

# Advocating Environmental Interests in China

Wanxin Li<sup>1</sup>

## Abstract

This article analyzes two cases of environmental advocacy initiatives in China: institutionalizing environmental information transparency and sanctioning environmental violations. Both initiatives were aimed at achieving policy change at a national or regional level. While the study shows evidence of advocacy coalitions and pressure groups in the policy process, neither the coalitions nor the groups had a set of core beliefs which might have enabled them to persist over time. Because they were restricted to limited advocacy on particular concerns, they proved to be ephemeral and disappeared after the issues had been addressed. The cases conform to the pattern of decision-making in an authoritarian regime where policy initiatives tend to emanate from the government rather than from the public.

## Key words

environmental governance, advocacy, political space, environmental interests, China.

Environmental challenges embody the features of wicked problems described by Weber and Khademian (2008). First, they are unstructured: causes and effects are extremely difficult to identify. They are open to varied interpretations and a consensus about their treatment becomes hard to reach. Second, they comprise overlapping and interconnected subsets of issues that cut across multiple policy domains and levels of government. Lastly, wicked problems are relentless and unlikely ever to be solved despite the best of intentions and the extent of the resources available (Weber & Khademian, 2008). Environmental policy-making seen in this context is a fluid activity – the issues are difficult to define, stakeholders are diverse, and the processes for making sense of the issues and searching for solutions are dynamic.

---

<sup>1</sup> Wanxin Li (Contributing author: Department of Public and Social Administration, City University of Hong Kong; Tsinghua Graduate School in Shenzhen. Email: [wanxin.li@cityu.edu.hk](mailto:wanxin.li@cityu.edu.hk))

The policy advocacy coalition framework (ACF) has been developed to explain policy-making processes and policy change and learning by examining interactive structures among major players who express their interests, beliefs, and actions in certain socio-economic contexts (Weible, Sabatier, & McQueen, 2009). Scholars have adopted an ACF for studying issues related to environmental policy-making (van Overveld, Hermans, & Verliefde, 2010), natural resource and ecological policies (Sotirov & Memmler, 2012; Weible, Pattison, & Sabatier, 2010), climate change (Bortree, Ahern, Dou, & Smith, 2011), and environmental justice (Kreger, Sargent, Arons, Standish, & Brindis, 2011). They have pointed out the difficulties and importance of obtaining knowledge of the goals and perceptions of numerous stakeholders in a multitude of scientific, political, economic, and social settings over a long periods of time (Sabatier, 2007). Environmental governance, similarly, takes places in a wide context in which stakeholders, including government agencies, civil society, and transnational organizations, seek to articulate their interests through both formal and informal means, to manage and conserve natural resources, to control pollution, and to resolve conflicts (W. Li, 2006, p. 10506).

This article aims to advance our understanding of the major actors, their claims, and their strategies for advocating environmental interests China where special interest politics is not salient, and where core beliefs are being constantly redefined alongside rapid social transformation (Pan, 2008). It is not evident who the environmental stakeholders in China are, especially since pressure groups are almost invisible unless directly faced with a contentious issue. Instead of focusing on established environmental organizations, therefore, I choose to examine two initiatives, namely, institutionalizing environmental information transparency nationally, and sanctioning industrial environmental violations regionally. Both initiatives are aimed at balancing environmental interests with other competing goals such as economic growth. By analyzing the Chinese case, the paper contributes to the literature on policy-making processes and advocacy coalition framework originally developed in a western country context where pluralism and organized special interest advocacy are a regular form of political life.<sup>1</sup>

The next section reviews the changes in Chinese society that demand the articulation of

environmental interests. Section 3 analyzes two cases where government and intellectual elites formed coalitions to advocate environmental policy change from within the system. Section 4 describes situations where the public resorted to extra-institutional channels for articulating their interests in regard to specific government environmental decisions. Based on the case analysis, the paper discusses the two major motivations for advocating environmental interests in China – value-based advocacy for systematic change and balancing interests in government decision-making. The conclusion seeks to place the discussion in the paper in the broader context of the literature on advocacy coalition framework as well as changes in administration and society in China.

## **Social Changes and the Articulation of Environmental Interests**

Even though since 1972 China has followed international practice and enacted environmental laws and regulations, there has been concern about local implementation and motivating local authorities to prioritize environmental protection over other considerations. With industrialization, air and water pollution has drawn the attention of both experts and the top leadership in China. Since 1977, higher education institutions have launched study programmes in environmental science and engineering to train professionals. During the 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> Five-Year plan periods (1981-1995), environmental scientists and engineers worked on pollution prevention and control technologies.<sup>2</sup> In 1996, the first year of the 9<sup>th</sup> Five-Year plan, there was an increase in reports on pollution control and environmental protection in the media and a rise in the number of national development guidelines. The State Council issued its Decisions on Issues on Environmental Protection in 1996 (The State Council of China, 2006). In the same year, combating acid rain and controlling water pollution in the major rivers and lakes such as Huai, Hai, and Liao River and Tai and Chao Lake were included in the 9<sup>th</sup> Five-Year Plan. The central government adopted a campaign approach for achieving its policy goals. For example, to curb water pollution in the Huai River caused by small township-village enterprises, the central government launched the “Midnight” campaign in 1997 to conduct surprise check on the listed fifteen highly polluting industries (Almond, Chen, Greenstone, & Li, 2009). The “Control One, Meet Two Standards” campaign was also initiated in 1997 to control sulfur dioxide emissions so that total SO<sub>2</sub> discharges could meet

