fundamental political institution.” Today, they are a fundamental policy institution. The Chinese campaign nearly disappeared as a subject of political inquiry after 1978, but there is still value in examining campaigns.<sup>2</sup> Campaigns are a channel of public participation in implementation processes and remain a primary vehicle used by the government to achieve policy goals, including environmental protection goals.

Environmental campaigns today are depoliticized, institutionalized, routinized, and are somewhat more sophisticated than Maoist strategies of mass mobilization. The instrumental value of campaigns has become paramount. The “political” value is secondary which makes them better tools with which to attain policy goals and to “guide” citizen behavior. They are not as political because they no longer involve personal political “struggle” and do not function to purge individuals and groups on

political grounds. In addition, campaigns have achieved a higher level of volunteerism. Today, citizens are more likely to participate because they support the policy goal and governmental efforts to reach that goal, not because they have to.

Party, government, and environmental protection officials mobilize direct participation of the public in campaigns at the national, provincial, city, and county levels. Authorities mobilize participation through local EPBs, Street Offices or residence committees (*shequ jianshe*), schools, and social organizations such as the Young Pioneers. Some campaigns involve promoting mass actions needed to achieve certain environmental goals such as preventing sand storms by planting trees, or modifying the environment by cleaning up trash or filling in swamps. Some campaigns have educational goals such as popularizing environmental laws or introducing new environmental products.

Campaigns are more than a tool of direct mobilization, education, and means to a policy end; on a more subtle level, they are a means of communication between the state and society. Campaigns “signal” to the population those issues which are priorities and which issues are appropriate to address. Campaigns reflect the state’s environmental protection agenda and are among the means by which the government transmits that agenda to citizens. Campaigns steer citizen participation toward the achievement of state-defined policy goals. Through campaigns, the state and citizens work together to reach policy goals. In addition, a side effect of state-mobilized campaigns has been to encourage public participation in policy processes outside the campaign structure, although with many of the same policy goals. Today, campaigns

have the effect of encouraging participation not displacing it. However, they do help to “frame” participation by guiding it toward certain policy ends.

This chapter shows how environmental campaigns have evolved since the Mao era and have become less politicized, more institutionalized and routinized, and a little more sophisticated. It describes how campaigns are carried out and illustrates some of the main campaigns at the national and city level (in Beijing, Taiyuan, and Chengdu.) Finally, the chapter discusses the significance of campaigns for state-society relations and explains why campaigns are still being used as a policy implementation tool.

### **Mass Mobilization and Ecological Construction Projects In Imperial China**

Many large-scale ecological construction projects were built during Imperial China (221 BC to 1911 AD) that took scores of peasants, slaves, and workers. Some of these projects were built by the people of China against their will, sometimes under the threat of death. The building of the great wall is one example. When Emperor Qin Shi Huangdi unified China in 221 BC, he decided to link all of the shorter walls built along China’s northern border since 600 BC. The wall was built to keep the barbarians in the north from descending upon China. The emperor's soldiers grabbed criminals, troublemakers, musicians, teachers, writers, artists, and humble peasants to help build the Great Wall. In all, about one million people marched north to build the Great Wall. Workers who complained or who tried to run away were buried alive. Many Chinese spent the rest of their life building the Great Wall. Many times, dead Chinese were buried in the wall. The Great Wall is sometimes called the "Long Graveyard" because so many people died while building the wall.

Many large projects were part of imperial state-building efforts and as Mark Elvin points out, growth and development are often taken beyond what is sustainable in order to acquire political, economic, and military power.<sup>3</sup> China's many water projects are an example of this.

Imperial China is famous for its huge water projects, especially flood control works, irrigation systems, and canals. While many of these large projects were part of China's state building efforts and brought in revenue (in the form of rice), China itself was never a "hydraulic society." In such a society, water management required substantial and centralized control; the central state monopolized political power and dominated the economy, resulting in an absolute despotic state. As Wittfogel points out, China was too large and too complex to be completely dominated for long.<sup>4</sup>

Many people were forced to labor on huge water projects and the Grand Canal is one example. The building of the canal began in 486 B.C. during the Zhou Dynasty. It was extended during the Qi Dynasty, and later by Emperor Yangdi of the Sui Dynasty during six years of rapid construction from 605-610 A.D. About half of the six million people drafted to build the canal died in the process. There was an explosive economic boom because of the increased trade and development associated with the canal.

While millions of Chinese were mobilized to work on huge ecological projects during the imperial period, the concepts of volunteerism and campaigns (*yundong*) are typically associated with Mao Zedong.

## **Roots of *Yundong*: Definitions and Typologies**

When we think of Mao's *yundong*, we immediately think of the devastating Cultural Revolution and The Great Leap Forward, both of which had practical as well as political goals. During Mao's reign, there were tens of other large and small-scale campaigns; campaigns were a daily staple. Everybody, from schoolteachers to janitors, would spend about an hour a day in study sessions linked with a campaign.<sup>5</sup> People would think of reading the newspaper and wall posters announcing new tasks; attending study sessions and meetings to plan local implementation; recruiting "activists"; and making self criticisms of their shortcomings.<sup>6</sup> All campaigns had slogans. The slogans are a reflection of the values, attitudes, and goals held by those in power.<sup>7</sup> Citizens knew the slogans by heart and would repeat them often.

Semantic differences make it necessary to explain the relationship between the Chinese word "*yundong*" and the equivalent English translations - campaign, drive, crusade, or movement. Gordon Bennett's early definition of *yundong* is "a government-sponsored effort to storm and eventually overwhelm strong but vulnerable barriers to the progress of socialism through intensive mass mobilization of active personal commitment."<sup>8</sup>

The word "*yundong*" and Gordon's definition are specific to China's economic/political system. The English equivalents however, are not. In addition, the English equivalents do not capture the idea that campaigns and movements are initiated by the state. With the English words, governments or other types of organizations can play the role of initiator.<sup>9</sup>

In this chapter, however, the words *yundong*, campaign, drive, and crusade will be used interchangeably and have meanings specific to the Chinese political system. A campaign is a “government-sponsored effort to forward socialism and attain specific policy goals through intensive mass mobilization and cultivation of active volunteerism.” *Yundong* will not be translated to mean “movement” which has a narrower definition.<sup>10</sup>

### **Typologies, Mechanics, and Phases of Mao Period *Yundong***

Various scholars have determined different typologies with which to classify campaigns.<sup>11</sup> Gordon Bennett’s typology is particularly useful. He divides campaigns into seven overlapping groups based on their function. Mobilized campaigns are meant to: 1) implement existing policy; 2) emulate model experience or demonstration; 3) introduce and popularize a new policy; 4) correct deviations from public norms; 5) rectify leadership malpractices among responsible cadres or organizations; 6) purge individuals or groups whose political opposition is excessive; and 7) effect enduring changes in both individual attitudes and social institutions.<sup>12</sup>

In the Mao period, there were several ways that authorities conducted campaigns. One way was to have “work teams” (*gongzuo dui*), who are already versed in a campaign, physically move on to another area to initiate the same campaign. Another way is to have officials at the national level designate certain provinces to become “trial cases” (*shidian*). These provinces would then designate *shidian* at the next lower administrative level. This process continues until there are *shidian* for a specific campaign at all administrative levels of government.<sup>13</sup>

Bennett offers other useful insights into the nature of campaigns. He delineates the common stages of campaigns. In general the phases are: 1) designate tasks & organize campaign; 2) emphasize study and investigation (familiarize people with “tasks” and recruit “activist” (*jjiji fenzi*) and “principle” (*gugan fenzi*) elements; 3) summing up of campaign (evaluate, punish offenders, and reward activists).<sup>14</sup> The phases in a campaign to introduce a new policy would look slightly different from campaigns meant to purge certain individuals.

The first, organizational, phase of a campaign represents the initial trial of new policy ideas in one area. Next, a few *zhongdian* (key points) are distilled from the experience for the purposes of popularizing the policy and to simplify education of cadres. Authorities then try to apply the *zhongdian* on a wider scale, in “*dianxing anzi*” (classic cases that illustrate the problems or issues of interest).

In the second phase of a campaign, during the mobilizational phase, individual trial areas begin to implement the campaign by recruiting activists and principles, familiarizing the population with the campaign, and collect data on campaign-relevant issues specific to that area.<sup>15</sup> The last part of this phase often entails public struggle sessions and denunciations, especially in cases where a *yundong* aims to eliminate or support specific behaviors.

In the third phase of a campaign, during the completion phase, the effectiveness of the campaign is evaluated. Sometimes if the campaign in a specific area is seen as a failure by higher-level authorities, then the whole process is repeated. In Maoist China, there were often deadlines by which campaigns should be complete at each successive administrative level of government.<sup>16</sup> However, interviewees from

China in the 1950s and 1960s reported that often there is no formal end to a campaign. The Chinese lump small to large *yundong* together under one category, despite the fact that some campaigns do not have all the characteristics of other campaigns.<sup>17</sup>

### **Environmental Campaigns During the Mao Period<sup>18</sup>**

In hindsight, Chinese leaders and outside observers admit that while some of Mao's *yundong* were successful in mobilizing collective action and often met their stated goals, the underlying values and misguided goals of many campaigns, however, did more harm than good to the environment.<sup>19</sup>

In her book entitled *Mao's War Against Nature*, Judith Shapiro examines how state-led campaigns had consequences for the natural environment during the Mao period.<sup>20</sup> She uses four themes (& campaigns) to organize her book and the man/nature relationships during the Mao period: 1) political repression (anti-rightist campaign), 2) utopian urgency (Great Leap Forward), 3) dogmatic uniformity (Learn from Dazhai), and 4) state-ordered relocations (war preparation campaign). She explains some of the major environmental campaigns in relation to other political currents and campaigns of the period. She chronicles how "Maoist values came to dominate and govern the human-nature relationship, and about what happened as a result" Mass environmental campaigns during the Mao period were not based on an underlying value of protecting the environment. Instead, they were based on the idea that man must conquer nature. She provides numerous examples of how Mao's campaigns led to environmental degradation at the local level. She argues that they did more harm to the environment than they did good, were applied without concern for local conditions, and were willfully carried out by a submissive population and

crushed intellectual freedom. Mass campaigns and attending slogans were meant to “unleash energy, build support, convey leaders’ expectations, create conformity, and discourage doubt and resistance.”<sup>21</sup>

### ***The Great Leap Forward***

One of the most devastating campaigns was The Great Leap Forward.<sup>22</sup> The Chinese admit that during the Great Leap Forward people caused massive environmental destruction and deterioration in the attempt to speed up economic growth. Concern for the environment was cast aside and pollution prevention management was in disarray. One slogan of the time was “the work of 20 years will be done in one day” (“*yitian dengyu ershinian*”).<sup>23</sup>

During the Great Leap, authorities wanted to make each village self-sufficient by producing its own steel. Across the country, citizens’ built more than 600,000 iron furnaces, 59,000 coking plants, 4,000 small power plants, and 9,000 cement plants. This “*Dalian Gangtie*” campaign had enormous environmental consequences as citizens cleared the hillsides to obtain fuel and built shoddy steel making facilities that spewed black smoke into the air and poisonous effluent into the waterways. The mass mobilization campaign also cleared the land of its mineral resources, which had the effect of destroying the landscape and appearance of many areas. Agricultural production dropped to dangerous levels as citizens abandoned the fields for the furnaces.<sup>24</sup>

Mao himself admitted later that the Great Leap Forward had largely been a mistake. There are physical consequences when the objective laws of nature and science are violated. The Great Leap Forward is perhaps one of the most devastating

instances of the consequences of man's irrationality, wishful thinking, and power run amuck.

Just after the Great Leap, authorities took legislative action and initiated counter campaigns to protect resources, encourage agriculture, and rectify industrial policy. The State Council passed two important regulations: "Regulations Regarding Protection of Forests" (*Linsen Baohu Tiaoli*) and "Regulations Regarding the Protection of Mineral Resources" (*Kuangchan Ziyuan Baohu Tiaoli*). Mao initiated a campaign called "open the wilderness to plant grain" (*kaihuang zhong liangshi*) to prevent further famine.<sup>25</sup> Authorities closed, stopped production, merged, and altered factories that had been built within city limits without concern for the environment. Industrial policy was easy to remedy. In contrast, the damages wrought to ecosystems was much more difficult to repair. Even in the 1990s, some of the harm done to the natural environment during the Great Leap has not been healed.<sup>26</sup>

### ***The 1960s: "Learn From Dazhai" and Preparations for War***

In the 1960's, Mao launched the "Learn From Dazhai" (*Xuexi Dazhai*) campaign. This campaign was based on the experience of one production brigade at Dazhai People's Commune that overcame the effects of disastrous floods through self-reliance.<sup>27</sup> In 1964, Mao promoted Dazhai as a model for the rest of the country to follow. He also used the model to promote extensive terracing and filling in of rivers and lakes to make crop fields. In short, Mao used the Dazhai model to prove that man could conquer nature through hard work and ideas. A common slogan was "if people listen to Chairman Mao, the land will listen to them."<sup>28</sup>

The Dazhai model was known across China and Dazhai became a “pilgrimage” destination for young communists imbued with revolutionary vigor and the “Dazhai spirit.” Units based on the Dazhai model were built in every province, every county, and in people’s communes. This dogmatic conformity led to destruction of countless forests and lakes, desperate attempts to grow grain in unsuitable areas, untold human suffering, and great waste. The Dazhai model remained intact until 1978 when Deng Xiaoping wrested power from Hua Guofeng, Mao’s successor. Hua supported the Dazhai campaign and when he was purged, the campaign lost its momentum.<sup>29</sup>

In the late 1960s to the early 1970s, Mao linked the “Learn from Dazhai” campaign to a campaign to prepare the people for war. At the time, border skirmishes with the Soviet Union had reached a peak and China had not yet begun rapprochement with the United States, so tensions were high. In the effort to prepare for war, massive relocation programs took place under the “Third Front” (*sanxian*) campaign<sup>30</sup> and the “educated youth movement” (*zhiqing yundong*)<sup>31</sup> to “open up” wastelands near the Soviet border (Heilongjiang, Inner Mongolia, and Xinjiang), and to remake the mountainous interior in china’s Southwest and western provinces (Yunnan, Guizhou, and Sichuan). These campaigns were intended to reduce the risk of famine and to build up an inland industrial base as a fallback in case of war. A common slogan was “prepare for war, prepare for famine, for the sake of the people’ (*bei zhan, bei huang, wei renmin*). These campaigns were diluted during the Great Cultural Revolution, but were strengthened in 1968.

In agricultural production in some provinces, the guiding principle became “take grain as the key link” (*yi liang wei gang*).<sup>32</sup> In others on the southern borders, it

became “everything must yield to rubber” (*yiqie wei xiangjiao rang lu*).<sup>33</sup> One slogan encouraged people to farm on steep mountains: “*zhongtian zhongdao shanding, chouzong choudao huxin*” (plant fields to the pinnacle of mountaintops).<sup>34</sup> Another slogan encouraged people to destroy bodies of water to create fields: “*weihai zaotian*” (fill in the seas and create fields) and “*xiang canghai yao liang*” (seek grain from the blue seas).<sup>35</sup> During this period, leaders forcibly relocated hundreds of thousands of urban youth to remake the wastelands into arable land and to build up an inland military industrial base. Leaders sought to avoid famine, but ended up destroying acres and acres of forests and grasslands to make marginal croplands.<sup>36</sup>

The “Third Front” campaign dominated the third five-year economic plan. In preparation for war, increasing production was stressed and industry and mining operations were moved to China’s interior. Roads and railroads were built into previously pristine wilderness areas. Heavily polluting enterprises were moved to remote mountain valleys in accordance with the guiding principle “*kaoshan, fensan, jindong*” (scatter and move near mountains and in caves). Sometimes whole factories were moved, other times, enterprises were built from scratch. It was impossible to build “industrial zones” with pollution prevention equipment in these remote areas and the environment suffered. In the cities, industry became the most important priority. “*Xianshengchan hou shenghuo*” (produce first and live second) became the guiding principle. One slogan was “turn consuming cities into producing cities” (*bian xiaofei chengshi wei shengchan chengshi*).<sup>37</sup> In keeping with this principle, many of China’s culturally rich cities were turned into polluted industrial centers.

Today's environmental authorities still blame many of China's environmental problems on decisions made between 1949 and 1976.<sup>38</sup> Campaigns associated with the Great Leap Forward and preparations for war in the 1950s and 1960s reshaped the Chinese landscape by opening wild lands for agriculture, terracing on steep mountain slopes, "moving mountains," triggering massive soil erosion, filling in lakes and rivers, destroying forests, decimating wild fauna and flora and bringing many rare animals close to extinction.<sup>39</sup>

During the Mao period, the Chinese campaign tactic was honed, but the methods and results of campaigns are controversial. Campaigns, in general, were seen by some as "effective vehicles for political participation" and that they contributed more toward meeting economic goals than they did not.<sup>40</sup> Not all Chinese scholars, however, were this optimistic. Even during the high tide of mass *yundong* during the 1960s, there was a debate among Chinese leaders as to the usefulness of *yundong*. Some saw campaigns being less and less effective as time went on.<sup>41</sup> In other cases, scholars questioned the goals of campaigns. There are several cases in which Chinese scholars and scientists warned of the dangers that would result from *yundong*, but their warnings were disregarded and sometimes they were persecuted for being counter revolutionary.<sup>42</sup>

Some argue that the campaign method was the only feasible choice for Chinese leaders at the time to accomplish the gargantuan task of developing China. China was not rich in financial resources but had a vast reservoir of human capital. The need for self-reliance was another argument that supported the use of the campaign method. Despite the controversies surrounding the campaign method, some scholars believed

that the general Chinese style of mass campaigns, distinct from other communist states, would continue after Mao.<sup>43</sup> There is evidence to suggest that authorities have continued to utilize the campaign method to achieve policy goals, although specific campaign goals and procedures have changed.

### **Changing State Values and The Evolution of Campaigns**

Beginning after the fall of Mao in 1976 and the rise of Deng Xiaoping to power in the late 1970s and early 1980s, campaigns began to change. These changes reflect the overall political, social, and economic shifts that took place at the time. Campaigns retain some of the previous functions of the Mao campaign, but have become less political. Overall, they became less political because of Deng Xiaoping's focus on "practical" matters, the shift of campaigns toward "rational" goals based on scientific research, the separation of party and state organs and the resulting partial shift in organizational responsibility for running campaigns from the party to the government. In addition, the gradual reliance on laws and regulations to shape behavior instead of ideology has altered campaigns. These changes have made campaigns more sophisticated. Campaigns still seek to unleash civil energy, build public support for governmental goals, convey leaders' expectations, and create conformity. In the environmental sector, broad campaign goals show some continuity with earlier periods. Campaigns continue to be used to implement existing policies, promote emulation of model experiences, introduce and popularize new laws and policies, establish public norms, and encourage enduring changes in both individual attitudes and social institutions.

## **Campaigns During the 1980s**

### ***“Environmental Protection Month”***

In the 1980s, environmental education campaigns for general citizens were much more sporadic and there were few operating agencies at the local level to implement campaigns. One example is the “National Environmental Protection Education Month” sponsored by the State Council Environmental Protection Leading Small Group. The impetus for this campaign was the promulgation of China’s first environmental protection law in 1979. In 1980 and 1981, in accordance with the Environmental Protection Law, the national education campaign sponsored by the State Council Environmental Protection Leading Small Group, and the propaganda department of the Standing Committee of the Chinese Communist Party Central Committee focused on popularizing the 1979 Trial Environmental Protection Law and basic environmental science knowledge in order to raise citizen’s environmental awareness.

Most provinces, municipalities, and large cities held a large-scale meeting at which authorities broadcasted the need for each department, industry, and mine to enact environmental protection measures. For example, in Heilongjiang, over 100,000 people attended such a meeting. All television, news, and education units were called upon to participate in various activities, as were the nation’s unions, science societies, Youth Leagues, and Women’s Federations. Activities included shows, plays, literature and art, and street propaganda activities. Local party authorities utilized neighborhood billboards and blackboards to display environmental protection slogans. The campaign encouraged the further development of citizen environmental monitoring groups

through Street and Residence Committees in select cities including Shanghai, Beijing, Xian, and Jinan.

According to environmental protection authorities, the Environmental Protection Month Drive also helped build support for the development of local environmental regulations in several areas including Shanxi, Hebei, Gansu, Yunnan, and a number of large cities. Some areas collected environmental dispute cases and worked to reveal environmental harms. In addition, the Drive helped promote the “three simultaneous policy.” The army stepped up its efforts to clean up water pollution from hospitals. Soldiers had already cleaned up 45 hospitals and were determined to finish the other 170 by the end of the year. Overall, the month-long drive heightened enthusiasm on the part of environmental protection authorities in selected locations. Yet, the lack of environmental protection apparatus personnel at the local level severely hampered the campaign.<sup>44</sup>

For example, in Chengdu, there was no Environmental Protection Commission until 1984 and there were no “environmental education months” or weeks until the 1990s. Starting in 1990, the Environmental Education Center coordinated an “environmental protection education week” (*xuanchuan zhou*) during which time the Environmental Protection Law was popularized through a number of activities. Taiyuan had a mere shadow of an “environmental education month” campaign and drew little attention in 1990.

Later “environmental education week or month” campaigns simply became campaigns to popularize environmental laws and occurred every time a new national or local law was promulgated. In Taiyuan, in the early 1990s and each year thereafter,

popularizing new environmental policies, laws, and regulations became the focus of campaigns for environmental protection workers and the general population. In 1990, alone, specific education campaigns included those to popularize the “Environmental Protection Law” and the “Shanxi Provincial Regulations Regarding the Prevention of Pollution in the Fen River.”

Another focus of “Environmental Month” campaigns was to popularize the policies or the “spirit” of the National and provincial Environmental Protection Working Meetings into city educational activities. EPB officials “studied” and “educated” the “Gujiao Spirit” (*Gujiao Jingshen*)<sup>45</sup> and the “*Lishuangliang* Spirit” (*Shuangliang Jingshen* or *Shuangliang Daolu*).<sup>46</sup>

### ***Compulsory Forestry Campaign***

Another early major national campaign, the “*zhishu zaolin*” (plant trees and create forests),<sup>47</sup> got its start in 1981 and is still going on today.<sup>48</sup> This campaign is unique in that it is compulsory. In 1981, the National People’s Congress under the direction of Deng Xiaoping passed the “Decision Regarding Development of a National Compulsory Tree Planting Campaign.” Subsequent legislation established the “Luhua Weiyuanhui” (Greening Committee) under the State Council and strengthened the massive tree planting campaign.<sup>49</sup>

The Regulations required all citizens of the PRC between the ages of 11 and 55 (60 for men) to plant three to five trees a year, excluding the infirm or weak. Central authorities determined priority areas for planting. The campaign was coordinated through work units. Unit leaders requisitioned the appropriate number of saplings from the local “Luhua Weiyuanhui” (Greening Committee). The China Greening

Foundation was established to collect donations, help determine priorities, train experts, and engage in educational activities. Donations were collected from domestic sources including individuals, collectives, enterprises, businesses, agencies, social organizations, and work units. In addition, donations were collected from foreign individuals and groups.<sup>50</sup>

Authorities harnessed the energy of the public to plant state-owned and collective forests, green urban areas, beautify enterprises, and green and protect rural areas.<sup>51</sup> Officially, the goals of the campaign were to utilize people power to green the nation, to raise the public's awareness of the need to plant trees, and to instill the understanding that each person is responsible for greening the nation (*luhua zhuguo renren you ze*). Authorities hoped to instill "green values" and to gain experience in organizing such massive campaigns.<sup>52</sup> Periodically officials would boost the campaign. In 1987, party and government leaders encouraged the masses to "*zhishu zhongcao, luhua zaolin*" "plant trees and grow grass, green things and create forests."<sup>53</sup> The national compulsory tree planting campaign is not only to mobilize the public to plant trees, it is also to instill love of one's country, promote the socialist spiritual culture, and mold a spiritually rich movement.<sup>54</sup>

### ***The Spirit of Gujiao Campaign***

Yet, another early campaign, the "Gujiao Jingshen" (Spirit of Gujiao), ironically, emerged from one of the most polluted areas in China, Taiyuan in Shanxi province. This famous, although not highly successful, campaign began the mid-1980s. To this day, officials in various parts of China invoke the "*Gujiao Jingshen*" slogan to encourage emulation of Gujiao and to promote respect for and adherence to

environmental laws and policies. The “*Gujiao Jingshen*” model is based on coal mining operations in the city of Gujiao, which is part of the Taiyuan administrative area. Starting in 1984, the Provincial People’s Congress, the Taiyuan City People’s Congress, and provincial and city environmental protection agencies requested that environmental protection be taken into consideration when developing this important mining area. Involved actors apparently did a good job in adhering to existing environmental laws in both the design and building phases, because Li Peng praised the project in a speech in 1985. Li Peng applauded the environmental protection efforts, dubbed them the “Gujiao Jingshen,” and extolled the nation to incorporate the “Gujiao Jingshen” into similar projects.<sup>55</sup> However, the “Gujiao Jingshen” also refers to the structure of the mining industry in Gujiao, where state enterprises took the lead in mining operations and smaller collective enterprises filled in the holes. The “miracle” of Gujiao was accomplished with financial and technical support from foreign sources. The Gujiao Spirit has since become a popular slogan used by government and environmental officials to promote environmental protection goals in all of Shanxi province and even nationally. On the 10<sup>th</sup> anniversary of the campaign in 1995, authorities held an expert workshop extolling the utility of the Gujiao model for the future.<sup>56</sup>

### **Institutionalization of the National Environmental Protection Administration, Environmental Education and Campaigns**

Since the 1980s, environmental campaign mobilization has been closely linked with education efforts. Typically, the “mobilizers” are the first targets of educational training, so that they in turn can educate and mobilize the wider population. Therefore,

the first targets of environmental education training were “specialists,” government and party leaders, enterprise leaders, and teachers.

Between 1985 and 1992, environmental education and campaigns increasingly came under the supervision of the growing environmental protection apparatus. The four main targets for environmental training and education efforts led by the Environmental Protection Commission and the National Environmental Protection Bureau focused on improving professional programs in schools, educating environmental protection officials, governmental officials, workers in polluting enterprises, and primary and secondary school teachers. Teachers in turn educated students about the environment in the classroom and in extracurricular activities. In Chengdu test cases, it is estimated that by the end of 1990, over 30,000 Jr. high school students had received some environmental education.<sup>57</sup>

The National Environmental Protection Administration (NEPA) began to take primary responsibility for implementing many environmental education campaigns after its establishment in 1988. NEPA called the first National Environmental Protection Education Work Meeting in 1990. At that time, environmental education could be characterized as being “closed” (*fengbi*). It was not until the second National Environmental Protection Education Work Meeting in 1991 that environmental education became “open” (*kaifang*). In essence, this means that before the second meeting, education efforts focused on environmental protection apparatus personnel. After the meeting, NEPA opened up environmental education to all and environmental education became a part of “cultural education” in every sector.<sup>58</sup> At the meeting, the director of NEPA’s Propaganda and Education Department, Qu Geping, NEPA’s

director, discussed the uses of environmental education. He stressed that education was to provide guidance. In addition, it must provide the foundation for understanding. It serves to mobilize and to promote monitoring.<sup>59</sup>

Therefore, beginning in 1992 and 1993, SEPA put more effort into providing environmental education for the masses, although most education efforts remained focused mainly on the four established education targets.<sup>60</sup> Throughout the 1990s, as the new environmental protection apparatus grew, environmental laws were put in place, and scores of educators, enterprise workers, and officials were introduced to environmental protection concepts, environmental campaigns became more complex and varied.

### **National and Local Environmental Protection Campaigns in the 1990s**

Since 1988, SEPA, the Ministry of Forestry, and other government environmental protection organizations work in tandem with education, propaganda, television and broadcast organizations to initiate and organize campaigns that focus on priority issues (*zhongdian*), which change over time. National level campaigns and mobilization efforts include those meant to shape citizen's values and those meant to mobilize citizens to act. Specific goals of campaigns include reforestation and afforestation, pollution control, elimination of pests, trash collection, popularization of laws, improvement of compliance, cultivation of environmental values, improvement of environmental awareness by celebrating annual commemorative days (such as Earth Day and World Environment Day), protection of endangered species, and preparation for major events, such as the Olympics. Smaller campaigns are simply labeled "*lusi xingdong*" (green actions) and focus on similar issues as national

campaigns. The following section outlines some of the larger environmental campaigns. It is not meant to be a comprehensive examination of environmental campaigns in the post 1949 period.

### ***Earth Day & World Environment Day***

Since 1989, environmental protection authorities worked hard to promote both environmental values and citizen action on an annual basis for the “two days” (*liangri*), Earth Day (*Diqiu Ri*) on April 22<sup>nd</sup> and World Environment Day (*Huanjing Ri*) on June 5<sup>th</sup>. In the following paragraphs, the inner workings of World Environment Day are explored, but many of the same procedures and activities are similar for Earth Day. During the early years, the Propaganda and Education Division of NEPA would issue a notice requesting the education department or education center in each province, municipality, and independent city to develop plans for World Environment Day. Included in the notice were examples of activities scheduled at the national level and those scheduled in Beijing. Education personnel around the country were expected to notify NEPA of their activity schedule.<sup>61</sup> NEPA would also issue a notice providing information about available education materials in order to get the most use of the materials and to avoid duplication of work to create materials. Provincial, municipal and city EPBs could choose to purchase materials that suited their needs from the issued “catalog.”

Activities held on World Environment Day include, youth painting, calligraphy, and writing contests, stamp, poster, and book displays, “green product” displays, environmental question and answer challenges, talent shows, news conferences, talks, lectures and workshops, public ceremonies with speeches and

reports, award ceremonies, television and radio programs, trash cleanups, recycling drives, public pledges,<sup>62</sup> high level meetings, announcements of new policies, student manned “information” tables in the community, handing out environmental education materials, and neighborhood “rallies” and gatherings.

In each of the three case cities, Earth Day and World Environment Day activities varied greatly. Beijing was the first city to celebrate World Environment Day, which it did in 1985.<sup>63</sup> Each year throughout the 1990s, city environmental protection officials, volunteers, and politicians participated in special Earth Day and World Environment Day activities. In 1995, on World Environment Day, the city invited outstanding environmental educators and unit representatives to participate in a conference about how best to raise the environmental awareness of China’s youth.<sup>64</sup> Elementary and secondary schools held writing and painting competitions. Among the popular slogans that year were “I love science, I love nature” (*wo ai kexue, wo ai daziran*) and “I need the earth and the earth needs me” (*wo xuyao diqiu, diqiu xuyao wo*).<sup>65</sup> More than 600 people participated in summer environment camps, and several governmental agencies worked together to produce a movie to educate citizens about automobile pollution.

In Chengdu, each year environmental protection authorities, in conjunction with other governmental organs, especially the Education Commission, to sponsor events, contests, and clean-up drives to commemorate Earth Day, World Environment Day and number of other anniversaries. For example, in 1992, to commemorate World Environment Day and the 20-year anniversary of the Declaration on the Human Environment, city and provincial leaders and more than 1,400 citizens gathered for a

ceremony. Other educational activities took place including an environmental science book display, a writing contest, and a painting contest.<sup>66</sup> In the early months of 1997, the media started carrying stories about the background of Earth Day and giving some background about Chengdu's environmental history. The city held a contest commemorating the panda bear. The EPB and the city Education Commission worked with a university in Japan to put on a painting contest for children in which more than 10,000 students participated. For World Environment Day, leaders from every administrative level joined in a workshop with special guests invited from abroad. The TV news did in-depth coverage of the workshop. The Mayor wrote a famous editorial calling for the beautification of Chengdu in the Chengdu Evening News. Canada and the city Education Commission worked together on a project to provide children less than 15 years of age with environmental education and with opportunities to plant trees.<sup>67</sup>

In Taiyuan, Earth Day and World Environment Day were paltry affairs compared to Beijing and Chengdu. Because the EPB did not have an independent education division, no one was responsible for the work of organizing these annual one-day campaigns. For example, in 1998, the city combined activities for Earth Day and World Environment Day. The theme for World Environment Day was "rise for the environment at the millennium" (2000 – *huanjing qiannian, xingdong qilai*). At a public event to celebrate World Environment Day, provincial and city authorities gave speeches and they honored the 28 elementary schools and 10 kindergartens that had been granted "green school" status. Then the Yingxe district EPB and others participated in an environmental protection activity.<sup>68</sup> Another slogan that was touted

this year was “it begins with me, and from now on we are going to protect our environment that gives life.” The EPB concentrated on putting on a huge “public event” for 6/5. The city EPB worked together with the provincial EPB. At this event, there was a desk set up at which people could ask questions related to the environment (paper/plastic etc...) The desk also featured a person to handle people’s complaints right on the spot. There was also a “*wenda*” activity, wherein the master of ceremonies would ask the crowd a question and whoever could answer it, would win a prize. There was also a display of different “environmental products” including “phosphate free detergent” and environmental protection equipment. The participating enterprises had heard (through the *Banshichu*) about the planned display and volunteered to display their products. At the “event,” governmental leaders signed a “year 2000 pledge banner” promising to protect the environment.

At the national level and in some cities, in the early 1990s, state environmental protection organs, schools, relevant work units, and quasi-governmental organizations, such as the Young Pioneers, at all levels took responsibility for organizing most of the activities and mobilizing participants. As time went on, more groups became involved in activities and participation became increasingly an expression of volunteerism. In the later 1990s, university student groups, new quasi-governmental environmental foundations and organizations, and more autonomous, popular, nongovernmental social organizations, if present, took on more responsibility for organizing activities and mobilizing participation.

Environmental protection authorities and Chinese leaders utilized Earth Day and World Environment Day as symbols of the need for everyone to become involved

in environmental protection and utilized the symbols to generate increasing levels of volunteerism among citizens.

### ***“Huanjing Bei” Campaigns***

In addition, in the early 1990s, environmental protection officials launched a targeted campaign to encourage increased media coverage of environmental issues and to signal “appropriate” environmental stories by rewarding those that met specific criteria. NEPA opened the “*Huanjing Bei*” (The Environment Cup) contest in 1990 and sponsored the contest off and on for the next few years. Judges would make awards to media outlets and individuals for the best stories on the environment. NEPA defined the scope of story contents to include those that focus on new achievements, new developments, new trends, innovative environmental management methods, new experiences, new models, outstanding enterprises or individuals to emulate, issues which impact our lives but of which we are unaware, the concerns of various sectors of society regarding environmental issues, suggestions, and disclosing and criticizing behavior that degrades the environment.<sup>69</sup>

At the local level, cities initiated their own versions of “environmental cups”. In Chengdu, the city EPB and the Chengdu Evening News worked together to hold the “Environmental Protection Cup,” a drive to popularize science and environmental protection. The Cup was in celebration of the ten-year anniversary of the PRC Environmental Protection Law.<sup>70</sup> The EPB worked with the Electronic Education Department at Sichuan Normal University to produce several TV shows including two on water pollution. The EPB worked with Chengdu’s Broadcasting Station to produce other environmental programs. The EPB worked with Sichuan Television Station to

produce a program on controlling air pollution. The EPB also produced a short video about the advances made in protecting Chengdu's environment. There were at least 24 news articles regarding environmental protection. Many education activities were coordinated to popularize the new Chengdu Noise Pollution Regulation.

Since 1989, in conjunction with Chengdu Evening News, The Environmental Education Center sponsored an "art contest" called "the environmental cup" (*huanjing bei*) to challenge peoples' environmental knowledge. Students sent in poems, stories, and comics related to science, as well as paintings and pictures that promote environmental awareness. Over 400 students entered the first contest. The top 15 contestants were eligible to enter the nation wide contest.<sup>71</sup>

***China Century Environmental Protection Drive (Zhonghua Huanbao Shijixing)***

The national Century Environmental Protection Drive was probably the most important campaign in China in the mid 1990s. The campaign began in 1993 signaling the start of a new emphasis on implementation and enforcement. The recently established NPC Environmental Protection and Natural Resources Committee teamed up with the Central Party Department of Propaganda, Ministry of Radio, Film, and Television, the National Environmental Protection Administration, the Communist Youth League and other ministries and organizations to issue a notice requiring China's news media organizations to step up their environmental education efforts and to expand their monitoring of environmental compliance. The notice outlined an annual environmental education drive called the China Century Environmental Protection Drive. During this annual drive, led by the NPC Environmental Protection

and Natural Resources Committee, high level officials and representatives of the media engage in supervisory activities on a national scale. Each year, the campaign has a different theme.<sup>72</sup> The goals of the annual drive are to raise everyone's environmental awareness and their respect for environmental laws.<sup>73</sup> Newspaper stories target specific polluting enterprises for criticism; educate the public on the last 20 years of environmental protection; raise awareness of environmental laws; and bring violations of environmental laws and classic environmental disputes to light.

The campaign provided the opportunity for national authorities to supervise environmental protection work at the local level. The annual drive proved to be a useful tool to motivate local areas to devise their own "century drive" activities. In addition, the annual drive greatly expanded the media's role in supervising environmental protection activities and in forging ties between the media and People's Congress members. Each year, authorities issued notices outlining the priority topics and the priority locations for the Century Drive. For example in 1994, the topics about which articles should be written included:

- articles to provide good and bad examples, but emphasize the good examples
- deforestation and grassland degradation in select areas and related economic losses and possible solutions
- soil erosion and resulting damages
- desertification – highlighting successes
- China's endangered plants and animals, the reasons for their peril and suggestions about how to protect them
- urban and industrial pollution problems and environmental problems in the countryside, especially the ecological damage caused by pollution from village and township enterprises

The notice provided a list of guiding principles and examples of specific activities that were to begin in April and finish in June. One of the guidelines requested that for those instances of serious pollution for which there was no quick financial or technical fix, participating organizations should solve those problems internally and not report them in public.<sup>74</sup>

In 1994, at the national level, over 100 reporters split into seven teams and visited at least 11 provinces and autonomous zones. At the local level, 26 provinces, municipalities, and autonomous zones organized their own Environmental Century Drives. Over 1,000 local reporters participated and wrote over 2,000 media reports on environmental issues.<sup>75</sup> That year, the Environment and Natural Resources Committee of the NPC focused on 10 provinces and autonomous zones during the annual environmental law compliance inspections. The inspection teams concentrated on assessing compliance to seven major laws including the Environmental Protection Law, the Forestry Law, the Law Protecting Wild Animals, and the Water and Soil Conservation Law. During the team's inspections, they discovered several cases where citizens had serious complaints about pollution and environmental degradation problems. The teams investigated these cases and found violations of environmental and natural resources protection laws.<sup>76</sup>

In 1995, The NPC Environment and Natural Resources Committee designated 55 education topics within the context of the overall theme. Five groups of reporters went to eight provinces, Heilongjiang Liaoning, Shandong, Jiangsu, Sichuan, Yunnan, Guizhou and Shanxi. Central TV sent seven reporters and cameramen to join the groups.<sup>77</sup>

In 1996, the theme for the NPC “China Environmental Protection Century Drive” was “protect life giving water.” This year the NPC organized over 100 personnel in 10 media teams and six television crews. The teams visited 13 provinces, autonomous zones and municipalities. During the drive, media outlets produced over 300 articles or TV and radio broadcasts.<sup>78</sup> The drive focused on the cleanup of the “three rivers and lakes,” and on implementing the environmental protection goals of the 9<sup>th</sup> 5-yr plan. According to records, more than 30 provinces and cities organized “century drive” activities to fit their particular circumstances. Even some counties and enterprises organized some type of “century drive.” Across the country, more than 2,000 reporters participated in this year’s drive by visiting more than 3,000 townships and enterprises. Reporters wrote nearly 20,000 articles, which benefited environmental protection work by offering guidance and monitoring.<sup>79</sup>

In 1997, the theme for the NPC China Environment Century Drive was “protect our natural resources and use them sustainably” (*baohu ziyuan, yongxu liyong*). This year, 117 reporters at the national level formed 10 groups and visited 11 provinces and wrote over 300 articles. The groups were particularly interested in the implementation of the Forest Law and Grasslands Law. The groups visited the Li and Huai River areas to check up on clean-up efforts. They also visited Shenhua Collective Shenhua Dongsheng Meikuang (coal mine). According to preliminary statistics, 212 cities and prefectures initiated their own version of the China Environment Century Drive.

In 1998, the theme for the China Environment Century Drive was “protect and develop the oceans” (*baohu haiyang, kaifa haiyang*). The NPC Environment

Committee sponsored an education activity called “build a cultivated shoreline of ten thousand li.” The education campaign lasted three and a half months. Twenty- two media outlets sent representatives on visits along the coastline from the northern tip of China to the southern tip. The groups visited 11 provinces, autonomous zones, and municipalities; 54 cities; and 210 harbors, enterprises, and townships. They wrote over 800 articles about what they saw. The articles praised the accomplishments of Dalian, Qingdao, Caizhou, Xiamen, and Shenzhen. They also disclosed illegal polluting activities in Huanbohai, a mine in Zhejiang, Guangdong Nanou Island, and Xiao DongJiang. The campaign helped to end 20 years of polluting behavior (polluted water being put directly into the Bohai Sea) by Sandong Longkou paper factory.<sup>80</sup>

The 1999 China Environment Century Drive was conducted with 14 Central government and State Council Ministries and Commissions. The themes this year were “declare a propaganda war on air pollution” (*xiang daqi wuran xunzhan*) and “Love our Yellow River” (*ai wo huanghe*). Targets of the drive included Lanzhou, Taiyuan, Yinzhou, Xining and other highly polluted cities. For the “*ai wo Huang* River, the NPC worked with the Ministry of water Resources formed 20 reporters from central media work units. Reporters visited eight provinces and areas along the Huang River. This year the drive focused on the three provinces Shandong, Hebei, and Henan, along the Hai and Huai Rivers where there had been some serious pollution disputes. They reported on pollution problems in Guangdong’s Nanao, Zhejiang’s Fanshan, Shandong’s Longkou. Reporters also covered the drinking water problems in two counties in Shandong’s Bingzhou prefecture (Wudi, and Zhanhua). By the end of 1999, the dirty water problem faced by 800,000 citizens.<sup>81</sup>

Cities across China initiated their own century environment drives to coincide with the national drive. In Beijing, the drive was called the “Greater Capital City Environmental Protection Drive” (*Jingdu Dadi Huanbao Xing*). Each year, representatives from the City Party Commission, the People’s Congress, the city government, and numerous media outlets visited work units in specific counties to examine environmental conditions. The specific theme of local drives was not always identical to the theme in the national drive. For example, the theme during the 1997 “Greater Beijing Environmental Protection Tour (Drive)” was “treasure water resources and protect our lifeline” (*zhenxi shuiziyuan, baohu shengmingxian*).<sup>82</sup> At the national level, there was a different theme for 1997. However, the national theme for 1996 was “protect life giving water”.

In Taiyuan, starting in 1994, and every year thereafter, authorities focused education efforts on the national “*Zhonghua huanbao shijixing*” and the related provincial “*Sanpu huanbaoxing*,” or “*Bingzhou huanbao xing*” drives. National representatives from SEPA, the NPC, and media outlets worked with local officials and reporters to conduct inspections of polluting enterprises, help to raise environmental awareness, and promote improved implementation and enforcement. During these annual campaigns, local media outlets increased the number of stories on environmental protection. Individual districts would hold special environmental education activities. In 1994, Hexi District put on three activities, the “optimum boiler room,” the “environmental street,” and the “smokeless street” to get work units to be on their best behavior. Beicheng District showed off three exhibition boiler rooms. Nancheng District held the “*wenming guolufang*” (cultured boiler) contest.

### *Eliminate the Four Pests*

Authorities in various cities continued on an ongoing basis the “Eliminate the Four Pests” (Chu Si Hai) campaign. The “Eliminate the Four Pests” campaign was first mobilized during Mao’s reign. A poster exhorting citizens to “get rid of the four pests” was hanging on the wall of the Southwest Agricultural University in 1998. The campaign gave time limits by when citizens were to have eliminated a percentage of the pests. A similar poster was noticed in Beijing in 1998.<sup>83</sup> Now the four pests are flies, rats, mosquitoes, and roaches.

### *Eliminate White Trash Campaigns*

In 1994 and subsequent years, the transportation sector initiated a nation wide campaign to clean up trash alongside highways and railroad tracks. The scope of the “eliminate white trash campaigns” expanded to include entire cities in the later 1990s. In 1994, the Ministry of Railroads established the “love your country’s sanitation movement committee” (*aiguo wesheng yundong weyuanhui*) and helped to organize over 956,941 railroad and highway workers and passengers to clean up trash. “The first year’s activities were largely successful, some railroad workers and passengers, however, ignored rules regarding littering.”<sup>84</sup> In 1995, the Ministry of Railroads concentrated on raising awareness and solving the problem of “white trash” (*baise laji*) along the nations railroad tracks by initiating a month long campaign. More than 400 volunteers from the Communist Youth League attended a ceremony commemorating the opening of the activity on World Environment Day. Over the course of the day in various locations around China, over 20,000 volunteers gathered at more than 500 train stations to pick up litter along railroad tracks. According to

reports, this year's activities were particularly successful because: 1) the activity organizers and activity audiences worked together to pick up trash; 2) education was mixed with taking action; 3) state priorities and citizen concerns about cleaning up trash along railroad tracks converged.<sup>85</sup>

In 1997, eliminating "white trash" became even a higher priority for authorities and they initiated a nation wide campaign to forward the work. Authorities took a three-pronged approach, increasing newspaper articles, television programs, and sponsoring "eliminate white trash month" activities. Newspapers were to increase the number of stories regarding the Central government and the Beijing government encouraged newspapers to increase the number of stories regarding the problem of white trash, the relevant regulations, and examples of successes in eliminating white trash. The "eliminate white trash month" activities took place around World Environment Day. Companies producing biodegradable plastic bags and other environmental products put up displays. The China Environmental Protection Foundation, the Pollution Control Division of SEPA, and Dongcheng District representatives sponsored a "eliminating white trash begins with me" cleanup activity at Beijing Railway Station.<sup>86</sup>

Chengdu also emphasized cleaning up the city's "white trash" as early as 1992.<sup>87</sup> In 1995, the Ministry of Railroads, EPB personnel, and local leaders ceremoniously picked up "white trash" along Chengdu's railways.<sup>88</sup>

*San Hu, San He Campaign (Three Lakes and Three Rivers)*<sup>89</sup>

This targeted pollution cleanup campaign began as early as 1994 and focused on the Huai, Hai, and Liao Rivers, and the Tai, Chao, and Zhenchi Lakes. One of the

main catalysts of this campaign was the horrific environmental conditions along the Huai River that reached their peak in 1994. By May of that year, the pollution problems along the Huai River had become a priority. At that time, several provincial representatives from Anwei, Zhejiang, Shandong, and Sichuan attended an enforcement meeting. Xie Zhenhua, Songjian, and Wang Yangzhu represented the State Council and SEPA at the meeting. Various State Council officials at the provincial level also attended the meeting. The participants decided to make the cleanup of the Huai River by the end of the century a priority.

