Regulating Land and Pollution at Lake Dianchi

Compliance and Enforcement in a Chinese and Comparative Perspective

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Introduction

Long before development opportunities arrived, Lake Dianchi, located right below Kunming city in southwest China, had been rich in natural resources. “The lake’s water was pure and clean. We would swim there and even wash our clothes,” explained an old woman from Jiacun’ village, which borders the eastern side of the lake. In addition to clean water, local farmers, though not rich, used to have plenty of fertile land. However, in the last two decades, development has brought change for the better and for the worse. The inhabitants of this periurban region—like many Chinese—have been able to share in the prosperity that rapid industrialization and rural urbanization brought. Farmers switched to off-farm jobs in the new industries. On the more developed eastern side of the lake, farmers even turned to real estate development, building second houses while leasing their old ones to newly arrived migrants. In addition, villages have earned income by renting out farmland for enterprise construction. Lake Dianchi thus witnessed its inhabitants trans-

1 All localities and names of persons and companies have been replaced with fictitious names whenever the identity of informants was at stake and when possible.
form from relative rural poverty to an initial stage of periurban riches.

Economic development had its price: it was disastrous for the natural resources of the lake's catchments. A combination of industrial pollution, municipal waste discharge, soil erosion, and various kinds of nonpoint pollution from chemical fertilizers, solid wastes, and pesticides used in horticulture severely atrophied the lake's water. In addition, the numerous new paper and chemical fertilizer factories polluted the rivers of the lake's catchments and the region's air. Last but not least, arable land, once an abundant resource, also suffered from development. Kunming's unstoppable expansion devoured whole villages, while in those villages left intact, the farmers' own housing craze combined with the construction of village enterprises and new highways caused the amount of arable land to decrease even further, to the extent that some villages lost most of their land.

Lake Dianchi is but one of the many localities in China where development has adversely affected natural resources. Throughout the country, economic development in combination with urbanization and industrialization has led to natural-resource degradation. Most of China's larger cities suffer from serious air quality problems. The country's major lakes and rivers have been severely polluted, and accidents involving highly toxic spills such as those at the Tuojiang River in 2004 and the Songhua River in 2005 continue to occur. A World Bank study on air pollution found in 2005 that sixteen of the world's most polluted cities were in China. Furthermore, the country's arable land continues to decline, in part because of urban and rural construction, but also because of land transformation to stop further soil erosion. Such erosion led to serious desertification

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that in turn led to severe water shortages throughout northern China and sandstorms reaching all the way to South Korea.

China’s foremost approach to stop resource loss has been the use of the legal system. Initial legislation made in the 1980s was vague and weak, and therefore unable to protect natural resources. China’s legal reconstruction and the country’s special circumstances were an important reason why China’s original natural-resource protection laws had been vague and weak. Lacking legal experience and faced with an enormous and rapidly changing society, during the early days of reform (in the 1980s and early 1990s), Deng Xiaoping’s credo mo shitou guo he (crossing the river by feeling the stones) had been central for China’s legal development. Following a piecemeal approach, the country at first used an incremental method of law-making. 4 This meant that the country first established abstract general laws that could later be specified in easily changeable administrative regulations. As legislation was the result of extensive bargaining between various stakeholders, for natural-resource protection this meant watered-down legislation that sacrificed environmental for economic and social concerns.

After 1995, national leadership was convinced that by strengthening antipollution and land legislation in force, mainly enacted in the 1980s, the improved legislation could stem resource loss more effectively. This belief was based on reports by scholars and policymakers blaming the ongoing deterioration of natural resources on the existing legislation. 5 Thus, for natural-resource protection law, the piecemeal approach and the bargaining practices were partly

abandoned in the mid-1990s. In 1998, the amended Land Management Act (LMA) established a strict arable land protection system that limited the conversion of arable land into nonarable use. In a similar fashion, pollution laws were amended and new laws introduced. While the amended 1995 Air Pollution Prevention and Control Law failed to realize most of the ambitious legislative proposals of environmentalists, the amended 1996 Water Pollution Prevention and Control Law (WPPCL), the 2000 Air Pollution Prevention and Control Law (APPCL), and the 2002 Environmental Impact Assessment Law did introduce stricter and more specific norms to protect the nation from pollution.