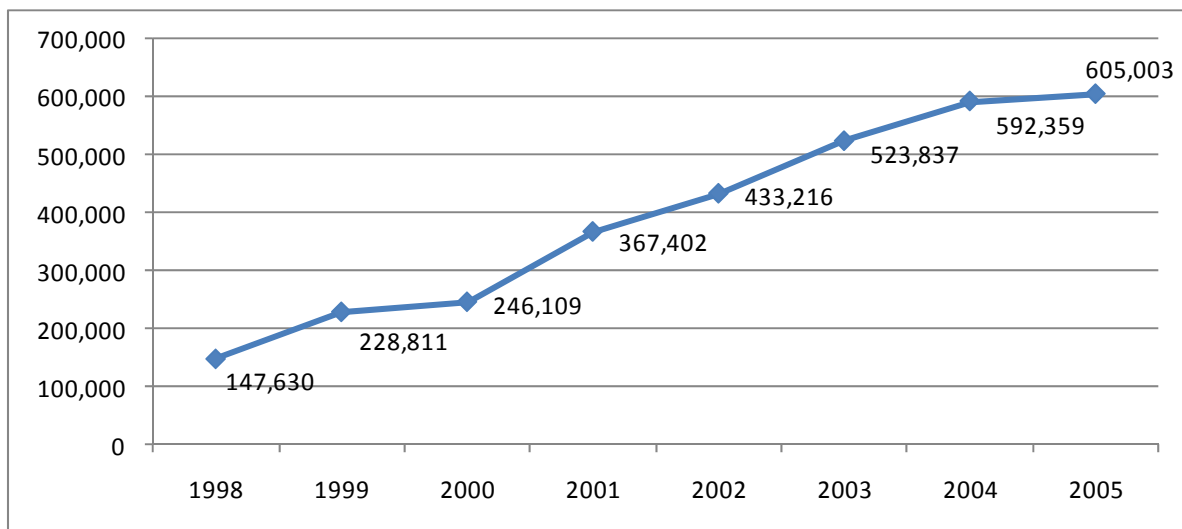
national standards and ambient air quality could meet standards in functional areas (State Environmental Protection Administration, 1996). News reporters with major newspapers and magazines were invited to join the “Midnight” campaign to expose serious water pollution cases and violators. This was a significant development as pollution had been mainly considered a technical issue and discussed only among experts and high level policy-makers. It was not until 1996 that environmental protection started to draw media and public attention.

Historically, advocates for environmental interests have been a few officials of environmental agencies, academics, leaders of environmental non-governmental organizations (NGOs), and sympathetic news reporters. However, environmental interests were not sufficiently articulated and economic growth dominated the government agenda until the launch of the 11<sup>th</sup> Five-Year Plan in 2005. The 2005 Songhua River incident made the Chinese central government realize that industrial pollution could threaten social stability as well as the image of China in the international community (Organization for Economic Co-operation and Development, 2005). The Songhua river flows into Russia. There was therefore pressure for environmental information-sharing and collaborative actions for handling the problem between the two countries. In December 2005, Mr. Xie Zhenhua was forced to resign from his position as chief of the State Environmental Protection Administration (SEPA, upgraded to the Ministry of Environmental Protection in 2008). However, in November 2006, he was appointed vice-chairman of the National Development and Reform Commission (NDRC), a comprehensive development decision-making agency above all the line ministries and departments in the Chinese central government. The Chinese leadership hoped that the placing of such a strong environmental advocate in the agency that was mainly concerned with economic growth would enable it to take the environment into account in decision-making at the national level (Xinhua News Agency, 2007). Furthermore, in December 2005, the State Council published its Decision on Embarking on A Scientific Approach to Development and Enhancing Environmental Protection (The State Council of China, 2006). Together with the national targets of 20 per cent increase in energy efficiency and 10 per cent reduction in pollution discharge set for the years from 2006 to 2010, the 11<sup>th</sup> Five-Year plan period, the Chinese central government signaled to local governments that it had included environmental protection on the government agenda.