The clean up was to proceed in three stages. During the first phase, heavily polluting, economically inefficient, and enterprises with hard to solve environmental problems were to be closed, shut down, merged with other enterprises, or converted to less polluting production. During the second phase, other pollution sources were to be cleaned up and wastewater treatment plants were to be built. The third phase would see the clean up of the river complete.<sup>90</sup>

In July, a number of large environmental accidents occurred along the lower Huai River. The State Council became involved in the ensuing investigations. The State Council Environmental Protection commission followed the progress of the Huai River clean up, particularly during 1994 and 1995. The commission heard a report on the “Temporary Regulations Regarding Pollution Prevention in the Huai River Watershed” The Commission worked with the four provinces in the Huai River watershed (Henan, Anwei, Shandong and Jiangsu) and with the relevant ministries under the State Council to strictly follow cleanup orders. Efforts focused on cleaning up pollution problems to ensure high quality drinking water for residents. The Council

leaders were determined to clean up the Huai River even at the cost of slowing down economic development. Authorities planned to clean up the Huai River by the year 2000.<sup>91</sup> At the 7<sup>th</sup> meeting of the 3<sup>rd</sup> Plenum of the State Council Environmental Protection Commission, members listened to a report on plans to clean up the Huai River watershed. Throughout 1995, pollution problems along the river continued to worsen and seriously affected the development of agriculture along the river. The Commission pushed stronger measures to clean up the river. Newspapers carried stories of the problems along the Huai River and of the successes in cleaning up massive amounts of pollution. Citizens were encouraged to monitor their neighborhoods for illegal industrial activity and to report it immediately. Cities at the county level and above were required to build wastewater treatment plants and were forbidden to let untreated water into the Huai River. Leaders were determined to make the Huai River cleanup a model (*Huai He Moshi*) for the rest of the country to follow.<sup>92</sup>

By 1999, work on the first phase on Dian Lake was achieved. In addition, 44% and 54% of the enterprises along the Hai and Liao Rivers have reached standard. Work on Huai River and Tai Lake continued and thousands of inspection visits to enterprises along the river and lake showed that 90% of operations were within standard. Authorities stepped up pollution prevention efforts along the Bohai Sea.<sup>93</sup>

Other reports are not so optimistic about the success of the campaign to clean up Dian Lake. EPB officials in the area have lamented that the sheer size of the pollution problem has slowed progress and they complain that it is difficult to get

polluters to quit polluting activities or to install the proper pollution prevention equipment.<sup>94</sup>

***“15 Smalls” Campaign (Shiwu Shao)***

This campaign began in 1996 and focused on locating and closing certain kinds of small, inefficient, backward, and local enterprises. Many of these enterprises were located along the three rivers or near the three lakes that remained priorities. Of the 70,754 enterprises slated to be closed under the “15 smalls” decision, by December, 57,430 of these or 81% were closed. Xie Zhenhua boasted that China’s progress at closing these small enterprises in such a short amount of time, was unprecedented in the developing world, and would have been impossible in western developed countries.<sup>95</sup> The campaign was a priority in 1997 as well. In 1998, reportedly 15% of the enterprises that had been shut down under this campaign had reopened and were still operating illegally.<sup>96</sup>

***“Zero (tolerance) Drive” (Lingdian Xingdong)***

The “15 Smalls” campaign and the cleanup along the Huai River were linked to another enforcement publicity campaign called the “Lingdian Xingdong” which began in 1997. The campaign focused on the NEPA organized enforcement inspections along the Huai River towards the end of the year and the government’s successes in cleaning up pollution along the river over the last three years. Media enterprises were heavily involved with the campaign and had the duty to publicize government laws and policies, educate the public, mobilize public support for the campaign, assist in monitoring activities, and reveal and criticize lawbreakers. The campaign brought attention to the government’s efforts to cleanup pollution problems

and was more of a public publicity campaign than anything else, although media articles urged citizens to report illegal behavior. In all, sixty reporters wrote nearly 300 news articles covering the campaign.<sup>97</sup> Again, as in most enforcement campaigns, enterprises re-open after the campaign passes through their administrative area.

### ***“One Control, Two Targets” Campaign***

The “one control, two targets” (*yikong shuangdabiao*)<sup>98</sup> is a national campaign that began in 1998 and was linked with the State Council Decisions Regarding Some Environmental Protection Problems” (*Guowuyuan guanyu huanjing baohu ruogan wenti de jue ding*). The goal of this campaign was to implement the directive in the Decisions to bring all enterprises into compliance with either national or local environmental standards (air and water) by the end of 2000.<sup>99</sup> The campaign’s second goal was to make economic structural adjustments in order to advance economic growth. In 1998, 35% of China’s enterprises did not comply with water pollution standards, and 50% of the industrial furnaces did not comply with air pollution standards.<sup>100</sup> By the end of the year, 13 cities complied with air quality standards, and 18 cities complied with water quality standards. Six cities managed to comply with both air and water standards.<sup>101</sup>

In 1999, state leaders emphasized their sincerity about closing enterprises that were unable to meet pollution standards by the end of the “*yikong shuang dabiao*” drive at the end of this year. EPB directors sometimes went to investigate problems in enterprises that had been unable to meet requirements. By the end of November, 56% of China’s heavily polluting enterprises and 74% of all other industrial polluting enterprises had met standards. Five provinces in the Eastern region got 80% of their

enterprises to standard. In the three provinces and cities in the Midwest region got 70% of their enterprises to standard. 28 cities got their surface water to standard and nine cities got their air pollution down to standard.<sup>102</sup>

### ***“Tui Geng, Huan Lin” Campaign***

The “tui geng, huan lin” (converting farmland to forest -and grasslands) campaign, primarily run by the Nation Forestry Bureau, began with two demonstration areas, the upper reaches of the Yangtze and the Yellow Rivers, near the end of 1999. The campaign encouraged people to plant trees or grass in recovered crop or barren lands. The goals of the campaign included decreasing soil erosion, improving the ecological health of the Yangtze and Yellow River Watersheds, and restoring grassland and man-made forests to approximately 432,000 hectares of land. The campaign involved activities in 13 provinces and over 772 counties. In 1999, 25.87% of the land in these areas was forested (or grasslands). The goal of the campaign was to increase this area to 38.21% by 2010. The first phase of the project will run from 2000-2005. After two years of work, more than 18,670,000 Mu of land had been planted with trees or grass in those two areas. In 2002, the campaign was adopted on a broader scale. The goal for 2002 was to convert 30 million mu of land. Half of that was completed by May of 2002.<sup>103</sup>

### **City-Specific Campaigns: Three Case Cities Compared<sup>104</sup>**

Campaigns, or the lack thereof, helped to shape the environmental history of each city. As late as 1998, Taiyuan officials had not yet recognized the value of encouraging public participation. One enforcement official that wrote a book on the issue only mentioned the two GONGOs, Huanjing Baohu Xiehui and the Xuehui, as

being non-governmental groups that the EPB could work with to improve implementation of environmental law and policy.<sup>105</sup> In comparison, officials in Chengdu and Beijing recognized the role of public participation in environmental protection in the early 1990s. Also, in contrast with Chengdu and Beijing, officials in the education section of the EPB in Taiyuan did not directly communicate with quasi-governmental and student nongovernmental social organizations, such as the Communist Youth League (*gongqingtuan*), the Young Pioneers (*shaogongwei*), The Women's Federation, and university student environmental groups. Instead, they communicated through the official Taiyuan branch of the China Society for Environmental Science.<sup>106</sup> The personnel in the education section could not remember specific activities initiated by the student groups.

It wasn't until 1999 and 2000 that the number, variety, and depth of education programs in Taiyuan began to catch up to those in Chengdu and Beijing in the early to mid 1990s. 1999 was the first year that Taiyuan participated in the "green school program." There was environmental curriculum in schools before this program, but nothing close to what Chengdu had developed. Taiyuan's "green school program" evolved out of the "special school" program started in 1997. For World Environment Day this year, there was an event where school representatives shared their experiences in becoming a "green school."

Beijing's environmental history has been influenced heavily by the wishes of high-level central government and party leaders and because the city is the capital and the location for major national events. Because of these conditions, there have been a high number of environmental campaigns in Beijing. The campaigns in turn have

influenced the level and intensity of public participation, in all forms, in the city. The primary environmental campaigns in Beijing have been related to highly visible national celebrations and events, including the Asian Games in 1990, The World Women's Conference in 1995, the return of Hong Kong and the unsuccessful bid for the Olympics in 1997, the return of Macao, the 50<sup>th</sup> anniversary of the founding of the People's Republic in 1999, and China's successful bid in 2002 for the 2008 Olympics.

Other campaigns in Beijing were similar to those in other cities around the country such as the annual campaigns for Earth Day and World Environment Day, drives to popularize specific environmental laws and policies, and the "one control to meet two targets" (*yi kong shuang dabiao*) campaign. The campaigns linked to Beijing's status as the nation's capital and the location for highly visible regional and world events have been crucial in shaping Beijing's environmental history and in determining the level and intensity of public participation in the city.

Campaigns not only have directly influenced the level of participation in environmental protection activities, they have also indirectly shaped participation by "signaling" the population that participation was acceptable and even encouraged in the environment sector. Campaigns helped to highlight the specific environmental issues that should be addressed by the public and to inform the public which channels of participation, such as complaints against illegal polluters, were acceptable or even a citizen's duty.

Chengdu seemed to focus less on mobilizing citizens through Street Committees and encouraging neighborhood monitoring activities and more on providing an environmental education and mobilizing citizens through schools. Even

before formal arrangements were made between environmental and education authorities in 1994 and 1995,<sup>107</sup> school officials took it upon themselves to provide environmental science and environmental protection education to students and mobilize students to participate in “after school” environmental protection activities.

It is easy to see that Taiyuan has been the least successful in sophisticating state-mobilized campaigns. Both a consequence and a cause for this was the fact that there was no independent environmental propaganda and education section in the Taiyuan city EPB until 1998, and even then, the section was not very proactive. Between 1986 and 1998, responsibility for city education tasks fell upon those in the Personnel Section.<sup>108</sup> At one point, in 1990, there was an education “center,” but it was disbanded very early. In contrast, the Chengdu city EPB’s education division was established in 1995 and Beijing’s in 1989, and both cities have had an Environmental Education Center.

During the late 1980s and early 1990s, the lack of an education section at the Taiyuan EPB did not mean the city EPB did not have any education campaigns at all, it did. The city government and environmental protection officials failed to make environmental education a priority, so the number, scope, and breadth of environmental campaigns in Taiyuan were paltry in comparison with other cities. The campaigns undertaken by Taiyuan authorities were largely initiated at the national and provincial levels and not with activist city EPB officials. Most campaigns began and ended with environmental protection personnel and did not filter down into the general population through Street Committees or schools. Environmental protection officials missed the opportunity to make environmental protection a salient issue, so

implementation of environmental laws and policies, advancement of sound environmental management, and promotion of social development in Taiyuan suffered as a result.

### **Campaign Mechanics and Mobilizing Structures**

Environmental protection officials work with a variety of actors in carrying out environmental protection campaigns including national, provincial, city, and street party and government organizations. They work with:

- numerous governmental ministries and commissions
- work units
- street and village and township offices
- resident's committees
- quasi-governmental organizations

The list of the other governmental and quasi-governmental organizations that work with environmental protection officials to provide environmental education and sponsor campaigns has grown longer over time. Some ministries work with SEPA because they share jurisdiction over various physical aspects of the environment and must work together to implement specific laws and regulations. Others work with SEPA because they have access to resources required by SEPA, such as mass media outlets.

#### ***EPB and Street Level Participation***

Officials in local EPBs responsible for environmental education are the liaisons with local village and township committees, work units, and urban street offices or wards (*banshichu*) to bring environmental education down to the people at the most basic level in urban areas and to mobilize support of environmental protection activities. EPB officials work with specific individuals in the street office or

residents' committee that are responsible for environmental activities. Such volunteers or employees of a street office then work with the multitude of residents' committees in urban areas. Carlos Wing-Hung Lo went so far as to say the environmental protection representatives with the street offices and residents' committees were the "basic units for the entire mechanism of administration of rules and regulations [in the environment sector]."<sup>109</sup>

Wards and residents' committees are quasi-official state organizations at the most grassroots level in Chinese urban areas. These "party-backed" grassroots organizations, while being primarily subject to state imperatives, also stimulate voluntary citizen participation and gather citizen input into local matters.<sup>110</sup> They also respond to citizens' grievances and occasionally still act as mediators in local disputes. According to Benjamin Read, the *raison d'être* of these organizations is to assist in governance and policy implementation at the street level. In the environmental protection sector, these committees help to mobilize residents to participate in campaigns and to monitor polluting enterprises. The state has worked to strengthen the wards and residents' committees over the past 15 years because of the demand for increased social services and the declining responsibility of the work unit to provide them. In theory, people in their neighborhood elect committee members, however, the street offices typically choose them. Usually, there are no more candidates than there are positions to be filled.<sup>111</sup>

The committees are involved in mobilization and "governance" in a variety of ways. "The committees work to diffuse information about laws, policies, campaigns, and initiatives to individual constituents." In addition to just disseminating

information, they also drum up support for state goals and generate and coordinate active and passive participation in activities designed to meet these goals, including environmental protection goals.<sup>112</sup>

In campaign style, EPBs work with street offices and residents' committees at various times of the year to popularize environmental laws, garner support for environmental protection goals, monitor polluting enterprises, and organize events. In Guangdong, residents committees form "small environmental supervision groups (*huanbao jiandu xiaozu*) with "street environmental committees" (*jiedao huan wehui*) under the guidance of district environmental committees and district EPBs, to monitor polluting enterprises. In 1991, the supervision groups were involved in 1,400 instances of monitoring pollution and discovered 137 problem cases and dealt with 280 complaints.<sup>113</sup>

In both Beijing and Taiyuan, at least twice a year, the committees work to organize environmental protection activities on Earth Day and World Environment Day. For example, in Beijing in 1992, Street Committees and work units hung more than 3,000 character posters and banners promoting environmental protection. In addition, they hung over 100,000 blackboard newspapers and announcements.<sup>114</sup>

Responsible parties at the street office and/or residents' committees organize dancers, singers, and other entertainers to participate in activities. They organize volunteers to blow up balloons, build props, and create character posters and cloth banners for the activity. They mobilize residents to attend activities. They inform the local work units of the planned activity, which may then decide to contribute in some way. Often companies that manufacture environmental products will display their

goods. One official boasted that in the last few years, it has become much easier to find volunteers to attend events. Businesses see it as a marketing opportunity.<sup>115</sup>

Taiyuan EPBs, street offices, and resident's committees are typically less active and have not formed supervision groups. In a rare burst of activism, a particularly enthusiastic inner district EPB director went beyond the mandated chore of mobilizing volunteers for Earth Day and World Environment Day. He worked with street committees quite closely in the late 1990s to gauge resident's environmental knowledge and promote awareness.

Street committee staff charged with environmental protection duties and EPB staff worked together to complete a survey on environmental awareness in his district. The street office chose six resident committees to participate in the survey and act as liaisons with area residents. EPB officials and committee members visited households, leaving a questionnaire, a stamped return addressed envelope, and a small reward for participating in the survey, such as a fruit basket.

This EPB director reviewed the surveys and found some of the individuals in his district to have particularly germane comments; so, he asked these people to become his special "contacts" in the district. In essence, these individuals became special honorary "*jiandu yuan*" "inspectors or supervisors" for local EPBs. In these cases, the individuals not only are a source of information for officials, they themselves benefit from the relationship. They receive both instrumental and expressive benefits. They help to reduce pollution in their neighborhoods and derive a sense of satisfaction because they voiced their support for a cleaner environment. They fulfilled their civic duty by reporting potential violations of the law. These individuals

operate outside of the formal complaint system, often reporting directly to higher-level officials in the EPB.<sup>116</sup>

The “street-level” environmental protection activist network is highly developed in Beijing, more so than in Chengdu or Taiyuan. The Beijing “network” has had far more opportunities to be activated and cultivated. This is because of Beijing’s status as the national capital and because it is often the location of national ceremonies or events, such as the Asian Games, the 50<sup>th</sup> Anniversary of the People’s Republic, ceremonies for the return of Hong Kong and Macao, and the upcoming 2008 Olympics.

### **Quasi-Party Organizations: Turning Environmental Volunteers into Activists**

#### ***Youth Mobilization***

In the early 1990s, NEPA officials stepped up cooperation with quasi-governmental youth organizations including the Communist Youth League and the Young Pioneers to mobilize China’s youth to participate in environmental protection campaigns. Top Chinese leaders, including Li Peng showed interest in mobilizing China’s youth to participate in environmental protection efforts. In a speech at a provincial meeting of the Young Pioneers, Li Peng expressed his wish that people should work together to improve environmental protection “from an early age” (*yao cong xiao zuoqi*). He hoped tomorrow’s youth could make China’s “skies bluer, ground greener, and water clearer” (*tian geng lan, di geng lu, shui geng qing*).<sup>117</sup>

These early education activities probably sought to educate the leaders and activists in communist youth organizations in China’s larger cities, so they in turn could begin to mobilize the public.

In January of 1991, Qu Geping from NEPA and the Central Committee of the Communist Youth League held a press conference announcing a new nation-wide environmental education drive that would last one year.<sup>118</sup> In 1992, NEPA and the Youth League embarked a related 2-year long national environmental education drive to spread environmental values among the nation's youth. The Youth League sponsored propaganda activities to study environmental protection laws and environmental knowledge. At the closing of the drive two years later in 1994, youth in nearly 100 work units and over 700 individuals were awarded for being progressive units and individuals and for their contributions to the drive.<sup>119</sup>

In some cities, the Youth League would actively participate in other environmental campaigns such as those for Earth Day and World Environment Day. In Beijing in 1992, environmental education activities flourished in the city because it was the 20<sup>th</sup> anniversary of the UN Declaration on the Human Environment signed at Stockholm. 15,000 students signed an "earth pledge." Young Pioneer Environmental Protection Brigades (*Honglingbu Huanjing Baohu Dadui*) from eight districts and counties held a large education activity in Beihai Park.<sup>120</sup>

At the national level, in 1993, the first "China Youth Environmental Forum" took place.<sup>121</sup> Top leaders in SEPA, the National People's Congress Communist Youth League made speeches at the forum. The World Bank, the China Trade Union, the All Women's Federation, and the China Science and Technology society extended their congratulations via telephone. Three documents were drafted and made public, the "China Youth Green Pledge" (*Zhongguo Qingnian Luse Yiyan*), the "The 21<sup>st</sup> Century China Youth Environment Drive" (*21 Shiji Zhongguo Qingnian Huanjing*

*Xingdong*), and “Recommendations for Environmental Protection Policies in China’s Market Economy” (*Shichang Jingji Xia Huianjing Baohu de Zhengce Jianyishu*). The goals of the drive were to motivate youth all over China to become involved in environmental protection efforts, to become “pioneers” in these efforts. China’s youth were enlisted to help raise everyone’s environmental awareness, to control environmental pollution, improve environmental quality and to contribute to the realization of efforts to reconcile environmental protection and economic growth.<sup>122</sup>

The mobilization of youth slowly trickled down to the city level. In Beijing in 1995 for example, Communist Youth league members planted grass and thousands of trees and flowers. League volunteers established 350 “green earth protection responsibility Zones” (*ludi baohu zirencu*).<sup>123</sup> In Chengdu, in 1997, the Communist Youth League organized 43 groups of “League Volunteers” (*qingnian ziyuanzhe*) to work on the Funan River cleanup and “greening” campaign.<sup>124</sup> In Taiyuan, it was only in the late 1990s that League members were mobilized en masse. In 1998, they were mobilized to participate in a massive cleanup of the Fen River, which ran through the middle of the city. One collaborative project between the Jiaowei, the League, and the EPB was a “Green Drive” (*luse xingdong*) to plant trees. Specific classes or work units took responsibility for the care of individual trees. There was even a sign posted in front of each tree indicating which unit had responsibility for its care. That same year, the Taiyuan Ministry of Construction worked with the Communist Youth League to organize activities for the “make the world a cleaner place” (*shi shijie qingjie qilai*) activity. This world event seeks to get people to be more environmentally aware and to clean up their surroundings. The theme for the holiday at the international level was

“think of the whole world, but it begins with me” (*xinxiang quanqiu congwozuozi*).

The theme in at the national level in China was different; it was “everybody work together and clean up the city” (*renren dongshou, qingjie chengshi*).<sup>125</sup>

In Taiyuan, in the late 1990s, the EPBs did not work directly with nongovernmental organizations. Instead, the EPB worked with the *Huanjing Dexue Xuehui*, a GONGO, which then contacted other GONGOs such as the Women’s Federation and student environmental groups. At some time, three universities, Taiyuan Industrial University, Shanxi University, and the University of Television and Broadcasting had some form of an environmental group. A group of students in Shanxi University’s Student Union (*xueshenghui*) formed the Student Union Environmental Club to popularize environmental protection on campus. The Communist Youth League ran the group at the University of Television and Broadcasting (*Dianshi Guangbo Daxue*), called the “Qing Qing Huanbao She.”<sup>126</sup> While these particular groups have disbanded, since September of 2003, students at Shanxi University in Taiyuan have become active in holding “green camps” (*luseying*).

In each of the three case cities, at the very least, the Youth League and the Young Pioneers became important channels of mobilization for all sorts of environmental campaigns throughout the 1990s, including those focused on recycling, cleaning up “white trash,” preparing for China’s Olympic bids, improving water and energy conservation, and policy enforcement.<sup>127</sup>

The mobilization efforts of NEPA, the Youth League, and the Young Pioneers predate the formation of student environmental groups that are now prolific across the

country. Activists that took part in these early youth education drives participated in the creation of university student environmental groups and became some of the first young members of popular social organizations such as Friends of the Earth.<sup>128</sup> These early mobilization efforts were successful in training highly motivated activists.

### ***The Role of Women's Organizations in Environmental Protection***

The All China Women's Federation involvement in mobilization campaigns was less "enthusiastic" than and came later in time than did the various youth groups, but it also played an important role in creating environmental "activists" that would continue to advance China's environmental protection goals long after the original Federation campaigns ended.

The Women's Federation stepped up its involvement with environmental protection efforts around 1992. It worked with the State Science and Technology Commission, with the support of the UN Economic and Social Council, to put on a workshop called "The International Workshop on the role of Women in Environment and Sustainable Development" (*Funu zai Hanjing He Chixu Fazhanzhong de Zuoyung Guoji Yantaohui*). 45 representatives from China attended the meeting. Later in 1994, At the bequest of the China Delegation to the 4<sup>th</sup> World Women's Conference Organizing Committee and NEPA, the China Environmental Science Society organized a "women and the environment" forum, which took place on 6/5. The main topic of the forum was the "role of women in protecting the environment." Sub-topics included "women in environmental management and policy," "the environment for women in enterprises," "raising environmental awareness at home," "women and green products," and "ecological degradation and poverty." In addition, that year, the

NPC Central Committee, the CPPCC, the State Council, and NEPA honored 100 women involved in environmental protection work.<sup>129</sup>

In 1995, the China Environmental Science Society and the Federation sponsored a meeting in Beijing called “Women and the Environment.” The groups invited 40 experts, officials, and workers from, enterprises, research institutes, vocational schools, universities, ecological and agricultural trial work units, social organizations and governmental agencies to the meeting to discuss ways in which women could contribute to environmental protection efforts. Also present at the meeting were representatives from several foreign organizations including the UN Women’s Development Foundation, the Canadian Embassy, and the Ford Foundation.<sup>130</sup>

The Women’s Federation received a donation of 10,000,000 Yuan from the Maifu Company for environmental education purposes. It was used to organize a large-scale education program in conjunction with the All China Women’s Federation that lasted from October 1997 to June 1998. The program was called “women, the home, and the environment.” 2,000,000 women from around the nation (20 provinces) participated. Over 700,000 women competed in an environmental knowledge contest and participated in a lecture series and other activities. An accompanying slogan was “environmental protection, each person is responsible, every household participates.” On World Environment Day, 100 prominent women were given awards for their environmental protection work connected to the campaign.<sup>131</sup>

### *Local Women's Federation Activities*

The Women's Federation worked to promote the participation of women in environmental protection efforts at the local level across China, although women's groups were more active in some areas.

Women's groups were active in Beijing in the early 1990s. In 1992, the Women's Federation mobilized 2,324 "green management protection teams" (*luuse guanhu dui*), in which more than 16,225 people participated. The teams put on the "March 8<sup>th</sup>, Green Program" (*Sanba Lusi Gongcheng*). Over 620,000 women from all over the city participated in tree planting and beautification projects. They cleaned up thousands of balconies and courtyards and planted more than 5,500,000 trees.<sup>132</sup>

In Chengdu, women's groups began to participate later in the decade. The EPB worked with the All Women's Federation to sponsor a workshop to discuss "family, infrastructure, and the environment" (*jiayuan, jianshe, huanjing*). Participants included women experts and academics. Topics of discussion included sustainable development in Chengdu. Participants put forth a number of suggestions and comments, which garnered the attention of the city Party Standing Committee and the city government.<sup>133</sup>

In Taiyuan, during the late 1990s, there was some effort on the part of authorities to involve government organized social organizations, such as the All Women's Federation, and the general public in environmental campaigns. There was a large drive to clean up the Fen River, which runs through the city. Over 40,000 people including Federation members participated in efforts to mitigate soil erosion problems, plant grasses, and pick up trash.<sup>134</sup> In 1998, the city EPB worked with the Women's'

Federation to put on educational activities called the “*Bingzhou Funu ‘Aiwojiayuan’*” (love my planet). They organized “*weming*” families from 10 districts, counties, and small cities in Taiyuan. They went onto every major street to hold the “Saturday environmental protection volunteer family activities.” They introduced the concept of recycling, introduced household sanitation, they planted trees and flowers, picked up trash in parks and along the river. More than 8,000 households participated in this particular activity. In the Wanbolin district alone, over 1200 families worked together to clean up over a hundred dead fish, 3,000 tons of trash, clean up ponds and plant trees and flowers. In Xianghualing, the Women’s Federation and the EPB organized more than 500 households to clean up plastic bags and trash along the Beishao River.<sup>135</sup>

As the previous paragraphs suggest, in some areas, women started very early and made longer-term commitments to promoting environmental protection. In other areas, women did not become active in environmental protection activities until the late 1990s and did not continue their environmental protection work after the end of national campaigns. In Xian, the Women’s Federation continued with local environmental protection activities. Women there created a quasi non-governmental group under the auspicious of the Women’s Federation, devoted to supporting environmental protection efforts. In contrast, the Women’s Federation in Taiyuan did not continue their environmental education activities after the national drive concluded. The mobilization of women’s groups was not as successful as mobilization efforts with youth groups, if success is measured by how proactive these groups became once nationally mobilized campaigns ended.

## **Conclusion**

“Mass campaign-like” mobilization efforts still exist in China. These efforts, however, are not as political or as disruptive to daily life as their Mao period predecessors. Campaigns involve less “struggle” both among the people and between man and nature, although individuals and organizations may be “criticized” for sluggish implementation or failure to attain campaign goals. In addition, there are fewer, if any, campaigns meant to purge individuals or groups on political grounds. Part of the reason for this is the general overall decline of the use of Maoist ideology to justify state policies. In addition, the main responsibility for mobilization has shifted from party apparatus to governmental bodies. Propaganda campaigns have become less a function of political education and more a function of general educational goals. However, authorities motivate participation by appealing to citizens’ link to the collective good. Action campaigns, while still working to instill group unity, “socialist spiritual values,” nationalism, and raise citizen awareness, are focused on achieving concrete policy goals such as reforestation.

As the political functions of campaigns have been downplayed and state-society “cooperation” has been emphasized, how has this affected the function, structure, mechanics and phases of environmental protection campaigns? Patterns across campaigns show that many of the original functions of campaigns have endured, as have some campaign stages and processes. However, the political function of campaigns is attenuated and campaigns are much less coercive. Modern campaigns are meant to achieve specific policy goals, but also to instill love of one’s country, to promote the socialist spiritual culture, and to mold a spiritually rich movement.<sup>136</sup>

Campaigns have served to help strengthen implementation efforts. When officials responsible for carrying out policies approach enterprises, they justify their demands by spouting the current campaign slogans and guiding principles. In other words, campaigns are still used as justification for action in conjunction with the law.

An examination of the various campaigns illustrates various patterns across campaigns. Campaigns in the environment sector still work to accomplish a variety of goals including 1) implement existing policy; 2) emulate model experience or demonstration; 3) introduce and popularize a new policy; 4) correct deviations from public norms 5) rectify leadership malpractices among responsible cadres or organizations; and 6) effect enduring changes in both individual attitudes and social institutions. There are still large-scale, national level campaigns as well as more localized campaigns.

All sorts of issues are the subjects of campaigns, but the three main areas covered in campaigns are education, enforcement, and issues that require mass action, like tree planting. Campaigns usually accompany the promulgation of new policies and laws, especially major laws and unpopular enforcement policies, such as the order to close down small-scale factories. Some campaigns mobilize citizens to take action, such as the tree planting and trash clean-up campaigns. Other campaigns praise outstanding behavior, while educating the target population.

Most campaign goals are determined at higher levels of government. In other words, provinces will be responsible for implementing campaigns initiated at the national level. Some provinces devise their own priorities and campaigns as well as implement national goals. Likewise, cities will be responsible for implementing the

provincial agenda at the city level, as well as devise their own priorities. This delegation of responsibility also happens at the district and county levels. For example, the early “Environmental Education Month” campaign was initiated by the State Council Environmental Protection Leading Small Group, and the propaganda department of the Standing Committee of the Chinese Communist Party Central Committee at the national level and was implemented by party apparatus at lower administrative levels. After new environmental laws are passed at the national level, lower administrative levels organize “study sessions” to popularize the laws at the local level. Likewise, authorities take the China Century Environmental Protection Drive, which started as a nation level campaign, and replicate it at lower administrative levels through the local People’s Congresses and media outlets.

Today, campaigns involve “truer” volunteerism than they have been in the past. Environmental protection officials boasted that they only had to announce they were looking for enterprises and units to participate in World Environment Day activities to receive a number of volunteers. In addition, many of the mobilized groups, especially youth group went on to mobilize their own activities. A new volunteerist spirit has taken root; Mao would be proud. However, he might not be so happy about the lack of struggle in modern day campaigns.

## Endnotes to Chapter Five

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<sup>1</sup> Quotation from Townsend, *Political Participation in Communist China*, p. 76, originally from Tu Ching, “Gongchandangyuan Yinggai Shi Renmin Chunging Ti Zhongshi Daibiao” (Communists Should be Loyal Representatives of the Masses), *Hong Qi (Red Flag)*, 1962, no.6, p. 2.

<sup>2</sup> A recent exception to this is Liz Economy’s article on China’s Open the West campaign. Elizabeth Economy, "China's Go West Campaign: Ecological Construction or Ecological Exploitation," *China Environment Series*, (Washington D.C.: China Environment Forum, The Woodrow Wilson Center, 2002).

<sup>3</sup> Elvin, "The Environmental Legacy of Imperial China," p. 15.

<sup>4</sup> See Karl Wittfogel, “The Theory of Oriental Society,” reprinted in Morton Fried, ed., *Readings in Anthropology*. 2<sup>nd</sup> ed. New York: Ty Crowell, 1968; and Karl Wittfogel, *Oriental Despotism: A Comparative Study of Total Power*, New York: Random House, 1981.

<sup>5</sup> Gordon Bennett, *Yundong: Mass Campaigns in Chinese Communist Leadership*, China Research Monographs (Berkeley, CA: University of California, Center for Chinese Studies, 1976), p. 41.

<sup>6</sup> Bennett, *Yundong: Mass Campaigns in Chinese Communist Leadership*, p. 20.

<sup>7</sup> Shapiro, *Mao's War Against Nature*.

<sup>8</sup> Bennett, *Yundong: Mass Campaigns in Chinese Communist Leadership*, p. 18.

<sup>9</sup> The governments of many countries utilize campaigns to help structure behavior, sometimes in conjunction with laws and regulations. For example, in America in the late 1960s and 1970s, a person could watch television and see a commercial where an Indian in traditional garb is rowing down a stream. The Indian begins to cry when he sees garbage in the stream. This commercial was part of a larger governmental campaign to encourage people not to litter.

<sup>10</sup> Again, social movements are “collective challenges based on common purposes and social solidarities, in sustained interaction with elite opponents and authorities.” This definition was crafted by Sidney Tarrow and synthesizes earlier theories of social movements including those that focused on the concepts of grievances, resource mobilization, identity, and political opportunity as factors affecting the emergence of a movement. Tarrow’s definition combines four components: collective challenge (social movements engage in contentious politics or protest), common purpose, political opportunity, and sustained interaction. Tarrow, *Power in Movement*, pp. 4-7.

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<sup>11</sup> One typology categorizes campaigns into three groups economic, ideological, and struggle. Charles P. Cell, "Making the Revolution Work: Mass Mobilization Campaigns in the People's Republic of China," (Ph.D. dissertation, University of Michigan, 1973), p. 26. Another version breaks down campaigns into two groups: whether or not an "enemy" or a "functional goal" is the focus of a campaign. Alan P. L. Liu, *Communications and National Integration in Communist China*, (Berkeley, CA: University of California Press, 1971), pp. 87-92.

<sup>12</sup> Bennett, *Yundong: Mass Campaigns in Chinese Communist Leadership*, p. 47.

<sup>13</sup> Bennett, *Yundong: Mass Campaigns in Chinese Communist Leadership*.

<sup>14</sup> Bennett, *Yundong: Mass Campaigns in Chinese Communist Leadership*, pp. 38-45.

<sup>15</sup> Bennett, *Yundong: Mass Campaigns in Chinese Communist Leadership*, p. 41

<sup>16</sup> In the Socialist Education campaign, the deadline for the completion of campaign goals was six months in a single production brigade, one year for a single county, three years for 1/3 of China, and seven years for all of China to achieve the 23 articles of the campaign. See Bennett, *Yundong: Mass Campaigns in Chinese Communist Leadership*, p. 40.

<sup>17</sup> Bennett, *Yundong: Mass Campaigns in Chinese Communist Leadership*, p. 38.

<sup>18</sup> See Appendix A

<sup>19</sup> *Zhongguo Huanjing Nianjian*, 1990 (*China Environment Yearbook*), p. 2.

<sup>20</sup> Shapiro recognizes that more than one campaign was occurring at a time and that some of the slogans from multiple campaigns appeared occasionally throughout the Mao period. Her book focuses on the causes of environmental degradation in China. "Environmental degradation under Mao can be linked to such problems as population explosion, arable land limits, poverty, misguided policies and mistaken beliefs, and irrational price structures due to state ownership. However, the underlying dynamics of such degradation lay in a nationwide war against nature expressed through a pattern comprised of the four motifs: political repression, utopian urgency, uniformity that ignored regional variation and time-tested local practices, and state-sponsored relocations into wilderness areas." Shapiro, *Mao's War Against Nature*, pp. 4-13.

<sup>21</sup> Shapiro, *Mao's War Against Nature*, pp. 1-19.

<sup>22</sup> Shapiro, *Mao's War Against Nature*, pp. 11, 67-93.

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<sup>23</sup> *Zhongguo Huanjing Nianjian*, 1990 (*China Environment Yearbook*), p. 2.

<sup>24</sup> *Zhongguo Huanjing Nianjian*, 1990 (*China Environment Yearbook*), p. 2.

<sup>25</sup> Shapiro, *Mao's War Against Nature*, p. 10.

<sup>26</sup> *Zhongguo Huanjing Nianjian*, 1990 (*China Environment Yearbook*), p. 2.

<sup>27</sup> After over a hundred families' homes were destroyed, crop fields drenched, and necessary tools washed away in floods in 1963, the Party Secretary, Chen Yonggui announced his commitment to get through the disaster without help from the outside. He proclaimed a campaign of the "three nos" wherein Dazhai refused 'state grain, funds, and relief materials' and declared the brigade self-sufficient. Shapiro, *Mao's War Against Nature*, pp.95-114.

<sup>28</sup> Shapiro, *Mao's War Against Nature*, pp.95-114.

<sup>29</sup> One reason the Dazhai model may have gained such prominence is that the Dazhai Party Secretary, Chen Yonggui, was welcomed into the national Party Central Committee in 1969. Shapiro, *Mao's War Against Nature*, p. 103-105.

<sup>30</sup> The Third Front Campaign actually began in the 1950s, in the provinces of Qinghai, Gansu, Ningxia. The campaign was intensified in 1964 and lasted until 1971. Shapiro, *Mao's War Against Nature*, pp. 145-159; Barry Naughton, "The Third Front: Defense Industrialization in the Chinese Interior," *China Quarterly*, no. 115 (1988).

<sup>31</sup> The educated youth movement began in the 1950s as Mao encouraged educated youth to move to the countryside to learn from the masses. In 1964 alone, more than 300,000 youth volunteered or were sent to the countryside. The movement was intensified in 1968 and 1969. In all, some 20 million people were sent down to the countryside or into the mountains.

<sup>32</sup> It was not until 1987, that this principle was dismissed and attempts were made to diversify and to arrange the agriculture sector according to natural laws. *Zhongguo Huanjing Nianjian*, 1990 (*China Environment Yearbook*), p. 10.

<sup>33</sup> Cultivation of rubber was stressed in Yunnan, Hainan, and Guangdong provinces. One estimation of deforestation in Xishuangbanna, an autonomous region in Yunnan province on the border of Laos and Burma, calculated that in 1941, 69.4 percent of Xishuangbanna was forested, but by 1981 this had been reduced to 26 percent. Among the main causes of this loss of virgin forest was using "slash and burn" techniques to cultivate rubber plantations. By 1979, after thousands of "send down" youth protested to be sent home, the work farms were nearly empty. Shapiro, *Mao's War Against Nature*, pp. 171-187.

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- <sup>34</sup> *Zhongguo Huanjing Nianjian*, 1990 (*China Environment Yearbook*), p. 3.
- <sup>35</sup> Shapiro, *Mao's War Against Nature*, pp. 95-137.
- <sup>36</sup> Large land reclamation schemes transformed millions of acres of wasteland into arable in Inner Mongolia, Heilongjiang, and Xinjiang. Shapiro, *Mao's War Against Nature*, pp. 139-145.
- <sup>37</sup> *Zhongguo Huanjing Nianjian*, 1990 (*China Environment Yearbook*), p. 3.
- <sup>38</sup> *Zhongguo Huanjing Nianjian*, 1990 (*China Environment Yearbook*), p. 1.
- <sup>39</sup> *Zhongguo Huanjing Nianjian*, 1990 (*China Environment Yearbook*), p. 3.
- <sup>40</sup> Bennett, *Yundong: Mass Campaigns in Chinese Communist Leadership*, p. 15.
- <sup>41</sup> Bennett, *Yundong: Mass Campaigns in Chinese Communist Leadership*, pp. 75-91.
- <sup>42</sup> Shapiro, *Mao's War Against Nature*, p. 4.
- <sup>43</sup> Bennett, *Yundong: Mass Campaigns in Chinese Communist Leadership*, pp. 81-85.
- <sup>44</sup> State Council Environmental Protection Leading Small Group (Guowuyuan Huanjing Baohu Lingdao Xiaozu Bangongshi). Report on Launching the 'National Environmental Protection Education Month' 1980 (Guanyu Kaizhan 'Quanguo Huanjing Baohu Xuanchuan yue' Qingkuang de Baogao, 1980), pp. 121-123.
- <sup>45</sup> The “Gujiao Spirit” has become a popular slogan used by government and environmental officials to promote environmental protection goals to this day. *Huanjing Nianjian*, 1996, pp. 101-102, 1992, p. 451.
- <sup>46</sup> Shuangliang Jingshen stands for the spirit of a man named Li Shuangliang, who worked at Tai Steel Company. He was credited with devising a new way to deal with metal slag that was more environmentally sound than previous methods. 1992.p. 451.
- <sup>47</sup> The long name for this campaign is “zhishu, zaolin, luhua zhuguo, zhi jianshe shehui zhuyi, zaofu zisun houdai de fuda shiye, shi zhili shanhe, wei hu han gaishan shengtai huanjing de yi xiang zhongda zhanluo shishi.”
- <sup>48</sup> See Li Ruihuan’s speech on “questions regarding the ‘greening’ of our country” (*Guanyu woguo luhua de jige wenti*) *Zhongguo Huanjing Nianjian*, 2000 (*China Environment Yearbook*), pp. 6-10.

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<sup>49</sup> This was followed in 1982 by the State Council “Implementation Regulations Regarding Development of a National Compulsory Tree Planting Campaign.” *Zhongguo Linye Nianjian 1991 (China Forestry Yearbook)*, (Beijing, China: Zhongguo Linye Chubanshe, 1992), p. 152.

<sup>50</sup> *Zhongguo Linye Nianjian 1991 (China Forestry Yearbook)*, p. 164.

<sup>51</sup> *Zhongguo Linye Nianjian 1991 (China Forestry Yearbook)*, pp. 153-165.

<sup>52</sup> *Zhongguo Linye Nianjian 1991 (China Forestry Yearbook)*, p. 154.

<sup>53</sup> *Zhongguo Huanjing Nianjian, 1990 (China Environment Yearbook)*, p 10.

<sup>54</sup> *Zhongguo Linye Nianjian 1991 (China Forestry Yearbook)*, p. 155.

<sup>55</sup> *Huanjing Nianjian, 1996*, pp. 101-102.

<sup>56</sup> *Zhongguo Linye Nianjian 1996 (China Forestry Yearbook)*, p. 101.

<sup>57</sup> For example, in 1988, one district in Chengdu created an Environmental Small Group and principles from all jr. highs were called together to plan environment education strategies. Principles of each school became responsible for establishing a school education small leading group and implementing environmental education plans. District educators worked with a provincial publishing house to create an environmental education book appropriate to the area’s unique conditions. Middle school students were required to attend environmental education classes after their regular “test period” and then were tested on their environmental knowledge. Their scores were incorporated into their overall grade. This procedure was settled upon because it “resolved the contradictions between environmental education and studying for culture class [jiejuele kaizhan huanjing jiaoyu yu xuexi wenhuake de maodun]. *Zhongguo Huanjing Nianjian, 1991 (China Environment Yearbook)*, p. 421. Also see Jahiel, "Policy Implementation Through Organizational Learning: The Case of Water Pollution Control in China's Reforming Socialist System," pp. 137-186 for an informative review of China’s environmental education programs and the efforts to create “issue salience” in three case cities in China. See also *Zhongguo Huanjing Nianjian, 1991 (China Environment Yearbook)*, pp. 587-589.

<sup>58</sup> *Zhongguo Huanjing Nianjian, 1991 (China Environment Yearbook)*, p. 563.

<sup>59</sup> *Zhongguo Huanjing Nianjian, 1991 (China Environment Yearbook)*, p. 185.

<sup>60</sup> Wen, "Greening the Chinese Media." p.39; *Zhongguo Huanjing Nianjian, 1991 (China Environment Yearbook)*, p. 590.

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<sup>61</sup> State Council Environmental Protection Leading Small Group (Guowuyuan Huanjing Baohu Lingdao Xiaozu Bangongshi), "Report on Launching the 'National Environmental Protection Education Month,'" pp. 158-159.

<sup>62</sup> For example, in 1991, the Young Pioneers made a pledge during a national public ceremony to "love and protect the earth – our common home, our common mother" (aihu diqiu – women gongtong de jiayuan, women gongtong de muqin). They asked that everyone join them in the pledge. *Zhongguo Huanjing Baohu Xingzheng Ershinian (20 Years of Administering Environmental Protection in China)*, p. 419.

<sup>63</sup> Beijing De Huanjing (Beijing's Environment) (Beijing, China: Beijing Huanjing Baohu Jijinhui, 1999b), p. 75.

<sup>64</sup> *Zhongguo Huanjing Nianjian, 1996 (China Environment Yearbook)*, p. 300

<sup>65</sup> *Beijing Nianjian, 1996 (Beijing Yearbook)*, p. 290.

<sup>66</sup> *Chengdu Nianjian, 1993 (Chengdu Yearbook)*, (Chengdu, China: Chengdu Niangjianshe, 1993), p. 264.

<sup>67</sup> *Zhongguo Huanjing Nianjian, 1998 (China Environment Yearbook)*, pp. 471-472.

<sup>68</sup> *Zhongguo Huanjingbao*, June 6, 2000, p. 1.

<sup>69</sup> State Council Environmental Protection Leading Small Group (Guowuyuan Huanjing Baohu Lingdao Xiaozu Bangongshi), "Report on Launching the 'National Environmental Protection Education Month,'" pp. 195-196.

<sup>70</sup> *Zhongguo Huanjing Nianjian, 1998 (China Environment Yearbook)*.

<sup>71</sup> *Zhongguo Huanjing Nianjian, 1998 (China Environment Yearbook)*, p. 415.

<sup>72</sup> *Zhongguo Huanjing Nianjian 1994 (China Environment Yearbook)*, (Beijing, China: China Environment Yearbook Press, 1995), p. 10-12. See Appendix for a comprehensive list of annual campaign themes and priority locations.

<sup>73</sup> *Zhongguo Huanjing Nianjian 1994 (China Environment Yearbook)*, p.11.

<sup>74</sup> *Zhongguo Huanjing Nianjian, 1995 (China Environment Yearbook)*, pp. 23-24.

<sup>75</sup> *Zhongguo Huanjing Nianjian, 1995 (China Environment Yearbook)*, p. 75.

<sup>76</sup> *Zhongguo Huanjing Nianjian, 1995 (China Environment Yearbook)*, p. 75.

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- <sup>77</sup> *Zhongguo Huanjing Nianjian, 1996 (China Environment Yearbook)*, p. 98.
- <sup>78</sup> Two CCTV broadcasts in Beijing, “Cleaning Up Shougang’s Pollution Demands Immediate Attention” and “The People Demand a Better Environment,” elicited a strong reaction from citizens. A CCTV program about the severity of pollution on the Yangtze River likewise triggered a surge of letters from citizens expressing their concern. *Zhongguo Huanjing Nianjian, 1997 (China Environment Yearbook)*, (Beijing, China: China Environment Yearbook Press, 1997), p. 67.
- <sup>79</sup> *Zhongguo Huanjing Nianjian, 1997 (China Environment Yearbook)*, p. 182.
- <sup>80</sup> *Zhongguo Huanjing Nianjian 1999 (China Environment Yearbook)*, p.129.
- <sup>81</sup> *Zhongguo Huanjing Nianjian, 2000 (China Environment Yearbook)*, p. 153-156.
- <sup>82</sup> *Zhongguo Huanjing Nianjian, 1998 (China Environment Yearbook)*, p. 377.
- <sup>83</sup> Shapiro, *Mao's War Against Nature*, p. 88.
- <sup>84</sup> *Zhongguo Huanjing Nianjian, 1995 (China Environment Yearbook)*, p. 195.
- <sup>85</sup> *Zhongguo Huanjing Nianjian, 1995 (China Environment Yearbook)*, p. 196.
- <sup>86</sup> *Zhongguo Huanjing Nianjian, 1998 (China Environment Yearbook)*, p. 298.
- <sup>87</sup> *Chengdu Nianjian, 1993 (Chengdu Yearbook)*, p. 264.
- <sup>88</sup> *Zhongguo Huanjing Nianjian, 1996 (China Environment Yearbook)*, pp. 393-394.
- <sup>89</sup> Later on, the campaign became the “3321” campaign. In addition to the three lakes and three rivers, “two controls” (erkong) and one city were added to the list of priorities. The “two controls” refers to getting control of sulfur dioxide emissions and acid rain. The one city refers to Beijing.
- <sup>90</sup> *Zhongguo Huanjing Nianjian, 1995 (China Environment Yearbook)*, p. 408.
- <sup>91</sup> *Zhongguo Huanjing Nianjian, 1996 (China Environment Yearbook)*, p. 97.
- <sup>92</sup> *Zhongguo Huanjing Nianjian, 1996 (China Environment Yearbook)*, p. 98.
- <sup>93</sup> *Zhongguo Huanjing Nianjian, 2000 (China Environment Yearbook)*, p. 154-155.
- <sup>94</sup> Economy, "China's Go West Campaign: Ecological Construction or Ecological Exploitation," p. 8.