Around the same time, apart from blaming legislation, scholars and policy-makers also attributed ongoing resource loss in places such as Lake Dianchi to weak enforcement. They held that weak enforcement—whether of natural-resource protection law or any other locally unfavorable national legislation—was caused by difang baohu zhuyi (local protectionism). Local protectionism meant that local governments let their own local interests prevail over national concerns. Local governments were able to exercise such protectionism through their control over the budgets and personnel management of their local bureaucracies—including courts, procurates, police, and administrative departments such as land bureaus, industrial bureaus, and environmental protection bureaus (EPBs).

After 1995, in order to overcome the local protectionist influence on law enforcement, China’s leadership decided to strengthen central control over local inspections and sanctions for violations. Accordingly, in a seemingly Maoist fashion, China organized national political campaigns aimed to enhance the enforcement of natural-

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6 Due to the limitations of this paper and its focus on local data from Lake Dianchi, this large body of work cannot be fully reproduced here. Here and further in this paper such literature will be referenced indirectly by directing readers to the thesis this paper was based on where a full literature overview can be found. For an overview of this literature, see van Rooij, *Regulating Land and Pollution in China*, ch. 13.

7 Ibid.
resource protection law. Since 1996, there have been continuous rounds of campaigns for arable land protection law enforcement and for pollution law enforcement. These efforts were similar to the political-legal campaigns Beijing has organized against other illegal practices caused by weak enforcement such as drug trafficking, corruption, pirated goods, and illegal Internet cafés.

Since the second half of the 1990s, China’s central-level leadership has thus changed the existing legislation and organized law enforcement campaigns to control or at least slow down the ongoing deterioration of natural resources at places such as Lake Dianchi. The question is what these changes have accomplished at the local level. Can these changes prevent a future with shortages of water to drink, air to breathe, and arable land for food to eat? To what extent have stricter norms been better equipped to prevent the local conversion of arable land or control local air and water pollution? Have legal enforcement campaigns been able to overcome local protectionism and serve as a sufficient deterrent to end ongoing local violations and prevent violations from occurring in the future?

In order to answer these questions, the larger research on which this chapter is based sought to identify what influence China’s post-1995 legislative changes and law enforcement campaigns have had on compliance with natural-resource protection law at Lake Dianchi. A threefold study was prepared to find the answers to these questions. First, the legislative history of the legislative changes was studied by analyzing how the process of how the laws were made affected their implementation in terms of compliance and enforcement. Second, compliance and violation behavior at Lake Dianchi was studied by analyzing what factors influenced regulated actors

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8 Ibid., Chapter 14.
to either obey or break the law. Third, enforcement work was studied by looking at why regular enforcement was problematic and what impact political campaigns had on such enforcement work. An interdisciplinary methodology was used that combined a year of local fieldwork and interviews with an extensive study of existing research concerned with Kunming city in China and other localities in other countries.

This chapter provides an overview of the findings of this research about compliance and law enforcement at Lake Dianchi. It first summarizes the study’s findings about compliance with and violation of arable land protection and pollution law at Lake Dianchi, providing a typology of types of compliance and violation and analyzing why they occurred as they did. Second, it summarizes findings about why regular law enforcement was so weak and the extent to which law enforcement campaigns helped to create added compliance at Lake Dianchi. Finally, in its conclusion the chapter further analyzes what the findings about Lake Dianchi signify when compared to findings from other parts of China and when compared with existing theories and studies about regulatory law from other both Western and non-Western countries, looking at the influence of market forces and civil society on compliance and enforcement, the challenges of complexity for effective regulatory law, and the political rationality and ad hoc nature of lawmaking and enforcement. It ends with an outlook on the future that seeks to understand what hope there is for a better control of pollution and arable land loss at Lake Dianchi.

Compliance and Violation at Lake Dianchi

Around Lake Dianchi, land and pollution regulation have had both positive and negative responses. While some targeted actors abided by the newly introduced norms, others blatantly broke them, sometimes causing considerable damage to the natural environment and to those living there. Understanding the implementation of law in
China does not only require an understanding of how the state implements such law, but also involves an understanding of how those whose behaviors are targeted by the law (the regulated actors) respond to the norms.