Why should these moves be regarded as credible environmental commitments when there were already comprehensive environmental regulations and full-fledged environmental protection bureaus (EPBs) in the country? The answer is that local government officials enjoy discretion and autonomy in their decision-making and national policies are not necessarily faithfully followed. Local authorities usually prioritize economic growth, fiscal revenue, employment generation, and their political careers over the environmental implications of their decisions. The differences in priorities between the centre and the regions as well as implementation gaps in the government hierarchy have been well documented (L. Li, 2011; Wu, 2011; Zhu & Ru, 2008). Many local officials recognize that environmental protection is the foundation for sustainable growth into the future. For example, in July 2007, in light of water pollution in Tai Lake, the former party secretary of Jiangsu province publicly declared that he would sacrifice gross domestic product (GDP) growth for better environmental quality (K. Zhang, 2007). However, individual leaders' initiatives are insufficient to guarantee government environmental performance. Industrial pollution has been the major cause for environmental degradation in China and organized economic interests have always been much better articulated than environmental interests in society (Bailey, 2007; Schachter & Liu, 2005). In the face of such constraints, environmental information disclosure has become a "third-wave" of environmental regulation, after command-and-control and economic policy instruments, and is considered especially useful for developing countries where the resources and capacity for government enforcement are lacking (Tietenberg & Wheeler, 1998; Wheeler, 2000). Enhancing environmental information transparency and sanctioning industrial environmental violations are considered necessary for bridging the institutional gaps to provide concerned parties with better evidence and enforcement tools to articulate their environmental interests (W. Li, 2011). Thus, as the cases will illustrate in the next section, both intellectual and government elites have been pushing for such systemic changes in the environmental governance in China.

At the same time, the Chinese public has become increasingly aware of environmental problems in their daily lives. From 1998 to 2005, there has been a four-fold increase in the number of public complaints on environmental issues in the form of complaint letters or

personal visits to the EPBs (Figure 1). The heightened level of public concern has also been reflected in the growing coverage in the mass media. For example, the People’s Daily, which is representative of viewpoint of the Chinese central government, published 2,131 news articles on the environment from 1978 to 2008. In the last ten years there were 1,133 reports, exceeding the cumulative total of the first twenty-one years (998 reports) (Y. Xu, 2009). Thus, “a green public sphere” for articulating environmental interests in Chinese society has emerged (Baum, 2007). Public discontent with industrial pollution and poor environmental quality could no longer be ignored and local governments have come under pressure to fulfill their responsibilities for protecting the environment as required by the law (Xue, Simonis, & Dudek, 2007).



Source: Chinese Environmental Yearbook 1999-2006.

Figure 1. Public complaints on environmental issues 1998-2005

In western democracies such as the United States, NGOs have played a pivotal role in relating environmental issues to fundamental regime values such as the sanctity of life, freedom and equity. Organized environmental interests could effectively compete with other interest groups to shape public policies and compel the government to enact and enforce

environmental laws (Coglianese, 2001; Rose, 2000). In China, however, the articulation of environmental interests as they affect the grassroots tends to be issue-focused and sporadic. Systemic changes in environmental governance could only be achieved by elites who share common environmental values, have access to state actors, and can influence government policy-making (Wang, 2008). The two cases presented below will illustrate this point.

### **Institutionalizing Environmental Information Disclosure in China**

Owing to technical nature of environmental issues and the paternalistic tradition of public administration in China, the policy agenda has been under the strict control of government officials and their advisors (Wang, 2008). In the late 1990s, international organizations started to pay attention to industrial pollution control in developing countries and to form coalitions with domestic policy entrepreneurs to advocate national environmental policy change. This ‘epistemic community’ was comprised of legal professionals, economists, political leaders, bureaucrats, and business leaders who considered environmental information disclosure a useful tool for developing countries to achieve low cost pollution control as well as democracy (Braithwaite & Drahos, 2000). An expert team of the World Bank took the initiative to promote the new paradigm of industrial pollution control among Asian developing countries such as Indonesia, Vietnam, and China (Afsah, LaPlante, & Wheeler, 1996).

The World Bank team included one Chinese member, Dr. Hua Wang. Using the Program for Pollution Control, Evaluation and Rating (PROPER) in Indonesia as a basis,<sup>3</sup> Dr. Wang prepared a proposal in 1998 for funding support by the World Bank to develop China’s environmental information disclosure program. The project objectives were to use five colors – green, blue, yellow, red, and black – to rate the environmental performance of industrial enterprises from the best to the worst and then to disclose the rating results via the mass media, which in turn would encourage the public to get involved in helping to keep industry clean (Wangenheim, 2004).