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- <sup>95</sup> *Zhongguo Huanjing Nianjian, 1997 (China Environment Yearbook)*, p. 45.
- <sup>96</sup> *Zhongguo Huanjing Nianjian 1999 (China Environment Yearbook)*, p.93.
- <sup>97</sup> *Zhongguo Huanjing Nianjian, 1998 (China Environment Yearbook)*, p. 297.
- <sup>98</sup> This campaign is sometimes referred to “total volume control and double standardization”
- <sup>99</sup> *Zhongguo Huanjing Nianjian 1999 (China Environment Yearbook)*, p. 152.
- <sup>100</sup> *Zhongguo Huanjing Nianjian 1999 (China Environment Yearbook)*, p.93.
- <sup>101</sup> Xiamen, Nanning, Ninbo and others were in compliance with air quality standards. Shenzhen, Zhuhai and others were in compliance with water quality standards. Gulin and Haikou were in compliance with both. *Zhongguo Huanjing Nianjian 1999 (China Environment Yearbook)*, p. 90.
- <sup>102</sup> *Zhongguo Huanjing Nianjian, 2000 (China Environment Yearbook)*, pp. 153-154.
- <sup>103</sup> *Zhongguo Huanjing Bao*, web version, June 23, 2002. See (<http://www.zhb.gov.cn/news/index.php3?position=19872>).
- <sup>104</sup> For descriptions of city-level campaigns, see appendix A.
- <sup>105</sup> Pian Yongfu, "Taiyuanshi Huanjing, Jingji Chixu Xietiao Fazhan Chutan (Preliminary Explorations into the Coordinated Development of Environmental and Economic Sustainability in Taiyuan)," *Lun Shanxi Kechixu Fazhan (Discussions on Sustainable Development in Shanxi Province)*, (Shanxi, China: Shanxisheng 21 Shiji Yicheng Lingdao zhu Bangongshi, 1998), p. 82.
- <sup>106</sup> Interview #50, Spring 2000.
- <sup>107</sup> Interview #34, winter 2000.
- <sup>108</sup> Interview #50, Spring 2000.
- <sup>109</sup> Wing-Hung Lo, "Environmental Management By Law in China: The Guangzhou Experience."
- <sup>110</sup> Benjamin L. Read, "Revitalizing the State's Urban 'Nerve Tips'," *The China Quarterly*, no. 163 (2000), p. 808.

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- <sup>111</sup> Benjamin L. Read, "China's Urban Residents' Committees as a Crucial Case of State-Fostered Grassroots Association," *Paper Presented at the 43rd Annual Convention of the International Studies Association, (Chicago, Ill, 2001)*.
- <sup>112</sup> Read, "Revitalizing the State's Urban 'Nerve Tips.'"
- <sup>113</sup> Wing-Hung Lo and Wing Leung Sai, "Environmental Agency and Public Opinion in Guangzhou: The Limits of a Popular Approach to Environmental Governance," p. 693-694.
- <sup>114</sup> *Beijing Nianjian, 1993 (Beijing Yearbook)*, Beijingshi Difangzhi Bianzhuanyuanhui, (Beijing, China: Beijing Nianjianshe, 1993), p. 474.
- <sup>115</sup> Interview #50, Spring 2000
- <sup>116</sup> Interview #52, Spring 2000
- <sup>117</sup> *Zhongguo Huanjing Baohu Xingzheng Ershinian (20 Years of Administering Environmental Protection in China)*, ed Zhongguo Huanjing Baohu Xingzheng Ershinian Bian Weihui, (Beijing, China: Zhongguo Huanjing Kexue Chubanshe, 1994), pp. 431-432.
- <sup>118</sup> *Zhongguo Huanjing Baohu Xingzheng Ershinian (20 Years of Administering Environmental Protection in China)*, p. 425.
- <sup>119</sup> *Zhongguo Huanjing Baohu Xingzheng Ershinian (20 Years of Administering Environmental Protection in China)*, p. 427; *Zhongguo Huanjing Nianjian, 1995 (China Environment Yearbook)*, p. 195.
- <sup>120</sup> *Beijing Nianjian, 1993 (Beijing Yearbook)*, p. 474.
- <sup>121</sup> The theme for the 2<sup>nd</sup> annual "Youth Environment Forum" (*Qingnian Huanjing Luntan*) was "enterprise and the environment" (*qiye yu huanjing*). At the meeting, over 100 youths involved in environmental sector enterprises were honored. The meeting was sponsored by the Communist Youth League, SEPA, the Qinglian, and the China Environmental Protection Foundation. *Zhongguo Huanjing Nianjian, 1995 (China Environment Yearbook)*, p. 415.
- <sup>122</sup> *Zhongguo Huanjing Baohu Xingzheng Ershinian (20 Years of Administering Environmental Protection in China)*, P. 443.
- <sup>123</sup> *Beijing Nianjian, 1996 (Beijing Yearbook)*, Beijingshi Difangzhi Bianzhuanyuanhui, (Beijing, China: Beijing Nianjianshe, 1996), p. 154.

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- <sup>124</sup> *Chengdu Nianjian, 1998 (Chengdu Yearbook)*, (Chengdu, China: Chengdu Nianjianshe, 1998), p. 119.
- <sup>125</sup> *Zhongguo Huanjingbao*, (China Environment News) September 19, 1998, p. 1.
- <sup>126</sup> Interviews #s 46, 50, and 52, Spring 2000.
- <sup>127</sup> *Zhongguo Huanjing Baohu Xingzheng Ershinian (20 Years of Administering Environmental Protection in China)*, pp. 432-433, p. 443; *Zhongguo Huanjing Nianjian, 1995 (China Environment Yearbook)*, p.415; *Zhongguo Huanjing Nianjian, 1998 (China Environment Yearbook)*, p.297; *Zhongguo Huanjing Nianjian, 2000 (China Environment Yearbook)*, pp. 343-344.
- <sup>128</sup> Interview and survey data on student environmental groups indicate that Youth League and student union members, the same groups that took part in early youth environmental education initiated some of the school environmental groups drives.
- <sup>129</sup> *Zhongguo Huanjing Nianjian, 1995 (China Environment Yearbook)*, p. 408.
- <sup>130</sup> *Zhongguo Huanjing Nianjian, 1996 (China Environment Yearbook)*, p. 456.
- <sup>131</sup> *Zhongguo Huanjing Nianjian 1999 (China Environment Yearbook)*, p. 254.
- <sup>132</sup> *Beijing Nianjian, 1993 (Beijing Yearbook)*, p. 477.
- <sup>133</sup> *Chengdu Nianjian, 2000 (Chengdu Yearbook)*, (Chengdu, China: Chengdu Nianjianshe, 2000), p. 109.
- <sup>134</sup> *Zhongguo Huanjing Nianjian, 1998 (China Environment Yearbook)*, pp. 478-479.
- <sup>135</sup> *Zhongguo Huanjingbao*, August 27, 1998, p. 1.
- <sup>136</sup> *Zhongguo Linye Nianjian 1991 (China Forestry Yearbook)*, p. 155.

## Chapter 6

### Diversity Among Environmental Social Organizations: Corporatist Actors and Chinese Activists

“Citizens are environmental protection’s primary soldiers. If there is no public support and participation, even the best policies will be useless. After there is more widespread public participation in managing environmental quality, then we can create an atmosphere that supports environmental protection. Consequently, we can advance our environmental objectives.” (Xie Zhenhua’s speech at the 1995 celebration commemorating World Environment Day.)<sup>1</sup>

This chapter focuses on China’s environmental social organizations (ESOs) (*huanjing baohu shehuituanti* or *huanbao shetuan* for short), the groups in China closest to environmental nongovernmental organizations common in the West. It examines ESOs theoretically and answers the question of why these groups emerged when they did. Issues concerning ESOs to be analyzed include: their development over time, their relationship with governmental and party actors, their agendas, and the factors contributing to, or hindering, their further expansion. Further, this chapter examines the role of ESOs in China’s potential environmental movements and their efforts to influence policy outcomes.

Why not call Chinese environmental groups nongovernmental organizations (NGOs)?<sup>2</sup> Part of the reason why is because they are not called NGOs in the Chinese language. In addition, not all Chinese environmental groups are independent from the government.

In China, authorities group all of the non-profit organizations, foundations, GONGOs, popular ESOs, and citizen non-profit enterprises, together in one category called social organizations, or *shetuan*. However, it is theoretically useful and practical

to split the category of *shetuan* into separate distinct subgroups. There are six different types of ESOs, categorized based on their relationship to the state.

- **GONGOs:** these are government organized nongovernmental organizations that deal directly with the general public and have a public service orientation, but maintain a very close relationship to the state.
- **Professional GONGOs:** organizations established by the government that are structured and act like trade, business, or professional associations.
- **Popular social organizations** (*minjian zuzhi*): these are more autonomous environmental organizations created by one or more motivated individuals.
- **Citizen non-profit enterprises:**<sup>3</sup> these are popular organizations, unable or chose not to register with the government, instead register as enterprises, even though they do not usually engage in for-profit activities.
- **Informal networks:** these are informal, unregistered organizations, or more correctly, loose networks of volunteers, some of which are web-based.
- **Student groups:** these groups are founded and run by students, usually at the university level.

While corporatism usually refers to business organizations, the concepts and models can be applied just as easily to the non-profit sector. In this chapter, corporatism in the non-profit sector is called “civic corporatism.”<sup>4</sup> While the popular ESOs are still tethered to the state because of legal and bureaucratic controls, they can be construed as members of a very tenuous civil society, and at times, as social movement organizations.

As in other countries where environmental nongovernmental organizations have played critical roles in creating environmental movements, Chinese ESOs have been crucial to the emergence of China’s first environmental proto-movements. ESOs act as social movement organizations in China’s emerging nature and wildlife conservation proto-movement. This chapter explains why ESOs have been very active in the wildlife conservation proto-movements and in “green-life” activism but have

not been as active in an anti-pollution movement, as one would expect given the experiences of Japan, Taiwan, and South Korea.<sup>5</sup>

Some professional government-organized nongovernmental organizations (GONGOs) appeared in the late 1970s and 1980s, but most appeared in the 1990s. All of the popular ESOs (*minjian zuzhi*) appeared in the 1990s.<sup>6</sup> The numbers of each type of ESO are increasing at a gradual pace, except for student organizations, which are proliferating rapidly. Part of the reason for this is the legal framework guiding ESO development.

There is a weak legal framework to support the long-term development of the ESO sector, and without this legal foundation, the ability of ESOs to mobilize resources, to increase their capacity, and to network will remain limited. The citizen non-profit enterprises, the informal networks, and the student groups are not subject to the same laws as the registered social organizations, so it is likely they will proliferate more rapidly, but their fate is just as tenuous as registered organizations. Student groups can be shut down by schools and non-profit enterprises can be shut down by their supervisory government organ.

While Chinese ESOs are not structured like NGOs in Western nations, they do fulfill some of the functions usually attributed to NGOs in other countries. They provide environmental education to the public and often mobilize the public to participate in environmental protection activities. They legitimize the state's environmental protection efforts, and some of them provide scientific, economic, or legal expertise to society and to governmental actors.

## **Theoretically Re-Conceptualizing Chinese Social Organizations**

How should we view China's ESOs theoretically? Theoretically, China's social organizations fit into more than one conceptual category, depending upon the group in question. Several different models and theories are "tried on" to see which best fits the emerging groups in China. The first theoretical framework to be applied considers Chinese ESOs to be corporatist structures, the second regards ESOs as social movement organizations (SMOs), and the third views them as components of civil society.

### **ESOs as Corporatist Structures**

The concept of corporatism is broad and in many cases, not well defined. There are three main conceptualizations of corporatism:<sup>7</sup> Some see it as a system of political economy distinct from capitalism and socialism;<sup>8</sup> Others view it as a form of the state within a capitalist society;<sup>9</sup> Finally, some consider it as a system of interest representation.<sup>10</sup> In this research, corporatism is seen as the latter - a system of interest representation.<sup>11</sup>

Phillippe Schmitter's definition of corporatism as interest representation is adopted in this research because it best describes the empirical reality in China. His definition is as follows:

Corporatism can be defined as a system of interest representation<sup>12</sup> in which the constituent units are organized into a limited number of singular, compulsory, noncompetitive, hierarchically ordered and functionally differentiated categories, recognized or licensed (if not created) by the state and granted a deliberate representational monopoly within their respective categories in exchange for observing certain controls on their selection of leaders and articulation of demands and supports.<sup>13</sup>

Schmitter's definition outlines the fundamental belief underlying a corporatist system; primarily, the unity of fractured interests in society can be achieved through authoritarian guidance by the state.<sup>14</sup> Schmitter's definition has been widely utilized and is still the most useful.

State and social corporatism are two of the main types of corporatism.<sup>15</sup> In state corporatism, organizational or institutional interests are included in the policy process because they ultimately help the state. Social corporatism, on the other hand, describes the process whereby groups in society develop autonomously to better facilitate interest articulation from social groups.

Typically, corporatist models have only applied to economic and occupational interests. The focus of these studies has been on the relationship between the state and associations with organized interests, such as labor unions and business associations, regarding the issues of capital and labor. The studies of corporatist structures in China also focused on economic-corporate groups and their role in the political system.<sup>16</sup>

However, as Nedelmann and Meier point out, Schmitter's definition can be applied more broadly.<sup>17</sup> Nedelmann and Meier assert that if one wants to generalize about state-society relations as a whole, then one must also examine other types of interests and social groups outside of the economic realm. Therefore, applying corporatist models to non-profit organizations has some historical justification. To distinguish corporatism in the non-profit sector, in this research, corporatism will be called "civic-corporatism."

To see if the state civic-corporatist model is useful, we must first outline what ESOs would look like if they were corporatist. If Chinese ESOs are corporatist

structures, then their leaders are approved or appointed by the state. Some may even be established by the state itself. The state may also have some control over the organizations' agendas. In return, the ESO would have a "representative monopoly" in its respective realm. For example, a research organization may have a monopoly on supplying the state with certain kinds of data. A corporatist organization may have some autonomy, but its recognized interests will generally be in line with those of the state.

### *ESOs as Social Movement Organizations*

The second theoretical model to be applied is that of social movement organizations. Social movement theories were already discussed in chapter two of this dissertation, so they will not be repeated here; but it is useful, however to take a closer look at social movement organizations (SMOs), which are crucial for the emergence and development of a social movement.

While SMOs help create political opportunities for a movement to emerge and they help shape the nature of a movement, these organizations themselves are influenced by the political context within which they emerge, in turn influencing their role in social movements. In other words, "external opportunities impact movement structures, which in turn influence the kind and level of mobilization."<sup>18</sup> It should be pointed out that China's ESOs may not look or act exactly like SMOs in other countries simply because of the unique political opportunities in China that shape the development of ESOs. For example, in China, political opportunities for direct, flamboyant protest against governmental and party authorities are minimal. So, unlike SMOs in the U.S. and South Korea, Chinese SMOs may not directly engage in what

Americans would consider overtly contentious politics with the state, such as organizing protests to surround Zhongnanhai to demand higher compensation for victims of pollution. This raises an important point: If contentious politics is at the heart of a social movement, does this mean that SMOs in China must engage in contentious or disruptive tactics?

A specific action, such as writing a book criticizing the construction of the Three Gorges Dam, may not be controversial in the U.S. or Western Europe, but it could be considered contentious within China's political context. It is arguable that contention itself is socially constructed. If citizens must utilize extra-institutional channels and that if citizens and authorities believe they are in contention with each other, then they are.

The definition of contention therefore is society specific. This approach is more closely associated with the culturally oriented scholars such as John Foran and Hank Johnston.<sup>19</sup> Again, the political opportunities that shape the structure of China's ESOs also shapes their activities. A letter campaign or student "gatherings" to try to stop logging in Yunnan province in order to save habitat for the Golden Monkey or writing a book opposing the Three Gorges Dam is contentious within the Chinese context. However, if Chinese ESOs do not act in a contentious manner and they do not mobilize dense social networks toward reaching a common goal, then the SMO model would not be quite appropriate.

If Chinese ESOs were SMOs, then they would bring people together into strong social networks, bound by "inherited cultural symbols," that would engage in sustained collective, contentious politics with elite opponents and/or authorities.<sup>20</sup>

ESOs as SMOs would be grassroots organizations that mobilize individuals and groups to start and sustain movements. They not only mobilize participants, they also disseminate information, help to forge a collective identity, and even satisfy the interests of their leaders.<sup>21</sup> In this case, another model would be necessary. One possible model is civil society.

### *The Search for Civil Society in China: A Historical Perspective*

Previous scholars have found the term “civil society”<sup>22</sup> problematic in the Chinese context. The concept of civil society was created in the West, so one cannot expect to find exactly the same phenomenon in the East. One popular Western definition of civil society is as follows: “civil society is that arena of social engagement existing above the individual yet below the state. It is a complex network of economic, cultural, and social practices based on friendship, custom, the market, and voluntary affiliation. It consists of structures that shape public affairs.”<sup>23</sup>

In the Chinese language, “civil society” is not directly translatable. The Chinese terms closest in meaning are *wenming shehui* (cultural society) and “the public sphere.” A definition of the public sphere in the Chinese context is “an arena of nonstate activity at the local level that contributes to the supply of services and resources to the public good.”<sup>24</sup> Wakeman’s definition is narrow and excludes anything about civil society shaping public affairs.<sup>25</sup>

During the imperial and republican periods, the public sphere in China was much smaller and more commercial in its orientation than the civil society found in the West, and at no time was it strong enough to influence the state on a large scale. In China, the public sphere relied on elite public participation and was centered on

groups and localities instead of on individuals and private property.<sup>26</sup> Scholars categorize trends in the development of China's public sphere into four periods: the Imperial period (221 B.C. to 1911),<sup>27</sup> the Republican period (1912 to 1949), the Communist period (1949 to 1978), and the Post-Deng period (1978-present). Organizations that developed in the late Qing Dynasty probably come the closest to resembling civil society. There was a general weakening of the state due to a succession of weak emperors, rebellion, encroachment from the West, and the advent of nationalism.<sup>28</sup> National issues interrupted local life and public opinion about national issues emerged. Officials were criticized and eventually national reforms were carried out.<sup>29</sup>

During the Mao period from 1949 to 1978, philanthropic and religious activities were discouraged vigorously; civil organizations and the government monopolized mobilization structures and resources. Few, if any, independent non-governmental organizations conducted activities. The "political space" for non-governmental organizations essentially did not exist during this period due to the extensive power and control of the state.

A civil society needs the consent of the state to function properly and this consent did not really ever exist under Chinese imperial rule, in Confucian traditions, or under Mao Zedong's communist system. However, an elite public sphere, vaguely resembling civil society, did form during certain periods in China's history and might again in the future.

## **Re-emergence of Social Organizations in China in the Post-Mao Period: The Importance of Political Opportunities**

After 1978, the political and economic reforms of Deng Xiaoping paved the way for the re-emergence of a private economy and of semi-autonomous civic organizations. Some of these groups were active in policy research and advocacy, but these organizations were shut down or forced to temporarily suspend their activities due to the political clampdown after the Tiananmen massacre in 1989; thus marking a break in the development of quasi-nongovernmental groups.

After Tiananmen, these groups proliferated rapidly in the 1990s. The old Confucian traditions of philanthropy also re-emerged, as businessmen turned to charity as an alternative to being taxed and as a way to improve their social standing.<sup>30</sup> The semi-autonomous relief and educational organizations that began to re-emerge were even welcomed by a government that found itself increasingly unable to stretch its resources to provide adequate social services. The recognition by the Chinese state that it needed social groups to assist with meeting the needs of China's population created space for this re-emergence. In the 1990s, it became possible to speak of social organizations in terms of providing an alternative or a supplement to the government supply of goods and services.<sup>31</sup>

The term "non-governmental organization" became more commonplace after the 1995 Fourth World Conference on Women was held in the PRC;<sup>32</sup> but in 1996, it was still not possible to think of social organizations in terms of fostering the development of pluralism, though the central government did acknowledge there were

some functions outside its control. According to the Vice Premier of the State Council: “The use of social organizations is to concentrate capital and to meet needs that the government is unable to meet. We support their legal status. As to foundations, they are to pool funds from citizens, officials and organizations. We rely mainly on state funds, but a country so large cannot do everything.”<sup>33</sup> Chinese leaders were heartened by international praise for emerging social organizations in China and by those who said the emergence of these groups signaled that China was now a “modern” country.

The acknowledgement by Chinese leaders and government officials that the state could not “do everything” represents a shift to a more rational view of state-society relations and a sophistication of the state’s approach to those relations. However, it is important to note that the state still has a large role in shaping the number, nature, and activities of social organizations. It keeps them tethered to the state through regulatory measures, as will be discussed in detail later in this chapter.

### **The Rise of Environmental Social Organizations**

There are five main reasons why environmental social organizations began to appear in the early 1990s and each of these reasons represents a change in the opportunity structure shaping participation. First, as noted above, Deng’s reforms essentially created the initial opening for major forces to begin working in favor of ESO development in China and the establishment of social organizations in other sectors in the late 1980s helped make space for ESOs to emerge. Second, the global expansion of environmental NGOs and other international pressures helped to determine when ESOs emerged in China. In addition, China needed organizations that could interface with foreign nongovernmental organizations and could help draw in

financial and other resources. Third, authorities encouraged the creation of ESOs. Environmental protection officials realized they needed the public's assistance in optimizing the enforcement of environmental laws and policies at the local level. Fourth, local EPBs began to expand environmental education programs to the broader public, so more citizens became concerned with pollution and environmental deterioration. Fifth, individuals began to take more initiative to promote wider public participation in the environmental protection sector.

### ***Liberalization of the Economy and Governmental Decentralization***

Since 1978, when Deng Xiaoping initiated the "open door" policy, China has revived the private economic sphere and has also become increasingly integrated into the international system. Contact with international environmental institutions has probably influenced the strategies China adopts in addressing environmental problems. China's push for economic development has spawned horrific environmental degradation, but also has generated the wealth necessary to address environmental problems with modern technologies. China has instituted economic reforms, encouraged private business, begun to decentralize the economy, privatized some government industries, established a stock market, and consistently wooed foreign investment. China's growth rate has been in double-digit figures for several years in a row. This high growth rate has also brought inflation, corruption, unemployment, crime, social instability, and high expectations. The dismantling of the centrally controlled economy has started to alter the social system, and the government has encouraged some economic self-sufficiency. According to the National Committee's interpretation, China's economic goals have been to encourage growth in

the non-state industries, commerce, and the service sector so that the economy will be able to employ the growing work force.<sup>34</sup>

***Global Expansion of Environmental NGOs and other International Pressures***

The proliferation of environmental NGOs around the globe has put pressure on Chinese leaders to establish governmental ESOs (GONGOs) and to allow more independent groups to form. The prominence that some international environmental NGOs have gained through media exposure may have contributed to the spread of the ESO concept in the PRC. Increasingly Chinese students have studied abroad in the US, Britain, Australia, Germany, and Japan since the late 1970s and have been exposed to environmental NGOs. Some of these people helped to spread the ESO concept within academic circles upon their return to China.

In addition, Agenda 21<sup>35</sup>, which was signed at the Rio Conference in 1992, includes a chapter calling for an expanded role for ESOs in environmental protection. “Governments should involve non-governmental organizations in sustainable development plans, making the best use of their abilities in such areas as education, alleviation of poverty and environmental protection and rehabilitation...”<sup>36</sup> The rather sudden expansion of GONGOs in 1994 corresponds with the implementation of Agenda 21.

The environmental NGO networks that have built up in many countries, and across borders, have become more complex, increased their resources and have much to offer in the way of scientific knowledge and contacts. China’s leaders do not want

to “miss out” on these resources, and will be motivated to support an expanding ESO sector that can participate in these networks.

The Chinese government has set up ESOs in order to be eligible for financial and capacity building opportunities with foreign organizations. Some U.S. grant-making organizations do not normally fund governmental organizations in foreign countries (although some do). To be eligible for grant funds from these organizations, the Chinese government may have set up, quasi-autonomous NGOs (GONGOs) to serve as “front organizations.” In China, agreements must be set up by “like organizations,” so a Chinese governmental agency cannot sign a formal agreement with a US NGO. The Chinese government has been known to set up a “front organization” in this type of situation as well, so that agreements can be carried out. This occurred when the National Committee on US-China Relations, a non-profit organization in the US, set up the Ussuri Watershed Land Use Planning Project. The non-governmental organization that was set up by the Chinese government that eventually worked with the National Committee consisted of the same scientists and policy makers that were previously employed by the government agencies in the area. The organization was “non-governmental” in name only.<sup>37</sup> The trilateral project was “designed to form a team of American, Chinese, and Russian natural scientists, social scientists, and public policy specialists who undertake activities aimed at sustainable development in the 20,000,000 hectare Ussuri River watershed.”<sup>38</sup>

Chinese ESOs also have contact with foreign and international environmental and other organizations, which will help to build Chinese ESO capacity. From the early 1990s, ESOs like FON and others forged relationships with environmental

groups from Hong Kong, such as Friends of the Earth, as well as groups in India and South Korea.<sup>39</sup>

### *Encouragement and Support from Officials*

Opportunities for public participation expanded due to increased encouragement by authorities. Some of this encouragement was informal and some was in the form of formal declarations. Evidence of formal support can be found in the Chinese Agenda 21. In Agenda 21, state leaders declared their commitment “to improve the system for making and investigating complaints, and expand the public’s role in the enforcement of sustainable development laws so as to ensure that individuals, groups and organizations with legal standing have reliable channels for participating in the enforcement process to protect their legal rights and public interests.”<sup>40</sup>

Environmental protection officials began to recognize that it was “only through participation by the public and support from citizens could the implementation of government environmental protection measures and policies be improved; “we need environmental social organizations.”<sup>41</sup> By the early 1990s, the environmental protection apparatus had begun to be more assertive, giving concerned citizens stronger allies in the government. The founders of the first registered Chinese ESO, Friends of Nature, FON, made the move to establish a group after receiving encouragement to do so by a high level environmental protection official.<sup>42</sup> In 1995, the State Council issued a decision that encouraged local governments and ministries to establish opportunities and systems to promote public participation and to “bring social organizations into play.” They emphasized that public participation in

environmental protection work was useful in bringing up and revealing unlawful behaviors.<sup>43</sup>

Allies in the government helped to provide political opportunities for ESOs to become established and have directly encouraged and supported ESO activities. One example of this support is the encouragement given to FON and others in their campaign to save the Golden Monkey and its habitat in Yunnan. The campaign received support from some local party and governmental officials as well as from national-level party and governmental officials.<sup>44</sup> High-level authorities recognize that the government needs citizen participation in order to implement environmental laws and policies and that it cannot achieve environmental protection goals without public involvement.<sup>45</sup>

### ***Deterioration of China's Environmental Quality and Rising Environmental Consciousness***

Widespread environmental degradation in China and rising environmental awareness are forces for the development of environmental ESOs. ESOs began to appear at the same time environmental protection authorities began to expand environmental education campaigns to the general public,<sup>46</sup> which is not a coincidence. Before the late 1980s and early 1990s, environmental education efforts focused on educating environmental protection officials, governmental officials, workers in polluting enterprises, primary and secondary school teachers.<sup>47</sup> Starting in the early 1990s, authorities expanded education activities to include more ordinary citizens. These education efforts helped citizens began to see that pollution might not

be inevitable. Citizens became more aware of China's multiple environmental problems.

The list of China's environmental problems is long. According to the 1995 Report on the State of the Environment in China, issued by the National Environmental Protection Agency, the seven major environmental problems in China are: water pollution (70 percent of the nation's rivers are polluted and forty one of the forty four major cities have groundwater contamination problems); urban air pollution, (respiratory disease rate is extremely high); industrial toxic and hazardous solid wastes and urban refuse; comparative shortage of surface water resources in the Northern regions and shortages in many cities (ground subsidence in at least five major cities exists because of over pumping aquifers); serious soil erosion; deforestation and serious grassland degeneration; and reduction of habitat.

There is evidence of a growing environmental consciousness. One survey, done in the early 1990s, found that 99 percent of the respondents felt environmental pollution and ecological destruction in China were "serious" or "fairly serious" matters and 95 percent of them were worried that environmental pollution might damage their health.<sup>48</sup> The former director of the Institute of Environment and Development said she started the ESO because she felt that environmental pollution in China was a big problem and that people should not just depend on the government to solve the problem.<sup>49</sup> Governmental education efforts helped to raise citizens' environmental awareness and concern. They helped citizens to see environmental protection as not only the purview of experts, but as a responsibility of each individual.

### ***Individual Initiative as a Factor***

Finally, individual citizens took more initiative to expand public participation. Citizens concerned with environmental quality were hearted by the Chinese state's efforts at environmental protection and took up the call for citizen participation in the environment sector. On prominent example of individual initiative is Liang Congjie, the founder of FON. He took to heart the part of the Environmental Protection Law that calls on the public to take action to protect the environment. He feels it is the duty of ordinary citizens to work with the government to improve environmental quality. In the early 1990s, he felt he had the responsibility to mobilize and motivate people to understand that diminished environmental quality should not be the price of development. Further, he wanted to educate the public about endangered species and motivate others to help preserve the environment for future generations.<sup>50</sup>

### **Laws Regulating ESO Expansion**

In China, all of the different types of organizations that remotely resemble social groups, including associations, foundations,<sup>51</sup> research institutes, and other groups, fall under the official heading of social organizations. There has been a broad, general framework regarding social organizations since the 1950s. Registration of associations used to be handled by the now-defunct Ministry of Internal Affairs based on the regulation "Provisional Measures Regarding the Registration of Social Organizations." At this point in time, the term social organizations referred to the quasi-governmental organizations such as the Communist Youth League, the All Women's Federation, and the Young Pioneers. In 1988, responsibility for managing social organizations was handed over to the newly created Social Organizations

Department of the Ministry of Civil Affairs; in 1989, state leaders promulgated a new regulation, “Measures on the Registration of Social Organizations”<sup>52</sup>

Starting in 1995, there was a two-year moratorium on the registration of social organizations until three new regulations were promulgated in October of 1998. At that time, the Department of Civic Organization Management was established within the Ministry of Civil Affairs to manage registration activities. The new regulations are: 1) Regulations Concerning the Registration and Management of Social Organizations (*Shehui tuanti Dengji Guanli Tiaoli*);<sup>53</sup> 2) Provisional Regulations Concerning the Registration and Management of Civil Non-profit Enterprises, (*Minban Feiqiye Danwei Dengji Guanli Zhanxing Tiaoli*); and 3) Provisional Regulations Concerning the Registration and Management of Institutions (*Shiye Danwei Dengji Guanli Zhanxing Tiaoli*), this type of organization would typically be concerned with research.

According to these new laws, social organizations and civil non-profit enterprises still require the review and approval of two governmental agencies: the appropriate professional supervisory agency and the Bureau or Ministry of Civil Affairs at the same administrative level as the applying organization. Getting approval from the professional supervisory agency is the most difficult part of getting registered. For example, the State Environmental Protection Administration (SEPA) would have to review and approve any national-level organization applying to conduct activities related to environmental protection and the Beijing Municipal Environmental Protection Bureau would have to approve of any Beijing-based organization. The professional supervisory agency is called the *guakao* (“mother-in-

law”) unit and vouches for and takes responsibility for the organization seeking registration. While it is unclear what would happen to the sponsoring agency if a social organization steps out of bounds, being saddled with such a responsibility is enough to discourage governmental agencies from granting approval lightly.

The social organization measure outlines other strict requirements. Provision ten requires that a social organization have at least fifty members. It may be difficult for an organization to get this many members when it is in its infancy. It may lead organizations to remain unregistered in their initial phase of development. The same provision dictates that national level organizations have 100,000 yuan in assets and funding and a local organization have 30,000 yuan. Social organizations are allowed to be legal entities and can establish branch organizations, but civil non-profit enterprises may not.

If a social organization already exists whose activities are the same or similar to the organization registering, then there is “no need” to establish another one.<sup>54</sup> On this basis alone, an organization could be denied first-tier social organization status. This provision helps to set up the corporatist relationship between the state and social organizations. It gives an organization a representational monopoly in its respective category.

This restriction does not apply to civil non-profit enterprises and institutions. Institutions, however, can only be established by governmental agencies or by other organizations using governmental funds. While there are fewer restrictions regarding the establishment of civic non-profit enterprises, it still may be difficult for this type of

not-for-profit organization to obtain the approval of their appropriate “professional” supervisory agency.

Some social organizations evaded state control by taking a different route to obtain legal status, such as Beijing Global Village. These organizations have registered as for-profit enterprises. In some respects, this is an easier route, but the for-profit status may make some potential donors stay away. Other groups have avoided getting registered at all, such as Beijing’s Green Earth Volunteers. These groups get together on an ad hoc basis, but they still are able to mobilize a large number of people. Again, potential donors may shy away from these organizations.

In summary, the main impediments to the establishment of more social organizations are the requirement to get approval of a supporting professional supervisory government agency and the limit of one representative organization in an administrative area. The rapid increase in the number of student organizations shows that when there are not regulations limiting their development, organizations will proliferate.

While the three new laws have helped to clarify the legal status of social organizations, they do not make it any easier for citizens to establish a social organization or even a civic non-profit enterprise. The laws help to clarify who can establish a social organization and how, thus making establishing an ESO legal. On the other hand, the laws severely inhibit wider proliferation of ESOs because it is so hard to get approval from a guakao organization. Along with legal restrictions, numerous other factors inhibit the rapid expansion of ESOs in China.

## **Barriers to ESO Expansion**

Earlier work on ESOs in China suggests that the two factors most important in shaping ESO development have been the “greening” of the central state and the government’s “alternating politics of tolerance and strict control of civil organizations.”<sup>55</sup> While both of these are important, other factors are also important including cultural tendencies and the “socioeconomic dependency’ structures unique to China.

### *Cultural and Political Constraints*

A political culture largely shaped by Confucian and Marxist-Leninist traditions, and the current political, social, and economic structures will all work against the development of independent social organizations in China. Lucian Pye maintains that political culture is important when trying to understand political developments in China.<sup>56</sup> Below is a somewhat simplified argument as to why political culture is extremely important for understanding state-society relations and the nature of social organizations in China.

According to some, Chinese political culture is fraught with dualism, but Lucian Pye isolates Confucianist Leninism as a dominant thread that continues to influence Chinese politics. He points out that the interactions of the two have produced tensions, but have also accentuated the following psycho-cultural factors:

- the continuing practice of teaching people how to behave; everyone is trained as to what constitutes correct behavior.
- the idea of conformity is pervasive and shapes behavior.
- the moral behavior of individuals is framed in the context of the collective, which produces considerable attention to superior-subordinate relationships.

These traditions create a “marked instinct for hierarchy” and respect for authority.<sup>57</sup> These psycho-cultural factors help to shape state-society relations and have tended to create a dualistic cycle of behavior that Pye calls protesting mistreatment and stoic fatalism. People will tend to tolerate a situation until something causes a sudden protest. People tend to complain yet will continue to endure a situation indefinitely. All these factors increase the “costs” of collective action, forcing a type of “assurance game,”<sup>58</sup> that is, there will be no collective action unless enough people are willing to join in. The Chinese did not abandon their Confucian traditions before adopting Communism and both these traditions have sought to restrict social dissent.<sup>59</sup>

The Marxist-Leninist traditions adopted, modified, and instituted by Mao Zedong denies legitimacy to civil society because of its association with the bourgeoisie.<sup>60</sup> “Social movements” were initiated by the state in the form of mass movements. After 1978, the state loosened control over some aspects of civil organizations, but the party still maintains supreme authority and “individualism” is repressed. The good of the group comes before the good of the individual. The government also proclaims that social and economic rights are prior to political and civil rights.<sup>61</sup> Currently, people cannot participate in completely independent environmental non-governmental organizations without facing political and economic risk. Because of this risk, the “pay-off” for participating in unsanctioned non-governmental organizations is lower than the cost, which discourages collective action and the development of social movements. The foreign and domestic women’s groups that participated in the NGO Forum alongside the International Women’s Conference

in Beijing in 1995 were harassed and at times prevented from meeting with foreign counterparts during the conference.<sup>62</sup> Dai Qing, a journalist who wrote the book “Yangtze, Yangtze,” was imprisoned for a period of time because of her public criticism of the Three Gorges Dam Project.

***Socioeconomic “Dependency Structures”: Barriers to ESO Development***

During the 1980s and 1990s, for citizens concerned with environmental quality or environmental activism in China, there were very practical reasons why it is difficult to sustain ESOs because of the *guakao* (“mother-in-law”) and *danwei* systems. To have an independent ESO, people must be able to have the time, the money and other resources to manage it.

During the 1980s and 1990s, and in some areas even after the turn of the century, life in China revolved around the work unit, the *danwei*, which usually refers to the place where a person works, studies, or conducts research. A unit is not an independent organization; it is the lowest level of the state apparatus (in state companies or organizations). Most people received a salary, obtained housing, health care, schooling for children, and coupons for cloths, food, and furniture through the work unit. The *danwei* administered the birth-control program, mediated marriage disputes, and provided pensions and burial funds. When a worker wanted to get married, get a divorce, move, or change jobs he/she had to get the *danwei*'s permission. People also looked to their unit for recreation opportunities.

Andrew Walder beautifully captured the relationship between citizens and the state with the concept of “organized dependence,” which refers to the “extent to which, and ways in which, workers are dependent economically on their enterprises,

politically on the party and management, and personally on supervisors.”<sup>63</sup> These dependency structures made it very difficult for citizens to work full time at an autonomous ESO, unless it was also their work unit. Even if funding is obtained from a foundation from abroad for a couple of projects not sanctioned by the work unit, other survival needs would not be met, such as a housing allotment. A person would have to quit their work unit, to be available to work at an “unofficial” ESO full time, but in doing so, they would have to give up their housing and all of the other benefits. This made it very difficult for people to work at ESOs full time.<sup>64</sup>

In the 21<sup>st</sup> century, the “dependency structure” of the *danwei* is starting to break down. However, the same cannot be said about the *guakao* system. Starting in the late 1990s, *danwei* control over urban housing began to weaken as it became legal to buy and sell lease rights to houses and apartments. The *danwei* could still block such transactions. However, in September of 2003 a new policy bans employers from blocking owners of state-assigned housing from selling their properties. Other new policies regarding the *danwei* have recently been passed. As of October 2003, people will no longer need permission to get married or divorced. In addition, citizens will no longer need to go through the *danwei* to get a passport.<sup>65</sup> These changes will help to create socioeconomic structures that nourish the growth of social organizations, but until such reforms are made to the *guakao* system, environmental activists will have to come up with new and better ways to negotiate with the state and evade state control.

Herein lies the crux of the problem. Until legal and socioeconomic structures that support a permanent non-profit sector or a “civil society,” are in place, there is no

guarantee of any stability in the development of such a sector. Civil society or a non-profit sector needs the consent of the state to operate on an on-going basis.

### **Environmental Social Organizations: Empirical Evidence<sup>66</sup>**

As described earlier, there are six types of ESOs in China: GONGOs, professional GONGOs; “popular social organizations” (*minjian zuzhi*), or popular ESOs; citizen non-profit enterprises; informal networks; and student groups. Profiles of each type of these groups are very revealing - much of the recent scholarly work on environmental social organizations is in a profile format, some more in-depth than others.<sup>67</sup> Because of the existing dearth of research based on profiles, this research takes a different approach by aggregating data on the different types of ESOs. The main goal of this section is to illustrate the similarities and differences among GONGOs, professional GONGOs, autonomous ESOs, and informal volunteer networks in terms of their group structures, funding, and functions, or group agendas. In addition, this section examines student environmental groups as a distinct category.

#### ***Structure***

Most of China’s professional and other GONGOs are affiliated with central, provincial, or local governments, ministries, research organizations, educational institutions, or well-established state social organizations. Many of these organizations proclaim themselves to be non-governmental organizations but they are not independent of their state sponsor. The leaders of professional and other GONGOs are appointed by their sponsoring organization and many of them have dual positions in the governmental organization and the GONGO. Although the leaders of some GONGOs are retired from their professional careers, such as Shen Yimin, the

president of China Population and Environment Society who used to work at the State Statistical Bureau in the Population Statistics Department. Many GONGOs have regular full-time staff.

Some examples of national level professional GONGOs include the China Environmental Science Society and the China's Environmental Protection Industrial Association. These and other professional GONGOs have provincial and local branches. Examples of GONGOs associated with SEPA are the China Environmental Protection Foundation and the China Society for the Advancement of Environmental Culture.

Popular ESOs, citizen non-profit enterprises, informal networks, and student groups are established by individuals and are usually run by a small, part-time, unpaid staff.<sup>68</sup> These “grassroots” organizations are highly dependent upon the individual or individuals who established them. Some of the founders have good connections with government or party leaders. Several popular ESOs were started by individuals connected to the Chinese media, such as Wen Bo, who used to work with the China Environment News and was one of the founders of the University Students Green Forum. The continued survival of an ESO after the departure of its founder or founders is a problem some ESO founders are aware of and are trying to remedy.

Membership structure is a factor that distinguishes GONGOs and professional GONGOs from popular organizations. GONGOs are specialist or elitist organizations that do not have dues-paying “members”. Some popular ESOs, on the other hand, are membership organizations, like Friends of Nature (FON). The unregistered and

Internet groups also can be considered membership groups, although their members are volunteers and do not pay dues.

### ***Funding***

Funding sources for GONGOs and ESOs that are more autonomous are quite similar, although organizations that are more autonomous have not received much funding from the state environmental protection apparatus. The GONGOs that perform social services, such as the China Environmental Protection Foundation, and popular ESOs have a large variety of funding sources. Funding sources for the groups include the PRC government – especially provincial and municipal EPBs; international governmental organizations (UNEP and UNDP); U.S. and European foundations; foreign NGOs; foreign government departments; foreign companies; domestic companies and membership dues.

More and more domestic companies are funding specific education projects, both through GONGOs and popular ESOs. One such project makes it possible for groups of youths to volunteer at Keke Xili, the monitoring station on the Qinghai-Tibetan plateau set up by the government in conjunction with several ESOs and individuals.

The main difference in funding sources between popular ESOs and GONGOs is that popular ESOs do not receive much, if any, financial support from EPBs at the national, provincial, or local level. It should be noted, however, that they often receive other kinds of support such as information, data, and materials.

### *Comparing Agendas and Activities*

Comparing GONGO and ESO activities also sheds light on the similarities and differences between these types of groups. Both types of groups share some similar activities, including: public education; scientific or economic research; publishing and dissemination of information; academic exchanges; acting as a liaison with foreign NGOs; policy research; coordination of volunteer activities; and cooperating with the government.

The groups that engage in public education activities work to initiate social change. They seek to change people's attitudes and behavior toward the environment. For example, groups use a variety of means to discourage littering, to promote recycling, and to advise people on inappropriate actions harmful to the environment, such as picking bamboo in the panda forest (disrupting an ecosystem).

The main difference among the various groups is how activities are carried out. For GONGOs, activities that involve larger numbers of citizens, whether trash collection activities or youth painting contests, can be implemented through China's education system, through corporatist organizations such as the Communist Youth League, or through governmental structures such as local EPBs and Street Committees. These mobilization structures enhance the repertoire of involvement strategies GONGOs can use, beyond use of the media, the Internet and/or other means of communication. For autonomous ESOs and informal networks of volunteers, the "state-linked" mobilization structures are largely unavailable. Generally, these groups must rely more on word of mouth, the Internet, the media, hanging posters, other ESO groups, and the contact lists from other groups. However, when ESOs and informal

networks team up with GONGOs or government actors, additional mobilization structures and techniques are available.

When working with party and governmental organizations, popular ESOs and informal networks are forced to utilize different channels of influence than are available to GONGOs. The research-oriented groups that were established by the government, or by government research institutes, use normal governmental channels to funnel their research findings to those in authority, thereby possibly influencing the decision-making process. Researchers try to get their superiors to pay attention to their suggestions - if leaders of GONGOs believe an article written by a researcher is important, they may pass it on to NPC members or more likely to officials in the State Council. Members of popular ESOs and informal networks, on the other hand, do not generally have these internal connections through which they can forward ideas to China's leaders, though there are a couple of exceptions to this, such as Liang Congjie, a member of the Chinese People's Political Consultative Conference. Members of popular ESOs will sometimes utilize the media to get the attention of top leaders.

In general, China's GONGOs, popular ESOs, informal networks, and student groups do not mobilize local anti-pollution protests, which is a major difference between Chinese groups and their other Asian and western counterparts. However, there are a handful of organizations that have begun to discuss the plight of pollution victims and are working to expand access to justice in China.

Starting in February of 2001, FON began to print letters from citizens regarding pollution and environmental degradation, which helped to bring to light the stories of the victims of pollution.<sup>69</sup> FON may have been willing to begin discussing

pollution victims because of the emergence of a couple of groups that act as advocates for victims' rights and who, so far, have operated without the interference of government or party officials.

One such group is called The Center for Legal Assistance for Pollution Victims (CLAPV), associated with the Environmental and Natural Resource Law Research and Service Center at the China University of Politics and Law, which was established by a lawyer and professor named Wang Canfa. Dr. Wang gives free legal advice or helps in finding legal council for victims of pollution who have been unable to get their complaints resolved through their local EPB. Dr. Wang is motivated to find a way to help the increasing numbers of citizens harmed by pollution receive adequate compensation for their losses. Dr. Wang wants to intensify the pressure on enterprises to take the safety of their communities and environmental laws more seriously; however, Dr. Wang does not mobilize victims of pollution to form groups or act collectively to try to press their demands to governmental actors.