Two observations need to be made. First, there are different types of actors involved here. For pollution regulation the main regulated actors are enterprises, of which there are many kinds: both industrial and nonindustrial, both large and small, and both rich and poor. For arable land protection regulation, regulated actors are even more varied as those who may build on such land are many, including: farmers, village leadership, various governments (at township level or above), enterprises, social organizations (such as schools or temples), and land development companies. Second, there is no clear binary boundary between compliance and violation, and in many cases there are mixes of both. At Lake Dianchi there have been several types of violations of land and pollution regulation. In many of the villages surrounding the lake, enterprises have been constructed illegally on leased, collectively owned arable land without following the proper procedures that require conversion of ownership from collective to state, compensation for collective land ownership and land use rights, approval of land use conversion, and paying land use taxes to the state.\(^\text{10}\) In Jiacun village, for example, the improved connections with Kunming city and the demand for light-industry products led to growth opportunities for enterprises. Such small, privately owned enterprises were erected on collectively-owned arable land that the village leased to the enterprises. In return, the enterprises paid an annual rent that the sub-village collectives distributed to their villagers, about two thousand CNY per person per year. In Jiacun, most actors involved thus benefited from illegal land transactions as villagers got more money than they would have normally earned by working on their land, village leadership could develop the village, and enterprises could

\(^{10}\) This is in violation of Land Management Law §§ 43, 44, 45, 46, 47, 48, 49, 63.
find land to start businesses without having to pay the immense lump sum payments official requisitioning, conversion, and compensation would cost them. Such illegal practices also occurred in Licun, a Hui minority village on the western side of the lake. Village leaders here forced villagers to rent their arable land to the village leadership, which in turn rented it out again to enterprises and for housing construction. The profits made here were, however, not distributed to the villagers but were withheld, probably embezzled by the village leaders. A second type of land violation mainly occurred in the richer eastern part of the lake. For example, here in Jiacun village, households illegally constructed second residential houses while renting their old houses to migrant workers.11 Again villagers benefited as they got a better house and extra income, even here much more than they would have made from their land. A third type of violation that occurred at the lake concerned the embezzlement of compensation fees to be paid to farmers losing their land use rights when the land was appropriated by the state for construction projects. In these cases the proper procedure for construction approval on collective land was followed and steps were taken to convert ownership and land use purposes and even compensation was agreed upon. However, in the end compensation was not paid in full to the farmers but embezzled by government or village leadership during the process.12 This happened for example in Xiaocun, where the construction of a new road ended in riots once villagers suspected that their village leaders had taken part of the agreed compensation for land loss, while in fact it was the township leaders that took this money.

The most prevalent type of pollution violation at Lake Dianchi concerned enterprises that had the proper environmental installations but secretly switched them off during the night in order to cut costs. In Chinese this is called “toupai” (secret discharges). This happened for example in Baocun, where Huabei—a large, privately

11 This is in violation of Land Management Law § 62.1.
12 This is explicitly forbidden in LMA § 49.2.
owned chemical fertilizer plant for years known as a model clean enterprise—secretly switched off its pollution installations at night to increase its profits.\textsuperscript{13} Huafei’s discharges, which went for a long time unnoticed by local environmental authorities, had a significant impact on the local villagers whose rice was polluted and whose water buffaloes got so sick that they could no longer be used in the rice paddies. Another example of illegal secret discharges occurred when small chemical fertilizer companies producing sodium silicofluoride\textsuperscript{14} (SSF) also failed to use their environmental installations at night as clean production was economically not feasible for these small enterprises. The effects were terrible for farmers and enterprises downstream the Tanglang River from where the polluters were located. Enterprises had to halt production as the acidic water could no longer be used, while farmers complained of ruined paddies. This case even drew nationwide media attention when a CCTV news team reported on how the pollution affected the operation of China’s oldest hydroelectric power plant.\textsuperscript{15} The second type of pollution violation concerned enterprises that did not have the proper environmental installations at all. One example is the Kunming porcelain enamel factory, which supports six hundred employees and another three thousand pensioners from its state-owned past. The factory was unable to compete with the decreasing prices of plastic products, and with declining income and continuing staff costs, it had been unable to make the necessary environmental investments. As such the factory was obsolete and should have been closed,\textsuperscript{16} but continued to exist nonetheless. Apart from such industrial dinosaurs, such violations also occurred in small enterprises

\textsuperscript{13} Violating several provisions of law: WPPCL §§ 14.2, 29, 37; APPCL § 13; Dianchi Protection Regulations (DPR) § 17.1; 1996 Integrated Water Discharge Standard, GB 8978-96; and 1995 Discharge Standard of Water Pollutants for Phosphate Fertilizer Industry, GB 15580-95.