The World Bank and China had a good working relationship and Dr. Wang was engaged in dialogues on environmental policy-making between the two parties. On invitation by the Department of Science and Technology to the “Agenda 21 Conference” held in October 1998

in Beijing, Dr. Wang gave a presentation on the recent adoption of environmental information disclosure policies in other developing countries. After receiving very positive responses from the audience, Dr. Wang reached out to his former colleagues, Professor Genfa Lu of Nanjing University and Jinnan Wang, the chief engineer of the Chinese Research Academy of Environmental Sciences (CRAES). They agreed to select Hohhot and Zhenjiang as two pilot sites for experimenting with environmental information disclosure (W. Li, 2011). In October 1998, the World Bank approved the project, which was called the “Chinese Industrial Pollution Predicting and Environmental Management Information System.” This project was contracted to the CRAES in Beijing, which is a research organ of SEPA. The purpose of the project was to (1) establish an industrial pollution prediction system; (2) identify cost-effective pollution control instruments in China; and (3) experiment with information-based pollution control instruments and disseminate the results through the Internet or CD-ROMs to promote the system across China (Chinese Research Academy of Environmental Science CRAES & Hohhot Research Academy of Environmental Science HRAES, 2000). Since the project was packaged as a technical proposal instead of a policy reform it was not perceived to be intrusive or controversial, it quickly won the support of both technocrats and politicians<sup>4</sup> (W. Li, 2011).

Director Chu Guiming of the Zhenjiang EPB embraced the project wholeheartedly.<sup>5</sup> He successfully convinced the mayor of the city government to endorse the experiment. Furthermore, he established an implementation team comprising Zhenjiang EPB officials and academics of Nanjing University to ensure the rigor of the Zhenjiang project (W. Li, 2011).<sup>6</sup>

Dr. Hua Wang invited SEPA representatives to join the press conference in Zhenjiang for announcing the first-year results of the policy experiment. SEPA requested EPB officials from other provinces to come to Zhenjiang to learn from the experience. Director Chu appealed to the Jiangsu provincial EPB for its recognition of the project. Both SEPA and Jiangsu provincial EPB promoted the Zhenjiang experiment among their subordinates. In this way, a coalition was formed, incorporating the international policy advisor, domestic policy entrepreneurs in Zhenjiang EPB, Jiangsu provincial EPB, SEPA, and academics in Nanjing University and Chinese Research Academy of Environmental Science (CRAES). The network



of supporters for environmental information disclosure was subsequently expanded to cover many other environmental professionals in the country (W. Li, 2011).

Following the Zhenjiang experience, a Ministerial Circular was published by SEPA in November 2005 to formally introduce technical guidelines. All urban municipalities in China were to rate industrial environmental performance and to make that information publicly available by 2010 (State Environmental Protection Administration [2005] No. 125, 2005). In December 2005, the State Council published its Decision on Embarking on A Scientific Approach to Development and Enhancing Environmental Protection. Article 27 of the State Council Decision explicitly requires provincial, municipal, and city governments to publicize information on environmental quality and ecological vitality, regularly report information on environmental accidents promptly, and to create opportunities for public participation (The State Council of China, 2006). On April 5, 2007, the State Council promulgated the first Open Government Information Decree in Chinese history (The State Council of China, 2006). One week later, SEPA enacted its Measures of Environmental Information Disclosure (Trial) (State Environmental Protection Administration, 2007).

The coalition was successful in pushing forward the following two instrumental objectives: (1) utilizing advanced information technology for upgrading environmental management techniques, and (2) compensating the less optimal environmental monitoring and enforcement capacity of EPBs by means of public scrutiny of polluters. Members of the coalition shared environmental values as well as democratic values such as transparency and public participation. In a situation where economic growth dominated the national agenda, the following strategies were adopted to mobilize support from government and intellectual elites: (1) preaching and prescription through the focus on international experiences backed up by the reputation of the World Bank, and (2) persuasion through communication with government officials who were possibly more biased toward development, bringing to their attention the reality of environmental challenges. It only took about two years for the coalition to change local policies in Zhenjiang but about ten years to bring about national policy change.

## **Sanctioning Industrial Environmental Violations in Chongqing**

Weak enforcement of environmental regulations has been a major cause of industrial pollution in China. The “Three Synchronizations” (also called “three simultaneous steps”) in the 1989 Environmental Protection Law were designed to deal with new sources of pollution. They require that (1) the design, (2) the construction, and (3) the operation of a new industrial enterprise (or an existing factory expanding or changing its operations) be synchronized with the design, construction, and operation of an appropriate (end-of-pipe) pollution treatment facility. Moreover, an environmental impact assessment (EIA) report must be completed before a facility is granted a construction permit by a competent economic development authority (Laffont & Tirole, 1991). The rate of implementation of three synchronizations and EIAs has been over 90 per cent.

Regarding existing pollution sources, a local EPB monitors their pollutant discharge and sanctions violations of any rules and regulations. In reality, because facilities in many monitoring stations are outdated and because funds are limited, those activities are usually undertaken on a commission basis by the industry. However, due to a fundamental conflict between the project motive and the concern for professional impartiality, the accuracy of reports by the monitoring stations tend to be unreliable (W. Li, 2006). In 2012, the Chinese Central Television reported that an independent body, the Aquiculture Ecological Environment Monitoring Center on the Middle and Upper Reaches of the Yangtze River of the Ministry of Agriculture had attributed the loss of fish stock in the Wu River to yellow phosphorus that was released from an upstream plant owned by a large state-owned enterprise, Guizhou Kailin (Group) Co., Ltd. The general manager of the Kailin plant, however, disputed this, arguing that the loss of fish stock was due to extreme weather conditions and the high density of the fish farm. He emphasized that the Kailin plant was a model enterprise practicing circular economy recognized by the Guizhou provincial government and that its pollution discharge had met national standards and had been certified as such by the Xifeng county EPB. On those grounds he refused to compensate farmers for their loss of livelihood. The issue was still unresolved one-and-a-half years after its occurrence in 2010 (Chinese Central Television, 2012).