In summary, popular ESOs, and even GONGOs, are subject to the same laws regarding social organizations. GONGOs have direct corporatist links to state organizations, while popular ESOs have indirect links to the state through their *guakao* organization. Only the popular ESOs, informal networks, and student groups are membership organizations and receive some of their funding through their membership. The other funding sources for GONGOs and popular ESOs are quite similar, except popular ESOs receive little, if any, funding from Chinese governmental organizations.

GONGOs, popular ESOs, and informal volunteer networks engage in activities that mobilize individuals to participate in environmental protection activities, such as picking up trash, as well as in educational activities designed to change citizens' attitudes and behaviors. In essence, these efforts can be called "civic politics."<sup>70</sup> As described by Paul Wapner, actors engaged in civic politics are practicing politics in an attempt to instill new values and to change the behaviors of large numbers of people. The primary differences between the activities of GONGOs and popular ESOs are the means by which the groups reach the public and the channels through which they try to influence governmental actions and policies. GONGOs have access to internal channels through which to funnel suggestions, while popular ESOs generally must resort to letter campaigns or the media to get governmental actors to pay attention to their demands. Student groups have not been included in the previous discussion simply because they are not subject to the same laws and regulations as the GONGOs and other ESOs. However, given the rapid increase in the numbers of these student organizations, they need to be discussed.

### **Student groups**

Student groups should be discussed separately because they are not subject to the laws and regulations of registered ESOs, therefore it is easier for them to be established. As Lu Hongyan writes: "... since 1990, Chinese university student environmental associations have sprouted quickly, like bamboo shoots after a big rainstorm."<sup>71</sup> Why did these groups multiply so quickly, what is their relationship to ESOs, what have they accomplished, and what do they indicate about state-society relations? These are the questions explored in this section.

There are several reasons why student groups are now proliferating on college campuses across China. According to Lu Hongyan, students became involved in student environmental groups because of increasing pollution problems. Many students from rural areas, who come to universities in urban areas, are exposed to pollution and the relationships among “industry, government, and communities in creating environmental problems” for the first time.<sup>72</sup>

Even more generally, the reason why political space opened up for the creation of student groups was because Chinese authorities mobilized youth to become active in environmental protection and have encouraged the development of the groups. Before 1993, top Chinese leaders, including Li Peng showed interest in mobilizing China’s youth to participate in environmental protection efforts. In a speech at a provincial meeting of the Young Pioneers, Li Peng expressed his wish that people should work together to improve environmental protection “from an early age” (*yao cong xiao zuoqi*). He hoped tomorrow’s youth could make China’s “skies bluer, ground greener, and water clearer” (*tian geng lan, di geng lu, shui geng qing*).<sup>73</sup>

At the national level, in 1993, top Chinese officials organized the first “China Youth Environmental Forum.”<sup>74</sup> The goals of the forum were to motivate youth all over China to become involved in environmental protection efforts, to become “pioneers” in these efforts. China’s youth were enlisted to help raise everyone’s environmental awareness, to control environmental pollution, to improve environmental quality and to contribute to the realization of efforts to reconcile environmental protection and economic growth.<sup>75</sup>

The mobilization efforts of NEPA, the Youth League, and the Young Pioneers predate the formation of student environmental groups that now proliferate across the country. Activists that took part in these early youth education drives participated in the creation of university student environmental groups and became some of the first young members of popular social organizations. Interview and survey data on student environmental groups indicate that some of the school environmental groups were initiated by the Youth League and the Student Union, the same groups that took part in early youth environmental education drives and who were other groups started by motivated individuals. As of 2001, individuals had established eighty-eight percent of the groups and only seven percent were established by school organizations.<sup>76</sup>

An excellent statistical study of university groups conducted by Lu Hongyan divides the development of these groups into three periods: 1) 1990-1995 – during this phase twelve groups were established and students conducted activities on campus in isolation from other groups; 2) 1996-1997 – during this phase ten groups were established and students began to expand activities to off campus venues. 3) 1998-2002 – the number of student groups exploded from 22 to 150 and students created several umbrella organizations linking separate groups.<sup>77</sup>

Lu Hongyan's survey also revealed that most groups have twenty to one hundred members. Funding for these groups primarily comes from member fees, university grants (from specific departments or schools, the Student Union, and the Youth League), and donations from businesses. Of the number of activities conducted by these groups, fifty-eight percent center on providing environmental education, thirty-two percent involve some sort of direct action (like going on site to pick up

trash), and ten percent involve conducting surveys, field research, or writing suggestions for local decision-makers. In 2001, the issues of most concern for these groups include desertification (especially sandstorms), water pollution and shortages, non-biodegradable trash, air pollution, global warming, and ozone depletion. It should be noted that the issues toward which the students are most concerned may not correspond to the specific activities conducted by the groups.

The groups interact with a variety of actors off-campus. Of the ninety-four groups surveyed, sixty-two have contact with local government officials (with local EPBs, most likely), fifty-five have links with registered and unregistered ESOs, fifty-four maintain contact with local news media, forty-two have links to local businesses, and fifteen have a relationship with international environmental NGOs.<sup>78</sup>

Most of the groups must be approved by the school Communist Youth League Committee (*xiaotuanwei*). In addition, some groups must get all of their activities approved by the *xiaotuanwei*. On occasion, an activity will be disallowed because of liability issues, if the activity is too large, or if it is “not appropriate.”<sup>79</sup>

The mission statements of some of the groups and of the umbrella group Green Students Forum in Beijing emphasize that the work of the groups is apolitical. This is to protect themselves both from being co-opted by students with ulterior motivations and from the suspicions of authorities.

The relationships among student groups developed slowly with much apprehension at first, but exploded after 1998; and will no doubt to continue to expand. In 1997, students in the newly established Green Students Forum in Beijing were unsure how authorities would receive their “collectivization”. One student even

remarked that teachers had warned students that forming an umbrella group was illegal.<sup>80</sup> Today, there are at least eight umbrella groups across China, with the Green Student Forum (Beijing), Green Stone (Jiangsu), Green SOS (Western China, and SEA Union (Chongqing) being the most active. The Beijing umbrella group plays something of an informal leadership role.<sup>81</sup>

The relationships student groups forge with local EPB personnel are worth examination. These early relationships help to form youths' opinions of governmental personnel that persist into adulthood. In Chengdu and Beijing, student groups reached out to officials. Some officials responded enthusiastically to the students. In Chengdu, EPB education officials and even EPB leaders attended large-scale education events put on by the students. Some officials did their best to educate youth about the EPB's work, but one official commented that it was sometimes difficult work because youth "naturally distrust governmental officials."<sup>82</sup>

The relationships between student groups and regular registered and unregistered ESOs, and international environmental groups are important. Student groups, as a unit, are members of select ESOs, which helps to forge a solid link between the two types of groups. The student groups have participated in ESO campaigns and there are strong feelings of solidarity with ESOs. Student groups in Beijing also took up Hong Kong's Friend's of the Earth's campaign to save trees by cutting down the number of holiday greeting cards, which was called the "Less Cards, More Trees" (Cut Cards, Not Trees).<sup>83</sup> Students from seventeen environmental groups in Beijing expressed their solidarity with FON, Green Plateau, and Green River and the Keke Xili anti-poaching teams through a letter written after Zaba Duojie was killed

while trying to protect Tibetan Antelope. The student groups took up the Tibetan Antelope, or Chiru, issue and even reached out to foreign students and student organizations to boycott shatoosh fabrics that come for the antelope and to shame people who purchase the fabric.

The groups must get their activities approved, however, when the group, or the individuals in the group, participate in an activity sponsored by an ESO off campus, they do not need approval. Therefore, students have been quite active in ESO activities, both non-contentious and contentious.

### **ESOs: Relationships With the State, Contentious Politics, and Proto-movements**

This section explains that most ESOs engage in non-contentious activities and often cooperate with local and national government actors. In addition, it explores cases when ESOs have employed more contentious approaches. It describes the first two campaigns in China's emerging nature and wildlife conservation proto-movement. Finally, it illustrates an interesting phenomenon where ESOs have taken on the role of peacemakers in situations that would otherwise erupt into environmental disputes.

#### ***When and Why ESOs Choose Non-Contentious Strategies***

Overall, most of the groups appear to be willing to work with the government and not in opposition to it. They have a much less contentious relationship with the government than Western NGOs. For example, Liang Congjie from the onset stated that FON was dedicated to working with the government.<sup>84</sup> Liao Xiaoyi, one of the founders of Beijing Global Village, also has stated that she is committed to working in cooperation with the government and not complain against it.<sup>85</sup>

This non-contentious approach to dealing with governmental authorities probably helped to create governmental acceptance of ESOs. It not only helped to create official acceptance, it also helped to make these new ESOs more palatable by ordinary citizens. A non-contentious approach has allowed ESOs to sustain themselves and survive. Also, in China where personal relationships, or *guanxi*, are still extremely important in everyday life, friendly relations with governmental or party actors could prove to be extremely valuable in achieving ESO goals.

One example of ESOs utilizing their position vis-à-vis the government occurred when FON and Liang Congjie worked to get a steel factory in Beijing relocated outside of the city. ESO leaders sat down with Beijing EPB officials to discuss the problem of Beigang and although no changes came out of the meeting, the fact that there was a meeting at all is significant. It is unclear why EPB officials decided to meet with FON leaders, but it is significant because the discussions represent a link between state and society through which citizens were free to articulate their interests regarding a specific pollution problem.

While most environmentalists lament the environmental pollution and degradation wrought partially due to rapid economic development, few question China's development path or the state's emphasis on economic development. Some recognize that development comes first and environmental protection comes second in China's coastal provinces, but argue that it would be a mistake to continue this trend in developing China's West. However, China's environmental groups do not include information on the deleterious effects of industrial pollution in their education agendas. One reason for this may be because economic development is the state's

primary goal and groups do not want to question it for fear of being put down by the government.

While most ESOs have a less contentious relationship with state actors than many groups in the U.S., Taiwan, Poland, and other nations, but they have, on occasion criticized government authorities. For example, Liang Congjie criticized officials that forsake environmental protection for the sake of their own personal economic gain. He also lamented China's implementation record and called for increased investment in environmental protection.<sup>86</sup>

### ***Instances of Contention, Conservation Campaigns and the Growth of a Proto-movement***

While Liang Congjie stated that he wanted to work with the government in the 1994 interview, he later describes the work FON engages in as a "battlefield." In a later interview he says, "we have a battlefield here saving the antelopes (in Qinghai), another battlefield there saving the golden monkey and still another in Sichuan saving the forests. We're very busy."<sup>87</sup> While FON and other groups do not directly engage in what westerners consider contentious politics with governmental authorities, they do become embroiled in contentious politics with some sectors in society. Over the last seven years, a handful of ESOs and student groups have come into conflict with local government officials, loggers, and poachers by participating in campaigns to preserve specific species. These campaigns constitute a proto-movement.

### ***Golden Monkey Campaign***

In 1995, environmental activist, Xi Zhihong held a workshop to discuss the plight of the Golden Monkey (also called the snub-nose monkey) and its habitat in

Deqing county Yunnan. Road building and illegal logging was a threat to the already endangered species. Xi Zhinong, had been taking pictures of the monkeys since 1992. Liang Congjie, of FON, attended the workshop and afterwards wrote a letter to the then Vice Premier to request that a moratorium on road building and logging be implemented in Deqing County. When Song Jian, who holds Liang Congjie in high regard received a letter from FON regarding the logging threat to Golden Monkey habitat, he immediately contacted the Ministry of Forestry and send an investigative team to Yunnan to examine the situation. Newly established student groups in Beijing joined in on the efforts to preserve the monkey habitat. Students at the Forestry Academy and other campuses held candlelight vigils to garner attention to the plight of the monkeys. Tony Saich argues that it was the threat of social unrest on college campuses that influenced the government's decision to ban logging in Golden Monkey habitat.<sup>88</sup>

Central level forestry authorities ordered a halt to the road building. However, local authorities and construction workers ignored the orders. Journalists working with FON and Xi Zhinong captured footage of the bulldozers digging the road, so locals were caught red-handed. Supposedly, Zhu Rongji viewed the tape and declared a ban on logging. Over ninety percent of the revenue for the Deqing government was derived from logging, so it was determined to continue building roads into the area so that logging could continue, even after central level forestry officials banned logging in the area.<sup>89</sup> Local officials resisted abandoning the logging and challenged FON to help them find another source of revenue for Deqing County, which faced a million dollar budget deficit.<sup>90</sup> The investigative work of Xi Zhinong, FON, and others was a

catalyst to widespread support for protecting the monkey habitat and helped to ensure the survival of the Golden Monkey and to protect the forest and the minority groups that lived there.<sup>91</sup>

### ***Tibetan Antelope Campaign***

The Tibetan antelope, or Chiru, is found in western China and in 1979 it was included on a list of endangered species. Therefore its trade is strictly forbidden under the CITES treaty. It became very fashionable to have fur coats made from the fur on the back of the neck of the Chiru, which made trade of the animal's fur very lucrative.

In 1992, officials of Zhiduo Prefecture, of which Keke Xili is a part, established an informal, non-official, anti-poaching team. The leader of the anti-poaching team was killed in 1994 while chasing poachers. His brother-in-law, Zhawa Dorje, took up the mission and expanded the successes of the anti-poaching team, the "Wild Yak Brigade." In 1998, Liang Congjie sent a letter to Tony Blair, Prime Minister of Great Britain, requesting his help to end the illegal trade of Tibetan Antelope. Tony Blair wrote back that he would do his utmost to end the trade. In 1998, Zaba Duoje came to Beijing and visited the Ministry of Forestry, SEPA, and other government agencies. He also gave a talk that was well attended by several student groups who all warmly welcomed him. Afterwards, some of the student groups took up the cause of the Tibetan Antelope

Zaba Duoje, was killed in November of 1998.<sup>92</sup> This event catapulted the Tibetan Antelope issue to the forefront of many ESOs and student groups. Seventeen student groups sent a letter of support to the team and to FON. FON and other groups raised enough money to purchase modern high tech jeeps for the Wild Yak Brigade to

use. FON also wrote a letter to SEPA and the Forestry Ministry, which suggested a massive three-province crackdown on the poachers. The government headed the suggestions and initiated a secret anti-poaching effort, which was very successful.

The central government established the Hoh Xil Nature Preserve in which poaching of the Tibetan antelope was banned. Construction on the Qinghai-Tibet railway is to be stopped when the antelope are migrating. So far, the number of Tibetan antelopes has climbed to 80,000 up from 70,000 in 1997.<sup>93</sup>

The fate of the anti-poaching team, however, is in question because the Qinghai provincial government announced plans to disband the teams and replace them with an “official” squad, which may negate many of the progress achieved by the Wild Yak Brigade.<sup>94</sup>

### ***Illegal Logging in Sichuan Province***

Xi Zhinong, once a member of FON, who founded his own ESO called Green Plateau, discovered large-scale logging in Hongya County, Yunnan, after top leaders had ordered the halt of all logging because of the floods on the Yangtze in 1998. Xi Zhinong helped a camera crew from China Central Television (CCTV) film a story on the logging. Local authorities tried to block the filming footage of felled trees and rolling timber. A FON member took the video back, which aired on "Economic Half-Hour" on September 29 1998. Afterwards, a local FON member got anonymous phone calls threatening his life.<sup>95</sup>

In each of these campaigns, China's ESOs utilized established networks with other registered groups and student groups to engage in a variety of activities, some contentious and some not, to achieve their common goal of protecting China's forest

habitat and endangered species. Investigative teams from Green Plateau and FON digging up illegal activities of loggers is reminiscent of the investigative work of Greenpeace and other groups. While the ESOs are not in direct confrontation with central level authorities, they have engaged in contentious politics with local authorities and other social groups.

***Role as Peacemaker***

On a couple of occasions, FON has taken on the role as a peacemaker to prevent a dispute from escalating. One of these instances involved brokering a dispute between scientists and poachers in Northwestern China. In one dramatic episode, Xi Zhinong received news of a scientific expedition team, who had stumbled upon a group of poachers killing endangered animals in Xinjiang, that was being held hostage. He immediately related the news to Liang Congjie who then made several phone calls to save the scientists. First, he tried to find the State Council emergency number, but the number was a “secret.” He then called the State Council Complaint Office, but was told to call the Public Security Bureau. He called the Public Security Bureau’s Complaint Office, but was told to call the Public Security Office and the Ministry of Forestry in Xinjiang. Liang Congjie called a FON member in Urumchi who then called the proper Xinjiang authorities. Officials from the Public Security Office and the Ministry of Forestry called Liang Congjie back and asked for the specific location of the scientists. The officials sent a team out to the location, but it would take time, as the scientists were 600 miles away. In the mean time, the scientists were negotiating with their captors. The scientists released the poachers they had captured and then the poachers released the scientists. Of interest is that officials from

the EPB in the Aherjinshan protected area did not allow the story of the scientists to be released. Instances of poaching had occurred in the last few years in the area, but each time authorities did not release the news.<sup>96</sup> FON utilized its network to get the news out and to drum up support for protection of endangered animals in Xinjiang. FON also sent a letter with suggestions regarding protecting the Tibetan Antelope in the Keke Xili regions to the State Environmental Protection Administration (SEPA) and the Ministry of Forestry asking officials to get together and figure out the next steps in protecting the antelope and coordinate enforcement between Qinghai, Tibet, and Xinjiang.

Another example of ESOs working as peacemakers occurred in Yunnan. When minority groups in Yunnan were up in arms about Japanese climbing expeditions coming to Yunnan to climb Zuomeilixue Mountain, a sacred mountain, Xi Zhinong called Liang Congjie who then wrote a letter to the United Front Work Department of the Central Committee of the Communist Party warning of the likely event of protest and requesting help to resolve the situation.<sup>97</sup> Liang's letter helped to diffuse the tension and helped to protect the interests of minority groups in Yunnan, after the Vice Director of the department got in touch with the appropriate departments in Yunnan.<sup>98</sup>

This example of a success story for the student groups illustrates that when the students are persistent, when they offer compelling arguments in favor of a specific action, and are backed up by environmental laws and regulations, they can make a difference. In addition, the specter of protesting youth on Beijing's campuses helped to convince national level authorities to support a ban on road building in Yunnan province and protect the Golden monkey habitat from logging.<sup>99</sup>

## **How ESOs matter**

There are a number of conditions under which ESOs tend to make a difference in policy outcomes, including when ESO agendas are aligned with central government objectives, when ESO leaders are socially prominent individuals, or if the ESO is in a position to utilize institutionalized channels as GONGOs often do.

When ESOs undertake environmental campaigns that seek to change behavior and are supported by governmental laws or regulations that prohibit specific behaviors or suggest a specific course of action, then the group will be more successful. An example of this situation is when Beijing University students worked to get the school's cafeterias to use biodegradable containers.

Starting in 1998, Beijing University's student environmental groups<sup>100</sup> contested the school's continued use of non-biodegradable disposable food containers and endeavored to convince the food service department to change their practices. The students put together a report and presented it to the manager of the university's five cafeterias that contained a student issue-awareness survey, an economic survey of the students' willingness to pay for different materials, and information about substitute products. The students continually reminded the manager that Beijing municipal government prohibited the use of non-biodegradable disposable food containers. The manager was not convinced. The students then took their report to the "head" of student life at the university, but to no avail. After a year of effort, the students convinced the food service manager to use substitute containers for one day, Earth Day, that year. On Earth Day, the students invited two newspaper reporters to come to the university, who then wrote moving articles about the students' efforts. Finally, in

1999, after over a year of student activism, the manager relented and started using a more environmentally friendly product in all the university's cafeterias.<sup>101</sup>

Most of the groups examined were involved in some type of public education activity, meaning these ESOs work to raise public awareness and concern over environmental problems, enhancing governmental efforts or providing a service the government was unable or had not yet been provided. One extremely important example is FON's efforts to extend environmental education to young students in rural areas of China. FON developed a program called "Green Hope" (Luse Xiwang) which first brought together volunteers from around China, provided them with training, and arranged for them to travel to schools across China to provide environmental education to children that might not otherwise be exposed to such education. It is hard to gauge the influence of The Green Hope program and other education efforts, but simply looking at the thank you letters sent by people educated by FON volunteers gives some measure of the results of FON's education efforts. Some letters expressed thanks for opening up new worlds, others showed that people had taken action as a result of one of FON's programs by donating money to green causes or by becoming more involved in local environmental activities. Education efforts are raising consciousness and promoting green action one person at a time.

Both an individual's stature (position in society) and personalistic ties are important and have provided a channel of ESO influence in policy decisions. Respected members of ESOs have acted as articulate representatives of citizens in favor of more progressive environmental approaches and advocated actions regarding

specific issues, such as Liang Congjie's influential letters to Song Jian, once a Vice Premier, and Liang's actions through the CPPCC on a number of issues.

Institutionalized official channels are still important, in both new and old ways, as an avenue of ESO influence. ESOs, especially GONGOs, have been included in policymaking processes. It is reported that some NGOs were involved in deliberations just before the writing of the draft Environmental Impact Assessment Law that passed the National People's Congress in October of 2002 and went into effect in September 2003. Some of these organizations have close ties to SEPA, while others receive some foreign funding.<sup>102</sup>

## **Conclusion**

When discussing environmental social organizations in the People's Republic of China, the label "non-governmental organization" is problematic because most, if not all, of the groups are structured such that they are still "tethered" to the state through *guakao*, "mother-in-law" supervisory organs. To avoid conceptual confusion, it is best to call these organizations what they are called in China, that is "social organizations." These social organizations occupy a space where the official (*guan*), public (*gong*), and private (*si*) realms overlap. There are several types of social organizations that can be categorized based on their relationship to the state. At one end of the spectrum are GONGOs, which are closely associated with the state. At the other end are popular social organizations, informal unregistered networks, and student organizations.

The landscape of social organizations in China has been very fluid over time and the political and legal foundation supporting ESOs is relatively weak. All of the

social organizations in China must be affiliated with a “step-mother,” *guakao*, governmental organization that provides protection and legitimacy and the government could, theoretically and legally, shut down ESOs and GONGOs at any time. Several social science policy research institutes were shut down after the Tiananmen massacre in 1989. Unregistered, totally independent ESOs must operate completely underground, and involvement with such organizations poses political and economic risks for individuals. The government is much more tolerant of organizations involved in relief, education, or charity work.<sup>103</sup>

There are significant barriers to the expansion of popular ESOs across China. The absence of a strong civil society in China’s past works against the development of such a sector now. The political culture in China, heavily influenced by Confucian and Marxist-Leninist, traditions also inhibit strong, independent social organizations. Both traditions support the supreme position of the state over society. Finally, “organized dependence,” fostered through socioeconomic structures such as the *guakao* and the *danwei* systems, is a strong inhibitor of autonomous ESO growth. Additionally, until laws are enacted that guarantee the rights of independent organizations, any group can be shut down at any time.

It should be noted that if the regulations hampering the expansion of the number of regular ESOs were lifted, then we would probably see dramatic jumps in the numbers of groups, much like what happened after 1998 to student groups. The study of student groups could take up volumes and should be an area further explored in future studies.

Some of the forces that are encouraging the development of ESOs include international pressures, increasing economic liberalization, governmental decentralization, the deterioration of China's environment, and a rising awareness of environmental problems by the public. ESOs have helped to locate and collect resources that would not otherwise be available to China. Many foreign non-governmental groups do not provide money directly to governmental organizations. There is some evidence that ESOs have been set up by the government merely as "front operations," so that agreements with non-governmental organizations in other countries can be carried out. Behind these "NGO fronts", the same old state apparatus goes about its business. The growth of international NGOs and the rapid increase in the capacity and expertise of environmental NGO networks may motivate China's leaders to create organizations that can participate in those networks, but the autonomy of these groups will not be guaranteed.

Despite the organizational and financial ties to government bodies, the GONGOs and ESOs in China are dynamic and groups have begun to network. In September of 1999, the first "Non-governmental Organization Forum on US-China Environmental Cooperation" brought together over 60 organizations, many from China. At the forum, participants attended panels on topics related to the creation and development of ESOs. Participants shared their knowledge about how to create an enabling environment for ESOs, how to obtain funding, how to strengthen administrative capacity, and how to promote successful educational outreach activities.

It is not enough to examine the structure of ESOs, because China's ESOs are not structurally similar to ESOs in other countries, but are, in some ways, functionally equivalent. In other words, even if Chinese ESOs, including GONGOs, may look different, and operate in a different political and legal context, they could still have the same beneficial effects on environmental protection efforts. Therefore, it also is important to examine China's ESOs from a functional perspective.

For example, while it appears that most of China's GONGOs cannot be considered independent, they still are initiators of social change, because of their involvement with environmental education activities. They do practice civic politics, in the way that Wapner describes: "groups work through social, economic, and cultural networks to affect change."<sup>104</sup> Popular ESOs are engaged in civic politics to an even greater degree. While the concept of "civil society" may not be quite appropriate in discussing environmental social organizations in China, these groups do practice civic politics. Both GONGOs and popular ESOs are involved in initiatives aimed at changing citizen behaviors that affect the environment are building momentum in the effort to spread environmental values in China's largest cities.

Civil society is the least useful model for understanding ESOs in China. Historically, China has had either a weak or non-existent civil society, in the Western sense of the word. China has had a small scale "public sphere," that was more economic or managerial in nature. The closest Chinese society came to exhibiting a civil society was during the late Qing dynasty and early Republican period. The reforms initiated by Deng Xiaoping after 1978, opened up more political space for people to form quasi-or semi-governmental social organizations in many sectors of

society, but it is doubtful that these groups can be considered components of civil society because of their close connections with central governmental bodies. Only two or three groups resemble anything close to a non-economic civil society.

Most of the groups described above do not adhere to the Western definition of a civil society and do not even really fit Wakeman's definition of the public sphere because of the organizational proximity to central government bodies. A dozen or more of the groups were set up by individuals in elite circles outside the government, and contribute to the supply of services to the public good. However, even these groups must have a "mother-in-law" organization that will ultimately take responsibility for the group's actions.

The corporatist model is still a very useful tool for understanding China's ESOs and their relationship to the state, but it is not the only model that depicts observations of ESOs and their role in society. Considering ESOs as social movement organizations has some utility, but it is limited to the popular ESOs. Least useful is the model of civil society.

In the past, the concept of corporatism has been reserved for organizations in the economic sphere. However, the concept of corporatism as a model for interest articulation is extremely helpful in understanding professional and other GONGOs. To distinguish corporatism in the non-profit sector from other forms of corporatism, it can be called "civic-corporatism."

There is some utility in viewing ESOs as social movement organizations. Some members and leaders of popular ESOs view themselves as being involved in China's nascent environmental movement.<sup>105</sup> While ESOs generally cooperate with

the state, they have since the late 1990s become engaged in contentious politics with local-level authorities and specific groups of social actors. Numerous ESOs have teamed up in campaigns to protect China's endangered species. These actions can be considered a nature and wildlife conservation proto-movement because this networking has become quite dense, because the groups have sustained their activism over time (and location), and because they have engaged in contentious politics with local governmental authorities and other social actors (loggers and poachers), and because they employed the symbols of heroism.

## Endnotes to Chapter Six

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<sup>1</sup> *Zhongguo Huanjing Nianjian, 1995 (China Environment Yearbook)*, p. 197.

<sup>2</sup> The UN definition of an NGO is “a non-profit entity whose members are citizens or associations of citizens of one or more countries and whose activities are determined by the collective will of its members in response to the needs of the members or of one or more communities with which the NGO cooperates.” United Nations, Economic and Social Council (ECOSOC), *Open-Ended Working Group on the Review of Arrangements for Consultations with Non-Governmental Organizations*, Report of the Secretary-General, May 26, 1994: E/AC.70/1994/5, p. 4. While the UN definition of an NGO does not specifically indicate that an NGO should be independent from the government, it does say that a group’s activities should be determined by the collective will of its members, which implies some autonomy. The term “non-governmental” itself indicates that NGOs are not within the purview of the government. Therefore, an NGO is an organization that has some degree of organizational autonomy, is formed independently of the state, be voluntary in nature, and have a non-profit orientation. See Whiting, *The Non-governmental Sector in China: A Preliminary Report*, The Ford Foundation, Beijing, China, July 1989, p. 2.

<sup>3</sup> Jin Jiamen came up with this name, see Jin, "The Growing Importance of Public Participation in China's Environmental Movement," p. 6.

<sup>4</sup> A later section of this chapter has a more detailed discussion of this issue.

<sup>5</sup> Please refer to chapters two and three for more information on the roles of NGOs in anti-pollution movements in other countries.

<sup>6</sup> Reportedly, a formal official of the Ministry of land Resources tried to set up an ESO in 1991, with the staff of the Chinese Academy of Social Sciences, but was turned down. See Ho, "Greening Without Conflict? Environmentalism, NGOs and Civil Society in China."

<sup>7</sup> This tripartite conceptualization is from Alan Cawson, *Corporatism and Political Theory*, New York: Basil Blackwell Inc., 1986, pp. 22-26. Originally a typology of corporatism was outlined by Leo Panitch in “Recent Theorizations of Corporatism: Reflections on a Growth Industry,” *British Journal of Sociology*, 2 (1980): 159-87.

<sup>8</sup> See J. T. Winkler, “Corporatism,” *European Journal of Sociology* 17 (1976): 100-36.

<sup>9</sup> See B. Jessop, “Capitalism, Parliamentarism and Social Democracy,” in P.C. Schmitter and G. Lehmbruch, eds., *Trends toward Corporatist Intermediation*, Beverly Hills and London: Sage Publications, 1979.

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<sup>10</sup> Interest articulation is defined as a way in which “interests are organized and interact with the state.” See Schmitter, “Still the Century of Corporatism?” *Review of Politics* 36, (1974): 85-131.

<sup>11</sup> See Birgitta Nedelmann and Kurt G. Meier, “Theories of Contemporary Corporatism, Static or Dynamic?” in Philippe C. Schmitter and Gerhard Lehmbruch eds. *Trends Toward Corporatist Intermediation* (Beverly Hills and London, Sage Publications, 1979), pp. 97-99, for a discussion of some of the conceptual traps one triggers when speaking of corporatism. For instance, Nedelmann and Meier assert that corporatists see the state on one side and social organizations on the other, without fully describing state structures. My resolution to the dilemma is not to include descriptions of state structures in the definition of corporatism, but to use established categories of state and government structures. If corporatism is conceptualized as a system of interest articulation, then it can be combined with established models of the state, such as authoritarian and pluralist, and with established models of economic systems, such as socialism and capitalism, to provide a more accurate overall description of the relationship between state and society.

<sup>12</sup> Schmitter restricts his definition of corporatism to include only the process of interest articulation. However, the corporatist model can also provide insight into the policy formation and implementation processes. Schmitter pays less attention to these processes. The process of interest articulation does not end with the organization and articulation of interests; it continues through to the policy output. Interests are articulated in the form of demands to start, stop, modify, or create societal structures or behavior. Until these demands are “answered” in some fashion, the articulation process continues. The point being that interests are not articulated into a vacuum, there is some outcome expected from interest articulation. Gerhard Lehmbruch includes the policy formation and implementation processes in his conceptualization of corporatism, but he concentrates on “liberal” corporatism in advanced industrial societies and stresses the voluntary or “social” aspects of corporatism. An expanded concept of corporatism, that includes interest articulation, policy formation and implementation is more comprehensive and can be applied in a comparative analysis of state-society relations in countries such as the former Soviet Union and China. The components of Schmitter’s definition of corporatism can be applied in the policy formation and implementation process. These components basically describe the state’s role in the entire interest-outcome process. Associations articulate demands, which are translated into policy recommendations that are considered in policy-making processes. In the implementation stage, the interests of implementing agencies and individuals impact policy outcomes.

<sup>13</sup> See Phillippe Schmitter, “Still the Century of Corporatism?” in Frederick B. Pike and Thomas Stritch, eds., *The New Corporatism: Social-Political Structures in the Iberian World* (Notre Dame: University of Notre Dame Press, 1974), pp. 93-94.

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<sup>14</sup> See Philippe C. Schmitter “Still the Century of Corporatism,” in P.C. Schmitter and G. Lehmbruch, eds., *Trends toward Corporatist Intermediation* (Beverly Hills and London: Sage Publications, 1979), p. 15.

<sup>15</sup> Scholars often write about corporatism as an alternative conceptualization to pluralism in describing organized interest representation in democratic industrialized countries. This type of corporatism is called social corporatism. However, state-society relations in China have also been characterized as “corporatist.” Corporatist models can be applied to a socialist state in the midst of economic reforms, which is also trying to control the emergence of autonomous organizations. This second type of corporatism is usually referred to as socialist state corporatism.

<sup>16</sup> A few scholars have applied the concept of corporatism to organizations in China, including Margaret Pearson and Jonathan Unger. See Margaret Pearson, “The Janus Face of Business Associations in China: Socialist Corporatism in Foreign Enterprises,” *The Australian Journal of Chinese Affairs*, No. 31, (January 1994), p. 44; and Jonathan Unger and Barrett L. McCormick, “Corporatism in China: A Developmental State in an East Asian Context,” in *China After Socialism: In the Footsteps of Eastern Europe or East Asia?* New York: M.E. Sharpe, 1996, pp. 94, 104-107).

<sup>17</sup> Nedelmann and Meier, “Theories of Contemporary Corporatism,” pp. 999-100.

<sup>18</sup> Rucht, “The Impact of National Contexts on Social Movement Structures: A Cross-Movement and Cross-National Comparison,” pp. 185-186.

<sup>19</sup> Each of these scholars emphasizes social constructivism and cultural boundedness in their work. See John Foran, *Fragile Resistance: Social Transformation in Iran From 1500 to the Revolution*, (Boulder, CO: Westview Press, 1993); and Hank Johnston and Bert Klandermans, *Social Movements and Culture*, (Minneapolis, MN: University of Minnesota Press, 1995).

<sup>20</sup> The nature and actions of social movement organizations were simply extrapolated from Sidney Tarrow’s definition of social movements. Tarrow, *Power in Movement*. p. 19.

<sup>21</sup> Dieter Rucht, “The Impact of National Contexts on Social Movement Structures: A Cross-Movement and Cross-National Comparison,” *Comparative Perspectives on Social Movements: Political Opportunities, Mobilizing Structures, and Cultural Framings*, eds. Doug McAdam, McCarthy John D., and Mayer N Zald, (Cambridge: Cambridge University Press, 1996), p. 186.

<sup>22</sup> “Civil society itself is discussed through a variety of terms whose partial equivalence has not been effectively explored. These terms include: non-governmental

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organizations, voluntary associations, nonprofit sector...” Anthony Judge, “NGOs and Civil Society: Some Realities and Distortions.” *Transnational Associations*, March 1995, p. 156.

<sup>23</sup> Paul Wapner, “Politics Beyond the State: Environmental Activism and World Civic Politics,” *World Politics* 47, April 1995, p. 4.

<sup>24</sup> Frederic Wakeman, “The Civil Society and Public Sphere Debate: Western Reflections on Chinese Political Culture.” *Modern China* 19, no. 2, April 1993, p. 132.

<sup>25</sup> Gordon White, “Prospects for Civil Society in China: A Case Study of Xiaoshan City.” *The Australian Journal of Chinese Affairs* no. 29, January 1993, p.66.

<sup>26</sup> Frederic Wakeman, “The Civil Society and Public Sphere Debate: Western Reflections on Chinese Political Culture.” *Modern China* 19, no. 2, April 1993; William Rowe, “The Problem of ‘Civil Society’ in Late Imperial China, *Modern China* 19, no. 2, April 1993, pp. 139-157; Mary Backus Rankin, “Some Observations on a Chinese public Sphere,” *Modern China* 19, no. 2, April 1993, p169.

<sup>27</sup> In the Imperial period, during the Ming (1368-1644) and early Qing Dynasties (1644-1911) there were some signs of a nascent civil society. Merchant guilds, literary societies, religious groups, and secret societies (usually involved in the study of martial arts) existed, but these groups were small, local entities that usually did not enter into political debate. Rankin, “Some Observations on a Chinese public Sphere,”

<sup>28</sup> The Qing dynasty was a foreign dynasty; the Manchus ruled the nation. There was a resurgence of Chinese nationalism and rebellious trends against the Manchus in the late Qing, strengthened and also motivated by the Taiping Rebellion (1850s).

<sup>29</sup> Rankin, “Some Observations on a Chinese public Sphere,” p169-171.

<sup>30</sup> Whiting, *The Non-governmental Sector in China*, p. 8.

<sup>31</sup> Whiting, *The Non-governmental Sector in China*, p. 2.

<sup>32</sup> Interview with a member of a Chinese NGO, June 1997. The interviewee mentioned that special newspaper articles were devoted to explaining the term non-governmental organization from a Western point of view.

<sup>33</sup> Cook, et al, *The Rise of Non-governmental Organizations in China*, p. 4.

<sup>34</sup> Cook et al, *The Rise of Non-governmental Organizations in China*, pp. 1-2.

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<sup>35</sup> Agenda 21 was the comprehensive development and environment agenda signed by government representatives at the Rio United Nations Conference on Environment and Development, which has been used by governments, NGOs, and other organizations as a blueprint to sustainable development. *Agenda 21*, adopted by the U.N. Conference on Environment and Development at Rio de Janeiro, 13 June 1992, U.N. Doc. A/CONF.151/26 (vols. I, II, & III), 1992.

<sup>36</sup> Chapter 27 of Agenda 21 invites governments to channel input from non-governmental groups into the governmental policy development process. Agenda 21 recognizes that non-governmental (NGOs) in general, "... possess well-established and diverse experience, expertise and capacity in fields which will be of particular importance to the implementation and review envisaged through Agenda 21, and that the NGO community offers a global network that should be tapped, enabled and strengthened in support of efforts to achieve these common goals." United Nations, ECOSOC, *Open-Ended Working Group*, p. 13.

<sup>37</sup> Interview, Spring 1997.

<sup>38</sup> National Committee on U.S.- China Relations, Annual Report, 1995, p. 14.

<sup>39</sup> "Da Ziran de Youren," *Renmin Ribao (haiwaiban)*, August 30, 1995, p. 8.

<sup>40</sup> China's Agenda 21: White Paper on China's Population, Environment, and Development in the 21st Century, p. 20.

<sup>41</sup> Quote from an official from NEPA, 1994

<sup>42</sup> In 1993, Liang Congjie had a conversation with the then deputy director of NEPA, Xie Zhenhua (who became director in June of 93') during a meeting of the CPPCC in 1993, in which Xie Zhenhua hinted to Congjie that NEPA would welcome the creation of an independent citizens' group. To help rally public support that would help in the agency's frequent power struggles with more powerful, pro-development government actors. Lappin, "Can Green Mix with Red," p. 195.

<sup>43</sup> *Zhongguo Huanjing Nianjian*, 1996 (China Environment Yearbook), p. 10.

<sup>44</sup> Letter from Liang Congjie to the United Front Work Department of the Standing Committee of the Communist Party of China (Zhongyang Tongyi Zhanxian Bu), August 10, 1996; "Minjian Huanbao Zuzhi 'Ziran Zhi You' Dedao Songjian Shouken," *Huanjing Shibao*, November, 8, 1996, p. 1.

<sup>45</sup> "Yu Ziran Wei You: Yizhong Xiandai Gongmin Yishi," *Xin Zhou Ribao*, September 22, 1996, p. 1.

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<sup>46</sup> Wen, "Greening the Chinese Media," p. 39.

<sup>47</sup> This is not to say that there were no environmental education campaigns focusing on the general public, there were a few including campaigns to popularize environmental laws, the "environmental education month," cleanup campaigns associated with the Asian Games, and campaigns on Earth Day and World Environment Day. However, greater resources were allocated to educating the general public after 1992. Chapter five goes into greater detail about these education campaigns.

<sup>48</sup> Robert Bloomquist, Wang Xi, "The developing Environmental Law and Policy of The People's Republic of China: An Introduction and Appraisal," *The Georgetown International Environmental Law Review* 5, no. 25, 1992, p. 32.

<sup>49</sup> Interview, Spring 1997.

<sup>50</sup> "Luse Huanjing Kentanhui," *Keji Erbao*, June 17, 1993.

<sup>51</sup> In China, foundations are not organizations that have their own resource base; they are organizations that also seek contributions from various sources to carry out their programs.

<sup>52</sup> Whiting, *The Non-governmental Sector in China*, p. 11. As of 1993 the following additional regulations governing social organizations existed in China: "Measures Concerning the Management of Foundations" (promulgated by the State Council, 9/27/88); "Regulations Concerning the Registration and Management of Social Bodies" (promulgated by the State Council, 10/25/90); Circular of the Ministry of Civil Affairs, PRC and the People's Bank of China Concerning the Opening of Bank Accounts and other Related Issues By the Social Bodies" (No. 203, 1990). Only Beijing, Shanghai, and Guangzhou had passed "implementation regulations" that, in the Chinese legal system, usually provide the "teeth" to laws. Cook et al, *The Rise of Non-governmental Organizations in China*, p. 4.

<sup>53</sup> This law replaced the law of the same title issued in 1989.

<sup>54</sup> *Zhonghua Renmin Gongheguo Falu Quanshu* 1998 (PRC Law Compendium, 1998), China: Jilin Renmin Press, 1999.

<sup>55</sup> Ho, "Greening Without Conflict? Environmentalism, NGOs and Civil Society in China," pp. 807-898.

<sup>56</sup> Pye, *The Mandarin and the Cadre*, p. 30.

<sup>57</sup> Pye, *The Mandarin and the Cadre*, p. 30-35.

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<sup>58</sup> For an excellent treatment of the “assurance game” see Dennis Chong, *Collective Action and the Civil Rights Movement*, (Chicago: The University of Chicago Press, 1991), pp. 104-106.

<sup>59</sup> Pye, *The Mandarin and the Cadre*, p. 30.

<sup>60</sup> See Karl Marx, *The German Ideology* (New York: International Publishers, 1970), p. 70

<sup>61</sup> Andrew Nathan, “China and the International Human Rights Regime,” Paper for the “Constructive Engagement with China” Task Force, Council on Foreign Relations, 1996, p. 13.

<sup>62</sup> Interview, Spring 1997.

<sup>63</sup> Andrew Walder, *Communist Neo-traditionalism*, p. 13.

<sup>64</sup> Interview, Spring 1997.

<sup>65</sup> “Danwei People Become Citizens,” *Economist*, September 6, 2003, p. 38.

<sup>66</sup> All of the information analyzed for this section came from interviews the author had with members of Chinese ESOs and other people familiar with the nonprofit sector in China, and from written information provided by Chinese ESOs or from other published sources, such as newspaper articles and scholarly papers.

<sup>67</sup> Ho, “Greening Without Conflict? Environmentalism, NGOs and Civil Society in China.” Also see several unpublished papers by Wang Ming and others at the Qinghua University, School of Public Policy & Management, NGO Research Center; and “Environmental NGOs in China” Parts I-VII, The U.S. Embassy Beijing Environment, Science and Technology Section. Available online at <http://www.usembassy-china.org.cn/english>.

<sup>68</sup> Although some have a two or three full-time employees.

<sup>69</sup> “Aizhenchun,” *Ziran Zhi You Tongxun*, No. 2, February 2001, p. 19-20.

<sup>70</sup> Wapner, “Politics Beyond the State: Environmental Activism and World Civic Politics,” p. 5.

<sup>71</sup> Lu, “Bamboo Sprouts After the Rain: The History of University Student Environmental Associations in China,” p. 55.

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<sup>72</sup> Lu, "Bamboo Sprouts After the Rain: The History of University Student Environmental Associations in China," p. 57.

<sup>73</sup> *Zhongguo Huanjing Baohu Xingzheng Ershinian (20 Years of Administering Environmental Protection in China)*, pp. 431-432.

<sup>74</sup> The theme for the 2<sup>nd</sup> annual "Youth Environment Forum" (*Qingnian Huanjing Luntan*) was "enterprise and the environment" (*qiye yu huanjing*). At the meeting, over 100 youths involved in environmental sector enterprises were honored. The Communist Youth League, SEPA, the Qinglian, and the China Environmental Protection Foundation sponsored the meeting. *Zhongguo Huanjing Nianjian, 1995 (China Environment Yearbook)*, p. 415.

<sup>75</sup> *Zhongguo Huanjing Baohu Xingzheng Ershinian (20 Years of Administering Environmental Protection in China)*, p. 443.

<sup>76</sup> My own sample surveys of five groups and interviews with 10 students in college groups in Beijing and Chengdu indicated some groups were established by the school Student Union, the Youth League, various departments, and individuals. Also, Lu Hongyan's survey indicated that both individuals, departments, and official school social organizations started groups. Lu, "Bamboo Sprouts After the Rain: The History of University Student Environmental Associations in China." Chinese version – *Zhongguo Daxuesheng Huanbao Shetuan Xunshu Fazhan de Shehui Beijing Ji Yiyi*.

<sup>77</sup> Lu, "Bamboo Sprouts After the Rain: The History of University Student Environmental Associations in China," pp. 55-57.

<sup>78</sup> Lu, "Bamboo Sprouts After the Rain: The History of University Student Environmental Associations in China," pp. 59-63.

<sup>79</sup> Interviews, #26 and 35, Fall 1999 and Spring 2000.

<sup>80</sup> Interview, summer 1997.

<sup>81</sup> Lu, "Bamboo Sprouts After the Rain: The History of University Student Environmental Associations in China," p. 56.

<sup>82</sup> Interview, #37 Spring 2000.

<sup>83</sup> Interview, Fall 1999.

<sup>84</sup> "Zhongguo Wenhuyuan Chengli Luse Wenhushuyuan," *Renmen Ribao*, July 6, 1994, p. 4.

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<sup>85</sup> Ho, "Greening Without Conflict? Environmentalism, NGOs and Civil Society in China," p. 916, originally from Wei Huang, "Individuals Changing the World; An Interview with Sophie prize 2000 Winner Liao Xiaoyi," *Beijing Review* 22, August, 14<sup>th</sup>, 2000.

<sup>86</sup> "Yange Zhifa Baohu Huanjing," *Renmin Rebao*, March 12, 1996.

<sup>87</sup> McCarthy, Terry and Jaime A. Flocruz, "Toxic China," *Time Magazine (Asia)*, March 1, 1999.  
(<http://www.time.com/time/asia/asia/magazine/1999/990301/cover1.html>)

<sup>88</sup> As already noted, pressure from a variety of sources also influenced the government's decision in the Golden Monkey case. See Tony Saich, "Negotiating the State: The Development of Social Organizations in China," *China Quarterly*, no. 161 (2000).

<sup>89</sup> "Chinese Logging in Yunnan Effecting Endangered Monkeys," Reuters, April 7, 1996. (<http://forests.org/archive/asia/defyorde.htm>.)

<sup>90</sup> Seth Dunn, "Taking a Green Leap Forward," *Amicus* 18, no. 4 (1997), p. 14.

<sup>91</sup> "Woguo Diyge Minjian Huanbao Zuzhi – 'Ziran Zhi You,'" *Beijing Minjin*, 1996 Volume 2, p. 2.

<sup>92</sup> He also was the Vice Secretary of a county level party Committee in Qinghai Province. *Ziran Zhi You Tongxun*, No. 3; November 1998.