\textsuperscript{14} Na\textsubscript{2}SiF\textsubscript{6}


\textsuperscript{16} APPCL § 19.
producing light industrial or food-related products. One example that received attention in Kunming in 2004 was inner-city restaurants whose air, water, and noise installations did not meet the national and municipal standards. Such restaurants could often not pay for such installations largely because they were as expensive as the initial startup capital of the company.

While land and pollution regulations have been extensively violated at Lake Dianchi, there have been notable cases of compliance. Understanding these cases is important as it may hold the key to change existing violations into compliance. There have been different levels of compliance though. First of all, there have been cases where there was no opportunity to break the law, and thus compliance was not an option. An example is that the lack of demand for migrant housing in the poorer western part of the lake prevented housing violations in Baocun and Licun villages. Second, there are compliance cases where the regulated actor(s) involved could no longer break the law. In these cases compliance was also not the result of a conscious choice of the regulated actor(s), but rather the result of changes in circumstances. The clearest example of this type of compliance occurred in cases where former heavily polluting enterprises ceased operations after bankruptcy. The best example here is the Yunzhi paper company, whose pollution had for years had a disastrous impact on the Tanglang River and the many farmers and enterprises that depended on its water. For years nothing was done against this dominant local employer, until years of mismanagement following its privatization caused it to cease operation and thus its polluting activities.

In other compliance cases, violations of law ended or did not occur because of an effort made by the regulated actor(s). Such efforts occurred first of all when local communities put pressure on regulated actors to comply with the law, or even go beyond that and

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17 Violating APPCL § 14; Kunming Restaurant Environmental Protection Rules (KMEPR) §§ 8, 11; DPR § 21.2.
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exceed the minimum requirements of the law. Such pressure occurred for example when villagers protested against pollution at the Ningshi chemical fertilizer company. Villagers called the local EPB and the media every time they suspected that the factory was illegally discharging, sometimes even when they were not. In addition, these farmers cut the factory’s discharge pipes and led the flow of the factory’s wastewater onto their land in order to increase compensation. The pressure made Ningshi invest in compliance, and unlike Huafei prevented it from carrying out secret discharges at night since such discharges would have been detected straightaway due to the watchful eyes of the local communities. Similarly, protesting farmers have in certain cases also been able to get statutory minimum (or beyond statutory minimum) compensation for loss of their arable land use rights. Good examples are the community protests in Jiacun village that erupted first when villagers feared that a Buddhist temple construction project would not compensate for all the land taken. In protest, villagers nominated a mentally disabled villager as village chief in the 2001 elections. As a result of such pressure, the temple project was forced to go well beyond the statutory minimum for compensation and even twice beyond what was common practice in the village. In 2002 this led to another round of protests when farmers found that a school construction project did not pay enough compensation since it did not pay as much as the temple construction project did. This time villagers petitioned higher-level governments, and angry protesters sabotaged the construction work by cutting down power cables and surrounding the village committee headquarters to force their demands on the village’s democratically elected leaders. This led to a compromise where farmers received a little extra compensation and small plots of land for shops adjacent to the school.

In few of the cases researched compliance was the result of an effort by the regulated actor following state law enforcement action. In most compliance cases, such enforcement was absent, and compliance occurred due to other reasons outlined above. One example
where enforcement did lead to compliance was when the heavily polluting paper factory in Fucun village ended its violations\textsuperscript{18} after a campaign-time enforcement decision forced company management to move the factory out of the sensitive lakeside area to new compliant premises in the more remote Mincun village.

Understanding why compliance or violation occurred at Lake Dianchi involves understanding the specifics of each case and deriving generalities from the cases studied. Such exact analysis goes beyond the scope of this chapter, but was made in the thesis it was based on. Nonetheless, several findings from that study are relevant for this chapter. Compliance and violation can first of all be analyzed by looking at a combination of factors related to the regulated actors (internal factors) and to their context (external factors). A first internal factor important for pollution behavior is the size of the regulated actor. In the cases studied, we find that size matters, but it in different manners. For instance, there were pollution violations in both small as well as large enterprises. While this is not surprising as smaller enterprises have fewer financial resources and less knowledge to comply with the law, the larger study showed that large enterprises may actually be able to break the law undetected by using their position as a dominant employer to ward off pressure from local communities and even law enforcement. A second internal factor is the manner in which regulated actors viewed costs and benefits of compliance and violation. The cases demonstrate that regulated actors stressing economic goals, having a short-term perspective, and aiming at profit maximization rather than minimizing losses were more prone to violating the law. A third internal factor is the social responsiveness of the regulated actor.\textsuperscript{19} The larger study finds that in some cases a stronger openness of the regulated actor