Even when violations of rules and regulations are identified, the level of penalty is often inadequate to act as a deterrent. The pollution discharge fees were so low that it was economically rational for industries to pollute rather than to address the problem. According to one account, the operating cost of wastewater treatment in one highly polluting industry was around 1.2-1.8 RMB per ton. The fixed investment in wastewater treatment facility was 100 million RMB for the 150 ton per day alkali-recycling equipment used in the paper and pulp industry. But the maximum fine on wastewater discharge was only 100,000 RMB, making it more rational for the industry to pay the fine rather than to treat the pollution (Kim & Lee, 2006).

In an effort to deal with this problem, the Chongqing People's Congress revised its Chongqing Environmental Protection Decree in 2007 and included Article 111 in the new regulation, viz.,

“...having received an administrative order requesting to correct an identified environmental violation, if a polluter has not yet met the requirements by the deadline prescribed, the polluter will be fined by day of its violation since the administrative order was issued” (Chongqing People's Congress, 2007).

In the past, if a violation had been identified, no matter how long a polluter remained non-compliant only one violation could be counted and the polluter could only be fined once at the maximum amount prescribed by law. Now the Chongqing EPB can multiply that amount by the number of non-compliant days of “one” violation. According to the account by the director of the Chongqing bureau of environmental supervision under the Chongqing EPB, on the first day when the revised decree became effective on September 1, 2007, enforcement officers issued an administrative order requesting the violator to comply by September 3. When the enforcement officers revisited the plant on September 3, they found no corrections were made. The officers explained to the plant manager the terms of the new Article 111. The manager immediately asked his colleagues to take necessary measures to meet environmental standards (Lawson & Xu, 2007).

In March 2005, SEPA and the Environmental Defense Fund (EDF), an American-based environmental NGO jointly launched a research project entitled “Analyzing Efficiency and Effectiveness of Environmental Enforcement in China.” The objective of the project was to develop a better understanding of the behavior of industrial polluters and solve the problem of “high cost compliance but low cost violation.” Chongqing was one of the case studies included in the project (Bureau of Environmental Supervision, 2005). By November 2006, there were altogether 85 bureaus of environmental supervision at provincial, city, and county levels as well as 162 industrial enterprises participating in the study. The research team released a report declaring that, on average, it cost a violator 45 times more to take measures to control pollution than to pay a fine for non-compliance (C. Zhang, 2007).

Chongqing was the first city in China to include environmental performance in the evaluation metrics for top leaders in both the government and the Communist Party. To reduce air pollution, the Chongqing city government decided, at the third Chongqing People’s Congress meeting, to formally launch the Blue Sky program, which would run from 2005 to 2010. The aim was to enhance inter-agency coordination and the responsibility systems so as to achieve continuous improvement in environmental quality in Chongqing (W. Li & Chan, 2009).

Ms. Tang Xingqun, director of the Chongqing bureau of environmental supervision, was appointed to lead this program in 2000. Through her devotion to the job, she won the title of “iron lady” and was duly recognized by the Chongqing people, her colleagues working in other government agencies in Chongqing, her peers working in EPBs across the country, and her superiors in SEPA. She worked closely with the EDF persuaded the Chongqing municipal government to adopt the measure of “fine by day” (Liu, 2007). For her contribution to environmental protection, Ms. Tang won an award with the Asian Environmental Compliance and Enforcement Network (AECEN) in 2008 (Tang & Liu, 2009).

Despite being successfully adopted and implemented in Chongqing, the “fine by day” rule was only adopted by other two municipalities in China, Beijing and Shenzhen. Scholars have been advocating that the revised Environmental Protection Law and Water Pollution

Prevention and Control Law should also include such a clause. Unfortunately, the National People's Congress did not agree to this proposal. Industries have a high stake in the matter and they have clearly expressed a preference for maintaining the status quo (W. Xu & Yuan, 2010). In spite of this, it can be argued that some progress has been made in small coalitions comprising an international environmental NGO, environmental officials at both central and local levels of government, and legislators have successfully advanced local environmental interests.