<sup>93</sup> "Tibetan Antelope to Be Put Forward as Olympic Mascot," *China Daily*, September 13, 2003

<sup>94</sup> Friends of Nature News, Vol. II, 1999.

<sup>95</sup> McCarthy, Terry and Jaime A. Flocruz, "Toxic China," *Time Magazine (Asia)*, March 1, 1999.  
(<http://www.time.com/time/asia/asia/magazine/1999/990301/cover1.html>).

<sup>96</sup> "Beijing – Kunming Ziran Zhi You Tongxun, September 1999, p. 12.

<sup>97</sup> Letter from Liang Congjie to the United Front Work Department of the Standing Committee of the Communist Party of China (Zhongyang Tongyi Zhanxian Bu), August 10, 1996.

<sup>98</sup> Note written on the copy of the letter in FONs files.

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<sup>99</sup> Saich, "Negotiating the State: The Development of Social Organizations in China." , p. 139.

<sup>100</sup> The university had three such student groups as of 2000: Green Life Association (*Luse Shengming Xiehui*), Environment and Development Association (*Huanjing yu Fazhan Xiehui*), and the Mammoth Association (*Mengma Xiahui*).

<sup>101</sup> Interviews #3 and #20, Fall 1999.

<sup>102</sup> Neal Stender and Dong Wang, "The New EIA Law and Environmental Protection in China," *China Law & Practice* 16, no. 10 (2002-2003).

<sup>103</sup> Cook et al, *The Rise of Non-governmental Organizations in China*, p. 10.

<sup>104</sup> Wapner, *World Politics*, p. 5.

<sup>105</sup> "Waixingren Ye Ai Du De Hangye Baozhi," *Zhongguo Linyebao*, *Luse Zhoumo*, October 4, 1997, p. 3.

## Chapter Seven: Conclusion

### Volunteerism, Political Participation, and Environmental Proto-Movements in China

Pollution problems in China are among the worst in the world. Chinese leaders recognize this and have already taken steps to establish a national regulatory framework to manage the problems. This legal framework has legitimized the environmental enforcement activities of local EPBs. Despite these steps, however, implementation problems are cited as one of the most formidable barriers facing the Chinese in their attempts to advance air pollution reduction and other environmental protection goals. Implementation is a critical component of a successful regulatory system. One of the reasons for inconsistent implementation has been the low level of public participation, broadly defined in environmental policy processes.

Since the early 1990s, however, there has been a change in the levels of participation. Participation in all of the main channels has increased, although not in every province or city. Currently, the dominant modes of participation include direct citizen protests, disputes, and complaints; state-mobilized public campaigns; environmental social organizations; environmental impact assessment processes; and public comment processes.

Participation in each of the channels has increased in the 1990s. Overall, at the national level, the total number of complaints (people) and disputes went from 140,681 in 1990 to 241,321 in 1998, or nearly double. Another way to view this increase is on a per capita basis. In 1990, 1.23 people in 10,000 filed a complaint, while in 1998, 1.93 people in 10,000 filed a complaint. At the provincial level the

picture is much more complicated. In some provinces, there are dramatic increases from year to year. For example, in Yunnan in 1998, there were 56 complaints, while in 1999 there were 4,191 (an increase of over 7,000%). In a couple of provinces, however, the numbers of complaints and disputes have decreased overall. There is a major problem with the complaint and dispute data. Data omissions due to non-reporting seem to be extremely high, so the actual number of complaints and disputes each year is most likely higher.

The number of environmental social organizations has also increased in the 1990s. For example, there were only two registered, autonomous ESOs in Beijing in 1992, but in 1996, there were nineteen.<sup>1</sup> Nationally, there were no student groups in 1990, but by 2002, there were 150.<sup>2</sup> In 1990, there was no public input in environmental impact assessment processes, but by the mid-1990s, it was required by law in major national level projects, especially those with foreign donors. 1999 was the first year there was a public comment process for a national environmental law (the Land Law). Data from this and other research is clear: public participation in environmental policy processes has increased throughout the 1990s.

### **The Politics of Public Participation**

Previous research, conducted in western countries, indicates that citizen attitudes and participation in environmental protection makes a difference to policies and policy outcomes. China is no different. What is unique to China is the political tension between the need for public participation and the need to control it. Although there have been significant economic reforms and much larger “zones of indifference,” areas in which “political power on its own volition does not try to

penetrate or control,”<sup>3</sup> China is still an authoritarian country. The characterization of China as an authoritarian state alone explains why increasing participation and citizen input in policy processes would need to be controlled.

### **Political Opportunities and Constraints: The Need for Participation and the Need to Control It**

Environmental officials and some government leaders recognize that individual citizen participation at local levels is necessary to improve implementation and to achieve environmental protection goals. On the other hand, Chinese leaders and environmental officials seek to channel rising environmental awareness, effectively handle the inevitable complaints about pollution, and manage environmental disputes carefully to prevent social instability, economic disruptions, and a profusion of criticism aimed at the state. This has been a delicate balancing act for the Chinese regime. Some Chinese leaders and environmental protection officials have encouraged participation in order to strengthen enforcement efforts and this encouragement has been an important opportunity for the growth of activism. At the same time, authorities have tried to shape, channel, and control participation.

#### ***The Need for Participation - Education***

The development of environmental education programs in China illustrates the regime's need to involve the public in environmental protection as well as the need to control it. Environmental education in schools began to increase in the 1980s, although mainly in pilot programs in secondary schools. It was not until the 1990s that environmental education curriculum was a staple in both primary and secondary schools and the number of articles regarding the environment increased in the media.

There were 15,482 environmental programs (sponsored by the state) in the media in 1992, but by 1997, there were 61,622 programs. There were nearly twice as many programs in 1995 as there were in 1994 and a gradual increase annually thereafter. Part of the reason for slow increases in environmental education programs and media stories in the early 1990s was undoubtedly due to capacity issues within EPBs.

However, another reason has been the desire to control information flows regarding environmental pollution and degradation in China. The first national working meeting on education was not held until 1992, which marks the start of greater emphasis on public education. The 1992 United National Conference on Environment and Development likely spurred a greater interest in supporting education programs. In 1993, the National People's Congress Environmental Protection Committee was established, which often supported increased education programs. In addition, it is likely that Xie Zhenhua, who took over the top post at NEPA in June of 1993, was supportive of education programs.

Throughout the 1990s, as the new environmental protection apparatus grew and environmental laws were put in place, and as scores of educators, enterprise workers, and officials were introduced to environmental protection concepts, environmental campaigns became more complex and varied.

### ***Mobilized Participation and the Sophistication of Volunteerism***

Mobilized campaigns are evidence that Chinese leaders recognize that public participation is essential for achieving policy goals and that they seek to maintain some level of control over that participation. Campaigns today are more sophisticated than they were during the Mao period. This is because authorities have managed to

achieve a higher level of “volunteerism” among citizens and because campaigns have been de-politicized. Today, the primary goals of campaigns are policy oriented; political goals have become much less important.

There are campaigns to mobilize mass participation in activities such as planting trees, cleaning up trash, beautifying a city, or killing unwanted pests. Other campaigns are more educational in nature such as those to popularize specific environmental laws or adopt a certain attitude toward a subject. Some campaigns are at the local level, while others are mobilized at the national level and filter down. Various groups, such as EPBs, street offices and residence’s committees, the Communist Youth League and other youth and women’s groups, are enlisted to help mobilize ordinary citizens. These groups are enlisted because the state and the party alone cannot accomplish desired policy goals. EPB staff, alone, would be physically unable to plant all the trees necessary or be able to “green” an entire city prior to the Asian Games, for example. Citizen participation is physically necessary to achieve certain policy goals.

Campaigns are more than a tool of direct mobilization, education, and a means to a policy end; on a more subtle level, they are a means of communication between the state and society. Campaigns “signal” to the population those issues which are priorities and which issues are acceptable to address. Campaigns reflect the state’s environmental protection agenda and are among the means by which the government transmits that agenda to citizens. Campaigns steer citizen participation toward the achievement of state-defined policy goals. The state and citizens work together to reach policy goals through campaigns. In addition, a side effect of state-mobilized

campaigns has been to encourage public participation in policy processes outside the campaign structure, although with many of the same policy goals.

Some individuals or groups targeted for mobilization in campaigns have become more active in promoting environmental protection outside the state-mobilized campaign structure. One example of this is the Ma Ma Environmental Protection Volunteer Association, in Xiaanxi province, whose members first became exposed to participating in environmental protection activities while in the All China Women's Federation. These women became so excited about promoting environmental protection that they took the initiative to hold their own educational and various other activities outside of mobilized campaigns.

Another example of how participation in state-mobilized campaigns inspired citizens to initiate activities outside of the campaign structure can be seen in the increasing participation of China's youth. Some of the students involved in setting up the first autonomous school environmental groups were involved in the early state-organized China Youth Environmental Forum.<sup>4</sup>

Chinese officials needed the help of women's and youth GONGOs in numerous campaigns in the 1970s, 80s and 90s, but during the 1990s many officials recognized that additional participation would be needed. Authorities in some areas began to welcome the efforts of the Ma Ma Environmental Protection Volunteer Association and other groups in activities above and beyond state-mobilized campaigns.

Campaigns, specifically environmental campaigns, have changed since the days of Mao in that they have become less politicized, more sophisticated, and more

focused on policy goals. The emphasis on volunteerism, or having people participate freely in a campaign, as being induced by some acceptance of communist ideology has been replaced by the notion that citizens are motivated because they have some acceptance of the relevant governmental policy goals. Action campaigns, while still working to instill group unity, “socialist spiritual values,” nationalism, and citizen awareness, are focused on achieving concrete policy goals such as reforestation. Participation in campaigns is not enforced through coercion, but by appeals to one’s patriotism and sense of duty toward the environment. Volunteerism has taken off. When Earth Day and World Environment Day were first introduced into China, the majority of events were sponsored and organized by governmental and party authorities. Now, while there are still state-mobilized-activities, individual citizens and ESOs organize many of their own events.

***Beyond Mobilized Campaigns: The Recognition of the Need for Participation Grows***

In the post Tiananmen era, Chinese leaders acknowledge that they need the assistance of social organizations to meet the needs of China’s growing population and the environment sector is no different. Quasi-autonomous and popular environmental social organization participation helps to legitimize and reinforce state efforts in environmental protection. The government needed quasi-autonomous groups for their ability to attract funding for environmental protection activities from both domestic and foreign sources, many of which were not open to governmental agencies. Increasingly, the government is aided by the technical and managerial expertise of Chinese social organizations and the foreign expertise and resources they

accumulate. A top environmental protection official's encouragement led to Liang Congjie's efforts to establish one of the first popular ESOs.

Authorities have not only encouraged participation in campaigns and ESO activities, they also have encouraged citizens to utilize the standardized environmental complaint system. Leaders have put a great deal of effort into institutionalizing the complaint process and in setting up complaint hot lines and offices. Authorities within the environmental protection apparatus, as well as NPC members and government officials, want citizens to use the pollution hot lines set up in major cities and to notify EPBs when pollution problems emerge. Citizen participation in the system helps authorities to catch pollution problems early and to prevent major disputes from erupting. It helps them to implement environmental protection laws and policies. When citizens complain, it justifies official enforcement efforts to those in the relevant polluting enterprises.

The recognition of top leaders and environmental protection officials of the need for participation was a major political opportunity for citizens and is one of the main reasons why activism has increased. It also helps to explain why participation has increased in some provinces and not as much in others. In provinces and cities where leaders at the local level did not recognize this need, there is less participation. The Taiyuan example illustrates this most clearly. In Taiyuan, authorities had not yet recognized the need for public participation in the year 2000; consequently, they did not encourage it, resulting in less participation in Taiyuan.

Top-down encouragement of public involvement in the implementation of environmental protection policies led to increases in public participation. This bottom-

up pressure and top-down pressure from central level authorities to deal with grievances at the local level helped to make local authorities more accommodating to citizens. This in turn led to increased public confidence that local officials would address their grievances. This confidence increased feelings of efficacy and led to increased use of regime-sanctioned channels of participation, especially the complaint system. The result is a positively reinforcing cycle of increased participation and accommodation.

While official encouragements of participation and increased responsiveness to citizen grievances have been the most important political opportunities, these openings are not the only factors leading to increased participation.

#### ***Other Factors Contributing to Participation Increases***

At least five other factors contributed to increasing levels of participation. First, in addition to official encouragement, other political opportunities exist. Top leaders have made environmental protection a basic national policy. In addition, the government's capacity to manage participation has increased. Environmental protection is considered a topic of "low politics," so there is relatively wider openness for participation. The environmental protection sector is considered an appropriate area for "advanced social development."

Second, changes in China's legal framework open opportunities for more participation. Starting with the 1979 Trial Environmental Protection Law, legal protection for citizens who voice their environmental grievances has increased, making it more likely that citizens will get involved. Several laws thereafter have strengthened, or at least reinforced, citizens' rights to confront polluters.

Demonstration projects in Shenyang, Wuhan, and Chifeng, involving local laws that promote public access to information and enable public participation, represent the future possibility of even stronger legal support for participation.

Third, measurable increases in pollution contribute to the increase in participation to a significant degree. The quantitative analysis of environmental complaints detailed in chapter four clearly illustrates that as pollution levels increase, the numbers of complaints also increases. The generally positive relationship between pollution and complaints is a statistically significant one.

Fourth, higher levels of economic development also contribute to increasing participation, although this is not a significant factor in explaining increasing citizen complaints as shown in chapter four. This factor is of greater importance in predicting participation in some channels and not as important in other channels. Anecdotal evidence indicates that economic barriers inhibit some citizens from making complaints at higher administrative levels (*shangfang*) and filing legal suits.

Fifth, growing numbers of ESOs have helped to mobilize participation and so have become important in explaining increased levels of participation. In other words, ESOs have been both a dependent variable and an independent variable in this study. The membership ESOs and informal networks of volunteers are particularly important for helping to explain increased levels of participation. Starting in the late 1990s, ESOs have been instrumental in framing environmental issues. Their framing of the Golden Monkey habitat and Tibetan Antelope problems, combined with successful mobilization efforts, have been important in accounting for the rise of China's nature and wildlife conservation proto-movement.

In summary, political opportunities, due to official recognition that participation is necessary to meet environmental protection goals, are necessary to account for variation, but other factors are important as well. Among these are other types of political opportunities, legal opportunities, higher pollution levels, rising standards of economic well being, increasing opportunities for citizen mobilizing structures and control over framing processes. It should be noted that while environmental groups have been producing more of their own literature to give to citizens, about 79 percent of citizens polled by SEPA in 2000 said they get their information about environmental issues from television and radio programs, newspapers and magazines, and governmental education materials.<sup>5</sup>

### **The Need to Shape, Channel, and Control Participation**

As participation increased in the 1980s and 1990s, officials developed ways in which to shape, channel and control this participation. It became clear to scholars and officials in the early 1980s that environmental disputes and complaints were inevitable and they sought ways in which to keep these from disrupting production and social stability. Also, in the late 1980s, as the numbers of social organizations began to increase, authorities had to act to ensure participation did not become too zealous.

Party and governmental actors routinely use a variety of methods to shape, channel and control these and other forms of participation. These methods include suppression, repression, institutionalization and routinization of participation, and regulatory measures, as well as enhancing the legislative framework to prevent pollution, improving enforcement, and promoting environmental education.

Repressive and suppressive measures are most often used in instances of highly contentious politics, such as citizen protests or demonstrations against a polluting facility. While citizens are no longer put in prison for counterrevolutionary crimes, they are still sometimes put in prison for disrupting production, as noted in chapter three. News stories of disputes and protests are often suppressed in favor of stories that emphasize positive events and outcomes. This is not to suggest that all stories are suppressed or that the media has not become much more assertive in reporting the downsides of pollution, but some stories are still suppressed. It is state policy to report the positive over the negative. The reason for suppression is simple: authorities are concerned that stories of protest will breed more discontent, demonstrations, and social instability.

Authorities have institutionalized and routinized participation in a number of ways in order to channel and diffuse it. Environmental protection campaigns, while encouraging participation, also work to channel and guide it. Campaigns provide a vehicle for citizens to participate when they have no other alternatives. Campaigns are unwritten guidelines for citizens when they are trying to determine ways in which they can participate, and about which issues. Institutionalization of the environmental complaint system, by setting up pollution hot lines in major cities and encouraging people to report pollution problems early, has been a major push to prevent more disruptive disputes and simply to routinize the complaint process.

Authorities around the world utilize laws and regulations to set the boundaries of acceptable behavior and China is no different - but in China's case, the laws regulating citizen participation are more stringent, giving authorities a larger measure

of control. This is most evident in the laws and regulations regarding the establishment of social organizations. As described in chapter six, organizations must be approved by two government bodies before they can become registered. This and other stipulations severely limit the number of organizations that can register. Rules regarding making complaints to authorities limit the number of citizens that can visit government agencies in person, helping to prevent mobs from descending upon complaint bureaus, which could lead to collective protests. These regulations have been quite effective. If the regulations restricting the establishment of social organizations were more lenient, there would probably be many more environmental social organizations; Student environmental groups have proliferated very quickly precisely because these laws do not apply to them.

The state's projected image, in relation to environmental affairs and its response to environmental problems, has also helped to keep environmental activism from becoming overly zealous, simply because many people believe the state is doing the best job it can to manage China's vast environmental problems. About 49.5 percent of citizens polled in a SEPA survey said that the measures taken by governmental officials are the primary reason for environmental improvements in some areas.<sup>6</sup> Chinese leaders have passed a comprehensive set of laws regulating the environmental sector, have tried to educate enterprises on the need for environmental protection, and, since 1993, have tried to improve enforcement of environmental laws and regulations. These actions have all helped to portray the government as caring about environmental protection. While the regime's stated position that environmental protection is a basic national policy and its efforts to protect the environment help to

make the environmental sector one safe for public participation, this policy also has the effect of shaping participation. If citizens feel the government is doing a good job, then it negates one reason for citizens to take collective action in contention with governmental actors. Instead, citizens try to assist the government in its efforts to manage pollution. There are of course many exceptions. There are times when citizens do not trust the government to take appropriate action and there are instances when citizens confront authorities regarding their negligence, inaction, or corrupt behavior.

However, many people are satisfied with government action in the environment sector and this keeps more people from taking a confrontational stance. This is not the only reason why participation has not been more confrontational. Other reasons include China's political culture shaped by centuries of relatively authoritarian rule, Confucianist traditions, and repression.

In some ways, by heavily channeling and controlling participation, Chinese leaders have hampered the influence participation can have on policy and project outcomes, but this is by design. Most participation takes place in the implementation phase of environmental policy processes because it helps the state achieve its environmental protection goals without messing up the processes of policy formation.

### **Patterns Across Channels and The Influence of Participation**

Public participation does make some difference in environmental policy outcomes, although primarily during the implementation phase. Most participation occurs after policies have been set and after pollution or environmental degradation has already become a problem.

Citizen influence during the implementation phase is most obvious with the state-mobilized campaigns, which often follow the promulgation of new policies and laws and are a deliberate tool of implementation. Disputes, on the other hand, are not planned and typically influence single policy outcomes, such as the relocation of a specific enterprise. Complaints help authorities implement pollution prevention standards by helping authorities locate non-compliant or even illegal enterprises. In addition, citizen complaints help to justify authorities' enforcement activities to enterprises. Most of the activities of ESOs take place while policies are being implemented, such as monitoring logging bans. It is fair to say that participation in each channel enhances the chance that environmental protection policies and laws will be implemented successfully.

While most participation takes place during the implementation phase of the policy process, some forms also may influence policy decision-making. Some influence can be had through institutional official channels in the policy making phase, such as GONGO input regarding preferable pollution prevention equipment. Some influence before policy decisions also takes place through personalized ties. It is not outside the realm of possibility to think that the rise in the numbers of environmental disputes have made officials aware of the social consequences of industrial policy decisions, which may have influenced industrial policy decisions more generally, such as deciding to locate polluting enterprises further away from residential neighborhoods. However, there is no direct evidence to support this assertion. The complaint system may also influence decision-making. Numerous complaints about a

specific enterprise are taken into consideration when environmental protection authorities decide which enterprises they will suggest be moved or refitted.

Which of the channels is more effective? It depends upon which type of outcome one is discussing. One could ask several different questions. Which channels allow citizens to exert the most pressure on authorities to promote environmental protection? Which channels help to legitimize government policies? Which channels are more effective at influencing specific policy outcomes? Which channels are more likely to promote environmental quality? Which channels contribute the most to raising citizen environmental awareness levels? Which channels contribute the most to mobilizing citizen action in support of environmental protection? Which channels are more effective at developing civic consciousness? Often the answers to these questions are issue or problem specific. Disputes, complaints, and some campaigns focus on industrial pollution problems, while other campaigns and ESO activities focus on “green life” and conservation issues, so to ask which channel is best would be like comparing apples and oranges. Some of these questions are rhetorical or are too broad for meaningful answers.

This section focuses on discussing five of the above questions. It will discuss which channels provide citizens with greater means to pressure authorities, which channels legitimize government policies, which channels contribute the most to increasing environmental awareness and in mobilizing citizen action to protect the environment, and which channels are more effective at developing civic consciousness.

In general, disputes are more effective at pressuring authorities to enforce and improve pollution prevention policies; when citizens become embroiled in a fight or when they file administrative or court suits, the process involves more actors and focuses more attention on environmental protection authorities and practices, thereby applying more pressure. As one authority put it “*bu gao, bu li*,” “if they do not file suit, then they can be ignored.” It is inferred that the desire to avoid scrutiny from the media, government officials, and higher-level EPB officials has been one reason why authorities have become more responsive to citizen complaints. Both complaints and disputes probably put some pressure on planning authorities to adjust industrial policies to take the social consequences of pollution into consideration. ESO’s have had some influence in pressuring local authorities to implement conservation and natural resources politics. ESO efforts to bring illegal logging to light are but one example.

While some popular ESOs may put pressure on authorities to implement policies and laws, they also effectively legitimate some governmental policies. For example, monitoring illegal logging has the effect of legitimizing central government logging policies because the act of monitoring implies support for a policy; it also pressures local government authorities to adhere to those policies. At the same time, when ESOs refrain from bringing attention to potentially environmentally harmful activities, or by refraining from engaging in conversations about specific issues such as nuclear power, they are lending tacit legitimacy to governmental policies in these areas, as well as legitimizing state-defined boundaries on participation. ESOs legitimize policy when they cooperate with governmental actors, such as when they

mobilize people to plant trees or work with companies to bring them into compliance with ISO 14000 standards. Citizens that complain about polluting enterprises are often legitimating government pollution-prevention policies as well as legitimizing government definitions and framing of public participation. Perhaps most obviously, when citizens participate in mobilized campaigns, they are legitimizing campaign goals and processes.

State mobilized campaigns are very efficient at mobilizing citizen action because state structures to implement campaigns already exist and they reach down into nearly every local area. ESOs have only been active since the early 1990s and so have not yet developed the ability to reach such large numbers of people. The GONGOs are one exception to this because they are linked with government structures through corporatist bonds. However, ESOs do touch people's lives and can make a difference in shaping citizen behavior. Friends of Nature publishes letters from citizens that often talk about how they changed their behavior after participating in ESO activities. Campaigns also have been effective in educating citizens about environmental laws and policies and environmental issues in general. It has been shown that many citizens involved in disputes are very knowledgeable about environmental laws.<sup>7</sup> One explanation is that they learned about legal issues through the numerous campaigns to popularize environmental laws.

Participation in each of the channels contributes to developing citizens' civic consciousness, but in very different ways. Participation in state-mobilized campaigns is likely to cultivate the sense that one is doing one's civic duty by helping the state meet its environmental protection goals. The same is often true with filing complaints.

Participation in disputes develops a different civic sense. Instead of emphasizing one's civic duty to the state, participation in disputes involves defending one's environmental rights. Making demands on enterprises, authorities, and the legal system cultivates one's "rights consciousness," a different aspect of civic consciousness. Filing complaints and disputes, as well as participating in ESO led vigils, marches, and petition activities, focus on demanding government and enterprise accountability, other aspects of rights and civic consciousness.

### ***Generalizations About Influence***

Can we generalize about when participation makes a difference? It is possible to generalize to some degree. There are a few variables that influence the degree of difference participation makes across all channels of participation. First, it matters who is participating, supporting the notion that personalized ties, or *guanxi*, (although in this case not clientelist ties) is still important in Chinese society. Second, the level of commitment of citizens and the number of citizens participating are important factors, which indicates that social action can have some influence if the number of actors involved is large enough and if they are dedicated enough. Third, it helps to have pressure from a number of different sources, including the government, the media, ordinary citizens, and ESOs. Fourth, the attitudes of officials and government priorities are paramount. Fifth, the degree of the pollution or environmental issue and the tractability of the problem in relation to local conditions both make a difference. Sixth, the probability or existence of social instability is crucial in determining when participation makes a difference, again which supports the notion that social action can make a difference. Finally, institutionalized channels are still a way in which actors

can influence policy outcomes – specifically, professional GONGOs and other GONGOs utilize official channels to make suggestions and comments to higher level officials, and citizens make complaints through the institutionalized complaint system; both actors can influence decisions regarding areas needing attention and governmental priorities among other issues.

China is not unique regarding the conditions under which participation makes a difference, although there are obviously variations across countries depending upon the type of political, economic and legal systems that are in place. The attitudes of officials and businesses are crucial to some degree in determining when participation makes a difference in policy outcomes in any country, but because of China's authoritarian political system and relatively inconsistent implementation of environmental laws, the attitudes of officials are more important in China than they are in the U.S., for example.

It does matter who is participating. As discussed in chapter four, complaints from prominent persons, the media, National People's Congress and Chinese People's Political Consultative Committee, as well as from higher levels of government, are given more weight and are considered more credible. A letter from Liang Congjie, the head of an ESO and member of the Standing Committee of the CPPCC, carries more weight than a letter from the leader of a college student group. In addition, the determination of citizens to follow through and the number of citizens participating makes a difference. Citizens are more likely to see governmental action and have their dispute resolved if they are determined to invest the time, energy, and resources to take the complaint to higher levels of government or to the courts.

Authorities and other social actors are more likely to change the status quo if they are pressured from a number of different sources. As Tony Saich discovered, local authorities did not take efforts to protect the Golden Monkey until ESOs, student environmental groups, the media, and central government authorities pressured them. Efforts to get more environmentally friendly utensils in college cafeterias worked only after prolonged pressure from student groups, utilizing a number of methods. The students pointed out that the Beijing government had issued regulations outlawing non-biodegradable materials and were willing to enforce the regulations.

The attitudes of officials and enterprise managers and owners are still important factors that determine whether participation makes a difference. This includes attitudes toward environmental protection, economic development, and the law. There are numerous complaint and dispute cases in which a dispute dragged on for years simply because enterprise managers refused to do anything about a pollution problem. These managers had little respect for new environmental laws or the infant environmental protection apparatus. Furthermore, some officials are more concerned with profit; others feel China should develop economically first and then clean up the environment. When officials and enterprise owners have some respect for the law, support environmental protection, and can sympathize with the plight of citizens harmed by pollution, they are more likely to work with citizens and other officials to resolve a dispute and reduce a pollution problem. The attitudes of officials also are important in determining the number and effectiveness of government mobilized environmental campaigns. If officials are just “doing their jobs,” and do not wholeheartedly support environmental protection or are more concerned with

economic development, they will not be very proactive; hence, there will be fewer educational programs and environmental protection campaigns. Concerning environmental social organizations, because the approval of a supervisory governmental organization is needed, the attitudes of officials are crucial. Officials must support the ideas of both public participation and environmental protection in order to be willing to be responsible for an environmental social organization.

The severity of the pollution problem and the tractability of the problem in relation to local conditions both make a difference in policy outcome. These factors are most obvious in environmental disputes and complaints. Both chapters three and four illustrated that when a pollution problem is clearly in violation of standards or when the polluting enterprise is operating illegally, officials act more decisively to resolve a problem. The hardest disputes to resolve are those in which citizens are affected by an environmental problem, but the pollution is not in violation of standards, or there are no clear regulations or standards regulating the problem – as in the case with coal dust.

The tractability of the problem can certainly affect the outcome. It has been harder to resolve disputes regarding extremely large enterprises, such as Shougang (Capital Steel) in Beijing and Taigang in Taiyuan, which have multiple sources of pollution and are difficult to move. There is no doubt China has had more trees replanted with public participation than without, but the success of these programs is sometimes questionable. One reason environmental groups were successful in getting the government to take action to save the Golden Monkey habitat in Yunnan is because it was a manageable problem.

The probability or existence of social instability is important in determining when participation makes a difference. This factor is most obvious in disputes and complaints. When citizens take matters into their own hands, authorities have to pay more attention to their grievances. It is state policy. EPB directors only get involved in disputes if they cross administrative boundaries or if they have the potential to lead to social unrest. While the outcome of a case may not always be in favor of citizens, especially those cases in which they have been arrested for disrupting production, authorities generally believe environmental complaints are credible if citizens are willing to risk disruptive action. As chapter three notes, citizens generally use disruptive tactics as a last resort. Tony Saich argues that it was the threat of social unrest on college campuses that influenced the government's decision to ban logging in Golden Monkey habitat.<sup>8</sup>

There is a general debate in the social movement literature regarding the effectiveness of disruptive tactics in movement success and the terms of the debate are relevant to participation in general.<sup>9</sup> It may be that disruptive tactics are more effective in authoritarian countries given the need these regimes have to maintain control over the population. While it is true that disruptive tactics may land citizens in jail in strict authoritarian states, such tactics also can lead authorities to make policy changes, even though they may not admit that it is due to citizen pressure. This is especially true in countries, such as China, which have made some political and economic reforms and which some scholars have called a "soft authoritarian" country.<sup>10</sup>

Public participation undoubtedly makes a difference, primarily in the policy implementation stage, and it is clear that participation in non-democratic states is as

important in implementation success as it is in democratic countries. Perhaps it is the newer forms of participation in the policymaking process being instituted on a trial basis in China that hold the most promise of public influence. Some forms of participation that are just emerging in China include public input in environmental impact assessment processes, public comment processes – including public meetings and solicitation of comments by authorities - and informal channels of influence. It is beyond the scope of this dissertation to describe and analyze these channels of participation, but they are areas ripe for future research.

### **Participation and Influence in Decision-making Processes: Areas for Future Research**

Chinese authorities have strengthened the laws and regulations guiding environmental impact assessment processes since 1986 and public participation has become a more important component in these processes. The new Environmental Impact Assessment Law includes several provisions that encourage expert and public opinion in assessment processes. Provisions eleven and twenty-one state that the company writing the assessment for special projects and those projects that potentially could harm the environment (projects requiring an environmental impact report - *baogaoshu*) should solicit expert and public opinion and include polled opinions in the assessment report (or explain why they were not incorporated). Before a report is approved, opinions should be solicited through *lunzhenghui* or *tingzhenghui* (testimonial or hearing)<sup>11</sup> Provisions four and five call for open and fair impact assessment processes and state that participation by the public is encouraged. It should be noted that participation is only encouraged and should be included (*yingdang*), but

is not absolutely required (*bixu*). It is also notable that the state restricts participation in projects that involve state secrets. This undoubtedly includes projects with a military dimension and projects with a nuclear dimension, but could include other projects as well.

The role of experts and the public is an area ripe for future research and there are several questions one should ask: Who attends testimonials or hearings and how are they chosen? How informed are the opinions of those who participate? What role does the construction entity play in testimonials or hearings? How much weight is given to public opinion in the assessment process and in the project outcome? Can citizen objections to a project change its nature or even halt its progress? Does public participation in the assessment process help to alleviate problems after a project is finished? These questions also are relevant for other forms of public participation in environmental policy processes.

There are two main forms of public comment in environmental policymaking, public meetings and the solicited public comment process for new laws. Numerous types of public meetings exist. There have been meetings to discuss specific pollution accidents to get public input regarding the fate of a polluting enterprise. Environmental protection and other authorities have called meetings to discuss water and electricity pricing issues. Resident committees have called other meetings to discuss decisions to site polluting enterprises. These meetings cry out for examination. Why do some areas hold these types of meetings while others do not? What happens at these meetings and how genuine is public input? How are the outcomes of these

meetings incorporated into decisions that are implemented? How do these meetings fit with pluralist and mass line models of policymaking?

The other type of public comment process, soliciting comments for proposed new laws, has recently been established through legislation in China. The new Legislation Law that went into effect in January 2001 includes a provision that requires public comment on certain types of laws before they are passed. Major environmental laws fall in this category. In 1999, The State Environmental Protection Administration instituted the public comment process on a trial basis for the new Land Law and should utilize it to a greater degree in the future. As of yet, no detailed research has been conducted regarding the use of the public comment process in the environment sector, but some research has been done on the comment process in the financial sector.<sup>12</sup> The government instituted the public comment process to help decide the best way to reduce the government ownership stake in corporations listed on the Shanghai and Shenzhen Stock Exchanges. The China Securities Regulatory Commission posted a notice on its website soliciting public comments and in only a month received 4,100 suggestions. The proposals were discussed at a meeting of economists from eight financial research firms. The point is that the suggestions were not only collected but were seriously discussed by policymakers, possibly indicating a new openness in the decision-making process.<sup>13</sup>

Beyond the notion that a new openness in the decision-making process is emerging, there are a couple of other explanations for increased use of the public comment process. The process could be framed as an example of the “mass-line,” or more aptly, the “expert line.” If the practice is meant to garner input from experts or

the general public in order to increase expert and public respect and support for the resulting policies or laws, then it can be said to conform to the “mass or expert line” model of policy-making which would ensure easy implementation. In theory, because experts and/or the general population participated in the mass line process, by which citizen attitudes and preferences were polled and taken into consideration when designing policies, then they should be more easily implemented.

Another conceptual lens would be to view the public comment processes through the developmental theory of participation lens. According to this theory, citizens that participate in the making of policies and laws will be more supportive of these measures as well as supportive of the ruling regime. Some argue that one of the functions of participation is to develop “democratic” characteristics of the participant. Participation increases the awareness of political practices and the political system and basically works to raise one’s civic sense.”<sup>14</sup>

Yet another explanation is that authorities in various sectors are utilizing the public comment process simply because they have to. Along these lines, while the effects of participation on the specific policy or law would be rendered nearly meaningless, the very act of participation itself may or may not build citizens’ civic sense depending upon whether they believed their input was actually being utilized or not.

### **Sophistication of the Mass-Line and of State-Society Relations in China**

There is no doubt that each of the channels of participation in the environment sector has changed over time by becoming more sophisticated. Authorities have

standardized, rationalized, and routinized channels of participation by creating regulations, institutions, and accepted practices.

For example, authorities have standardized and institutionalized the environmental complaint system by creating regulations for EPBs to follow when they manage complaints. They have set up complaint offices and telephone hotlines for citizens, which expanded citizen access to officials. The institutionalized complaint system operates as a sophisticated, modern form of the mass line. When citizens complain, they are making their concerns known to lower-level authorities, who then include these concerns in reports to higher-level authorities, or take them into consideration when determining specific enterprises to be relocated, altered, shut down, or targeted for clean up.

As outlined in chapter four, in the early 1990s, some officials were still very unsympathetic to citizen environmental complaints, but officials can no longer ignore citizen complaints; the situation has become more complex. There is pressure from higher-level authorities to be more responsive and citizens have become more knowledgeable about environmental laws and their environmental rights, which emboldens them to voice their grievances. Standardizing the complaint process has routinized management of citizen grievances and functions to prevent violent disputes.

Dispute resolution processes have gone from being ad hoc in the early 1980s to being standardized and institutionalized in the late 1990s. This does not mean, however, that all disputes are resolved and that there are no problems with dispute resolution processes. One problem with the system is that, for a variety of reasons, some disputes never get resolved. Other looming problems with dispute resolution

include the lack of regulations regarding victim compensation, government intervention in court cases, self-interested courts, and lack of authority on the part of EPBs to enforce dispute resolutions, especially compensation claims. However, overall, citizens have more voice now than they did in the late 1970s because the right to accuse polluters was codified into law. While there are still instances where citizens are put in prison by police authorities for disrupting production as a means to protecting their environmental rights, there is greater leeway in protecting one's environmental rights than there was in the 1970s. In addition, there are specific procedures through which citizens can get themselves out of jail and press charges against polluters. The court procedures in dispute cases have become more rational and sophisticated. Currently, science is used to back up competing claims by both the plaintiff and the defendant, instead of being used by one court-appointed investigative team as was done in the 1970s and 1980s.

Even mobilized campaigns have become somewhat more sophisticated. Campaigns have been depoliticized, which has decreased the tension associated with campaigns as well as made them more routinized. While officials still mobilize participation, citizens have more of a choice whether to participate or not (except, of course, the individuals involved in the mobilizing, such as Street Office personnel). The repercussions of not participating for ordinary citizens are not as severe as they were in the Mao years. The choice factor indicates that those who do participate do so willingly, for a variety of motivations, which means there is a higher level of volunteerism. Volunteerism in modern China stems not so much from "communist

consciousness” as from a socialist, nationalist consciousness. To be “green” is to be patriotic.

Chinese authorities have evolved considerably in their dealings with citizen groups, representing a sophistication of state-society relations. While there are still strict regulations guiding the establishment of ESOs, Chinese leaders have at least acknowledged the need for social organizations in society and in some cases have encouraged them. This in itself is a sophistication of state-society relations. The state, however, still requires social organizations to find a sponsoring governmental organization in its professional field that will take responsibility for it; a *guakao* body still grants social organizations monopoly power within their profession by disallowing two social organizations that perform the same function to register in the same administrative area. This shows that while relations have become more sophisticated, there has not been a fundamental change in state-society relations since the early 1980s. Given that the fundamentals of state-society relations have not really changed, can anything but a state-sponsored social movement emerge in China?

### **Public Participation, Political Participation, and Social Movements**

This research has sought to discover why participation in the environment sector has been increasing and has also sought to discover the emergence of an environmental movement in China, but did not take such a movement as a given. One of the difficulties in researching social movements is that one can only examine positive instances of movement emergence. Researching participation is one way to get around this problem. By examining participation in general, one can explore the potential for a movement to emerge; not just any participation, but primarily political

participation. Without political participation, there can be no social movement. Not all action within a social movement is contentious, so focusing only on contentious politics to search for the possible emergence of a movement is limiting. Therefore, this research focused on a variety of participatory forms.

Another problem in social movement research is falling into the trap of setting up movements as dichotomous variables. One way this problem has been framed is to ask how can researchers study “non-movements?” The characterization of the problem as a dichotomous variable, i.e., movements or non-movements, leaves little room for varying cultural contexts and variation in movement phenomenon. Cultural, political, and economic contexts deserve some consideration, such as considering the social construction of contention. However, too much flexibility destroys the meaning of a definition of social movements, making the category meaningless.

### ***Proto-Movements in the Chinese Context***

A solution to this problem has been to maintain a rather rigid definition of a social movement, but to allow for more gray area between non-movements and movements by creating a new category of movements, that of proto-movements. Proto-movements exhibit the elements of a social movement, as defined by Sidney Tarrow, to some degree, but are constrained by the lack of political opportunities. The paucity of political opportunities leads the movement type phenomenon to be small, to be nascent, or to be *less* contentious. Some proto movements may develop into traditional movements, but some may not depending upon the configuration of political opportunities shaping it. If there are no changes in the political opportunity structure, then the proto-movement remains in the proto phase. This framework takes

movement phenomenon not as a dichotomous variable, but a continuous variable with political participation on one end to social movements at the other end. One change that would facilitate the development of China's conservation proto-movement would be to lift the governmental requirement for approval by two governmental ministries to establish an ESO.

In seeking explanations for the emergence of proto-movements and for explaining participation in authoritarian regimes, it is quite useful to apply concepts and theories used in the social movement literature. As discussed in chapters two, three, and six, political opportunities and threats have been the most important factors to influence levels of participation and the emergence of proto-movements. This is not to say that other factors are not important; as discussed at the beginning of this chapter, several other factors have been important. It must be stressed that although many political opportunities have opened up in China, the political opportunity structure remains the primary limiting variable to the emergence of a traditional movement.

In China, there is a nature and biodiversity conservation proto-movement based in Beijing and other large cities. A handful of popular ESOs and student groups have mobilized citizens in a number of campaigns to protect specific species and specific areas of habitat. They have acted collectively to preserve Golden Monkey habitat and to stop poaching of Tibetan antelope by participating in investigative teams, holding candlelight vigils, writing letters to government and party officials, aiding anti-poaching teams, working with the media, and a number of other activities. These groups engaged in contentious politics with local level officials seeking to

preserve economic inputs through illegal logging in Sichuan and Yunnan, and by illegally selling Shatoosh fabrics made from Tibetan antelope in Qinghai province.

The proto-movement is small when compared to China's population, but it has been effective in meeting its goals. Golden monkey habitat was spared first by a ban on road building in 1995 and by a general ban on logging from Zhu Rongji in 1998.<sup>15</sup> And, although the anti-poaching team was disbanded in Qinghai, the area is now a nature preserve where poaching is illegal.<sup>16</sup>

It is questionable how many citizens in China are aware of ESO activities or of the emergence of a nature and biodiversity proto-movement. Even students in Beijing that are active in environmental protection activities on campus put on by student groups may not be aware of popular ESO or GONGO activities off-campus. Many students cannot name an environmental organization outside of their university. This indicates that China's environmental proto-movement is very small scale in relation to China's huge population.

China's ESOs have not mobilized action to protest industrial pollution and, unlike China's neighbors in East Asia, an anti-pollution movement has not emerged. Local instances of protest regarding pollution remain isolated episodes of contentious politics. There are significant barriers to the growth of these episodes: China's ESOs have not become involved in mobilizational efforts, there is a shortage of political opportunities and political repression is still a risk, the prevailing "ideology of economic growth" has led to the belief that pollution is inevitable, authorities have channeled disputes through the complaint system in an effort to curb collective action, and finally, state control of the media has precluded environmental accidents or

pollution cases from “resonating” with the Chinese public, since there are no symbols around which to mobilize.

### **The Ramifications of Increased Participation For State-Society Relations, Democratization and Environmental Quality**

One could argue that increasing participation contributes indirectly to “creeping” democratization.<sup>17</sup> Creeping democratization is manifest through citizens increasing use of legal remedies to assert their legal rights, including their environmental rights. It also is manifest in decreasing repression of pollution victims since 1979 and in citizens’ access to representatives of the National People’s Congress, which has been growing in political power, albeit slowly and inconsistently.<sup>18</sup> There is some evidence that Chinese leaders may continue to encourage participation. Most recently, President Hu Jintao said the Communist Party “must undertake a sweeping systemic project to increase public participation in government and enforce the rule of law.”

We must enrich the forms of democracy, make democratic procedures complete, expand citizens’ orderly political participation and ensure that the people can exercise democratic elections, democratic decision-making, democratic administration and democratic scrutiny.” (Hu Jintao on the eve of China’s National Day holiday, October 2, 2003)<sup>19</sup>

Since increased participation is partially a result of encouragement by authorities and of increased responsiveness on the part of authorities, then citizens heartened by positive feedback to their environmental grievances may become more demanding in other areas, such as requesting a larger role in policymaking in a variety of sectors. Increased responsiveness by authorities could lead citizens to have higher expectations regarding more accountability in government. Increased citizen activism,

partially fueled by government encouragement and by greater governmental responsiveness, should lead to even greater governmental accountability in a positive reinforcing cycle.

### *Implications for Environmental Quality*

While participation is increasing overall, it is increasing more in some areas than it is in others. It is increasing primarily in China's urban areas, which has consequences for the expansion of environmental awareness and citizen activism, and for environmental quality. There is often a stark contrast in the attitudes of officials in inner city districts to those in outer city districts, even in Beijing, where inner city officials are much more supportive of environmental protection. When polluting enterprises are moved out of inner districts, they often end up in outer districts that are willing to sacrifice environmental protection for economic opportunities, despite the fact that a portion of the population will be adversely affected by pollution, without being compensated. With the opening of western China in accordance with the "Go West" campaign, it is highly probable that enterprises moving out west will enjoy lower environmental standards. Moving industries to outer districts or to China's western region is just displacement of China's pollution problems, not their resolution. With environmental awareness and activism at lower levels in outer districts, including China's northwestern (and probably northeastern) areas, there is less pressure on authorities to impose environmental laws and policies on incoming enterprises.

Given that increased participation is correlated to the attitudes of officials and to official encouragement, the variability of outcomes is once again dependent upon

Chinese authorities. This means that while public participation does make a difference in promoting beneficial environmental outcomes, it currently only works in a small portion of China's vast territory.

## Endnotes to Chapter Seven - Conclusion

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<sup>1</sup> Ho, "Greening Without Conflict? Environmentalism, NGOs and Civil Society in China," p. 901.

<sup>2</sup> Lu, "Bamboo Sprouts After the Rain: The History of University Student Environmental Associations in China," p. 57.

<sup>3</sup> Tang Tsuo introduced the term "zones of indifference" which has been picked up by other scholars, who argue the scope of these zones have expanded. Tsuo, *The Cultural Revolution and Post-Mao Reforms: A Historical Perspective*. p. xxiv; Shue, "State Sprawl: The Regulatory State and Social Life in a Small Chinese City," p. 93.

<sup>4</sup> In Chengdu there was the Green Environmental Protection Volunteer Service Core linked with the Communist Youth League. Interview #39, Spring 2000.

<sup>5</sup> Huanjing Nianjian, 2000 (China Environment Yearbook), p. 347.

<sup>6</sup> Huanjing Nianjian, 2000 (China Environment Yearbook), p. 347.

<sup>7</sup> Jing, "Environmental Protests in Rural China," p. 220.

<sup>8</sup> As already noted, pressure from a variety of sources also influenced the government's decision in the Golden Monkey case. See Saich, "Negotiating the State: The Development of Social Organizations in China."

<sup>9</sup> See the introduction to "How Social Movements Matter" for a quick review of the debate. Marco Giugni, Doug McAdam, and Charles Tilly, *How Social Movements Matter*, (Minneapolis and London: University of Minnesota Press, 1999), pp. xvi-xviii.

<sup>10</sup> Minxin Pei, "China's Evolution Toward Soft Authoritarianism," *What If China Doesn't Democratize?* Edward and McCormick Barrett L. Friedman, (Armonk, New York: M.E. Sharpe, 2000).

<sup>11</sup> Smaller projects, those that only require an impact declaration (*baogaobiao*) or an impact checklist (*dengjibiao*), do not require public input. "Zhongguo Huanjing Yingxiang Pingjiafa" (PRC Environmental Impact Assessment Law).

<sup>12</sup> One exception is the work of Richard Ferris and Zhang Hongjun, but their work only mentions the process and does not go into detail. Ferris and Zhang, "The Challenges of Reforming an Environmental Legal Culture: Assessing the Status Quo and Looking at Post-WTO Admission Challenges for the People's Republic of China."

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<sup>13</sup> Barry Naughton, "Selling Down the State Share: Contested Policy, New Rules," *China Leadership Monitor*, no. No. 1, Part 2 (2002), p. 6.