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toward its external context (especially its local community) and also
stronger participation of such local community in the decision-
making of the regulated actor led to greater compliance. However,
this only happened when the interests of the law and those of the
local community were aligned. If they were not and local commu-
nities actually benefited from violations of law, a regulated actor's
increased awareness of community concerns or increased commu-
nity participation did not lead to compliance, but could even sup-
port violation. It should be noted that the study of such internal
factors is highly challenging, and more data is necessary to fully
understand how the values and characteristics of the regulated
actor(s) influence compliance and violation behavior.20

As possible drivers of change it is essential to understand how
forces external to the regulated actor(s) have shaped compliance
and violation behavior at Lake Dianchi. As noted above, commu-
nity pressure can be a possible driver toward compliance. Examples
are the cases of community protests against pollution at the Ningshi
fertilizer factory and protests for a larger amount of compensation
in Jiacun village. Similarly, a lack of community pressure correlated
with continued violations. This occurred in Baocun village where
Huafei factory could continue to pollute the local environment
without any opposition. Another example is Licun village, where
local leaders could make illegal profits from other people's lands
unopposed. While no such study has been made concerning land
violations, the findings on community pressure at Lake Dianchi are
in line with research on pollution concerning other parts of China.
Studies about pollution control have found that a lack of commu-

20 Here much can be learned from research about land conversions by
Sargeson (Sally Sargeson, “Subduing ‘The Rural House-Building Craze’: Attitudes
Towards Housing Construction and Use Controls in Four Zhejiang Villages,” Chi-
na Quarterly 172 (December 2002)) and research by Fryxell and Lo about how
environmental values shape the pollution behaviors of enterprises (Gerald E.
Fryxell and Carlos W. H. Lo, “Organizational Membership and Environmental
Ethics: A Comparison of Managers in State-Owned Firms, Collectives Private
Firms and Joint Ventures in China,” World Development 29, no. 11 (2001)).
nity pressure correlates with continued pollution. 21 It is interesting to note that China has been witnessing increased collective action against pollution, 22 and a decrease in compensation payments for arable land loss. 23

An analysis of the cases further demonstrates that state enforcement measures had a limited effect on compliance. At the same time, in most violation cases enforcement was weak, at least until 2004, making the costs of violation lower than the expected benefits. This teaches that while enforcement is not an important variable for explaining compliance, in the cases studied a lack of enforcement does correlate with violation behavior, and increased enforcement may have an influence toward compliance. Present studies about arable land loss and pollution in other parts of China have held similarly that these practices continued due to weak enforcement. 24 However, none of the studies consulted have looked at what the effects of enforcement on compliance are.

The political context also played a role in compliance and violation at Lake Dianchi as the political system as a whole, local political institutional changes, local leaders, and local power configurations affected regulated actors and local communities. A first finding is that local governments have played an important role in condoning violations that were an important part of the local economy. This happened in many of the land and pollution violation cases. Until late 2004, local governments, from township to provincial

21 For an overview of the literature, see van Rooij, Regulating Land and Pollution in China, ch. 6.


24 See van Rooij, Regulating Land and Pollution in China, ch. 6.
level, never urged their land bureaus to act against violations of the LMA, e.g. Jiacun. Local governments also condoned severe violations at Yunzhi paper and the SSF companies even after receiving complaints. A second finding is that the local power configuration prevented local villagers from protesting when violations damaged their interests in some of the cases studied. Such local power configurations were to a large extent related to China’s political system, under which local governments have a considerable amount of autonomy from superior authorities and also lack democratic participation and control by local citizens. Local power configurations were also related to local family and connections (guanxi) networks. An example is Licun, where the local configurations of power that connected leaders in the village with leaders at the township and district level made protest even through elections difficult. Another example is Baocun, where Huafei and the other local enterprises had close relationships with village and township leaders who successfully prevented protests. Village democratization had in some cases a positive effect on compliance, while in others it had no effect. In the land cases in Jiacun, villagers actively used the increased room for participation rural democratization had given them, while in Licun such democratic powers were not used even though formally available. The reason for the difference is most likely the dependence of Licun farmers on their leaders and the strong relationship between their leader’s networks and higher-level authorities. China’s national political system has also been influential. Nonlocal nongovernment organizations did not play a role at Lake Dianchi, and protests against violations only occurred on a local basis. A likely reason for this is that the state provides strict limitations on the organization of nonstate interests groups, and as a result non-state groups working on sensitive issues have had trouble organizing in a manner that would indicate that they had reach throughout the country. National political support to act against violations can potentially help enhance compliance. Shifts in national policy led to enforcement campaigns, which, as we saw, influenced compliance in one pollution case. Studies on pollution and arable land from
other parts of China have found some similar findings, most notably the impact of decentralized political structures on violations of law and local governments condoning violations.²⁵ However, in the current literature little attention has been paid to the effects of democratization, local power structures, political campaigns, and political limitations to organized protest on compliance and violation or even on the continuation of pollution and arable land loss.