## **Conclusions**

This article has analyzed two cases of advocating environmental interests in China: institutionalizing environmental information transparency and sanctioning environmental violations. There exist in China both policy coalitions advocating systematic changes from within the system and ad hoc pressure groups which attempt to persuade the government to allow them a voice in policy changes which would address their grievances. The public perceived there was a need in some instances, especially decisions made on locally unwanted development projects, to go to extra-institutional channels to articulate their environmental interests. The cases demonstrate the difficulties encountered by ACF theorists in answering the following questions: how to identify the geographical and temporal scopes of a policy issue, how to delineate the composition of advocacy coalitions and members' core beliefs and policy beliefs, what strategies have been adopted to compete with rival coalitions and form collective actions, and how to develop a causal link between external events and changes occurred in policy subsystems (Sabatier & Weible, 2007).

Environmental information transparency and sanctioning environmental violators are policy issues of national significance. Both exhibit evidence of policy learning by Chinese technocrats from well-established environmental institutions in western countries, under the schemes of collaborative scientific research. The advocacy coalition in the former instance was at a national level but the later only at a regional level. This could probably be explained in terms of (1) the difference in status of the World Bank and the EDF, which could account for their varied accesses to the Chinese central government; and (2) the difference in the

potential threat of the two initiatives to industrial interests. Consequently, disclosing industrial pollution information was adopted as a national policy but fining non-compliant polluters by day was adopted in only three localities in China. This shows that political actors are confined by resources at their disposal and do not necessarily form coalitions of an optimal geographical coverage for the policy issue to be adequately addressed.

Furthermore, political actors in these cases did not have shared core beliefs but focused their attention on single issues. Neither the policy coalitions nor the pressure groups continued to exist after the issues were addressed. The advocates for environmental interests had to compete with economic interests for policy change but the dominant policy and social discourses were on GDP growth, income generation and individual success. Competing values such as sustainability, equity, and public participation were still very much at the peripheries. Dramatic external events such as the Songhua River incident facilitated the shift of environmental issues to mainstream national policy-making but it takes a long time to cultivate environmental and social values among the general Chinese public.

The Chinese government's desire for modernization and advancement has opened up more political space for alternative policy-making mechanisms as well as for articulating environmental interests in society. Environmentally conscious elites have mainly targeted at key decision-makers to deliver changes from within the system while those members of the public who have been harmed by environmental pollution have resorted to extra-institutional channels. In the final analysis, the boundaries of political space are drawn by the politically powerful groups and they do not allow for public contest. The initiatives discussed in this article are ultimately consistent with the actions of an authoritarian government which believes that the pursuit of the public interest, of which protecting the environment is one area, should emanate from the government rather than the public.

#### **Declaration of Conflicting Interests**

The author declares no conflicts of interest with respect to authorship and or publication of this article.

#### **Funding**

Financial support from the City University of Hong Kong (Project #7008072) is gratefully acknowledged.

## Notes

1. Social organization and association are not encouraged in China. Even farmers, for example, who share a common professional interest have not yet formed their own national association (Chen & Xu, 2011).
2. More information is available at <http://www.tsinghua.edu.cn/publish/env/6313/index.html>
3. PROPER is a World Bank research project in collaboration with Indonesia's Environmental Impact and Management Agency (BAPEDAL). This project was intended to overcome pervasive institutional barriers to environmental enforcement by creating "incentives for compliance through honor and shame" (Afsah and Ratananda 1999). PROPER was terminated after 1997 because of the Asian financial crisis and political instability in Indonesia.
4. Interview with Dr. Hua Wang in 2004.
5. Director Chu was a strong advocate of environmental information transparency. He said, "Environmental information should be made public no matter whether they convey good news or bad news. There is nothing that can be hidden forever. Air, water, and land are so openly accessible and so indispensable to people's lives. Government should make environmental information publicly available!"
6. By contrast, the Hohhot Research Academy of Environmental Sciences (HRAES) had to subsume the project under the Hohhot EPB's "Control One, Meet Two Standards" campaign against air pollution. The implementation team was limited to members of HRAES and the project was never endorsed by the Hohhot city government (W. Li, 2011).

## References:

- Afsah, S., LaPlante, B., & Wheeler, D. (1996). Controlling Industrial Pollution: A New Paradigm *Policy Research Working Paper 1672*. Washington, D.C.: The World Bank.
- Almond, D., Chen, Y., Greenstone, M., & Li, H. (2009). Winter heating or clean air? Unintended impacts of China's Huai river policy. *American economic review*, 99(2), 184-190.
- Bailey, I. (2007). Market Environmentalism, New Environmental Policy Instruments, and Climate Policy in the United Kingdom and Germany. *Annals of the Association of American Geographers*, 97(3), 530-550.
- Baum, J. R. (2007). Reining in the Bureaucrats: Democratic Transition and Administrative Procedural Reform in Korea. *Governance*, 20(2), 233-254.
- Bortree, D., Ahern, L., Dou, X., & Smith, A. N. (2011). Framing environmental advocacy: a study of 30 years of advertising in National Geographic Magazine. *International Journal of Nonprofit and Voluntary Sector Marketing*, n/a-n/a.
- Braithwaite, J., & Drahos, P. (2000). *Global business regulation*. Cambridge [England]; New York: Cambridge University Press.
- Bureau of Environmental Supervision. (2005). *Notice on SEPA carrying out the project Analyzing Efficiency and Effectiveness of Environmental Enforcement in China* 国家