<sup>14</sup> See Devra Coren Moehler, "Public Participation and Support for the Constitution in Uganda," unpublished paper; Benjamin Barber, *Strong Democracy: Participatory Politics for a New Age* (Berkeley: University of California Press, 1984).

<sup>15</sup> "Toxic China," Story in Timeasia.com by Terry McCarthy and Jaime a. Florcruz, March 1<sup>st</sup> 1999.

<sup>16</sup> "Tibetan Antelope to Be Put Forward as Olympic Mascot," *China Daily*, September 13, 2003

<sup>17</sup> Minxin Pei, "Creeping Democratization in China," *Consolidating the Third Wave Democracies*, ed, Larry Diamond, (Baltimore, MD: Johns Hopkins Press, 1997).

<sup>18</sup> See Dowdle, "Constructing Citizenship: the NPC as Catalyst for Political Participation," p. 330.

<sup>19</sup> "China Boss Urges More Democracy," *The Salt Lake Tribune*, October 2, 2003.

## **Appendix A – Description of Case Cities**

### **Beijing's Environmental History**

The city of Beijing emerged around 1000 B.C. as a trading town for Chinese, Korean, Mongolian, and Manchurian merchants. Later, the town became the capital of the Yan Kingdom and was called Yanjing. Genghis Khan burned Yanjing to the ground in 1215 AD, only to rebuild it in greater splendor. During the Ming Dynasty, the flourishing city came to be called Beiping (Northern Peace), but was renamed Beijing (Northern Capital).<sup>1</sup> Currently, it is the political, cultural, intellectual, and economic capital of China. It has been a model to display the nation's environmental protection efforts.

The city is an independent municipality directly under the control of the central government and has the same political status as a province. The city proper has four districts, Dongcheng, Xicheng, Chongwen, and Xuanwu. There are four suburban districts, Chaoyang, Haidian, Fengtai, and Shijingshan and four "outer" suburbs, Mentougou, Fangshan, Tongzhou, and Shunyi. Finally, there are six outlying counties, Miyun, Huairou, Pinggu, Changping, Yanqiong, and Daxing. Getting to the outer districts and counties without a car is still difficult. It requires about a half a day's journey by bus.

The municipality's population had increased dramatically since the founding of the People's Republic. In 1952, the population was almost 2.5 million. In 1978, it jumped to over 8.7 million. In 1989, it was over 10.2 million and by 1999, it had reached 12.3 million. The city is roughly 16,800 sq km and sits in at the junction of the North China Plain and the Taixing and Yanshan mountain ranges. About 62% of municipal Beijing is mountainous and 38% is flat. More than 100 rivers traverse through some part of Beijing. In the winter, Beijing is affected by the weather coming from the North, while in the summer; it is affected by the weather coming from the East China Sea. There are four distinct seasons. It can be bitterly cold in the winter because it is subject to cold fronts coming from Mongolia. It is windy during the spring and the winds bring notorious dust storms from the Northwest. In the summer, it is hot and rainy. Autumn is the balmiest. The sun shines about half the year and the average annual precipitation is 640 millimeters, although this varies greatly.

Beijing's outlying districts and counties have abundant resources including coal, iron, copper, lead, and gold. In addition, marble is plentiful as is limestone, dolomite, and refractory clay. Because of the abundance of clay and other rocks and minerals, the brick industry is thriving. When driving out of Beijing's inner and outer districts into the countryside, brick kilns can be seen dotting the landscape.

### **Development of the Environmental Protection Apparatus**

Beijing is home to the early pioneers of China's environmental protection efforts so, over the last three decades, the city often has been the first city to establish policies and institutions critical to these efforts. City officials were the first to set up a municipal "three wastes" (*sanpai*) office in 1971. From the early 1970s onward, Beijing garnered the attention of top Chinese Communist Party officials and government leaders. Premier Zhou Enlai himself emphasized that Beijing should be a

“clean” city, so officials should limit the number of polluting enterprises that could move there (at least in the inner districts). He ordered enterprise specific water, air, and solid waste pollution problems to be cleaned up. In addition, in the 1970s, the Beijing Environmental Science Research and Monitoring Institute were established. The city published its own “environmental protection” magazine and began modest environmental education efforts.<sup>2</sup>

In 1980, Deng Xiaoping declared that Beijing would “transformed into the nation’s cleanest, most sanitary, and most beautiful city.” These “guiding principles” had some impact on city early on. The city Environmental Protection Commission (a sub-commission under the *Chengjian weiyuanhui*) was established in the early 1980s. By 1983, environmental issues were included in the city government’s annual agenda. By 1989, an Environmental Protection Commission also had been established in some districts and counties.<sup>3</sup>

By 1990, deadline cleanup orders were included in the city’s broader economic and social development plans. The city Environmental Protection Commission was revamped in 1991 and expanded to 33 members. Every ministry and state level corporation established a department dedicated to environmental protection issues.<sup>4</sup> In 1993, higher-level authorities encouraged those districts and counties that had not yet established an EPB to do so. In addition, higher-level authorities got tough with Tongxian County for not including environmental protection indicators into government term targets for higher-level county officials.<sup>5</sup> The city established a City Environmental Protection Law Enforcement Inspection Leading Small Group and the city EPB established the Inspection Brigade.<sup>6</sup> The next year, environmental protection criteria were added to county and village leaders’ “term targets” (*renqimubiao*) in Tongxian County. In addition, that year, environmental protection coursework was added to the city level “Party school” general curriculum. Following the city’s lead, Chongwen, Xicheng, Dongcheng, Fengtai, and other districts and counties included environmental protection issues in local-level Party schools.<sup>7</sup>

In 1995, several districts and counties established “regulatory enforcement leading small groups.” Members of these groups included representatives from local Environmental Protection Commissions, People’s Congresses, governmental ministries, and the Chinese People’s Political Consultative Congress. These groups conducted an overall assessment of policy and law enforcement in their respective administrative areas.<sup>8</sup> After government restructuring in 1998, the Beijing Municipal EPB could communicate directly with the municipal government and relevant ministries. The EPB no longer had to issue notices or call meetings through the *Shizheng Guanli Weiyuanhui* or the *Chengjian Weiyuanhui*. In addition, the city EPB had more authority over the environmental impact assessment processes.<sup>9</sup>

Linked to the administrative and service arms of the city’s environmental protection apparatus, authorities built a community “volunteer” environmental network very early. In 1989, 350 of Beijing’s 400 Street and Village and Township Offices, had “deployed” people with the specific duty of monitoring environmental protection in neighborhoods, because of commitments made in Environmental Protection Responsibility System Contracts. These street level monitors linked Resident’s Committees with the local population. Special efforts were made to educate

“information officers” for Residence Committees in environmental issues so they in turn could educate the general public.<sup>10</sup> In some districts, polluting enterprises established “coordinating groups” which mutually monitored each other and shared experiences and information.<sup>11</sup>

These “volunteers” have been very important in mobilizing support for environmental protection in Beijing and in carrying out specific campaigns designed to “clean the face” of the city. Early environmental activists responsible for acting as a “bridge” or a “transmission belt” were a crucial link between the government and the citizenry.

Earlier, I discussed how campaigns were a manifestation of the state’s environmental protection agenda. While SEPA draws up an environmental plan each year, including educational goals, and local EPBs base their own plans on the goals set out by the national level, there is some latitude in carrying them out in accordance with “local conditions.” In other words, campaigns in one city may or may not be similar to campaigns in another city or province.

The environmental protection agenda in Beijing is particularly influenced by national objectives and the wishes of national leaders, because it is the capital. Therefore Beijing is the exception among Chinese cities, it is not the norm. In the 1980s, cleaning up Beijing was a national priority. Again, in the late 1990s and early 2000, Beijing’s environmental protection, especially air pollution, became a high national priority.<sup>12</sup> It is due to the attention, supervision, and support of the central government that Beijing has made substantial improvements in environmental quality.

Another reason why Beijing has been relatively successful in mitigating its pollution problems, compared to other cities, has been a constant influx of foreign investment over the years. In the late 1980s, the city was the recipient of World Bank loans to improve environmental management and pollution control, improve drinking water sources and distribution, and improve the city’s infrastructure.<sup>13</sup>

Another reason why Beijing’s environment has improved is that it began to relocate polluting enterprises early. In accordance with the directives of national leaders and environmental protection officials, tens of polluting enterprises were moved out of the city each year in the mid 1980s.<sup>14</sup> According to one environmental protection official, many of these enterprises were moved to any area that would welcome them, often ending up in Tongxian County.<sup>15</sup>

### **Basic Agenda and Major Campaigns**

From 1989 through 1991, Beijing environmental protection authorities considered the following their top priorities in environmental protection: establishing some of the eight proposed implementation mechanisms including the Three Simultaneous Policy, the Environmental Protection Target Responsibility System, the Comprehensive Environmental Improvement Assessment System, the discharge fee and pollution permit systems; building institutional capacity; getting environmental indicators added to the list of items to be examined when leaders were to be considered for promotion; including environmental targets and deadline cleanup orders in the city government’s economic and social plan; safeguarding city drinking water supplies; moving heavily polluting enterprises out of the city; discussing

environmental education curriculum for elementary and middle schools; surveying town and village enterprise pollution sources; developing the city's environmental regulatory framework; and the Asian Games clean-up campaigns. Specific tasks included building production lines to make soft coal briquettes, eliminating small coal fired boilers, planting trees, and testing automobiles on exhaust standards.<sup>16</sup>

The most important campaign that took place in Beijing in 1989 and 1990 was the “maintain social stability, welcome the Asian Games” (*bao wending, huang yayun*), which was to prepare the city for the upcoming Asian Games. The “maintain social stability, welcome the Asian Games” campaign was reinforced in 1990 with three sub-campaigns, the “300 days to the Asian Games” the “200 days to the Asian Games” and the “100 days to the Asian Games” activities. During the last, county environmental protection bureau directors proceeded with “practice drills” (*hizhan yanlian*). Each district and county conducted several drills at various levels to ensure that environmental protection people gradually took “environmental protection to heart” (*huanjing baohu zhujian shenru renxin*).<sup>17</sup> For the “maintain social stability, welcome the Asian Games” campaign, the city Environmental Protection Committee requested assistance from the municipal government. The government called upon every work unit, district, county, bureau, company, and ministry to do what the city environmental protection commission requested. Three separate ad hoc systems were set up: 1) the “supervision management system” (*jiandu guanli tixi*) 2) the “self-guarantee system” (*ziwo baozheng tixi*), and 3) the “environmental monitoring system” (*huanjing jiance tixi*). The environmental “activists” and responsible parties in Street, Village and Township Committees played important roles in getting these “systems” set up.

For the “supervision management system,” “full time environmental protection personnel in every city, district, county environmental protection office, street, village, and town” were paired with part-time information personnel from Residents and Village committees to form a system to monitor local pollution sources. The Environmental Yearbook lists the number of organizations and individuals with “responsibility” for the Asian games and who participated in the (ad hoc) system of supervision. Altogether there were 14 district and counties, 96 streets, 120 villages, 28 towns, and 4,551 Residents and Village Committees. Personnel from these organizations worked with about 341 full-time environmental protection personnel and 3,234 part time people from propaganda organs to form 3<sup>rd</sup> level management and 4<sup>th</sup> level supervision teams. These supervision teams were made up of professionals and ordinary citizens working together.<sup>18</sup> For the “self-guarantee system,” unit managers got personnel from every enterprise to police each other in order to strengthen management and ensure that no environmental accidents occurred. For the “environmental monitoring system,” existing monitoring station contingents were strengthened at each administrative level. In addition, volunteers from businesses and the citizenry helped with the work of the monitoring stations. The three systems implemented were not only to help control environmental quality during the Asian Games, but also represented the “new road” [*xinlu*] of environmental management and supervision for the future.<sup>19</sup>

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The international theme for World Environment Day was “children and the environment,” so most efforts were focused on China’s youth, but the influence of the Asian Games campaign was obvious. In Chaoyang, Xuanwu, and Chongwen districts, students formed the “Welcome the Asian Games Red Scarf Environmental Protection Group” (*Ying yayun honglingdai huanjing baohu dui*) and held all sorts of environmental protection activities. In Xicheng District, the 5<sup>th</sup> graders in all of the district’s elementary schools formed the “Red Scarf (Young Pioneers) Environmental Protection Brigade” (*Honglingbu huanjing baohu dadui*). Dongcheng, Fengtai, Shijingshan and Haidian elementary school students organized all sorts of education activities to popularize knowledge about environmental science and to raise the environmental awareness of youth.<sup>21</sup>

Leading up to and during the Asian Games, Beijing’s leaders showed more concern for the environment and its citizens were very active in environmental protection activities.<sup>22</sup> The government mobilized every citizen, from company presidents to factory workers, to become involved in the cleanup of Beijing. Personnel from district, county, city, and provincial environmental protection bureaus, as well as environmental workers from every street, village, township, and community committee worked overtime to make sure the city was clean. All of the environmental employees that had been laid off were called back to work. The municipality canceled all holidays for city, district, and county environmental protection managers.

The government set four main goals for environmental quality during the Asian Games (*si ge dadao*, 1) “no black smoke, no foul smells, nor soot on the ground; 2) cars on the road must meet emission standards; 3) drinking water must be clean; 4) there should be no environmental accidents.” This was the first time that the government had made these requests of enterprises, but it was not to be the last. For every major event in Beijing, the government has been successful in getting the city’s most polluting enterprises to suspend production so that Beijing’s skies could be blue for the events.

In 1992, the first annual “Green Streets Working Meeting” (*Jiedao Luhua Gongzuo Huiyi*) was called and over 6,000 people attended the meeting. “Green awards” were given out to individuals and units in several categories who performed well during last year’s “Green and Beautify the Capital City” campaign.<sup>23</sup> In 1992, the State Council Environment Protection Committee passed a decision that called for authorities in Beijing to mobilize the city’s citizens to clean up Beijing’s environment in anticipation of China’s Olympic bid.<sup>24</sup> Citizens were mobilized to clean up the city much as they were during the city’s Asian Games Campaign. In addition, the government kicked off the “clear skies” campaign (*huangtu bu lutian* – literally loess soil will not shroud the skies). Also in 1992, the government focused on completing

public works projects, strengthening government capacity and supervision, motivating public participation, training enforcement personnel, developing the administrative review system, aggressively pursuing fines that are due. Beijing increased the number of enterprises included in the trial water pollution permit system.

In 1993, the government focused on building the city's infrastructure, "realizing the five transformations," popularizing environmental awareness, getting laggard counties to incorporate environment work into governmental targets, continuing the "clear skies" campaign, responding to citizen complaints, beginning a trial for "clean production" facilities, and improving youth environmental education. There were several goals in "realizing the five transformations and propelling environmental protection work in the capital to a new level" (*shixian wuge zhuanbian, tuidong shoudu huanjing baohu gongzuo shang xin taijie*) campaign. First, overcome shortsighted thinking about environmental protection and correctly manage changes in environmental protection and development. Second, begin strictly enforcing the "three simultaneous" and total pollution control by surmounting the following beliefs "pollute first and clean up later" and "pollution is inevitable." Third, overcome the fear that economic development will slow down if environmental measures are implemented. Dare to manage courageously and strengthen legal and macro controls. Fourth, Overcome the planned economy management model and make environmental management more scientific and standardized. Fifth, overcome the fear of self-gratification and the fear of difficulty, strengthen environmental protection infrastructure, hold high standards and sternly demand transformation.<sup>25</sup> Each district and county came up with its own policies and slogans to implement this campaign. For example, Chaoyang district declared that development and economics could not trump environmental protection.

In addition, in 1993, leaders mobilized Communist Youth League members during a week-long campaign to "green and beautify" Beijing called "Green the Capital, Be the Vanguard, Contribute to the Bid for the Olympics" (*Luhua Shoudu Dang Xianfeng, Zhengban Aoyun Zuo Gongxian*).<sup>26</sup>

In 1994, the government concentrated on protecting drinking water sources, responding to citizens' complaints, and reducing water and air pollution. More enterprises were relocated, shut down or converted. Authorities urged increased participation on the Environmental Protection Target Responsibility System and strengthened the other eight-implementation measures. Authorities cracked down on companies buying and selling wild animal parts, reviewed implementation of the Wild Animal Protection Law, uncovered illegal pig killing and smuggling activities, and rescued wild animals from captivity. Environmental protection curriculum was added to the party school curriculum. Because there were several changes in governmental positions, education and training activities were stressed. Education and media shows and activities focused on several topics including protecting forests and wild animals, environmental laws and regulations, clean production, and environmental wrongs. Beijing became one of 5 provinces and municipalities to develop and promote green labeling for products.<sup>27</sup>

In 1994, Beijing's governmental leadership changed, so environmental protection officials put lots of effort into presenting Beijing's environmental

conditions and making suggestions to the new cadres in power. In addition, environmental protection authorities concentrated on training the new cadres about the city's environmental protection laws. In addition, the media worked more closely with environmental protection agencies to promote environmental awareness. The Central Television Station, Beijing Television Station and the city EPB worked together to provide programming for several newspaper stories and TV shows. These shows, including “*zhonghua huanbao shijixing*,” “*Jiaodian Fangtan*” and “*shifu yu shimin*” focused on 10 recent environmental wrongs, including building materials companies that had broken environmental protection laws, and parties that had dumped garbage in protected areas near water sources. In total, the media had over 365 environmental media stories and propaganda activities, a higher number than last year. In addition, the media published more exposes. The city Party Commission and government used over 30 pieces of information provided by district and county EPBs. Among those, city leaders wrote comments on 10, further promoting environmental protection work.<sup>28</sup>

In 1995, the guiding spirit for environmental protection was “seize opportunities, deepen reforms, expand opening, promote development, and maintain social stability” (*guazhu jiyu, shenhua gaige, kuoda kaifang, zhujing fazhan, baochi wending*). Law enforcement and supervision management structures were strengthened. The priority issues for the year were preventing air pollution and protecting drinking water resources.<sup>29</sup> Authorities initiated new and additional efforts to protect Beijing's drinking water sources. Again, this year, authorities focused on improving environmental quality and resolving citizen complaints. The city Environmental Protection Commission ordered the establishment of regulatory enforcement leading small groups. Authorities continued efforts to clean up polluting enterprises or relocate them. Environmental education programs and activities focused on preventing automobile pollution and raising the environmental awareness of youth.<sup>30</sup>

Citizens were mobilized to monitor environmental conditions before and during the Fourth World Women's Conference around Huairuo, to make sure the conference went smoothly. Measures were taken to increase government responsibility for environmental quality, such as revising regulations guiding the assessment system. For the conference, in 1995, the city government and EPBs mobilized 12,000 people to monitor polluting enterprises in each district and county, especially around Huairuo to ensure that the Conference would run smoothly. Several high-level officials participated on environmental law enforcement inspection teams.<sup>31</sup> Over 100,000 Communist Youth League members were mobilized to pick up delegates and their luggage, prepare information packets, clean up trash around the city, and plant grass and flowers.<sup>32</sup>

In 1996, Authorities strengthened environmental management measures, utilize efficient measures to reduce pollution, to complete public works, to resolve citizen complaints, to complete planned cleanup orders and other tasks, and improve the city's ranking in the Comprehensive Environmental Improvement Assessment System. Responsibilities for the 27 indicators in the assessment system were re-allocated and indicators measuring decreasing pollution levels were added. Assessment

implementation measures were strengthened. Tens of enterprises were either cleaned up, shut down, or relocated.

In 1997, Beijing and central officials revitalized efforts to clean up Beijing. The mayor emphasized that Beijing was the nation's capital and therefore should be a leader and a model in environmental protection efforts. Authorities concentrated on controlling air pollution, improving performance in the Comprehensive Environmental Improvement Assessment System, strengthening environmental regulations and enforcement. Beijing enthusiastically implemented the national campaign to close fifteen types of small scale polluting enterprises. The government banned the sale of leaded gasoline within the city proper. The government issued two notices calling for restricting the use of non-biodegradable food containers and certain types of plastic bags, requiring containers be recycled. The city government began to publicly report air quality indicators on a weekly basis. The theme for the year's "Greater Beijing Environmental Protection Drive" that included numerous media programs and articles, and inspection tours by high level officials and reporters, was "treasure water resources and protect our lifeline," (*zhenxi shuaiziyuan, baohu shengmingxian*) This year the China Environmental Protection Foundation and the Women's Federation were very active in supporting environmental education events through elementary and secondary schools. Other popular social organizations and schools supported other education activities.<sup>33</sup>

Of significance is that city officials began a trial period of reporting air quality indicators to the public on a weekly basis.<sup>34</sup> It is significant because it represents a new level of transparency in providing information to the public. Beijing was only one of a handful of cities to participate in the trial program that was later to be implemented in over 30 major cities.

In addition, a handful of citizen popular environmental social organizations had been slowly developing in the city and their efforts were beginning to be recognized. The government for their environmental protection education activities praised environmental social organizations like Global Village Beijing and Friends of Nature. The city Environmental Protection Foundation and the Women's Federation contributed a great deal in holding education activities aiming to get citizens to change their lifestyles and consumer habits at local elementary and secondary schools. A lot of volunteers showed up at the activities. The city EPB, the Beijing Environmental Protection Foundation and the Beijing Evening News joined forces to organize a public environmental survey (*gongzhong huanjing yishi wenzhuan diaocha*). The 1,187 returned surveys showed that Beijing residents cared about the environment and supported efforts to improve environmental quality.<sup>35</sup> During the next year, the government and the city's social organizations, EPB officials held a meeting with over 50 representatives of environmental social organizations and volunteers to discuss plans to clean up the city.<sup>36</sup>

In June of 1997, the Beijing government announced its campaign to wipe out "white trash" this included a notice requiring that "one time Styrofoam lunch boxes" be recycled. Beijing had "learned" from the experience in Wuhan where the government had banned the Styrofoam lunch boxes, but the campaign did not work because the government just banned the selling and the use of such containers, it did

not ban the production. The products that could be used as substitutes were more expensive than Styrofoam. In addition, governmental bodies themselves continued to use Styrofoam. The notice issued by the Beijing Municipal Environmental Protection Administration banned the production of such containers. Units that produced or sold the containers were required to recycle or get someone to recycle the used containers they sold, otherwise that unit would lose its license to manufacture and sell the containers. The industry had to act or perish. It worked in connection with the EPB to quickly set up the Beijing City “triumphant” environmental protection center. In September 1997, the center recycled 49 tons of the containers; in October, it recycled 170 tons, in November, it recycled 280 tons and in December, it recycled 283 tons. The recycling rate reached 50%, which was 20% more than the projected target.<sup>37</sup>

1998 marks a watershed year for environmental protection in Beijing. The State Council approved emergency measures to control air pollution in Beijing and the city’s environmental quality became a central government priority. In 1998, cleaning up Beijing became a national priority, primarily because of the upcoming 50<sup>th</sup> anniversary of the founding of the PRC and the city’s upcoming Olympic bid. The national government authorities made decreasing Beijing’s air pollution one of the 15 priority projects for the year and promised that Beijing’s summer air and water quality in the city proper should meet standards by 2002. The city enacted energy measures to achieve air pollution prevention targets including promoting the use of high quality coal, outlawing old cars, more stringent management of construction sites, and promoting the use of clean energy in busses.

Authorities called upon citizens to contribute to the effort. One popular slogan was “let us act to bring blue skies back to Beijing” (*rang women xingdong, huan jingcheng lantian*).<sup>38</sup> The municipal party commission, the Ministry of Propaganda, and the People’s Congress, Construction Environmental Protection Committee promoted the theme of “return blue skies to Beijing” (*hai shoudu yipian lantian*) during the 1998 capital city environmental protection drive. The drive’s supervisory group visited over 40 enterprises in 11 districts and counties, and issued about 160 essays.<sup>39</sup> In March, the Environmental Education Center, Mei Hou Corporation, and Beijing People’s Broadcasting Station held a series of 42 programs and interactive media events. Experts discussed environmental problems in some shows and in others, citizens were encouraged to call into the hotline to air their grievances and experiences. In addition, people nominated “green guards” and told stories of how these “green guards” had contributed to environmental protection work.<sup>40</sup>

In addition, further steps were taken to protect underground and above ground drinking water supplies. The city emphasized the need to eliminate “white trash” from the city. A very high number of enterprises were given deadline cleanup orders, over 1,125. 18 enterprises were either shut down or relocated. High-level officials from SEPA, NPC and CPPCC got involved in enforcement inspections.<sup>41</sup>

In 1999, Cleaning up Beijing’s air pollution remained a national priority. Zhu Rongji and Jiang Zemin declared that all the ministries under the State Council should cooperate in this effort. Even the People’s Liberation Army became involved in Beijing’s cleanup. The city People’s Congress passed other regulations to further reduce air pollution. The mayor declared that air quality index reports were to be

issued on a daily instead of a weekly basis. Reportedly, citizens responded well to the stepped up reports and they enthusiastically reported pollution violations.<sup>42</sup> With the help of the central government, the PLA, all levels of government, every ministry, each work unit, and all the citizens of the city, Beijing's air quality improved to be at least "level 3," 75 percent of the year.

While preventing air pollution was the major focus of efforts, other areas were not ignored altogether. The city Central Committee of the People's Congress passed several regulations and notices regarding the banning the sale of certain types of plastic bags and food containers that contributed to "white trash." The long-standing projects to protect the Miyun and Huairuo reservoirs were completed and some progress was made in cleaning up local rivers. Some advances in dealing with solid waste were made as almost 56% of the city sold waste was treated. The city revamped the environmental impact assessment process so it would be in accordance with national regulations. Beijing formed the "one control, two targets" (*yi kong shuang dabiao*) leading small group in accordance with the national campaign. Plans for Beijing's ecological infrastructure were drawn up and included short, mid, and long-term goals. The city Ministry of Propaganda, the city People's Congress, and the city EPB helped support the "1999 Capital City Environmental Protection drive" (*Jingdu dadi huanbao xing*) with the theme "let us work together, to return clear water and blue skies to Beijing" (*rang women gongtong xingdong, huan jingcheng bishui lantian*). This slogan could be heard everywhere. Again, numerous media outlets participated by leading discussions and in monitoring. Another popular slogan was "environmental protection begins with me" (*huanbao congwo zuoqi*). Levels of environmental awareness increased and citizens enthusiastically supported environmental protection efforts. A large number of "environmental protection model districts" (*baohu huanjing de xianjing shechu*) and activists came to the fore.

**Table A.1 Beijing Pollution Data: Changes Over Time**

Indicator	1990	1999
Comp.Env. Improvement Assessment System Score	70.1 (3 <sup>rd</sup> )	79.07 (17 <sup>th</sup> )
% effluent within standard	54%	83%
SO <sub>2</sub> emissions	340,000 tons (total)	161,674 tons (industrial only)
Solid waste produced	6170,000 tons	1,1610,000 tons

### Conclusions

One reason why Beijing has been relatively successful in achieving its environmental protection goals has been that from 1989, onwards, Street, Village, and Township Offices were included in the Environmental Protection Target Responsibility System and so signed "contracts" with relevant governmental organs. Including these "street level" organizations in the system heightened environmental awareness and stimulated more public participation. This is not to imply that

mobilized participation turned each and every citizen into an environmental protection activist, on the contrary, many people probably shunned mobilization efforts. However, the responsibility contracts brought more people into contact with the concepts and values associated with environmental protection than otherwise would have occurred.

Crucial to the efforts to build a citizen monitoring system and to provide environmental education, was the work of the education division or section within the local EPB, be it at the city or district level. The Beijing government and EPB supported education activities very early on and gained the authority to implement education plans.

### **Chengdu's Environmental History**

The city of Chengdu has had a long history and is currently the capital of Sichuan province, the most populous province in China. The word "Chengdu" means the "perfect metropolis." The city grew up around the Dujiangyan dam and irrigation system that was created by engineer Li Bing during the late Warring States Period (Zhou dynasty). During the Han dynasty, the city became famous for its craftsmen and artisans. Sometimes it is called "brocade city" because of its thriving brocade silk manufacturing and trade. During the 19<sup>th</sup> Century, Frenchmen called it the "Paris of China." Chengdu residents boast that the city has been the political, economic, military, and cultural capital of Southwestern China for over 2,000 years.<sup>43</sup>

The city is located on the Sichuan Basin and the Chengdu plain and is about 12,389 sq m, with the city proper being 87 sq. m. The city is mainly flat, with over 40 percent being plains, 28 percent being hills, and 32 percent being mountainous. It is subject to the Asian monsoon rains in the spring and it is relatively warm and muggy even in the winter, although it snows in the mountains occasionally. It gets quite hot in the summer. It gets an average of about 997 to 1300 cm of rain annually, but it is sunny for most of the year.<sup>44</sup>

The area is flush with water, both underground and above ground; 40 different rivers flow through parts of the city, so it is lush and green. The pride of the province, and the city, is the massive dam and irrigation system that channels the Du River on the Chuanxi plain. The system is credited with supplying plentiful drinking and irrigation waters to the entire province.

The area is known for its agriculture and over 37 percent of Chengdu's land is farmable. Crops can be grown year round and the largest products are rice, wheat, and cabbage. The area is also known for its Chinese medicine, its fruit, and tea.<sup>45</sup>

Chengdu's flora and fauna are abundant and diverse. Numerous endangered and rare species, including the panda, make their home in the area, which is almost 21 percent forest. Numerous national parks and wildlife refuges can be found there, as well as one of the International Heritage Sites.<sup>46</sup>

Chengdu has plentiful natural rock and mineral resources, which are quite concentrated in certain areas. In about 400 mines, over 60 types of minerals are found including iron, titanium, vanadium, copper, lead, zinc, aluminum, gold, silver,

strontium, marble, coal, and natural gas. Most of the coal deposits are along the mountains near Pengzhou, Dujiangyan, and Chongzhou city.

### **Administrative Development and Economic Growth**

Chengdu has grown significantly between the founding of the People's Republic and the present, both geographically and economically. It was among the first inland cities slated for development during the 1950s. At that time, the primary manufactured goods were machines and electronics. However, other types of factories were quickly established to manufacture automobiles, tools, construction machinery, chemical products, and wood products. During the subsequent decades, steel foundries and other heavy industry moved into the city. The city grew substantially in 1983 when it annexed Wenjiang prefecture. By 1993, the city ranked 11<sup>th</sup> among the 50 economically strongest cities in China. It is well known for its electronic, aerospace, airplane, machine manufacturing and gold foundries. It produces a fourth of the nation's seamless piping. 85% of the city's revenue is generated in the industrial sector. The ratio of light to heavy industry is 43 to 57.<sup>47</sup>

In 1989, the government designated the city as an independent municipality under the direct supervision of the central government, effectively limiting provincial control over the city. By 1993, there were 17 districts, counties, and small cities in the Chengdu Municipal area including Jinjiang, Qingyang, Chenghua, Jinniu, Wuhou, Qingbaijiang, and Longquanze districts; Dujiangyan city, Pengzhou City, Xia, and Chongzhou city; Wenjiang, Yan, Xidu, Dayi, Xinjin, Shuangliu, Jiantang, and Pujiang counties. That year, the city's population reached 9.08 million people, which grew to about 10 million by 1999.<sup>48</sup>

### **Chengdu's Environment**

Chengdu's environment has improved in some respects, but worsened in others. Between 1979 and 1988, the annual average milligrams of sulfur dioxide per cubic meter decreased from 0.15 to 0.07, but fluctuated greatly in the 1990s. The amount of particulate matter increased from 0.30 mg/m<sup>3</sup> in 1982 to 0.42mg/m<sup>3</sup> in 1988. By 1985 the heavy metals in the underground aquifers had been controlled to meet "2<sup>nd</sup> level" national standards.<sup>49</sup> The city had numerous chrome plating factories and as a result had quite a problem with chromium slag waste.<sup>50</sup> By 2000, air pollution had been stabilized to the point where air quality was at the second index level 51 weeks out of the year, and 92 percent of the city's drinking water met standard.

**Table A. 2 Chengdu Pollution Data: Changes Over Time**

<b>Indicator</b>	<b>1990 or 1992</b>	<b>1999</b>
<b>Comp. Env. Improvement Assessment System Score</b>	62.0 (15 <sup>th</sup> )	82.83 (6 <sup>th</sup> )
<b>% effluent within standard</b>	62% (1992)	66%
<b>SO<sub>2</sub> emissions</b>	43,420	47,544 tons

## **Environmental Protection Apparatus**

In 1972, the city created the Three Simultaneous Leading Small Group. It established an office, which carried out its day-to-day work. At that time, there were 12 people working at the office. In 1973, the Three Simultaneous Leading Small Group and the corresponding office became the Chengdu Environmental Protection Leading Small Group and the Environmental Protection Office (EPO) respectively. The number of workers expanded to 15. In March of 1979, the city formally established the Chengdu Environmental Protection Bureau (EPB) and employed 25 people. EPB replaced the EPO. The city established an environmental monitoring center station and began to conduct environmental monitoring of air, water, underground aquifers, radioactive wastes, noise pollution, and soil health.<sup>51</sup>

In the early 1980s, there were some setbacks and some victories for the development of the environmental protection apparatus in Chengdu. In September 1983, the EPB came under the purview of the Urban and Rural Commission of Construction and Management (*Shichengxiang Jianshe Guanli Weiyuanhui*) and was reduced to a division, although it kept the name of the Environmental Protection Bureau (EPB). In April of 1984, two Deputy Mayors were among 15 prominent Chengdu officials that formed the Chengdu City Environmental Protection Commission. In May 1984, the EPB once again became independent, although it was still a second tier organization under the Construction Commission. At that time, it employed 40 people. Several associated institutes were also established at that time including, the Chengdu City Ecological and Environmental Science Research Monitoring Institute, the Environmental Protection Scientific Research Institute, and the Environmental Pollution Supervision Institute. By that time, the environmental protection system employed about 248 people. Of that number, 68% or 169 people were technical people.<sup>52</sup>

Lower administrative areas in Chengdu were quick to establish their own EPBs. Xicheng district was the first district to open an EPB in 1988. Several other districts, counties, and small cities followed suit in 1989 including Jinniu, Longquanze, Dongcheng districts; Wenjiang, Peng, Dayi, Xinjin counties, and the small city of Dujiangyan. By 1989, 9 of Chengdu's 17 lower administrative areas had established EPBs. In 1990, after gaining the approval of the "City Organization Establishment Committee" (*Shi Jigou Bianzhi Weiyuanhui*) and the city government, four new environmental protection bureaus were established in Bei County, Qingbaijiang District, Shuangliao County, and Zongqing County. This brings the total number of EPBs in Chengdu to 13 (out of a total of 17). The remaining four districts and counties had EPBs in the planning stages.

In 1989, Chengdu became an independent city under the direct supervision of the central government (*danlie chengshi*), which provided it with more autonomy. At the provincial level, the EPB was still under the purview of the Ministry of Construction, and was so until 1996, but because Chengdu was a *danlie chengshi*, city authorities could grant the EPB more authority, so the EPB became independent earlier than it otherwise would have. In 1989, the Mayor, also the chairman of the Environmental Protection Committee opened the 3<sup>rd</sup> city wide Environmental Protection Meeting where he and other environmental protection authorities grappled

with how to reconcile economic and environmental protection goals. Also discussed was a draft of the “Chengdu City People’s Government Decision to Strengthen Chengdu’s Environmental Protection Work”.

In 1990, the “City Organization Establishment Committee” (*Shi Jigou Bianzhi Weiyuanhui*) approved the establishment of an “Environmental Protection Propaganda and Education Center.” The center was a county level “professional” work unit under the leadership of the city EPB and employed 15 people.<sup>53</sup> Within the EPB, the responsibility for education activities fell to officials in the Division of Organization and Personnel (*Zhuzhi Renshi Chu*). In addition, that year Chengdu strengthened the Environmental Supervision System (*Huanjing Baohu Jianchayuan Zhidu*) so that the whole city, every district, county, village, town, and street would participate (all three levels *yiji*- whole city; *erji*- districts, counties, and small cities; *sanji* – village and townships). That year, for the first time 59 inspectors were certified at the city and district levels.

In 1991, the city took major steps to upgrade its environmental protection industrial sector and increased the number of firms working in the sector to 100. Chengdu firms were often among those winning prizes for innovations in pollution prevention in 1991 and 1992. In addition, in 1992, 14 of Chengdu’s 19 districts, counties, and small cities got their environmental monitoring stations certified by provincial authorities. By 1993, two city-level and 17-district/county level monitoring stations received certification to operate (CMA – *Zhongguo jiliang renzheng*).<sup>54</sup>

In 1995, the EPB grew from eight divisions and offices to nine (Office of General Affairs, Organization and Personnel Division, Planning and Finance Division, Policy and Law Division, Construction Management Division, Pollution Management Division, Technology and Monitoring Division, the Office of Industry, and the Office of Records and Supervision. The number of employees increased from 39 to 55. In addition, that year, the city authorized the establishment of the “Chengdu Construction and Environmental Protection Supervision Unit” (*Chengdushi Chengjian Jiancha Zongdui Huanjing Baohu Jiancha Dadui*). The brigade was a “county level” administrative unit under the city EPB responsible for enforcement of environmental protection laws.<sup>55</sup>

In 1996, the city EPB became one of the “demonstration” organizations for the trial use of the new “*sanding*” organizational restructuring theory.<sup>56</sup> In addition, the EPB tried a new competitive system to hire 9 new employees from among retired military personnel and people out of a job because of industrial restructuring.<sup>57</sup>

Chengdu has two formal government-linked “social organizations,” (GONGOs) the Society for Environmental Science (*Huanjing Kexue Xiehui*) and the Environmental Protection Industry Association (*Huanjing Baohu Chanye Xiehui*). As of 2000, there were nine university student groups in the city and all of them networked with the education division at the EPB.<sup>58</sup> A burgeoning popular social organization, “Green Rivers Environmental Conservation Promotion Society” (*Sichuan Luse Jianghe Huanjing Baohu Zhujinhui*) became a registered group in 1999 (the Sichuan Environmental Protection Bureau was the sponsoring organization). The city and provincial EPBs work directly with GONGOs, student groups, and popular social organizations.

The city EPB works with numerous foreign NGOs and state actors on environmental protection projects, but all of these linkages were arranged through EPBs at the provincial and national levels.<sup>59</sup>

### **Chengdu's Environmental Protection Agenda and Major Campaigns**

In 1989, the EPB set up the “Environmental Protection Responsibility System” (EPRS), primarily based on the indicators set out in the “Urban Environment Rating System.” The Deputy Mayor represented the city government, the Economic Commission, Dongcheng District and Xicheng District Governments, the city EPB, the city Ministry of Construction, Ministry of Public Utilities, and several other ministries or bureaus in signing 10 Environmental Protection Target Responsibility System contracts.

The city started early to upgrade investment in environmental protection, and to relocate or modify heavily polluting enterprises. In 1989, investment in pollution prevention equipment in new, enlarged, or altered facilities was about 3.2%. In 1989, 62 pollution sources were fitted with pollution prevention equipment. In addition, 32 facilities, which had serious pollution problems and were the targets of citizen complaints were closed, forced to stop production, combined with other enterprises, forced to modify their production products, or moved to a different location. Facilities that moved included the Bingjiang Chemical Plant. Of these 8 were relocated. Other polluting enterprises, including the Seamless Steel Tube Factory, the Chengdu Alcohol Factory, and the Chengdu Textile Factory were all modified or outfitted with water pollution prevention equipment and so, were “basically” no longer a problem. In 1989, there were 256 electroplating facilities in Chengdu. After a year of research and experimentation, a research group, consisting of company representatives and EPB experts, came up with process that would eliminate hazardous chromium by six valence.<sup>60</sup>

In 1989, city authorities had several concerns regarding the environment. Even though air pollution was not the subject of the most complaints, Chengdu's reputation for air pollution was growing. And city residents called Chengdu “chendu” or “dust capital.” City, provincial, and national level authorities were quite concerned about the water pollution problems in the inner city districts. In 1989, the Environmental Protection Committee formed a 4-person inspection team that evaluated Chengdu's performance and determined priorities for environmental protection work. The priorities for the year included protecting water resources, reducing particulate matter, and providing proper guidance in the development of Village and Township enterprises. The city EPB conducted an environmental survey of the Dujiangyan dam and weir system as a first step in stepped up efforts to preserve the system and ensure good water quality.<sup>61</sup>

In the late 1980s, Chengdu placed emphasis on including environmental education into the regular school curriculum at the elementary and jr. high school levels. For example, in 1988, one district created an Environmental Small Group and principles from all jr. highs were called together to plan environment education strategies. Principles of each school became responsible for establishing a school education small leading group and implementing environmental education plans.

District educators worked with a provincial publishing house to create an environmental education book appropriate to the area's unique conditions. Middle school students were required to attend environmental education classes after their regular "test period" and then were tested on their environmental knowledge. Their scores were incorporated into their overall grade.<sup>62</sup> By the end of 1990, over 30,000 jr. high school students had received some environmental education.

Within the EPB, responsibility for education fell to officials in the Division of Organization and Personnel (*Zuzhi Renshi Chu*) until 1990 when the "City Organization Establishment Committee" (*Shi Jigou Bianzhi Weiyuanhui*) approved the establishment of an "Environmental Protection Propaganda and Education Center." The center was a county level "professional" work unit under the leadership of the city EPB and employed 15 people. Since 1989, in conjunction with Chengdu Evening News, the center has sponsored an "art contest" called "the environmental cup" (*huanjing bei*) to challenge peoples' environmental knowledge. Students send in poems, stories, and comics related to science, as well as paintings and pictures that promote environmental awareness. Over 400 students entered the first contest. The top 15 contestants were eligible to enter the nation wide contest.<sup>63</sup> The center received some financial support from the EPB, but the center's employees were also responsible for seeking funding from various sources themselves.

Starting in 1990, the center coordinated an "environmental protection education week" (*xuanchuan zhou*) during which time, the Environmental Protection Law was popularized through a number of activities. In addition, leaders from the city, from each district, county, and small city gave speeches on television commemorating the week. Other education efforts include TV programs about controlling air and water pollution, activities to promote awareness of the noise pollution law, tree plantings, and cleaning up trash along rivers and streets.

In 1990, the priorities for the year included developing the Comprehensive Environmental Improvement Assessment System, establishing the Environmental Protection Target Responsibility System network and achieving environmental protection targets, clarifying the responsibilities of each member of the city Environmental Protection Committee, advancing pollution mitigation efforts and strengthening environmental management.<sup>64</sup>

Chengdu qualified to be named one of China's "10 most hygienic cities" and was designated a "clean city" (*weisheng shi*) in 1990, which helped to put environmental protection and sanitation on the city's agenda.<sup>65</sup> Chengdu's designation as a "clean city" provided a good vehicle for enlisting the help of enterprises and citizens to improve the city's ratings in the national Comprehensive Environmental Improvement Assessment System. Throughout the early 1990s, authorities emphasized that the EPB needed to work closely with other ministries, needed to broaden education programs, and needed to mobilize the public to participate in "*weisheng chengshi*" activities. It was important to city officials that EPB officials mobilized the public to achieve good ratings in the Comprehensive Environmental Improvement Assessment System. Authorities told subordinates that this would help to build a strong relationship between the central party and the people. "There are concrete benefits in serving the public. Not only are there economic benefits, there are

also political benefits. If we provide good environmental quality, then citizens will be satisfied and they will see that the central government is working to serve them and will realize the advantages of a socialist system. So, us leaders need to pay attention to environmental protection to ensure economic and social progress.”<sup>66</sup>

Authorities utilized the city’s designation as a “clean city” to encourage work units and enterprises to focus on reaching their Comprehensive Environmental Improvement Assessment System infrastructure targets. Authorities strengthened the assessment system and consolidated industry. This year the overall “grade” for the city in the national system was 62.2. Although this was an improvement from the previous year, Chengdu still ranked 18<sup>th</sup> of 32 cities. Even Taiyuan ranked higher than Chengdu that year.

At the annual Citywide Environmental Protection Meeting in October of 1990, representatives discussed the Environmental Protection Target Responsibility System and the deputy mayor represented the governments of all 17 districts, counties, and small cities in signing responsibility contracts. The mayor declared that a priority goal was to integrate environmental protection work into economic and social plans, into daily work of every governmental sector, into each governmental target responsibility system, and in the official “grading and promotion” system.<sup>67</sup> City authorities set up the Environmental Protection Work Target Responsibility System Network” (*Chengdushi Huanjing Baohu Gongzuo Mubiao Zeren Wangluo*). This group decided which units were to participate in the responsibility system at lower administrative levels and established concrete measures to ensure targets were met.<sup>68</sup>

Other developments that year include the establishment of a city Automobile Emissions Management Office by the EPB in cooperation with the Public Security Bureau. The Bureau issued a notice regarding controlling emissions and Street Offices worked to check the emissions of thousands of cars. In addition, the city EPB, the Ministry of Agriculture, and the Ministry of Statistics undertook a survey of pollution sources in villages and townships. The Chengdu Shengtai Huanjing Keyan Jiancesuo completed a survey of endangered and rare plants and animals in Sichuan province and then undertook a report on flora and fauna in the Chengdu watershed.

In 1990, there were two relatively serious (*jiaoda*) accidents, in both inner districts and outer counties. The first occurred on November 21<sup>st</sup> in Shuangliuxian. A paper factory next to a stream, discharged wastewater that had not been treated, which seriously pollute the Luxi River. The second occurred on April 23<sup>rd</sup> in city when a solvent factory discharged ten tons of phenol and coal tar contaminating the Qingbai River. The first accident, the Shuangliuxian paper factory spill, polluted the water sources in the village and about 2,000 people exhibited symptoms of vomiting, fever, loss of appetite and diarrhea. The factory was forced to shut down on the 22<sup>nd</sup>, incurring severe economic losses. After the accident, city and county governmental and environmental protection bureau leaders went with the Ministry of Industry representatives to investigate the accident. They formed an investigative group consisting of environmental protection and other ministry officials to investigate and manage the accident. The second incident, the Qingbai River accident occurred when the Minjiang Dongli Rongji factory discharged tens of tons of phenol and coal tar into the Du River. The spill polluted the drinking water source for 10,000 people and shut

down the water supply plant for three days. All together, 78 mu (13 acres) of land were affected causing economic losses due to crop failure. A “portion” of the residents suffered severe symptoms including vomiting and diarrhea. Citizens complained loudly. Leaders from the EPB and the “epidemic prevention station” (*fangyizhan*) immediately went to the scene to investigate. The Minjiang Dongli Solvent Factory was “shut down and reorganized” (*tingchan zhengdun*).