The economic context, which consists of market forces, such as the markets for labor, land, housing, and industrial and agricultural products, was a major influence on compliance and violation behavior, both affecting it directly and indirectly through influencing other internal and external factors. Market forces played a role in Licun and Baocun villages, where there were no illegal housing construction as there was no demand for such houses. Another example of pollution compliance due to market forces occurred in connection with the Yunzhi paper factory, a case where the factory’s bankruptcy, following years of mismanagement after privatization, halted its polluting activities. Economic forces also made violations lucrative when there was a demand for illegal products. An example is the demand for illegal land conversion for enterprises and extra houses in Jiacun. Another example is the small SSF enterprises and the restaurants in Kunming for whose products, which could largely be made only in violation of pollution regulations, there was a high demand. The economic context also had an indirect effect on compliance behavior as it shaped the possibilities and willingness of local communities and local authorities to address such violations. When there was a homogeneous local economy with dominant employers or sources of income, local communities and local authorities became more dependent on such employers or sources of income. A good example is the difference between the independent and actively protesting farmers in Ningshi, which had a heterogeneous urbanized economy, and Baocun village’s dependent and

²⁵ See van Rooij, Regulating Land and Pollution in China, ch. 6.
meek local population, who have all depended on income from the polluting industrial giant in their village due to a lack of other sources of income. Such dependence also existed in villages where most farmers had local jobs and were dependent on the village committee (VC) leadership and where such VC leadership was well connected in the village as well as with higher-level governments. A good example of this is Licun, where local villagers did not protest against illegal land practices of their own VC. Dependence on violation-related income also led to less community pressure. For example, the lack of protests or political pressure on violations of housing and enterprise construction regulation in Jiacun village existed because income from these violating activities benefited most local villagers and governments, and land conversions had become an important local source of income. Finally, the economic context sometimes affects factors related to the regulated actor itself, and especially how costs and benefits were weighed and the moral attitudes related to such weighing. Here the clearest example is the difference in how farmers deciding on building extra housing thought about protecting arable land in urbanizing Jiacun, with a high demand for construction land and where arable land was not perceived to be important, and the remote and rural Baocun, where land was still seen as sacred and not built on for second houses since there was little demand for the latter. The findings here resonate with existing studies about arable land loss in other parts of China that argue that land loss and pollution continue due to economic growth, urbanization, and industrialization.26 However, studies about pollution in China have paid little attention to how the economic context is related to pollution. In addition, the fact that violating activities can be dominant local sources of income, which are more difficult to regulate, has not been recognized in the literature assessed here.27

26 Cf. with van Rooij, Regulating Land and Pollution in China, ch. 6.
27 Ibid.
Law Enforcement: Regular and Campaigns

Regular enforcement against pollution and land violations—carried out by the three main bureaus in charge, i.e., the Environmental Protection Bureau, the State Land Management Bureau (SLB), and the Dianchi Management Bureau (DMB)—was difficult at Lake Dianchi. In none of the cases of compliance studied has regular enforcement been an important factor influencing the regulated actor to comply with the law. In most of the cases of violation studied, regular enforcement was weak. Regular inspections had trouble detecting violations that had been ongoing and of long duration. With regard to detected violations, in none of the cases studied were sanctions issued during regular enforcement.