- 环境保护总局关于开展《中国环境监察执法效能研究》项目工作的通知. (BES [2005] No. 21).
- Chen, X., & Xu, P. (2011). From Resistance to Advocacy: Political Representation for Disabled People in China. *The China Quarterly*, 207, 649-667. doi: doi:10.1017/S0305741011000695
- Chinese Central Television. (2012, 12 January 2012). *Fish died on a large scale on the Wu River in Guizhou, but no resolution was found one and a half years after the incident* 贵州乌江水库鱼类大规模死亡 事发1年半仍未获解决. Topics in Focus. Beijing.
- Chinese Research Academy of Environmental Science CRAES, & Hohhot Research Academy of Environmental Science HRAES. (2000). Working Report on Environmental Information Disclosure in Hohhot 呼和浩特市环境信息公开工作报告. Hohhot: Hohhot Research Academy of Environmental Sciences.
- Chongqing Environmental Protection Decree 重庆市环境保护条例, [2007] No. 7 C.F.R. (2007).
- Coglianesse, C. (2001, April). *Is Consensus an Appropriate Basis for Regulatory Policy?* Working paper. Regulatory Policy Program Working Paper, (RWP01-012). Cambridge.
- Friendship Award awards friends. (2004, 30 September 2004). *People's Daily*. Retrieved from [http://english.peopledaily.com.cn/200409/30/eng20040930\\_158811.html](http://english.peopledaily.com.cn/200409/30/eng20040930_158811.html)
- Kim, S., & Lee, H. (2006). The Impact of Organizational Context and Information Technology on Employee Knowledge-Sharing Capabilities. *Public Administration Review*, 66(3), 370-385.
- Kreger, M., Sargent, K., Arons, A., Standish, M., & Brindis, C. D. D. (2011). Creating an Environmental Justice Framework for Policy Change in Childhood Asthma: A Grassroots to Treetops Approach. *American Journal of Public Health*, 101(S1), S208-216.
- Laffont, J.-J., & Tirole, J. (1991). The Politics of Government Decision-Making: A Theory of Regulatory Capture. *The Quarterly Journal of Economics*, 106(4), 1089-1127.
- Lawson, J., & Xu, F. (2007). SARS in Canada and China: Two Approaches to Emergency Health Policy. *Governance*, 20(2), 209-232.
- Li, L. (2011). Distrust in Government Leaders, Demand for Leadership Change, and Preference for Popular Elections in Rural China. *Political Behavior*, 33(2), 291-311.
- Li, L. (2012). The Magnitude and Resilience of Trust in the Center. *Modern China*, forthcoming.
- Li, W. (2006). Environmental Governance: Issues and Challenges. *Environmental Law Reporter: News & Analysis*, 36(7), 10505-10525.
- Li, W. (2011). Self-motivated vs. forced disclosure of environmental information in China—a comparative case study of the pilot disclosure programs. *The China Quarterly*, 206, 331-351. doi: 10.1017/S0305741011000294
- Li, W., & Chan, H. S. (2009). Clean Air in Urban China: The Case of Inter-agency Coordination in Chongqing's Blue Sky Program. *Public Administration & Development*, 29(1), 55-67.
- Lin, H., Zhang, J.-y., & Dudek, D. J. (2004). *Controlling Acid Rain in China: Controlling total SO<sub>2</sub> emissions and piloting emissions trading* Beijing: China Environmental Science Press.
- Liu, S. (2007, 26 September 2007). Ms. TANG Xingqun, director of Chongqing bureau of