Chengdu’s environment improved on a couple of fronts the next year. There were no “serious accidents in Chengdu in 1992, but there were three “relatively large” accidents.<sup>69</sup> Last year’s focus on the Comprehensive Environmental Improvement Assessment System worked, because the city went from being ranked 18<sup>th</sup> to being ranked 13<sup>th</sup> in the nation. Chengdu was the number one rated city in Sichuan province.<sup>70</sup>

Environmental protection obviously had stepped up a notch on authorities’ agendas because it was among the “10 high priority” projects for the city.<sup>71</sup> Authorities designated 78 enterprises for deadline cleanup orders. 20 enterprises that had been sources of citizen complaints were closed down, merged, altered, or relocated.<sup>72</sup>

The city Planning Commission and the EPB jointly issued the “Trial Regulations Regarding the Management of Chengdu’s Environmental Protection Planning” The regulations helped pave the way for environmental protection measures to be integrated into economic and social development plans and to balance environmental protection and economic growth. The regulation stipulated that environmental planning targets had to be met and that environmental protection work was one of the criteria by which districts, counties, small cities, and ministries would be evaluated. Also, it stipulated environmental protection criteria be included in enterprise promotions and in decisions to designate “exemplary work units.”<sup>73</sup>

In 1992, emphasis was placed again on improving Chengdu’s score in the Comprehensive Environmental Improvement Assessment System, especially in the areas of air pollution and noise pollution. The city moved up in the national ranks from 13<sup>th</sup> to 7<sup>th</sup> and again got the highest score of all the cities in Sichuan province. It was honored as being the city that made the best progress of all participating cities between 1989 and 1991.<sup>74</sup> It was voted the second “cleanest” city in the nation. Chengdu was among the top cities in the nation in terms of switching from raw coal to coal briquettes. Campaigns to make Chengdu a clean city tapered off in the mid-1990s because the objectives of such campaigns had largely been achieved.

Major investments were made to improve the environment of the town of Dawan in Qingbaijiang district, which is northeast of the city proper.<sup>75</sup> Over 13,000,000 Yuan was invested between 1992 and 1995. There were several aspects to the project including building a forested buffer zone between the industrial zone and residential areas, reducing hazardous air pollutants, water treatment plants, ethylene containment facilities. In addition, in 1992, the city passed local regulations to implement the national water pollution prevention law. The regulations were meant to help protect the city’s drinking water supplies. The city government issued rules relating to the management of underground water supplies.<sup>76</sup>

In 1993, Chengdu dropped a little in the National Comprehensive Environmental Improvement Assessment System rankings. This year Chengdu was ranked 11<sup>th</sup> of the 37 cities participating in the Comprehensive Environmental Improvement Assessment System and was the #2 ranking city in Sichuan province.

In keeping with the national trend to strengthen enforcement measures, Xinjin county court established a “resident” enforcement division (*zhixing ting*) at the county EPB. The division was charged with helping to implement regulations and to pressure reluctant actors to fork over money for the pollution levy system. Quickly thereafter, Qingbaijiang district, Xindu county, Shuangliu county, Longquanze district, Dujiangyan city, and Chengdu city established enforcement divisions (or offices) at local EPBs (or EPOs).<sup>77</sup>

1994 was the first year that the city tried out the socialist market economy system,<sup>78</sup> and while efforts to strengthen economic and environmental “infrastructure” continued, the city did not improve its standing in the national Comprehensive Environmental Improvement Assessment System rankings. It remained in 11<sup>th</sup> place. In the category of pollution prevention, the city ranked 26<sup>th</sup> (out of 37).

Authorities issued 105 deadline cleanup orders and invested more than 17,689,200 Yuan in the cleanups. 75 of these cleaned up voluntarily. Authorities took care of 13 pollution problems about which citizens loudly complained. 18 enterprises were relocated, closed, merged, or modified. In addition, officials held criticism and training sessions for 250 enterprises.<sup>79</sup>

Over the year, new Environmental Protection Target Responsibility System contracts were signed with 19 district, county, and small city governments. In contrast, only 10 city level ministries signed new contracts. Naturally, lower level extensions of these also signed contracts. A demonstration project for dealing with electroplating sludge was established in the city to combat the practice of illegal dumping of sludge.<sup>80</sup>

The city established a “quality inspection and supervision station” to ensure the quality of environmental protection industry products and environmental protection projects. In addition, the Chengdu monitoring center took samples of underground water aquifers to be tested in the 2<sup>nd</sup> national underground aquifer testing activity. Chengdu’s water passed in each category of tests. In accordance with requests from the UNEP, a training session was held for women regarding handling pesticides safely. The training was held at the UN University Technology Transfer Center in Sichuan province. The city EPB and the Environmental Education Center organized a study sessions focused on “China’s Environmental Protection Legal System Television Education Talks.” Over 300 people from 10 districts, counties, and small cities attended the study sessions. Of these 300, 232 passed required examinations.<sup>81</sup>

1994 was the first year that a Sichuan group of the national environmental protection enforcement investigation team visited Chengdu. The group examined environmental protection enforcement organs, the coal dust problem at the Chengdu power plant, the Chengdu seamless cooper tubing factory water pollution management, the Panda Reserve, the Dujiangyan dam and weir system, and the upper reaches of the city’s main river.<sup>82</sup>

In 1995, the city improved its standing somewhat in the national Comprehensive Environmental Improvement Assessment System. Chengdu was ranked 9<sup>th</sup> in the national system. The city still had severe air pollution problems, especially with automobile exhaust. Noise pollution increased, especially around construction sites. The EPB took care of 96 old pollution problems. Seven of these were closed, merged, modified, relocated, or temporarily shut down. The EPB planned to complete five deadline cleanup orders, but outdid themselves by completing eight projects.<sup>83</sup>

In 1995, the city Education Commission and the EPB circulated a notice calling on educators to organize environmental education activities for elementary and secondary school students around the slogan “leave some healthy land for younger generations” (*hai wo yipian jingtu*) for Earth Day and World Environment Day. District EPBs worked with over 20 work units and schools in the inner districts to set up environmental education “stations” around the city. Emphasis was placed on including environmental education in “social studies” classes (*shehuixue*). In addition, mobilization efforts were carried out through existing government sponsored social organizations such as the Young Pioneers (*shaoxiandui*) or (*honglingjindui*). “Environmental essay” contests (*huanbao zhengwen*) became a popular vehicle to promote environmental awareness among young people.

In 1996, the city EPB, the city Education Commission, and the Tongyi Corporation held a “*Tongyi Huanjing Bei*” (Tongyi Environment Cup). About 50,000 students from 200 different elementary and secondary schools in Chengdu’s 17 districts participated. 43 schools and 495 individuals won prizes for their paintings and prose on environmental topics. 77 of the participants got to go to Summer Environmental Camp activities.<sup>84</sup> Several other campaigns took place including the “Funan River Cleanup and Greening” campaign,<sup>85</sup> and various campaigns to that organized study sessions focused on environmental protection laws.

Elementary and Jr. High School students made various pledges during environmental protection campaigns including “be a transmitter of environmental protection knowledge” (*zuo huanbao zhishe de xiao xuanchuanyuan*); be a young guardian of flowers, grass, and trees,” (*zuo hua cao shumu de xiao jianhuyuan*); be a young protector of wild animals” (*zuo yesheng dongwu de xiao baohuzhe*); “be a young caretaker of your environment” (*zuo shenbian huanjing de xiao qingjiyuan*); “be a young supervisor of resource conservation” (*zuo jieyue ziyuan de xiao jianduyuan*).<sup>86</sup> Numerous slogans were employed to motivate support for environmental protection including “call upon everyone to act as loyal protectors of mother earth, environmental protection begins with me” (*haozhao dajia cong wo zuoqi, cong shenbian zuoqi, jiji xingdong qilai, zuo diqiu muqin de zhongcheng weishi*).

In 1996, the city maintained its rank of 9<sup>th</sup> in the national Comprehensive Environmental Improvement Assessment System. Some environmental problems worsened, however, including higher pollution levels in village and township enterprises. At the 13<sup>th</sup> City Environmental Protection Committee Work Meeting in April, committee members stressed the need to attract foreign and national investment, while prohibiting polluting enterprises from moving into the city. City authorities

closed down 434 enterprises that fell into the 15 categories of polluting enterprises the central government ordered to be closed down.<sup>87</sup>

In 1997, the city experienced growth of over 11% and some progress was made in controlling pollution. According to environmental protection authorities, however, the city's overall environmental quality was still short of national standards. The focus of environmental protection efforts remained the city proper and attention to agricultural villages lagged behind. In some areas, environmental degradation expanded. The continued use of traditional operating methods exacerbated the inefficient use of natural resources and high level of inefficient energy use. Financial resources for cleanup were at a critical level and technological know how was lacking. In addition, in some areas, the environmental protection system and apparatus was incomplete.<sup>88</sup>

Authorities forwarded several important environmental protection advancements. The city finally passed regulations to implement Agenda 21. The government outlawed the sale of non-biodegradable plastic food containers. Chengdu became one of the 12 trial cities to implement ISO 14000. In addition, it became one of the trial cities in the East Asian Acid Rain Monitoring Network (along with Chongqing). The first school in Sichuan province to participate in the GLOBE program opened in city. At the 4<sup>th</sup> city wide Environmental Protection Meeting, authorities approved the "Chengdu Government Decision Regarding Strengthening Environmental Protection" and generated four general policies. 1) Uphold both environmental and development policies together and strengthen the environmental legal system. 2) Uphold both urban environmental protection and protect the natural environment to improve environmental quality. 3) Utilize market measures to protect the environment and open up new channels of financing to raise more money to invest in environmental protection. 4) Adhere to the sustainable development line of thinking and the strategy of improving science and technology in the city.<sup>89</sup>

In addition, in 1997, the Education Commission and the EPB conducted a survey of 10 schools, grades 3-5 and their families (total of 3,000 students and 6,000 family members). The survey sought to find out how air pollution problems in different districts of the city influenced the health of students and their families. This was the second such survey since 1991. Not only did the survey provide information to authorities about the effects of air pollution, it also helped to educate citizens about environmental protection.<sup>90</sup>

In 1998, Chengdu enjoyed relatively good economic growth with GDP increasing by 10.1 percent over last year. Yearbook staff claimed that the city's environmental quality had been stabilized and Chengdu ranked 4<sup>th</sup> out of 46 cities in the overall ranking of the national Comprehensive Environmental Improvement Assessment System. The number of enterprises from which pollution levy fees were collected increased from 554 to 601. However, pollution levels continued to increase, especially in villages and townships. The city fell far short of reaching its goals for the national "yikong, liangzhi" (one control, two targets) campaign. The city had to designate over 50 deadline cleanup orders for the ninth five-year plan. Water flow in rivers decreased and drinking water supplies were in danger of contamination. Levels of acid rain increased and noise pollution from cars, construction sites, and enterprises

had not yet been controlled. Noise pollution was particularly bothersome to citizens. Wastewater seepage from landfills was still a problem and posed a health danger.<sup>91</sup> Starting in March of 1998, weekly air quality indicators were made public, which was considered "environmental and socially efficient."

In 1999, Chengdu's success at reaching the "one control, two targets" was lower than national average. Of Chengdu's 1,711 enterprises, 870 (50.85%) met standards. Of the 183 city level enterprises, 63 (34.34%) met standards. Of the 532 county level enterprises, 207 (38.90%) were up to standard. The city landfill contaminated both underground aquifers and rivers, which caused numerous citizen complaints in Longquanze, Qingbaijian, Jintang and other districts and counties. Over 1,000,000 have been affected by the contamination of water sources. Overall, however, Chengdu ranked 6<sup>th</sup> in the National Comprehensive Environmental Improvement Assessment System and got first place among Sichuan's cities. The system of environmental law enforcement was strengthened and the city created addition oversight measures of environment inspection teams.<sup>92</sup>

Environmental issues often show up in more general "spiritual and cultural development" (*jingshen wenming jianshe*) campaigns such as the "six nos" (*liu bu*) drive. This education effort attempted to get people not to "spit, throw trash, smoke in public, curse, damage public property, violate traffic laws, and illegally occupy public land."<sup>93</sup>

### **Taiyuan's Environmental History**

Taiyuan is the capital city of Shanxi province, which was once part of the center of Chinese civilization. During the Spring and Autumn Period (770-476 B.C.), the Taiyuan area was called Jinyang City. It became the capital of the State of Zhao during the Warring States Period (475-221 B.C.). By the 13<sup>th</sup> century, Taiyuan had developed into a prosperous city. Unfortunately, it lay directly in the path of northern invaders, so it was often the location of military battles.<sup>94</sup> When the Tang Dynasty fell, the area lost much of its vitality. Jinyang City was destroyed and a new city was built, Taiyuan.

Although 70% of Shanxi is mountainous, Taiyuan itself is flat. The city lies west of the province's main mountain range, and is surrounded on three sides by low mountains. Taiyuan is just east of the center of Shanxi province, which is landlocked and borders Hebei, Henan, Inner Mongolia, and Xiaanxi. Taiyuan's climate is somewhat different from nearby areas. The annual mean temperature is 9.5° C. It is not very cold in the winter and it rains mainly in the fall. There are a high number of sunny days and the area is very dry.

The city is cut in half by the Fen River, which runs north to south. However, the riverbed is dry much of the time. The Fen River does not have many tributaries; therefore, there is no influx of fresher water to dilute the river's pollution. In other words, the river has little capacity for bio-purification. The city faces daily water shortages and water is rationed. There is a project to divert water from the Yellow River to the city, but it will not be completed until at least 2003.<sup>95</sup>

For many years, the Taiyuan administrative area had five inner city districts, and one city, and three outer counties. By 1998, the administrative area had been changed significantly. The inner city became much larger and had 6 districts including Yingze, Xiaodian, Jinyuan, Wanbolin, Fencaoping, and Xianghualing. The outer city now includes three counties, Qingxu, Shouyang, and Yangqu, and two cities, Gujiao and Yuci.

In 1994, the whole city area had 41 “Subdistrict Offices” (*Jiedao Banshichu*), 1,155 Resident’s Committees (*Jumin Weiyuanhui*), 83 Town Committees (*Xiang or Zhen Weiyuanhui*), and 1,281 Village Committees (*Cun Weiyuanhui*).<sup>96</sup>

Taiyuan is the richest city in the province. In 1993, the per capita GDP of residents was 5,528 Yuan, but grew to 10,487 by 1998. Between 1989 and 1998, the population grew from 2.5 million to 2.9 million. In 1993, the population was 2,713,500, of which, 993,900 worked in agriculture and 1,719,600 worked in other sectors. Shanxi province is not rich, despite its ample natural resources, namely coal and minerals.

Taiyuan has been is a major national center for heavy industry for nearly a hundred years. In the early 20<sup>th</sup> Century, the Chinese began to industrialize the area around Taiyuan. The Japanese further built up industry in the area during their invasion of China in the 1930s. After 1949, the Chinese government concentrated on developing the area’s resources and industry.<sup>97</sup> Many of the early facilities were built without pollution prevention equipment because at that time, the health and environmental hazards were unknown. Water treatment facilities and other forms of infrastructure have not been built to keep up with the city’s industrial development, leading to more pollution. Not only are there very large scale polluting enterprises in Taiyuan, there are also many small and medium sized ones. While these enterprises were built in the suburbs, Taiyuan’s population has grown so much that these factories are now surrounded by residential areas.<sup>98</sup>

In 1992, the central government approved Taiyuan as an “inland open city” (*neilu shenghui kaifang chengshi*) and coastal city policies applied to the city. It was now open to overseas investment. In just one year, the city established 500 joint ventures with foreign companies. This opening marked a new phase in Taiyuan’s development and stimulated economic growth.<sup>99</sup> In 1994, the central government designated Taiyuan as an “international city.”<sup>100</sup> The goal was to transform Taiyuan into a modern international city by the turn of the century or a little beyond. Part of this transformation requires the city to “create the three optimums” (*chuang san you*), which are to “beautify the environment, provide excellent service, and maintain social order.”<sup>101</sup>

Taiyuan is the political, economic, cultural, and transportation center of Shanxi province and is still one of China’s main industrial cities. The four “pillar” enterprises, coal, metallurgy, machinery and chemicals are especially strong. It has developed a wide range of related industries including coke, mining equipment, machine tools, automobiles, fertilizer, paper, food stuffs, textiles, and electronics. Taiyuan is probably the biggest manufacturer of “special” steel (mostly stainless steel) in the country, but the metallurgical industry produces more than 5,300 different products. Taiyuan exports large quantities of aluminum ingots. The chemical industry can make 15 of the

17 major categories of chemical products.<sup>102</sup> Between 1992 and 1994, the percentage of GDP contributed by heavy industry decreased from 4.8% to 4.2%. Light industry increased from 60.4% to 60.8%. The service sector increased from 34.8% to 35%.<sup>103</sup> In addition, China's largest coalmines can be found around Taiyuan and nearby Datong. A third of China's known iron and coal deposits are located in Shanxi. Shanxi province is one of the three provinces, Inner Mongolia, Xiaanxi, and Shanxi, that make up the "black triangle" because of the abundance of coal, the designation as energy producing areas, and the black coal which has caused various forms of environmental degradation and pollution. The coal industry of Taiyuan is often held up as a development model in which large state-owned coalmines play the major role, but are supplemented by local and township mines.

The inner districts of Taiyuan, once small and compact, have expanded to meet previously isolated industrial areas. Polluting enterprises that have not been re-located further away from the city now surrounds the city proper. Taiyuan Iron and Steel Works (*Taigang*) is located just north of the most densely populated areas, which is unfortunate, because the winds blow northwest to southwest carrying pollutants into parts of the city. Taigang occupies miles of land and is a small city unto itself. Almost a 5<sup>th</sup> of Taiyuan's land area is devoted to various facilities connected to Taigang, including the Mineral Wool Factory, the Taiyuan Steel Manufacturing Plant, Taiyuan Coking Plant, Taiyuan Steel Machinery Factory, and Taiyuan Steel Research Institute. Other industries in the area include the Shanxi Chemical Plant, and the Jingan Chemical Plant. Other large enterprises that surround the city include the Taiyuan Heavy Machinery Group, Taiyuan Mining Machinery Works and Taiyuan Chemical Group.

### **Taiyuan's Environment**

Taiyuan is a classic example of a polluted city in the north of China. The city's pollution problems are exacerbated by the area's geography and the "unsound" (*buheli*) structure industry. In 1997, a World Bank report named Taiyuan's air pollution problem as one of the world's worst. It had six times the World Health Organization's standard for suspended pollutants. It had ten times the sulfur dioxide of LA. The main cause of this horrible air pollution problem is the burning of coal. Shanxi residents burn three to four times more coal than the national average per person. A lot of Shanxi's coal is very high in sulfur, exacerbating the problem. However, Shanxi and Taiyuan have little else to use as energy upon which to base their economic development.<sup>104</sup>

Reducing air pollution in and around Taiyuan associated with mining, processing, and burning coal has been the focus of national attention. The city became a center of air pollution research and monitoring during the 6<sup>th</sup> five-year plan. Even as early as 1984, when Li Peng applauded Gujiao's experience in coal mining, the area has been a priority city in environmental protection. In 1987, the city was the location for the first annual national air pollution prevention working meeting, further indicating that it was a priority for officials. The provincial government provided Taiyuan with special environmental protection financial assistance on an annual basis.<sup>105</sup> In the 1990s, there have been strong research efforts to reduce the area's air

pollution problems, including international project in clean coking technology, coal washing, flue-gas desulphurization, cleaner combustion technologies, coalmine methane, and coal conversion.<sup>106</sup> Despite international, national and provincial assistance, in 1999, Taiyuan's composite air pollution index still regularly topped the list among China's 42 major cities.<sup>107</sup>

There are certainly technological reasons for the slow progress in combating Taiyuan's air pollution problem. However, a brief review of the development of the city's environmental protection system and an analysis of the city's development and environmental protection agendas show that there are other reasons as well. The first thing one notices is that the inner city is still surrounded by heavily polluting enterprises, which have not been relocated as they have in other cities. Second, it becomes obvious that city government and environmental protection officials have been dragging their heels in implementing environmental protection initiatives, improving environmental management, building the capacity of the environmental protection apparatus, educating the city's leaders and citizens about the environment, encouraging public participation, and responding to citizen grievances. In essence, the ideology of economic reforms has somewhat hindered efforts to reach environmental protection goals.

### **Development of the Environmental Protection Apparatus and Taiyuan's Environmental Protection Agenda**

Taiyuan's environmental protection apparatus grew very slowly compared to other cities and the city government is largely responsible because it did not grant permission for specific committees and sections to be established and it was slow to incorporate environmental protection measures into the city's economic and social development plans. City authorities established the city Environmental Protection Bureau in 1976. However, the bureau did not really begin its planning or work until after the Communist Party's 3<sup>rd</sup> session of the 11<sup>th</sup> plenum in 1979. In the 1970s, only Shanxi University had an "environmental science research room." In 1982, the bureau designed the first three-year plan to prevent pollution. However, a five-year environmental plan was not incorporated into the city's economic and social development plans until 1991.

In 1983, there were institutional changes across the country, which placed the governmental agencies responsible for environmental protection under the jurisdiction of the Ministry of Construction. Many EPBs, including Taiyuan's, lost their independent status and became Environmental Protection Offices under the Ministry of Construction.<sup>108</sup> In Taiyuan, the environmental protection work was negatively impacted by this structural change. While the Taiyuan EPO became an EPB in 1989, it was still under the jurisdiction of the Ministry of Construction and remained so until 1994.<sup>109</sup> The 1990 Environment Yearbook asserted that Taiyuan created an Environmental Protection Commission in 1984, which was responsible for organizing, coordinating, and supervising the whole city's environmental protection work.<sup>110</sup> However, in actuality, the City Construction Commission probably carried out these duties.<sup>111</sup> Similarly, within the Taiyuan City People's Congress, the City Construction

Committee (*Chengjian Weiyuanhui*) was responsible for environmental protection matters.<sup>112</sup>

During the 1980s, while the city environmental protection structures remained impoverished, some progress was made in setting up pollution control measures and Taiyuan received support from higher levels. High-level provincial officials expressed support for environmental protection work in Taiyuan, including Provincial Party Vice Secretary, Wang Maolin<sup>113</sup> and Premier Li Peng. Li Peng praised the work in the coal mining area of Gujiao and proclaimed it a national model. The details of this “campaign” are discussed in the chapter on government-mobilized campaigns. The primary objective of EPO officials was to implement the “three simultaneous” policy on all medium and large development projects. In 1986, 1987, 1988, and 1989 the government focused on getting a handle on air pollution from boilers, building public sanitation facilities, and providing residents with heat. The “environmental science research room” at Shanxi University expanded into an Environmental Protection Department and a Biological Sciences Department. As early as 1989, environmental protection officials were aware of some of the barriers in achieving environmental protection goals. These barriers included the lack of environmental awareness on the part of governmental officials and the general public, the lack of EPB resources, capacity, and internal efficiency. While authorities were aware of these problems, it took years for them to be addressed, illustrating Taiyuan’s lack of political will to proactively pursue environmental protection goals.

During the 1990s, the Taiyuan City EPB improved its overall capacity somewhat, but it was not until the later half of the decade that significant changes were made in the environmental protection apparatus structure and in the environmental agenda. Between 1990 and 1994, the number of environmental protection authorities at all levels increased from 372 to 448.<sup>114</sup> Officials concentrated on enforcing the “three simultaneous” policy, establishing the Comprehensive Environmental Improvement Assessment System, and other pollution control policies. The primary focus for the first three years was on building the Environmental Protection Target Responsibility System. In 1989, the city Mayor signed a responsibility contract for the remainder of his term and then signed contracts with eight commissions and ministries, three inner city district governments, and 33 enterprises.<sup>115</sup> These numbers expanded to eleven commissions and ministries, eight districts and counties, and 30 priority enterprises by 1993.<sup>116</sup> In addition, during the 1990s, Taiyuan slowly built up its monitoring capabilities and was one of the trial cities for the Pollution Permit System, which began in 1990 and expanded in 1991.

In the early 1990s, environmental education activities were very basic and included character posters, plays, contests, expert symposiums, and anti-pollution campaigns. As with other cities, Taiyuan emphasized noise pollution prevention. There was no independent section of the EPB dedicated to environmental education, nor was there an Environmental Protection Education Center, which hindered education activities and was to have profound effects on the development of environmental awareness among both governmental officials and the general public.

During the late 1990s, some advances were made in building the EPB’s educational capacity. The structure of the EPB was modernized and independent

monitoring and education sections were established. Education campaigns were expanded and more citizens became involved in pollution cleanup projects and in “monitoring” polluting enterprises. The city began to participate in the national “green school program” in 1999. The first phase of the Fen River cleanup was completed. Authorities completed a survey of pollution sources in village and township enterprises. Significant advances were made in implementation and enforcement activities, including deadline cleanup projects. Supervision work was standardized, making it more difficult for corruption to occur. There was broader recognition that environmental pollution is a barrier to further economic development. Officials began planning for reducing the number of polluting enterprises inside the city and for restructuring the city’s industrial structure. Despite these structural and ideological advances, the city was still one of the most polluted in the world in 1999.

In 1997, officials pointed out that Taiyuan still had problems in achieving environmental protection goals because of the fact that some officials have limited understanding of basic national policies, sustainable development strategies, and the severity of pollution problems. In addition, they tend to focus on short-term interests, are unable to strictly undertake environmental duties and enforce environmental laws and regulations. Finally, there are financial and other resource shortages.

In the new millennium, provincial and city authorities have redoubled efforts to clean up Taiyuan’s image, focusing primarily on technological fixes. The city banned the sale of unleaded gasoline within city limits. In 2000, there was a major campaign to crack down on polluting enterprises, which demanded that they meet national emissions standards or close.<sup>117</sup> To avoid closure, Taigang alone reportedly invested 327 million Yuan on pollution control – more than in the previous 10 years combined. In 2001, “minibus” taxis (*miandiche*) were banned from the streets. New liquid natural gas powered buses are to be introduced. A large heating plant will be built to replace 150 existing coal-fired, highly polluting boilers. If pollution is “moderate” to “heavy” (level IV or V) on three consecutive days, authorities claim they will institute driving restrictions. In addition, the city is experimenting with tradable emissions permits.<sup>118</sup>

Throughout the 1990s, the same problems kept cropping up in Taiyuan’s efforts to slow environmental degradation, managing pollution, and cleaning up the city. While it was known early on that environmental awareness was lacking, the city dragged its heels in approving an independent environmental education section in the EPB. City officials were also relatively less responsive to citizen environmental grievances and officials displayed a weak legal ethic. There were relatively fewer opportunities for the public to participate in environmental protection activities. The role of public participation in implementation processes was not recognized until the end of the decade. Shanxi did not publish its version of Agenda 21 until 1999, five years after the national version was completed. One of the stated goals in the province’s Agenda 21 is to have 85% of the population understand the concepts behind sustainable development and to have 80% of the population participating in Agenda 21 related activities.

The director of one district EPB was more proactive than the others. He conducted his own environmental awareness survey of district residents. He worked

very hard to establish relationships with people in his community who showed an interest in environmental protection. He paid over 40,000 Yuan a year to provide books, the China Environment News and/or Shanxi Environment News to individuals, schools, enterprises, and People's Congress representatives in his district. He chose particularly enthusiastic people in the district's neighborhoods to work with him on environmental protection affairs and to be his eyes and ears on the streets.<sup>119</sup>

If Shanxi and Taiyuan are to meet environmental goals, more officials will need to be as proactive as the head of the Yingze District EPB, to be more responsive to citizen grievances, allow opportunities and organizations for the public to constructively participate in environmental protection activities, and recognize the importance of participation in implementing environmental laws and policies.

### **Taiyuan's Environmental Campaigns**

Of the three case cities, Taiyuan's governmental and environmental protection authorities sponsored the least number of environmental campaigns, placed the least emphasis on environmental education, and did not encourage public participation in environmental protection affairs until the late 1990s. As a result, there was far less public participation in any of the available channels in Taiyuan when compared to Beijing and Chengdu.

#### ***Gujiao Jingshen and Li Shuangliang Jingshen Campaigns***

It is ironic that a couple of the most famous national environmental campaigns, "*Gujiao Jingshen*," and "*Li Shuangliang Jingshen*" (or *Li Shuangliang daolu*) are based on experiences in the Taiyuan area and did not seem to have much of an effect on overall environmental quality in the city. The first is particularly famous. To this day, officials invoke the "*Gujiao Jingshen*" (Spirit of Gujiao) slogan to remind people to copy the model of Gujiao and to promote respect for and adherence to environmental laws and policies.<sup>120</sup>

Other than the two examples outlined above, Taiyuan had very few environmental campaigns in the 1980s. One of the few campaigns was based on the national example of a special "environmental protection month." Taiyuan had an environmental education month," but the campaign drew little attention. Other campaigns that were initiated were very targeted and involved mainly government officials and enterprises. For example in 1985, there was a campaign to clean up the "one noise, two skies, and three streams" (*yi sheng, er qi, san gushui*). Cleaning up the "one noise" (pollution) referred to switching loud car horns for quieter ones. Cleaning up the two skies referred to cleaning up the yellow smoke from the Taiyuan Fertilizer Company and the red smoke from Taigang. The targets of the water pollution campaign included Taigang, the Taiyuan Paper Company, and six hospitals.<sup>121</sup>

1990 alone stands out as the only year which educational activities are mentioned in the yearbook until the mid 1990s. This indicates that the Environmental Education Center was still up and running. That year, the city EPB worked with local artists to put on the "sound of environment" (*huanjing zhi sheng*) play. EPB officials worked with the State Education Commission to sponsor the "Environmental Cup" a sports contest. Officials also sponsored environmental literary and painting contests.

The city “Society for Environmental Science (*Huanjing Kexue Xuehui*)<sup>122</sup> invited environmental experts to participate in an informal symposium. Also during 1990, the city held a campaign called “Control Noise Pollution Month.” This no doubt coincided with school entrance examinations. Typically, in cities around the nation during examination time, city officials attempt to create “ideal” conditions for students. The city government circulated a notice strictly controlling noise pollution. In addition, the City Environmental Protection Committee organized a “war on noise” with the help of the City Commission of Construction, Commission of Finance, EPB, and Ministry of Public Security. This group worked closely with the media. The group conducted surprise inspections at night, investigated citizen noise complaints, and published the names of offenders in the paper. This month long campaign spurred momentum in the public’s role as monitors.<sup>123</sup>

By 1997, Taiyuan was famous in the international community as being one of the most polluted cities in the world. The New York Times mentioned the horrible environmental conditions in Taiyuan in an article on the dirtiest cities in the world. By 1998, city officials were facing more pressure from central authorities to clean up the city and were embarrassed by Taiyuan’s now international reputation as one of the dirtiest cities in the world so, they launched a program to “clean up Taiyuan’s image” (*Taiyuan yao xilian*).<sup>124</sup>

To polish Taiyuan’s tarnished reputation, the Mayor announced that it was time to clean up Taiyuan’s environment; it could not be put off anymore. Also, it must be done so under less than optimal conditions. “Taiyuan’s pollution is extremely serious, there is a lack of funding, state owned enterprises have hit hard times, and most of the polluting enterprises in Taiyuan are managed by the province”<sup>125</sup> (so there is a limit to what the city can do about them). He laid out the order in which environmental protection goals were to be met and for the first time, more emphasis was placed on restructuring or relocating polluting enterprises.

## Appendix B - Environmental Casebooks Description and Analysis

### Data on Environmental Dispute Cases and Associated Implications

Air and water pollution cases are included in the survey and originate from four distinct casebooks compiled and written by professionals who have some expertise in environmental disputes. These casebooks include data on cases from the early 1970s through the mid 1990s.

A survey of cases from different time periods will tell us a great deal about the development of the environmental dispute resolution system, the changes in the ways environmental disputes were handled and viewed by authorities, and how outcomes changed over time.

### First Casebook

The first casebook is entitled *Huanjing Jiufen Anjian Shili*. The Environmental Law Institute at Wuhan University published the book in 1989. The Institute is associated with the now defunct National Environmental Protection Administration (NEPA). NEPA was upgraded to a “near ministerial” status in March of 1998 and was renamed the State Environmental Protection Administration (SEPA). At that time, the head of SEPA, Xie Zhenhua, received a minister’s portfolio. The Environmental Law Institute has national compendia of environmental disputes that were voluntarily sent to them by environmental protection bureaus and judicial organs from around the country. The Institute has run training workshops for Environmental Protection Bureau staff from different provinces and municipalities regarding the complexities involved in environmental disputes

The initial impetus for the casebook came from the National Commission on Education. At the time, there was a need to teach students about the emerging field of environmental law and the special characteristics of environmental dispute cases.

The commission requested that Zeng Zhaodu, a scholar at Wuhan University Environmental Law Institute, edit a casebook that could be used as a textbook by students at the university level. Zeng Zhaodu had collected data on many cases from all around the country. He chose 164 cases which he felt were “classic.” “Classic” cases would include those that are “model” cases and those that are representative of the special characteristics of environmental disputes.

The casebook is divided into two parts. The first part contains cases that were handled through “administrative means” (*xingzheng anzi*). The cases are listed in chronological order. Several cases were chosen for each year. The second part contains cases that were handled through the judicial system. The cases are then further categorized by the environmental medium involved (air, water, solid waste pollution etc...). Again, the cases are in chronological order. There were very few cases channeled through the courts during the 1970s and early 1980s included in the casebook, so all of these cases are included in the survey. The cases illustrate the variety in the nature of disputes that occurred in the past, their causes, and the proper administrative response. The cases illustrate the finer points of environmental law as they relate to environmental disputes. The titles of each case describe the reason why

the environmental damage occurred and thus used as a form of moral exhortation or warning.

One might assume that because the Wuhan Environmental Law Institute is associated with the governmental environmental protection apparatus that the cases may be biased in that they show the environmental protection officials in a favorable light and focus on cases that have a “happy ending”. However, this may not necessarily be true. After all, a scholar and not a governmental official compiled the casebook. In several of the cases, citizens affected by the air pollution reported the problem to the polluting enterprise and the local government, but their complaints were left unheeded. Even when the local environmental protection office got involved, the relevant work units and ministries often ignored the complaints. This illustrates the unresponsiveness of the local government to citizen demands and environmental protection office’s low level of authority relative to other governmental bodies and the willingness to disclose this to the public.

### **Second Casebook**

The second casebook entitled *Huanjing Jiufen Anli* (Environmental Dispute Case Studies), was written by, Yue Yongkang, the director of the Guizhou Provincial Environmental Protection Bureau. The China Environmental Sciences Press published it. Scholars from Guizhou University, Beijing University, and China University of Politics and Law reviewed drafts of the book. Director Yue, who has a strong interest in environmental law and collected data on all of the cases. He divides the book into several sections based on the case’s legal category: administrative, civil, criminal, mixed, and misjudged. Each section has examples of environmental cases involving different mediums including air, water, and noise pollution, solid waste pollution, and poaching. The order of the cases is primarily chronological and secondarily according to the pollution medium.

The author compiled and wrote the book to popularize environmental protection and to help improve the implementation of environmental laws. The author intended the book as a tool to help train personnel in environmental protection bureaus; factories; mining operations; enterprises; village and township enterprises; and justice departments, workers, and managers how to manage environmental disputes.<sup>126</sup> The cases are “classic” examples of more serious environmental disputes from various regions of the country, which have some “practical” meaning.

The direct connection of the author to the governmental environmental protection apparatus may raise the probability that the cases chosen will reflect the environmental protection apparatus in a favorable light.

### **Third Casebook**

The third casebook is entitled *Zhongguo Huanjing Dianxing Anjian Yu Zhifa Tiyaoyao* (Classic Environmental Cases in China and a Synopsis of Implementation). The primary editor of the third casebook was Xie Zhenhua. He worked with two other assistant editors and a number of contributors who are scholars of environmental law or work in China’s environmental protection apparatus. The China Environmental

Science Press published the book in 1994. The editors categorize the cases by type of law: criminal law, administrative law, civil law, and cases involving foreign nationals.

The editors hope the book will be used as a reference by anyone who may be involved in managing environmental dispute cases. The book's 100 cases are "classic" cases and occurred in various parts of China. One of the goals of the book is to share the experiences of enforcement officials from different parts of the country with their colleagues. The editors hope their reference book will strengthen the implementation of environmental laws, help to make implementation more based on law, and help to improve the standard of environmental supervision and the quality of enforcement officials.

Finally, the last cases are taken from a larger volume entitled: *Huanjing Jiufen Fangfan Yu Chuli Shiwu Quanshu* (Environmental Disputes: A Practical Guide for Prevention and Management). The *Zhongguo Yanshi Chubanshe* (China True Word Press) published this compendium in 1999, which contains many of the laws relevant to environmental disputes, a general discussion of China's legal system, and chapters outlining dispute resolution processes. The 47 cases included in the compendium are categorized by legal type, civil, administrative, and criminal.

The editors of the compendium come from a different background than the editors of the previous casebooks. This volume's lead editor, Wang Manzhuan, is a Ph.D. in the Environmental Economics Research Institute at Renmin University. There are two assistant editors: Li Tianwei, a Ph.D. at the Center for Environmental Assessment Engineering associated with the State Environmental Protection Administration; and Zeng Jingang, a Ph.D. in the Environmental Economics Research Center at Renmin University. Other contributors to the volumes include experts from China University of Politics and Law, the highest level of the People's Court, and the State Environmental Protection Administration. These editors are not environmental law scholars, but they are nonetheless engaged in work, which would require detailed knowledge and understanding of environmental laws. The editors note the trend is that environmental disputes increase in number each year. They believe the majority of disputes arise because: 1) enterprises ignore environmental laws and emit pollutants beyond what is allowable; 2) environmental protection officials either do not enforce laws or they act in an improper manner.

The editors compiled the compendium as a reference to be used by environmental protection organs at all levels, public security agencies, the People's Courts, the People's Procuratorate, and enterprise personnel on how to prevent and manage environmental disputes.

### ***Assumptions and Implications***

It was assumed that all of the pertinent information regarding a case was included in the case write-up. For instance, if the case write-up did not include information about compensation for the victims of pollution, then it is assumed there was no compensation given.

Each casebook targets an audience that is inclusive of actors from a number of professions, which may not always be on the same side of an environmental dispute.

This indicates that a bias in one direction by the editors is less likely; all actors are equally praised and criticized.

Different people edited each of the four casebooks, so any bias in case selection caused by one individual is minimal, or at least “diluted” by the use of four sources.

## Appendix C – National Environmental Dispute Data

**Table C. 1 National Dispute Data (1990-1999)**

Year	Total Disputes	Air Pollution	Water Pollution	Noise Pollution	Solid Waste	Other	Compensation (10,000 Yuan)
1986	128,823	39,752	33,644	30,500			5,265
1990	131,851	48,878	32,654	33,423	8,208	7,125	9,743
1991	111,359	36,340	35,331	27,814	3,935	7,939	4,109
1992	95,309	35,027	21,606	28,517	3,079	7,080	5,190
1993	98,207	35,585	22,999	29,862	2,910	6,851	4,124
1994	107,338	33,537	59,848	35,410	3,322	6,903	4,451
1995	109,650	38,433	22,688	39,991	3,684	5,835	3,855
1996	114,982	40,432	19,885	43,025	3,978	7,009	2,624
1997	135,226	47,244	23,825	54,921	3,606	5,630	2,694
1998	187,924	63,739	28,279	85,017	4,618	6,271	1,852
1999	252,398	88,924	33,369	116,484	7,176	6,445	2,116

Data for this table came from Canfa Wang, Kezhu Xu, and Min Liu, "A Summary of Policy and Legal Analysis on Dealing with Environmental Disputes in China," *Studies on Environmental Pollution Disputes in East Asia: Cases From Mainland China and Taiwan*, Canfa Wang, Jing Hu, Tadayoshi Terao, Kenji Otsuka, Kezhu Xu, and Min Liu, (Chiba, Japan: Institute of Developing Economies, Japan External Trade Organization, 2001). It is based on statistics contained in the Annual Environmental Statistics Gazette published by the National Environmental Protection Agency of China.

As Wang Canfa points out there are a few caveats attached to the data. It pertains only to disputes mediated by EPBs at various levels and does not include disputes resolved through the courts and by other administrative agencies. Likewise, the compensation figures do not show awards made in court cases or for disputes resolved by other administrative agencies.

The numbers of environmental disputes are masked because of record keeping strategies. It is unclear what percentage of "environmental complaints" are disputes mediated by the EPB. In addition, it is unclear how many disputes are settled through the courts because statistics recording court cases do not disaggregate the numbers of environmental disputes from other categories.<sup>127</sup> The number of disputes is extremely close to the number of complaints each year, but disputes are theoretically different from complaints. Added together, complaints and disputes equal the total number of environmental citizen grievances. As with the number of complaints, disputes declined slightly in 1991 through 1993. Wang Canfa attributes the decline to a corresponding decline in economic development and a change in the type of enterprises developed after 1989. Wang Canfa attributes the steady increase in the

numbers of disputes from 1994 through 1999 to higher pollution levels and greater citizen awareness of pollution.<sup>128</sup>

## **Appendix D – Environmental Dispute Cases**

### **Environmental Dispute Cases**

#### **1) Lanzhou Dispute Leads to Tragedy<sup>129</sup>**

In 1993, villagers living downriver of the Lanquan Chemical Company in Lanzhou, Gansu province, complained that the plant's sulfurous effluent had polluted the local water supply, poisoning fish and livestock and causing many local residents to suffer from dizziness and respiratory illness. Municipal authorities moved to halt production at the company on several occasions, but each time their demands were ignored by the plant's politically connected managers. Left with no other recourse, frustrated local residents took to the streets last August 14, sparking a pitched battle between demonstrators and an army of chemical plant worker. Hundreds of riot police eventually restored order, but not before two people were killed and a dozen wounded.

#### **2) Smoke, Dust, and Noise Pollution Impact Citizens' Lives in a city in Jiangsu Province**

In November of 1980, a Mr. Chou from the city's fuel oil machine factory in a city in Jiangsu province came to the EPO to complain about the dust, noise, and smoke from the copper furnace in this factory's foundry workshop. Mr. Chou lived in the Zhongxingang Eighth Brigade, which was separated from the foundry by a wall. Mr. Chou's main complaint was that the factory moved the copper furnace from another location in the factory and put it next to the foundry workshop. When the furnace was fired up, the smoke would affect several of the resident's homes. In addition, the low height of the wall, the sound and the dust all affected the residents. He hoped that the factory would relocate the furnace.

On November 26<sup>th</sup>, officials from the EPO along with representatives from the monitoring station, and the Health and Disease Control Station went to inspect the situation. They found that the noise pollution was excessive, and the dust emissions exceeded the national standards. The smoke and fumes from the furnace also were excessive. The EPO requested that the factory take measures to mitigate the dust, noise, and other pollution. The factory was enthusiastic about resolving the problems. BY May 1981, the factory had made a noticeable improvement in reducing noise and dust pollution and was in the process of implementing measures to reduce the remaining pollution problems. During this process, a leader from the Eighth Commune Brigade put forth an order commanding that the factory could not build the wall higher than 3.5 meters and requested that the factory move the copper furnace. The reason for this being that the wind would be blocked by the higher wall and the poisons from the copper furnace would no longer be harmlessly blown away, causing harm to the workers in the eighth Brigade.

Around this same time, the workers of the eighth Brigade tore down the wall and while the furnace workers were working, they poured night soil across the remaining wall into the factory. This affected the production work at the furnace (probably because of the smell and the muck). Because of this, the furnace workers requested that the environmental monitoring station repeat the test to see if the emissions from the furnace were poisonous. If the emissions were poisonous, then they would move the furnace; if not, then they would not move it.

While the testing was going on, a member of the commune once again poured night soil into the factory area. On June 6th, the EPO went to the area to convince the commune members not to resort to illegal means to resolve the dispute and to convince them to allow the factory to build the higher wall. The results of the monitoring tests indicated that the emissions were within standards. However, in order to ensure that the smoke did not harm citizens and to help repair the guanxi between the factory and the masses, the authorities requested that the factory move the furnace. The factory agreed to the request. In order to promote legal awareness, the EPO mailed copies of the future monitoring reports to the commune, the district public security bureau, the Yaxi Paichusuo, and to Mr. Chou. The EPO reminded the members of the commune that if there were a problem with pollution in the future, they should go to the proper governmental authorities to complain, and not take illegal steps to resolve the problem. They also suggested that the relevant governmental bureaus in the area should be supportive and enthusiastically work together with the members of the commune to improve their thinking. The final suggestion put forth by the EPO was that the commune member's homes not be moved; the factory should build up the wall three more meters; the factory should move the copper furnace; and the factory should reimburse Mr. Chou the money they deducted from his salary for the "night soil" incident. With these measure, all parties felt they had reached a satisfactory resolution to the dispute.

### **3) Strange Sickness Besets Village Due to New Waste Dump in Chengdu<sup>130</sup>**

The "incident" occurred in Wenjiang Yongquan Zhen Shuang Cun in 2000 involving a solid waste dump that the County Environmental Sanitation Management Institute built on "twice rented" land. In January of 1999, Shuang Cun San Zu rented nine mu to the Jiang Mou Gao Nursery. Later that year the company built a cement pool to raise fish. It then leased the land to the County Environmental Sanitation management Institute. In January of 2000, dump trucks started delivering trash.

It only took a few months for the nearby water wells to become polluted. Over 1,000 farmers put up with foul smells, polluted water, and swarms of flies for months. The head of the Institute claimed that he wanted to improve the conditions at the dump, but before he could take the necessary steps, the site had already become polluted. On April 20<sup>th</sup>, residents finally took matters into their own hands. Residents first blocked trash trucks from entering and then commandeered the truck. The truck driver found some people to help him get his truck back. A fight broke out and three villagers were hurt.

The residents called the Sichuan Youth Daily hotline to complain and hired a lawyer to file a suit. When the reporter arrived at the location, hundreds of residents gathered around. One woman claimed she had become ill from drinking the water, but her doctor could not diagnose her illness. Seventy percent of the residents claimed to have suffered ill effects from drinking the water.

At some point the County Committee and the County Government got involved. They consider the matter important and are working to clean up the area. The head of the sanitation institute has proclaimed that if need be, the dump will be closed. The residents have still hired a lawyer, who claims that the institute has broken various environmental laws including the “PRC Environmental Protection Law” and the “PRC Water Pollution Prevention Law.” The residents are suing for damages and demanding that the relevant ministry cease its “infringing behavior.”

#### **4) A Tuoli Coal Sifting Facility is a Constant Nuisance<sup>131</sup>**

Tuo Li Zhen is about 35 kilometers southwest of Beijing proper across the dry Yong Ding River. It is only a few miles away from the mountains of Fangshan District. Fangshan District is southwest of Fengtai District, which is home to many of the polluting enterprises still left in the “inner” suburban Beijing districts. It is zoned for industrial uses, which has created a very different development path for this area, compared to other areas around Beijing that are zoned for farming.

Tuo Li Zhen and the surrounding area has been home to several industrial enterprises and at least three major companies which have set up “coal sifting” and sales stations. Two of these companies are the Beijing Shi Mei Co and the Beijing Municipal Difang Meitan Kaifa Jingying Gongci (local coal development operations) (hereafter called Di Mei). Shi Mei closed most of its operations at the Tuo Li facility in the fall of 1999, although a skeleton crew still operates there and the company still has piles of coal on its property.