Two sets of variables can help to explain why regular enforcement was so problematic at Lake Dianchi. First, there are variables related to the enforcement agency itself. The bureaus studied lack financial resources. As a result, bureaus lack enforcement staff and equipment needed to carry out inspections. The origin of the bureaus’ financial resources has also negatively affected their enforcement work. EPB officials have told me confidentially that the fact that their EPB receives all of its funding from the local government has enabled this government to exercise considerable influence on their bureau. Officials at the land bureaus have told me a similar story. Township land offices, for example, used to be managed and funded directly by the township government. Under this structure, the land offices failed to play a proactive role as agencies detecting and reporting illegal land practices. The township land office followed its township government closely, and made land management subordinate to local economic development and social stability. As one SLB agent said: “The land office would be crazy to bite the hand that feeds it.” A second reason why the origin of bureau resources may lead to goal displacement is that part of the bureau’s resources is derived from continued violations of law. This problem is most apparent for EPBs. The Kunming EPB, for example, depends for 30 percent of its resources on pollution discharge fees. The bu-
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The bureau collects such fees as part of its work to implement national law. Fees are paid based on how much pollution enterprises discharge. EPBs are thus dependent on continued pollution, without which they are no longer able to pay for 30 percent of their staff. The Kunming SLB shows similar problems. Its enforcement department has a staff of twenty-two, of which only sixteen are paid for through regular funds.

Wide de facto discretion has further hampered effective law enforcement at all three bureaus. This is first of all related to the fact that internal bureau personnel procedures offer weak incentives and controls for job conformity. Stimulating and controlling agents has thus been difficult, especially since bureau management cannot verify what happens during inspections and the fact that the outcome of enforcement work is difficult to measure. Meanwhile, enforcement procedures in practice offer agents and bureau leaders considerable freedom when deciding on sanctions. As a result of the weak personnel procedures and the enforcement procedures, those deciding on sanctions have a large amount of discretion. When using this discretion, agents seem to be risk averse, trying to do their work in such a manner that it will not upset any of the relationships with management, the regulated actors, local politicians, and higher-level agencies.

A second set of variables hampering regular enforcement work is those related to the external context of the enforcement agency. The agency first of all is influenced by the regulated actor, who in several cases directly obstructed enforcement work. One example is that, especially at larger construction sites, inspection agents are

28 For good examples from other regions in the 1990s and how this problem affected enforcement there, see Xiaoying Ma and Leonard Ortolano, Environmental Regulation in China (Lanham: Rowman & Littlefield Publishing Group, 2000), 123–126. Cf. with Homer Sun, "Controlling the Environmental Consequences of Power Development in the PRC," Michigan Journal of International Law 17, no. 4 (1996): 1028, who argues that not just fees but also regular enforcement fines that form part of the normal bureau budget cause enforcement agents to favor violations over compliance.
sometimes not let onto the premises and have to force their way in by getting police support. Resistance against enforcement agents is particularly cumbersome for pollution inspections. A good example is the Huafei factory. The factory was until late 2004 listed as being in compliance, although most local villagers knew that the factory was secretly discharging at night. Huafei did so to evade daytime inspections as it knew well that nightly inspections were practically not feasible. The relevant EPBs are all located in Kunming city. All roads from Kunming to Baocun village, where Huafei is located, are not easy to travel and are very dangerous at night. Nightly discharges were therefore never detected during regular inspections. Furthermore, EPBs carry out few nightly inspections because personnel costs are higher and there is a significant chance that factory management is not present to let agents into the factory. Some miles further down the Tanglang River, the SSF companies have taken resistance a step further into what could be termed blatant obstruction. “Those enterprises engage in guerilla warfare with us,” a frustrated EPB inspection agent remarked. If before the media coverage enforcement action never stopped the ongoing violations because of local protectionism, after the coverage the Kunming EPB made a real effort to detect the violations. They have even installed around-the-clock discharge-monitoring equipment at one of the smaller enterprises to prevent the possibility of secret discharges at night. Agents found out later, however, that this particular factory was bold enough to build an extra illegal discharge pipe that circumvented the EPB’s detection equipment. Thus, it took months before the EPB was able to gather proof of violations. Apart from the difficulty of detecting violations at uncooperative or fully obstructive enterprises, regular enforcement has also been difficult because of a lack of support from local communities. In many of the cases where regular enforcement was difficult, local communities depended largely on the violating activities as major sources of income, or on some of the violators who had considerable power. For land, local communities supported and even engaged in violations, while for pollution some localities still failed to report pollution al-
though they suffered from it. The fact that local communities depended on violating activities had several consequences. First, there were fewer complaints about violations, making detection more difficult. Second, violation of law formed a source of local income, making it more difficult to deal with such violations stringently. Finally, local governments made regular law enforcement difficult as they failed to support more stringent action and sometimes obstructed the use of strong measures against violations. Local governments control natural-resource law enforcement through their influence on agency budgets and the appointment of bureau leadership. It is thus no surprise that interviewed enforcement agents state that they pay attention to local government concerns on economic growth and social stability in their regular sanction decisions.