- environmental supervision led an iron army for environmental protection 重庆市环境监察总队队长唐幸群带出环保铁军, *Sichuan News Net*.
- Organization for Economic Co-operation and Development. (2005). *Governance in China*. Paris: OECD.
- Pan, W. (2008). *The Thirty Years Changes of Social Value in China*. Beijing: China Social Sciences Press.
- Rose, F. (2000). *Coalitions across the class divide : lessons from the labor, peace, and environmental movements*. Ithaca, NY: Cornell University Press.
- Sabatier, P. A. (2007). The need for better theories. In P. A. Sabatier (Ed.), *Theories of the Policy Process* (2nd ed., pp. 3-17). Boulder, CO: Westview Press.
- Sabatier, P. A., & Weible, C. M. (2007). The Advocacy Coalition Framework: Innovations and clarifications. In P. A. Sabatier (Ed.), *Theories of the Policy Process* (2nd ed., pp. 189-220). Boulder, CO: Westview Press.
- Schachter, H. L., & Liu, R. (2005). Policy Development and New Immigrant Communities: A Case Study of Citizen Input in Defining Transit Problems. *Public Administration Review*, 65(5), 614-623.
- Sotirov, M., & Memmler, M. (2012). The Advocacy Coalition Framework in natural resource policy studies -- Recent experiences and further prospects. *Forest Policy and Economics*, 16(0), 51-64.
- State Environmental Protection Administration. (1996). *National Environmental Protection 9<sup>th</sup> Five-Year Plan and Vision for 2010 国家环境保护九五计划和2010 远景目标*.
- State Environmental Protection Administration. (2007). *Measures of Environmental Information Disclosure (Trial)* (huan jing xin xi gong kai ban fa (shi xing)), 35 C.F.R. (2007).
- State Environmental Protection Administration (2005) No. 125. (2005). *Comments on Expediting the Implementation of Rating Firm Environmental Behavior (guan yu jia kuai tui jin qi ye huan jing xing wei ping jia gong zuo de yi jian)*. (Circular No. 125).
- Sullivan, J., & Xie, L. (2009). Environmental Activism, Social Networks and the Internet. *The China Quarterly*, 198(1), 422-432. doi: doi:10.1017/S0305741009000381
- Tang, B., & Liu, S. (2009, 9 January 2009). The female director who is not afraid of and willing to enforce environmental regulations 敢于执法善于执法的女队长, *China Environmental News*. Retrieved from <http://www.cepb.gov.cn/kxfz/xwbd/22505.htm>
- The State Council of China. (2006). *The 11th Five-Year Plan of Social Economic Development in China*.
- Tietenberg, T. H., & Wheeler, D. (1998, October 23-25, 1998). *Empowering the Community: Information Strategies for Pollution Control*. Paper presented at the Frontiers of Environmental Economics Conference, Airlie House, Virginia.
- van Overveld, P. J. M., Hermans, L. M., & Verliefde, A. R. D. (2010). The use of technical knowledge in European water policy-making. *Environmental Policy and Governance*, 20(5), 322-335.
- Wang, S. (2008). Changing Models of China's Policy Agenda Setting. *Modern China*, 34(1), 56-87.
- Wangenheim, G. v. (2004). *Games and public administration : the law and economics of regulation and licensing*. Cheltenham, UK ; Northampton, MA: Edward Elgar.
- Weber, E. P., & Khademian, A. M. (2008). Wicked Problems, Knowledge Challenges, and Collaborative Capacity Builders in Network Settings. *Public Administration Review*,

- 68(2), 334-349.
- Weible, C. M., Pattison, A., & Sabatier, P. A. (2010). Harnessing expert-based information for learning and the sustainable management of complex socio-ecological systems. *Environmental Science & Policy*, 13(6), 522-534.
- Weible, C. M., Sabatier, P. A., & McQueen, K. (2009). Themes and Variations: Taking Stock of the Advocacy Coalition Framework. *Policy Studies Journal*, 37(1), 121-140.
- Wheeler, D. (2000). Greening Industry: New Roles for Communities, Markets, and Governments. Washington, D.C.: The World Bank.
- Wu, G. (2011). China in 2010: Dilemmas of "Scientific Development". *Asian Survey*, 51(1), 18-32.
- Xinhua News Agency. (2007, 7 January 2007). Sacked Environmental Chief Appointed NDRC Deputy Director. Retrieved from <http://china.org.cn/english/environment/195234.htm>
- Xu, W., & Yuan, E. (2010, 28 October 2010). How far away is national legislation from local experimentation? 地方实践到国家立法路有多远?, *China Environmental News*. Retrieved from [http://www.cenews.com.cn/xwzx/kdpdk/201010/t20101028\\_679551.html](http://www.cenews.com.cn/xwzx/kdpdk/201010/t20101028_679551.html)
- Xu, Y. (2009). Analyzing Environmental News Reports in the People's Daily in the Past 30 Years. *Young News Reporter* 18, 40-41.
- Xue, L., Simonis, U., E., & Dudek, D. J. (2007). Environmental Governance for China: Major Recommendations of a Task Force. *Environmental Politics*, 16(4), 669.
- Zhang, C. (2007, 24 September 2007). Severe punishment is suitable for water pollution 整治水污染宜用重典, *The Economic Observer Newspaper*. Retrieved from [http://news.h2o-china.com/html/2007/09/623151190596920\\_1.shtml](http://news.h2o-china.com/html/2007/09/623151190596920_1.shtml)
- Zhang, K. (2007). Tai Lake Pollution Completely Damaged the Xiao Kang Societies in Suzhou, Wuxi, and Changzhou 太湖蓝藻事件颠覆苏锡常全面小康成果. *China Net*. Retrieved from [http://www.china.com.cn/city/txt/2007-07/11/content\\_8506372.htm](http://www.china.com.cn/city/txt/2007-07/11/content_8506372.htm)
- Zhu, D., & Ru, J. (2008). Strategic environmental assessment in China: Motivations, politics, and effectiveness. *Journal of Environmental Management*, 88(4), 615-626.

## **Bio**

Wanxin Li is Assistant Professor in the Department of Public and Social Administration, City University of Hong Kong.