Housing for the companies was built in close proximity to the areas where coal is dumped by 10, 15, 50, 60, and 70-ton dump trucks, which bring in the coal from the mountains. The housing for Shi Mei and Di Mei is only meters away from where Di Mei stockpiles and “sifts” its coal. Housing consisted of two buildings. Two long single level buildings with about six units and one several story building just behind the lower building.

Di Mei completed its stockpiling facility in 1988. It expanded it in 1991 and again in 1993. The residential dwellings were built in 1986 and had all the proper approvals. Di Mei purchased one row of single level residential dwellings in 1993 and built offices and quality inspection facilities.

The road leading to Di Mei’s truck scale and uncovered storage area passes right by one end of both housing units. Trucks passing the housing units are very loud, with the 70 tonners being the loudest. The trucks cause the windows of the taller building to vibrate. The road itself has been torn up by the weight of the trucks and is covered with coal bits and dust.

In 1998, several residents contacted the Fangshan District Environmental Protection Bureau to complain about the noise pollution from the trucks and the “sifting” machines, and the coal dust pollution from the trucks and the facility. The EPB requested that Di Mei put tarps over the coal as it was being transported, that the company should wet the road to keep the coal dust down, should only operate during business hours, and put up protection over the piles of coal so that coal dust would not blow over into residential apartments. While Di Mei would satisfy these demands during inspections, most of the time the company ignored the demands. The residents continued to complain to the EPB and to relevant district and city ministries and governmental offices. Di Mei is a well off company with some influence, so authorities did not act on the complaints.

In 2000, the residents filed a civil case against Di Mei. The residents claimed the facility was breaking the noise pollution and air pollution laws and sought to get the company to stop its polluting behavior and to pay the court costs. The court refused to hear the case saying it should be taken care of through administrative means. The residents appealed the case.

The residents appealed to Beijing city court, which ruled that Fangshan district court should re-investigate the case. The Fangshan court accepted the appeal and in July of 2001 announced its ruling. It found that there was particulate and noise pollution and that there was some impact, but that it was within national standards. The defendant voluntarily gave each person 1,200 RMB. The plaintiffs had to pay the court costs of 921 RMB. The resident were not satisfied with the ruling and appealed once again. The residents lost the second appeal, but continue to complain the EPB and relevant governmental departments.

### **5) Cancer-Stricken Chinese Village Tries to Pierce a Wall of Silence<sup>132</sup>**

The village of Dragon Range in the Qin Mountains in Xiaanxi province is primarily a farming village, but there are four factories on the edge of town. The two fertilizer plants, a radio plant and a steel mill were built between the 1960s and the 1980s. Villagers have only recently come to realize that these four plants are probably responsible for the astronomical cancer rates that have plagued the village since the early 1970s. For years, the villagers thought their home was cursed. According to village records, of the 59 people who died in 1974, 36 or 60 percent, of them died of some type of cancer. Different types of cancer, liver, lung, throat, and stomach, affected people of all ages. Nationally cancer accounts for 15 to 19 percent of deaths in rural China.

In January of 2000, Wan Yinggong, a recently elected village chief decided to do something about the village’s problem. He called a community meeting to which all thirty families of the village attended. They all signed a petition requesting an investigation of the possible link between pollution and the high cancer rates. He sent it to the county government and several local newspapers. County officials came to the village and collected water and food samples. The officials never returned and never notified Mr. Wan of the results of the investigation.

A reporter in Xian did publish the story and called a fellow reporter in Beijing named Zhang Yi who worked for the Beijing Youth Daily. Zhang fought with his editor to get permission to visit the village. He made the trip and wrote an article about the “Caner Village.” As a result, other reporters followed suit. A young environmental activist named Lin Yi, a member of Friends of Nature, was moved by Zhang’s story and called him. Zhang put him in touch with another caller, a scientist at the Chinese Academy of Geological Sciences, named Lin Jinxing.

The activist, Lin Yi went to Dragon Range to collect samples for the scientist to analyze. Lin examined the samples and found level of lead and arsenic in the flour and soil that far exceeded safety standards. He called the village and told the citizens his findings. Beijing Youth Daily reported his findings.

In May of 2001, a reporter for the official New China News Agency filed a report on Dragon Range for internal circulation. Deputy Prime Minister and Politburo member Wen Jiabao read the article and ordered the State Environmental Protection Administration (SEPA) to conduct an investigation. SEPA sent investigators to the village to collect samples. The investigators did not report their results to people in the village. The outcome of this pollution disputes is unknown at this time.

## **6) Chemical Waste in Lin County**

In 1989, wastewater from a chemical factory in Lin County destroyed the wheat crops of local farmers. The farmer’s complaints finally reached the county magistrate, the county Party Secretary, the head of the People’s Consultative Committee and the head of the local People’s Congress. These top local leaders investigated the dispute and expressed their anger at the actions of the chemical factory. In the end, the chemical firm was fined and forced to stop production.<sup>133</sup>

## **7) Lion’s Head Concrete Factory Does Not Keep Its Promises: The People Are the Ones to Suffer<sup>134</sup>**

Taiyuan, Xishan District

Shitou Shuini Jituan You Xianzeren Gongce (Lion’s Head Cement Group Limited)

This facility has been the “smoking dragon” of the area for many years. Lion’s Head Cement (LHC) is a large facility under the jurisdiction of the provincial, city, and district EPBs. The president of the enterprise is Deng Shouxin. The party secretary is Cheng2 Yuguang and the director of the facility’s engineering and environmental protection division is Mai Liao.

China Environment News received several calls regarding the “smoking dragon” and in December of 1998, it sent a reporter out to investigate the situation. When the reporter arrived, he/she discovered “concrete snow” in the air and “concrete rain” on the clothes of the residents. The reporter noted the factory was engulfed in a cloud of dust and the #2 boiler was spewing thick gray smoke. Officials at the provincial and city EPBs just shake their heads at the facility. The Mayor of Taiyuan,

saw several young girls playing near the facility and commented, “if the government does not manage this type of issue, nobody else will.” At a meeting of the standing committee of the city government, he reiterated his opinion that the government should manage this type of issue.

In 1994, a reporter visited the facility and was assured by the president that “if the factory had not improved its environmental performance within a year, then it could not be done, and he would step down.” In 1995 the Sanjin Huanbaohang Jizhetuan visited the factory again. While some improvements had been made, the facility was far from being a model facility. The president promised that within three years the facility would be a “garden” facility (huayuanshi gongchang). However, in 1998, while some environmental improvements had been made, Deng Shouxin had not fulfilled his promise of turning the factory into a “garden factory.”

Cheng Yuguang and Mai Liao told the reporter that the pollution was caused by a management problem and that the #4 boiler was still in a “trial production” stage. The #4 boiler was fired up in 1996 (January 1<sup>st</sup>) and over 1.9 million yuan has been invested in pollution prevention equipment. According to environmental law, the “trial production” stage can only last for one year. Typically, after a year, if the pollution problems have not been resolved, the machinery should be shut down. The facility illegally obtained the check and acceptance (yanshou) for pollution control. Environmental officials repeatedly requested to check the situation, but were constantly put off.

After this story appeared in the newspaper, the factory purchased modern pollution prevention equipment for the 4<sup>th</sup> boiler.

## **8) The Dismantling of Phosphate Removal Equipment Without Authority Created Serious Environmental Pollution**

At the Shanghai City Metallurgical Measurement Instrument Factory (originally the Fourth Cold Rolled-strip Steel factory), when steel strips are placed in an acid bath in the strip-steel workshop, it releases a large cloud of acid fog and acidic effluent, which pollutes the environment and endangers nearby residents. Long exposure to acid fog and acidic effluent has corroded the factory building. There are cracks in the walls, the foundation is sinking, and the building has become a general danger. The acid has damaged underground water pipes.

In 1874, this factory with assistance by the Ministry of Metallurgy Industry, Communications University, and Jilin Research Institute of Practical Chemistry successfully developed an “electrolytic phosphate removal” technique after an effort of several years. Professionals at a conference to exchange experiences with metallurgical systems and treatment of acidic effluent highly praised the new technique. In 1976, xxx city “Three Wastes Office” and the Ministry of Metallurgy Industry gave this factory 390,000 Yuan to build experimental “electrolytic phosphate removal” equipment. After workers made the equipment compatible with production processes and the equipment became operational, it reduced emissions of acid fog and

acidic effluent. In 1978, at a national scientific meeting, the technology was awarded a research prize.

In the later half of 1978, the Metallurgical Measuring Equipment Factory leaders approached the Ministry of Metallurgy Industry requesting that the “electrolytic phosphate removal” equipment be dismantled because the factory wanted to change the products it manufactured. People at the Environmental Division of the ministry reasoned that the factory would continue to produce cold strip-steel and should continue to use and improve the “electrolytic phosphate removal” technology. However, the factory leaders did not heed the warning and in February of 1979 gave written notification to the Environmental Division at the Ministry of Metallurgy Industry requesting permission to dismantle the equipment. Without getting permission, the factory leaders dismantled the “electrolytic phosphate removal” equipment in the later half of 1979, which once again created a serious pollution problem.

In July of 1980, while the Ministry of Metallurgy Industry Environmental Division was conducting a routine inspection of the factory, about 50 nearby residents surrounded the factory to protest against the hazard of acid fog emissions. The residents demanded immediate remedial action. Because of this protest, the Ministry of Metallurgy Industry had no alternative but to provide additional financial assistance to the factory to complete remediation.

When the xxx citymetallurgical Measuring Equipment Factory dismantled the “electrolytic phosphate removal” equipment without permission, it caused the country a significant economic loss; it re-polluted the environment and endangered the people’s health. On October 31, 1980, the xxx City EPB fined the factory 20,000 Yuan (Shanghai Municipality 1980)

## **9) Water Pollution in Pizhou, Jiangsu Province<sup>135</sup>**

On November 26, 1993, pollution discharges from the upper reaches of the Fangting River killed a number of fish and other animals that were being bred by more than 100 households. Again in March 1994, there was another more dangerous pollution accident. “The river became ink dark in color and gave off a terrible smell.” Every living creature in the river was killed. Estimated economic damages from the discharge in nine villages and towns equaled RMB 2.85 million. Also, over twelve thousand hectares of rice and 3,300 hectares of cotton and other crop yields were damaged. Indirect economic damages reached RMB 3.43 million, bringing the total amount of damages to over RMB 6.28 million. As they did in 1993, the victims of this pollution accident appealed to various government bodies for help and requested compensation. The Pizhou media, both print and television, covered the pollution incidents. The Pizhou EPB sent a monitoring team to the site to collect samples. They found that the river was seriously polluted with a dissolved oxygen reading of zero and chemical oxygen demand exceeded national fishery standards by between 12 and 22 times. The investigation showed that the pollution discharges did not come from within Pizhou and so must have originated in Xuzhou city and Tongshan counties

upstream. The team found that the F. Brewery located in Tongshan County was discharging large amounts of distillers' grain (fermentation waste) was being dumped at the rate of about ten thousand tons per day. They also found that the Xuzhou W. Food & Drink Ltd. Co. (of the Jiangsu Group) and a vegetable oil factory (of the D. Group Company) were also discharging pollution into the river. The preliminary finding was that the brewery was the main polluter. The brewery was the largest brewery in Jiangsu province and was an important contributor to taxes in the county.

The Pizhou EPB reported the incident to the Xuzhou EPB and issued a request to the Pizhou People's government to get the brewery to halt production and to pay compensation. In April of 1994, the Xuzhou EPB formed an investigative group with the Pizhou and Tongshan county EPBs and commenced monitoring of river water quality. The party vice secretary general of Xuzhou city held a meditative meeting with departments from all the administrative areas. The Xuzhou EPB also submitted a report to the Xuzhou city government. The meeting did not produce a result. The victims of pollution demanded compensation and they wrote more than 50 letters to various governmental and party organizations including the Municipal Party Committee and Municipal Government of Xuzhou, the Party Committee and Government of Jiangsu Province, the State Council, the Environmental Resources Committee of the National People's Congress, to various newspapers, and to all relevant EPBs. After an exhaustive investigation, the relevant EPBs submitted a report to the Xuzhou government detailing both the 1993 and the 1994 pollution incidents and found that total economic damages in Pizhou reached at least RMB 12.98 million.

With the report in hand and increasing pressure from the pollution victims, the Xuzhou People's Government held a mediation meeting attended by all the relevant authorities including government, EPB, Water Conservation Bureau authorities, and the vice-mayor of Pizhou. In the meeting it was confirmed that the pollution damages were caused by the discharges from the enterprises in question. It was determined that the enterprises would be shut down if they did not bring effluent discharges into compliance by 1995. In addition, the enterprises were to pay no more than 150 thousand RMB to pollution victims. The decision was not put in writing, however, and the pollution victims were not satisfied with the paltry compensation package, so the dispute remained unresolved.

Subsequently, Mr. Lu, a duck breeder, and Mr. Li, an aquatic fisherman filed sued in the Pizhou People's Court in October of 1994. Mr. Lu wanted compensation of more than two hundred thirty five thousand RMB and Mr. Li wanted just over four hundred and eighty three thousand RMB. The defendants were named as the Xuzhou F. Brewery, the Jiangsu W. Bean Milk Group's Damiao Branch, and the D. Group's vegetable oil factory. The Pizhou court accepted the case, but due to government interference, the case was not tried. The plaintiffs continued their appeals for justice. They traveled to Beijing twice, to Nanjing twice and to Xuzhou more than 70 times. Finally in 1995, the Xuzhou Intermediate People's Court informed the Pizhou people's Court that it could try the cases. There was confusion and conflict over the venue for the trial, but it was finally decided that the Pizhou People's Court would try the case. During the first trial held in 1996, Mr. Li increased he and his partner's

demands for compensation. In addition, Mr. Lu, another duck farmer added his petition.

The court decided the fish and duck cases differently. In both cases, the court found that pollution discharged into the Fangting River had caused the harm. Xuzhou F. Brewery was found to be mainly liable. The former Jiangsu W. Bean Milk Group's Damiao Branch and the D. Group's vegetable oil factory should assume secondary liability. In the fish case, the defendants paid damages of RMB 500,275 and paid court costs of RMB 10,014 and court action costs of RMB 6,000. In the duck case, the defendants paid compensation of RMB 204,921 and paid court costs of RMB 5,583 and court action costs of RMB 3,000.

The defendants appealed the case and the appeals hearing occurred in March of 1997. The defendants (appellants) made the same arguments as they did in the first trial. The plaintiffs (appellees) then rebutted the arguments. It is important to note that the court prohibited media to attend the trial and from gathering materials related to the trial. The court did not hold another hearing, but did not make a judgment. Both the appellants and the appellees requested that the court make a decision several times, but all the court said was that the case was being decided by the relevant government organs. In effect, the government again intervened in the case. Finally in the spring of 1998, the court announced that the total amount of compensation that would be allowed in the cases would be RMB 400,000. The lawyers for the appellees suggested that they take the compensation, which they did. The suits were finally resolved.

## **10) Long-Term Pollution Problem Exacerbates A Conflict Between an Enterprise and the Community**

Managing Agency xxx District Environmental Protection Office, xxx City, Hubei province

In the residential district of Diaomi on Renshou Lu of xxx city there is a branch factory of the xxx City Enamel Plant. For many years, in the course of production has released poisonous gases, emitted soot and ashes, and made terrible noise pollution, which has been serious enough to disrupt the lives of nearby residents and threatened their health. On March 12 of 1983, the conflict came to a head when the residents wrecked the plant causing hundreds of thousand of Yuan in damages.

The factory emitted poisonous gasses included hydrogen fluoride and silicon tetrafluoride among others. Air quality testing revealed that the level of hydrogen fluoride in the atmosphere exceeded national standards by 2.7 to 13.7 percent (officials tested the air from 50 to 150 meters from the workshop and the amounts of pollutants varied accordingly). The amount of dust and soot in the atmosphere was about 10.6 milliliters per meter, which is over 5 times the national standard. In addition, the vibration and noise pollution was very severe. The blank workshop had 12 punching machines weighing 15 to 80 tons apiece. These machines produced noise pollution at 95 decibels (category A), which greatly exceeds the national standard.

The poisonous gases emitted by the factory caused the trees around the plant to wilt and die. It also caused the windows of resident's houses to corrode making them look like "cut glass." Many residents in the area experienced chronic itching, emotional anxiety, their nostrils became enflamed, their throats hurt, their mouth cavity's developed ulcers, their teeth bled, their hair fell out, and they had very low red blood cell counts.

Since 1976, area residents have negotiated with the enamel plant representatives and complained to officials at all levels of the government. Some residents have even filed class action suits. The residents have made considerable efforts to demand that the factory mitigate its pollution problems and clean up the surrounding area. In 1980, the Ministry of Light Industry invested 100,000 Yuan to help the plant mitigate its hazardous air pollutant and dust emissions. The investments succeeded in reducing the hazardous gases and particulate pollution by about half. The city and the district EPBs directed the plant to build upon these successes and continue to decrease their pollution emissions. In the end, factory leaders did not build upon the base, continued to engage in bad management practices, and in fact, discontinued the operation of the pollution reduction equipment already installed, citing economic hardships as the reason. As a result pollution problems increased significantly, reaching their previous intensity. Disputes among plant employees and nearby residents occurred frequently. Finally, in March of 1983, residents who had seen their complaints go unheeded took matters into their own hands and gathered to throw bricks and rocks at the plant. The plant managers did not report the incidents to the EPB. Instead, they set up spotlights within the factory walls to illuminate the activities of the victims. They also dispatched militia to "guard the safety of the plant." On March 12<sup>th</sup>, three residents of the xxx Match Factory were throwing rocks at the factory. Militia from the branch factory captured them and kept one person as a hostage. They also snagged an assistant division chief from the match factory who had gone to the enamel factory gate to exchange ideas. This exacerbated the situation and took the conflict to the next level. Residents of the match factory acted as a mob and tore off the roof of the enamel workshop, broke open the door and rushed into the workshop. Their actions disrupted production and forced workers to stop the glazing and shelving processes. Their actions damaged about 50 tons of enamelware worth hundreds of thousands of Yuan that was to be exported. In total the damages to product, equipment, and the buildings equaled about 500,000 Yuan.

After the incident, the enamel plant was under tremendous pressure, so they wrote a letter to the city Ministry of Light Industry Office to request funding in the amount of 900,000 Yuan in assistance to resolve their noise, particulate, and hazardous gas pollution problems. After an exerted effort the factory was relocated in 1984.

At the time the xxx District People's Government Environmental Protection Office suggested that the factory take the following emergency measures:

- 1) During the "transition period" the fluoride gas that passes through all of the baking furnaces have to pass through absorption towers, increase the alkali fluid levels, and increase mitigation efficiency. In addition, the EPO requested that all four of the furnaces not be operated at the same time, to prevent the

absorption towers from being overloaded, which can reduce operation efficiency.

- 2) All of the pollution prevention equipment that is currently installed must be in operation whenever production is in process. If the pollution abatement equipment breaks, production processes must be stopped. It is forbidden to continue production while repairing the equipment.
- 3) The plant must build a wall separating the residents living quarters from the pollution source in order to mitigate the pollution and reduce the hazards of noise and particulates.
- 4) Before moving the punching machines to the new plant, they cannot be used during the night hours, so that it does not disturb the sleep of nearby residents.
- 5) Plant leaders must convene a meeting of representatives from the residents' committees, local public security bureaus, and affected citizens. At the meeting plant representatives need to listen to resident's suggestions, to seek their forgiveness, explain how the plant will mitigate pollution. The plant must make the time, clean up the pollution and make sure that incident such as this do not re-occur.

Hubei province, 1983

Editor's commentary:

In 1976, residents living near the Renshou branch of the xxx city enamel plant requested that the plant clean up the hazardous air pollutants, the dust, and noise pollution that posed a hazard to the health of nearby residents. The plant made some improvements because of these demands. However, the plant did not continue to improve their pollution prevention measures, arguing that they were experiencing economic hardship. The plant even discontinued using the pollution prevention that had already been installed. Pollution from the plant became worse each day and the plant paid no attention to residents who begged them to mitigate their pollution. This enraged the residents who then began to hurl stones and bricks at the plant. The plant did not report the incidents; instead, it positioned a spotlight on the grounds and called in militia to protect the safety of the plant. Plant leaders considered residents their enemies and even held one resident hostage, making the situation intolerable as it could be. In anger, residents started to tear apart the factory, which was unlawful. The five penalty measures imposed by the xxx city EPB were needed and appropriate because it broke environmental protection laws, made enemies of the people, used militia, and kidnapped someone. However, it should have been strict in assigning legal liability to responsible persons.

**Appendix E – Comparison of Complaints, Emissions, GDP, and Environmental Awareness at the Provincial Level**

<b>92' Air Pollution Complaints</b>	<b>92' SO<sub>2</sub> Emissions</b>	<b>92' Per Capita GDP</b>	<b>92' Cumulative Media</b>
Guangdong Liaoning Shandong Sichuan Jiangsu	Shandong Sichuan Jiangsu Liaoning Hebei	Hainan Jiangsu Zhejiang Liaoning Guangdong	Jiangsu Hebei Hunan Sichuan Guizhou
<b>93' Air Pollution Complaints</b>	<b>93' SO<sub>2</sub> Emissions</b>	<b>93' Per Capita GDP</b>	<b>93' Cumulative Media</b>
Guangdong Liaoning Shandong Jiangsu Sichuan	Shandong Sichuan Jiangsu Hebei Liaoning	Hainan Jiangsu Zhejiang Liaoning Guangdong	Heilongjiang Hunan Sichuan Guizhou Henan
<b>94' Air Pollution Complaints</b>	<b>94' SO<sub>2</sub> Emissions</b>	<b>94' Per Capita GDP</b>	<b>94' Cumulative Media</b>
Guangdong Shandong Liaoning Sichuan Zhejiang	Shandong Sichuan Jiangsu Hebei Liaoning	Fujian Jiangsu Liaoning Zhejiang Guangdong	Hunan Heilongjiang Guizhou Sichuan Henan
<b>95' Air Pollution Complaints</b>	<b>95' SO<sub>2</sub> Emissions</b>	<b>95' Per Capita GDP</b>	<b>95' Cumulative Media</b>
Guangdong Liaoning Jiangsu Shandong Zhejiang	Shandong Sichuan Jiangsu Hebei Liaoning	Fujian Liaoning Jiangsu Zhejiang Guangdong	Shandong Jiangsu Guangdong Sichuan Henan

<b>96' Air Pollution Complaints</b>	<b>96' SO<sub>2</sub> Emissions</b>	<b>96' Per Capita GDP</b>	<b>96' Cumulative Media</b>
Guangdong Liaoning Jiangsu Sichuan Zhejiang	Shandong Jiangsu Hebei Sichuan Liaoning	Liaoning Fujian Jiangsu Zhejiang Guangdong	Anwei Sichuan Jiangsu Shandong Guangdong
<b>97' Air Pollution Complaints</b>	<b>97' SO<sub>2</sub> Emissions</b>	<b>97' Per Capita GDP</b>	<b>97' Cumulative Media</b>
Guangdong Liaoning Shandong Jiangsu Zhejiang	Shandong Hebei Jiangsu Liaoning Shanxi	Liaoning Fujian Jiangsu Guangdong Zhejiang	Guangxi Anwei Jiangsu Shandong Guangdong
<b>98' Air Pollution Complaints</b>	<b>98' SO<sub>2</sub> Emissions</b>	<b>98' Per Capita GDP</b>	<b>98' Cumulative Media</b>
Guangdong Jiangsu Zhejiang Shandong Liaoning Guangxi Sichuan Henan	Shandong Jiangsu Hebei Shanxi Guizhou Henan Liaoning Sichuan	Liaoning Jiangsu Fujian Guangdong Zhejiang	No Data

## Appendix F - Major Environmental Campaign Themes

**Table F.1 World Environment Day Themes (*Huanjingri*) (June 5<sup>th</sup>)**

1989	Guard Against Global Warming ( <i>Jingti Chuanqiu Biannuan</i> )
1990	Children and the Environment ( <i>Haizi Yu Huanjing</i> )
1991	Global Climate Change Requires Global Cooperation ( <i>Chuanqiu Biannuan Xuyao Chuanqiu Gongtong Hezuo</i> )
1992	
1993	Poverty and Environment-Breaking Free From the Vicious Cycle ( <i>Pingchong Yu Huanjing - Baituo Exing Xunhuan</i> )
1994	One Planet, One Home ( <i>Yige Diqu, Yig jiating</i> )
1995	Women and the Environment ( <i>Funu Yu Huanjing</i> )
1996	Our World, Our Dwelling, Our Home ( <i>Women de Diqu, Zhuzaidi, Jiayuan</i> )
1997	Act For Life on Earth ( <i>Wei Diqu Shengming Xingdong</i> )
1998	Drive Toward a Greener 21 <sup>st</sup> Century ( <i>Maixiang 21 Shiji Luse Shenghuo Xingdong</i> )

**Table F.2 PRC Century Environmental Protection Drive Themes**

1993	Declare war on Pollution ( <i>Xiang Wuran Xuanzhan</i> )
1994	Protect the Ecological Balance – Leave a Clean Environment to the Next Generation ( <i>Weihu Shengtai Pingzhong – Wei Zisun Houdai Liuxia Gengduo de Luse</i> )
1995	Cherish (Our) Natural Resources ( <i>Zhuxi Ziran Ziyuan</i> )
1996	Protect the Waters of Life ( <i>Baohu Shengming Zhi Shui</i> )
1997	Protect our Natural Resources and Use Them Sustainably ( <i>Baohu Ziyuan, Yongxu Liyong</i> )
1998	Protect and Develop the Oceans” ( <i>Baohu Haiyang, Kaifa Haiyang</i> )
1999	Declare War on Air Pollution” ( <i>Xiang Daqi Wuran Xunzhan</i> ) and “Love our Yellow River” ( <i>Ai Wo Huanghe</i> )

### Century Environmental Protection Drive Priority Locations & Issues

- 1994 Henan, Anwei, Hunan, Hubei, Sichuan, Xiaanxi, Shanxi, Jilin, Ningxia, Inner Mongolia, Fujian, Guizhou, Zhejiang, and Guangxi. The inspection teams concentrated on assessing compliance to 7 major laws including the Environmental Protection Law, the Forestry Law, the Law Protecting Wild Animals, and the Water and Soil Conservation Law.
- 1995 Heilongjiang Liaoning, Shandong, Jiangsu, Sichuan, Yunnan, Guizhou and Shanxi.
- 1996 Hainan, Shandong, Sichuan, Hubei, Liaoning, Qinghai, Xiaanxi, Henan, Inner Mongolia, Heilongjiang, Jilin, Jiangsu, and Anwei.

- 1997 Fujian, Shandong, Shanxi, Inner Mongolia, Xinjiang, Henan, Jiangsu, Anwei, Guizhou, Hebei, and Jiangxi
- 1998 The groups visited 11 provinces, autonomous zone, and municipalities; 54 cities, 210 harbors, enterprises, and townships along China's coastline.
- 1999 Shandong, Hebei, and Henan provinces. Priority cities included Lanzhou, Taiyuan, Yinzhou, Xining and other highly polluted cities.

## Endnotes to Appendices

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<sup>1</sup> Robert Storey, Nicko Goncharoff, Damian Harper, Marie Cambon, Thomas Huhti, Caroline Liou, and Alexander English, *Lonely Planet: China*, 6th ed. (Australia: Lonely Planet Publications, 1998), pp. 219-220.

<sup>2</sup> *Zhongguo Huanjing Nianjian*, 1990 (China Environment Yearbook), p. 267; Jiang Xiaoke, ed. *Beijing de Huanjing* (Beijing's Environment) (Beijing, China: Beijing Huanjing Baohu Jijinhui, 1999), p. 10.

<sup>3</sup> In 1989, Dongcheng, Xicheng, Xuanwu, Tongxian, and Fangshan all established commissions. The establishment of these commissions at lower administrative levels was encouraged, but not mandatory. The establishment of government organs (*bianzhi*) is at the discretion of leaders at each administrative level. Therefore, the decision to establish an Environmental Protection Commission is encouraged by city level authorities, but authorized at the district or county level for specific locations (districts etc...). For more on the *bianzhi* system see Kjeld Erik Brodsgaard, "Institutional Reform and the Bianzhi System in China," *The China Quarterly*, no. 170 (2002).

<sup>4</sup> *Zhongguo Huanjing Nianjian*, 1992 (China Environment Yearbook).

<sup>5</sup> *Zhongguo Huanjing Nianjian 1994* (China Environment Yearbook). p. 265.

<sup>6</sup> *Beijing Nianjian, 1994* (Beijing Yearbook), Beijingshi Difangzhi Bianzhuang Weiyuanhui, (Beijing, China: Beijing Nianjianshe, 1994), p. 363.

<sup>7</sup> *Zhongguo Huanjing Nianjian, 1995* (China Environment Yearbook), p. 267.

<sup>8</sup> *Zhongguo Huanjing Nianjian, 1996* (China Environment Yearbook), p. 298.

<sup>9</sup> Interview #6, Fall 1999.

<sup>10</sup> *Zhongguo Huanjing Nianjian, 1991* (China Environment Yearbook), p. 252-253.

<sup>11</sup> *Zhongguo Huanjing Nianjian, 1990* (China Environment Yearbook), p. 269-270.

<sup>12</sup> *Beijing De Huanjing* (Beijing's Environment) (Beijing, China: Beijing Huanjing Baohu Jijinhui, 1999a); U.S. Embassy Beijing. "China EPA Head Discusses Challenges, Priorities," *Beijing Environment, Science and Technology Update*, Oct. 1999.

<sup>13</sup> *Zhongguo Huanjing Nianjian, 1990* (China Environment Yearbook); *Zhongguo Huanjing Nianjian, 1991* (China Environment Yearbook).

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<sup>14</sup> By the end of 1990, 60 heavily polluting enterprises had been moved out of the city proper and the close suburbs 1990.

<sup>15</sup> Interview #15, Winter 2000

<sup>16</sup> *Zhongguo Huanjing Nianjian, 1990 (China Environment Yearbook); Zhongguo Huanjing Nianjian, 1991 (China Environment Yearbook).*

<sup>17</sup> *Zhongguo Huanjing Nianjian, 1991 (China Environment Yearbook), p. 253*

<sup>18</sup> *Zhongguo Huanjing Nianjian, 1991 (China Environment Yearbook), p. 251.*

<sup>19</sup> *Zhongguo Huanjing Nianjian, 1991 (China Environment Yearbook), p. 251.*

<sup>20</sup> *Zhongguo Huanjing Nianjian, 1991 (China Environment Yearbook), p. 253*

<sup>21</sup> *Zhongguo Huanjing Nianjian, 1991 (China Environment Yearbook), p. 253.*

<sup>22</sup> *Zhongguo Huanjing Nianjian, 1991 (China Environmental Yearbook), p. 251.*

<sup>23</sup> *Beijing Nianjian, 1993 (Beijing Yearbook), p. 477.*

<sup>24</sup> *Zhongguo Huanjing Baohu Xingzheng Ershinian (20 Years of Administering Environmental Protection in China), p. 432.*

<sup>25</sup> *Zhongguo Huanjing Nianjian 1994 (China Environment Yearbook), p. 265.*

<sup>26</sup> *Beijing Nianjian, 1994 (Beijing Yearbook); Beijing Nianjian, 1993 (Beijing Yearbook), p. 187.*

<sup>27</sup> *Zhongguo Huanjing Nianjian, 1995 (China Environment Yearbook), p. 265-267.*

<sup>28</sup> *Zhongguo Huanjing Nianjian, 1995 (China Environment Yearbook), p. 267.*

<sup>29</sup> *Beijing Nianjian, 1996 (Beijing Yearbook), p. 288.*

<sup>30</sup> *Zhongguo Huanjing Nianjian, 1996 (China Environment Yearbook), p. 298-300.*

<sup>31</sup> *Zhongguo Huanjing Nianjian, 1996 (China Environment Yearbook), p. 299.*

<sup>32</sup> *Beijing Nianjian, 1996 (Beijing Yearbook), p. 155.*

<sup>33</sup> *Zhongguo Huanjing Nianjian, 1998 (China Environment Yearbook), pp. 375-377/*

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- <sup>34</sup> *Zhongguo Huanjing Nianjian, 1998 (China Environment Yearbook)*, p. 376.
- <sup>35</sup> *Zhongguo Huanjing Nianjian, 1998 (China Environment Yearbook)*, p. 377.
- <sup>36</sup> *Zhongguo Huanjing Nianjian 1999 (China Environment Yearbook)*, p. 320.
- <sup>37</sup> “Yi Fen Qian Guan Dong,” *Zhongguo Huanjing Bao (China Environment News)*, January 27, 1998, p. 1.
- <sup>38</sup> *Zhongguo Huanjing Nianjian 1999 (China Environment Yearbook)*, p. 318.
- <sup>39</sup> *Zhongguo Huanjing Nianjian 1999 (China Environment Yearbook)*, p. 320.
- <sup>40</sup> *Zhongguo Huanjing Nianjian 1999 (China Environment Yearbook)*, p. 257.
- <sup>41</sup> *Zhongguo Huanjing Nianjian 1999 (China Environment Yearbook)*, pp. 318-320.
- <sup>42</sup> *Zhongguo Huanjing Nianjian, 2000 (China Environment Yearbook)*, pp. 412-414.
- <sup>43</sup> *Chengdu Dacidian, 1995*, (Sichuan, China: Sichuan Cishu Chubanshe, 1995), pp. 23-24; Storey, Goncharoff, Harper, Cambon, Huhti, Liou, and English, *Lonely Planet: China*, pp. 898-899
- <sup>44</sup> *Chengdu Dacidian, 1995*, p. 23.
- <sup>45</sup> *Chengdu Dacidian, 1995*, pp. 24-25
- <sup>46</sup> *Chengdu Dacidian, 1995*, pp. 24-25.
- <sup>47</sup> *Chengdu Dacidian, 1995*, pp. 25-27.
- <sup>48</sup> Chengdu has a large “floating” population. While exploring in the outer districts, I saw tens of people walking along the railroad tracks with baskets on their backs and long tongs in their hands, picking up any item of value including food. They were not government sanitation workers; they lacked the uniform and the plump look. The outer districts of Chengdu had the most “homeless” people I have ever seen in China.
- <sup>49</sup> *Zhongguo Huanjing Nianjian, 1990 (China Environment Yearbook)*, p. 112.
- <sup>50</sup> *Zhongguo Huanjing Nianjian, 1990 (China Environment Yearbook)*, p. 415.
- <sup>51</sup> *Chengdu Nianjian, 1990 (Chengdu Yearbook)*, Chengdu Nianjian Bianzhuabu, (Chengdu, China: Chengdu Chubanshe, 1990), p. 322.

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<sup>52</sup> *Zhongguo Huanjing Nianjian*, 1990 (*China Environmental Yearbook*), Beijing, Environmental Sciences Press, p. 112.

<sup>53</sup> Interview #34 winter, 2000; *Zhongguo Huanjing Nianjian*, 1991 (*China Environment Yearbook*), p. 419.

<sup>54</sup> *Chengdu Nianjian*, 1992 (*Chengdu Yearbook*), (Chengdu, China: Chengdu Nianjianshe, 1992); *Chengdu Nianjian*, 1993 (*Chengdu Yearbook*), p. 264.

<sup>55</sup> *Zhongguo Huanjing Nianjian*, 1996 (*China Environment Yearbook*), p. 394.

<sup>56</sup> According to this theory, when creating an organization or re-organizing an organization, the first thing that should be determined is the specific jobs that need to be accomplished and the job descriptions of those positions. Only then should the organization's structure be determined and then it can be determined if the organization should be approved.

<sup>57</sup> *Zhongguo Huanjing Nianjian*, 1997 (*China Environment Yearbook*), p. 345.

<sup>58</sup> Interview #34 winter, 2000.

<sup>59</sup> Interview #34 winter, 2000.

<sup>60</sup> *Huanjing Nianjian*, 1990, p. 112, 115.

<sup>61</sup> *Chengdu Nianjian*, 1990 (*Chengdu Yearbook*), p. 321.

<sup>62</sup> This procedure was settled upon because it “resolved the contradictions between environmental education and studying for culture class (*jiejuele kaizhan huanjing jiaoyu yu xuexi wenhuake de maodun*); *Zhongguo Huanjing Nianjian*, 1991 (*China Environment Yearbook*), p. 421.

<sup>63</sup> *Zhongguo Huanjing Nianjian*, 1990 (*China Environment Yearbook*), p. 415.

<sup>64</sup> *Zhongguo Huanjing Nianjian*, 1991 (*China Environment Yearbook*), p. 418.

<sup>65</sup> *Zhongguo Huanjing Nianjian*, 1991 (*China Environment Yearbook*), p. 420.

<sup>66</sup> This paragraph summarizes part of a speech given by the mayor of Chengdu, Xi Jinxiang, in October of 1990 at the city wide Environmental Protection Work Meeting. *Zhongguo Huanjing Nianjian*, 1991 (*China Environment Yearbook*), p. 541.

<sup>67</sup> *Zhongguo Huanjing Nianjian*, 1991 (*China Environment Yearbook*), p. 420.

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- <sup>68</sup> *Zhongguo Huanjing Nianjian, 1991 (China Environment Yearbook)*, p. 420.
- <sup>69</sup> *Chengdu Nianjian, 1992 (Chengdu Yearbook)*, p. 262.
- <sup>70</sup> *Zhongguo Huanjing Nianjian, 1992 (China Environment Yearbook)*, p. 401.
- <sup>71</sup> *Zhongguo Huanjing Nianjian, 1991 (China Environment Yearbook)*, p. 541.
- <sup>72</sup> *Chengdu Nianjian, 1992 (Chengdu Yearbook)*, p. 262.
- <sup>73</sup> *Chengdu Nianjian, 1992 (Chengdu Yearbook)*, p. 263.
- <sup>74</sup> *Zhongguo Huanjing Nianjian, 1993 (China Environment Yearbook)*, (Beijing, China: Environmental Science Press, 1993), p. 515.
- <sup>75</sup> The area is one of the industrial satellites of the city and a major national chemical industrial area. During the 1970s, it was famous for its serious industrial pollution disasters.
- <sup>76</sup> *Chengdu Nianjian, 1993 (Chengdu Yearbook)*, p. 263-264.
- <sup>77</sup> *Zhongguo Huanjing Nianjian, 1994 (China Environment Yearbook)*, p. 339.
- <sup>78</sup> *Chengdu Dacidian, 1995*, p. 13
- <sup>79</sup> *Chengdu Nianjian, 1995 (Chengdu Yearbook)*, (Chengdu, China: Chengdu Nianjian Chubanshe, 1995), pp. 308-309.
- <sup>80</sup> *Zhongguo Huanjing Nianjian, 1995 (China Environment Yearbook)*, p. 336.
- <sup>81</sup> *Chengdu Nianjian, 1995 (Chengdu Yearbook)*, pp. 308-312.
- <sup>82</sup> *Chengdu Nianjian, 1995 (Chengdu Yearbook)*, p. 309.
- <sup>83</sup> *Zhongguo Huanjing Nianjian, 1996 (China Environment Yearbook)*, p. 393.
- <sup>84</sup> *Zhongguo Huanjing Nianjian, 1997 (China Environment Yearbook)*, p. 345.
- <sup>85</sup> *Zhongguo Huanjing Nianjian, 1998 (China Environment Yearbook)*, p. 119.
- <sup>86</sup> Chengdushi Shiyejie Xiaoxuexiao, *Huanjing Jiaoyu Pian (Essays on Environmental Education)*, (Chengdu, China: Chengdu Huanjing Baohu Xuanchuan Jiaoyu Zhongxin, 1998), p. 10-11.

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<sup>87</sup> *Zhongguo Huanjing Nianjian, 1997 (China Environment Yearbook)*, pp. 344-345.

<sup>88</sup> *Zhongguo Huanjing Nianjian, 1998 (China Environment Yearbook)*, p. 470.

<sup>89</sup> *Zhongguo Huanjing Nianjian, 1998 (China Environment Yearbook)*, pp. 470-471.

<sup>90</sup> *Zhongguo Huanjing Nianjian, 1998 (China Environment Yearbook)*, pp. 471-472.

<sup>91</sup> *Zhongguo Huanjing Nianjian 1999 (China Environment Yearbook)*, pp. 418-420.

<sup>92</sup> *Zhongguo Huanjing Nianjian, 2000 (China Environment Yearbook)*, pp. 109, 178, 515-517.

<sup>93</sup> *Chengdu Nianjian, 1999 (Chengdu Yearbook)*, (Chengdu, China: Chengdu Nianjianshe, 1999), p. 12.

<sup>94</sup> The Lonely Planet Guide to China points out that at one time, 27 temples dedicated to the god of war were located in Taiyuan. See Storey, Goncharoff, Harper, Cambon, Huhti, Liou, and English, *China, Lonely Planet*, (Australia: Lonely Planet Publications, 1998), p. 517.

<sup>95</sup> Interview #45, Summer 2000.

<sup>96</sup> *Taiyuan Nianjian, 1994*.

<sup>97</sup> *China, Lonely Planet*, pp. 515-517.

<sup>98</sup> Pian Yongfu, "Taiyuanshi Huanjing, Jingji Chixu Xietiao Fazhan Chutan (Preliminary Explorations into the Coordinated Development of Environmental and Economic Sustainability in Taiyuan)", p. 85.

<sup>99</sup> *Taiyuan Nianjian, 1994*, p. 342.

<sup>100</sup> This means that Taiyuan would be an open international destination. Its laws and regulations would gradually be made to conform to international standards. The government would encourage city residents to learn foreign languages. It also meant that the government should improve the city's "spiritual and cultural development" (*jingshen wenming jianshe*).

<sup>101</sup> *Taiyuan Nianjian, 1994*, pp. 343-344.

<sup>102</sup> See

<<http://www.icchina.com/echinacities/default.asp?CityName=Taiyuan&ID=History>>

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- <sup>103</sup> *Taiyuan Nianjian, 1994*, p. 47.
- <sup>104</sup> *If Shanxi Can Do It (Clean Up), Anybody Can*, (Beijing, China: U.S Embassy, 2001).
- <sup>105</sup> *Zhongguo Huanjing Nianjian, 1992 (China Environment Yearbook)*, p. 451-452.
- <sup>106</sup> *If Shanxi Can Do It (Clean Up), Anybody Can*.
- <sup>107</sup> *Clearing Skies Over China*, Chicago Tribune February 1, 2002, by Michael A. Lev.
- <sup>108</sup> In some cities and counties, this major institutional reorganization had a debilitating effect on environmental protection work, while it had less of an effect on others. Abigail Jahiel argues that it had more impact (negative) in those administrative areas where the EPB had not established some authority and where environmental awareness was low. See Jahiel, "Policy Implementation Through Organizational Learning: The Case of Water Pollution Control in China's Reforming Socialist System," pp. 99-100.
- <sup>109</sup> Interview #47, Spring 2000.
- <sup>110</sup> *Zhongguo Huanjing Nianjian, 1990 (China Environment Yearbook)*, p. 389.
- <sup>111</sup> *Taiyuan Nianjian, 1994*, pp. 195-212.
- <sup>112</sup> *Taiyuan Nianjian, 1994*, pp. 75-76.
- <sup>113</sup> *Taiyuan Nianjian, 1994*, p. 389.
- <sup>114</sup> *Zhongguo Huanjing Nianjian, 1996 (China Environment Yearbook)*, p. 453.
- <sup>115</sup> *Zhongguo Huanjing Nianjian, 1990 (China Environment Yearbook)*.
- <sup>116</sup> *Zhongguo Huanjing Nianjian, 1994 (China Environment Yearbook)*.
- <sup>117</sup> Approximately one-fifth of the 18,000 enterprises that were targeted in the national campaign were located in Shanxi.
- <sup>118</sup> *If Shanxi Can Do It (Clean Up), Anybody Can*. Beijing; Interviews, Fall 2000.
- <sup>119</sup> Interview #52, Spring 2000
- <sup>120</sup> The Gujiao Jingshen campaign is described in detail earlier in this chapter.

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<sup>121</sup> *Taiyuan Nianjian*, 1994, p. 346.

<sup>122</sup> The “Society for Environmental Science” (*Huanjing Kexue Xuehui*) is connected with the EPB and has been existence for a long time. It is a membership organization similar to a professional association in the U.S. The group has about 300 members in Taiyuan. Corporate members pay a fee of 500 yuan annually and individual members pay 20 yuan a year. The group members network and share information; interview #50, Spring 2000.

<sup>123</sup> *Zhongguo Huanjing Nianjian*, 1991 (*China Environment Yearbook*), p. 423.

<sup>124</sup> *Zhongguo Huanjing Bao*, “Taiyuan Yao Xilian,” February 17, 1998, p. 1.

<sup>125</sup> *Zhongguo Huanjing Bao*, “Taiyuan Yao Xilian,” February 17, 1998, p. 1.

<sup>126</sup> In other words, the book is a type of training manual. See *Huanjing Jiufen Anli*, *Zhongguo Huanjing Kexue Chubanshe*, 1989, pp. 1-2.

<sup>127</sup> The categories of civil disputes mediated include family, housing and housing sites, inheritance, debts, business, neighbor disputes, compensation for damages, intellectual rights, personal rights, and other. Environmental disputes could fall in several of these categories depending upon the situation. The categories for criminal court cases include anti-revolutionary, offences against: public security, socialist economic order, citizens’ personal and democratic rights, properties, social management of order, marriages and families, dereliction of duty, and other. Environmental crimes could fall in a number of these categories.

<sup>128</sup> Wang, Xu, and Liu, "A Summary of Policy and Legal Analysis on Dealing with Environmental Disputes in China," p. 7.

<sup>129</sup> Lappin, "Can Green Mix with Red," p. 195.

<sup>130</sup> This story appeared in the Sichuan Youth Daily, April 25, 2000. p. 1.

<sup>131</sup> Information regarding this case came from several sources including interviews with the victims and their lawyer, court documents, and newspaper articles. See “Neng bu Neng Rang Women Touhuiqi?” *Shechu Fuwubao* (China Community News), January 1, 2000, p. 1, and “Fangshan Wuranan Zai Shen You Jiegou,” *Zhongguo Huanjingbao*, July 28, 2001- <http://www.zhb.gov.cn/news/index.php3?position=10448>

<sup>132</sup> See the Washington Post, November 5, 2001 story by Phillip P. Pan.

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<sup>133</sup> This story and others regarding the influence of local and national leaders in dispute outcomes can be found in Jahiel, "Policy Implementation Through Organizational Learning: The Case of Water Pollution Control in China's Reforming Socialist System," p. 363 & pp. 358-364.

<sup>134</sup> Zhongguo Huanjing Bao, 12/22/98, p. 2.

<sup>135</sup> This case is taken from Wang Canfa, "A Case of Water Pollution in Pizhou, Jiangsu Province," *Studies on Environmental Pollution Disputes in East Asia: Cases From Mainland China and Taiwan*, Canfa Wang, Jing Hu, Tadayoshi Terao, Kexzhu Xu, Min Liu, and Kenji Otsuka, (Tokyo: Institute of Developing Economies, IDE-JETRO, 2001), pp. 73-92.

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