As a result of these variables, law enforcement agents have difficulty detecting violations, and once violations are discovered, they issue nonstringent sanctions, paying special attention to the social and economic consequences of such sanctions. The result of this is that some violations could go on for years. Examples are the pollution violations at Huafei, Yunzhi, Kunming porcelain enamel factory, and the SSF companies, and the land violations in Jiacun, Baocun and Licun villages.

The study's findings are in many aspects similar to existing research on other parts of China. Such studies have especially blamed “local protectionism,” i.e., local governments protecting their own interests instead of enforcing national legislation. This study also found that local protectionism influenced regular law enforcement. Instead of just seeing this as an abject and corrupt phenomenon, the study sought to understand the causes of this practice. First, it finds that local protectionism was more widespread than existing studies led to believe. It concerned more than just corrupt, self-interested local politicians. In some of the cases studied, strict law enforcement was supported by a wide range of local actors, includ-

29 For an overview of these sources van Rooij, Regulating Land and Pollution in China, ch. 13.
ing local citizens, whose livelihoods depended directly or indirectly on ongoing violations. Second, it thus finds that local protectionism may have legitimate causes. Such protectionism has in some of the cases studied maintained local livelihoods and necessary local products, which if the law had been fully enforced would have come under pressure. The best examples are the violations of the LMA’s prohibitions on housing and enterprise construction on collective arable land. Other examples are the protection of Kunming porcelain enamel factory, the SSF companies, and local restaurants. Third, this study finds that local protectionism was at times a coping mechanism for risk averse law enforcement officials when lacking resources, having to enforce legislation with a wide scope of application that was widely violated, facing powerful regulated actors opposed to the law, and receiving limited support from local communities and local governments. As current scholarship holds, local protectionism is first caused by the high level of autonomy of local governments and their enforcement agents. This study, however, further finds that another important cause for local protectionism is the law’s lack of local feasibility, for regulated actors, local communities, local governments, and enforcement officials. In the existing studies on other parts of China, few scholars have addressed this cause or recognized the possible legitimacy of local protectionism. Meanwhile, regular enforcement has been weak, and the law’s equally legitimate goals of protecting arable land and preventing and controlling pollution proved difficult to achieve. Thus, while local protectionism may at times be an understandable phenomenon helping to adapt the law to local circumstances, it has also undermined the law and obstructed natural-resource protection.

Since 1996 Chinese leadership has recognized the danger of weak natural-resource protection law enforcement. To deal with the existing weak enforcement, campaigns were organized. The campaigns were organized through political pressure from the center, using cadre evaluation systems to overcome local protectionism, making campaign targets into priority policy on the basis of which local leaders were to be evaluated. The original campaigns had
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started at a time when there was a sense of urgency about natural-resource losses due to alarming reports about China’s rapidly declining arable land quantity\(^{30}\) and a series of pollution incidents attracting widespread media coverage that led to the adoption of strong measures against pollution in the ninth five-year plan and in new legislation.\(^{31}\) The campaigns made enforcement measurable, setting formalistic targets of numbers of inspections, strict sanctions, and model cases. During the campaigns, local actors were thus less allowed and less able to take local concerns into account.

Until 2004, the campaigns had little effect on ongoing violations studied at Lake Dianchi. Only in the case of the Fucun paper factory did a campaign directly end violations. Even though in 2004 land and pollution campaigns seemed to initiate a change in land violation cases in Jiacun, Licun, and Baocun villages, and pollution violations at Huafei and the SSF companies, the findings seem to indicate that these changes were to be short-lived.

The land campaigns aimed to force a legalization of existing illegal leases of collectively owned land to enterprises, by getting the enterprises and the village authorities involved to implement the proper procedures involving transfer of ownership from collective to state, approval of land use change from agriculture to construction, compensation for land rights losses, and payment of land use fees to the state. Plans were made to implement these changes, first by detailing the amount of illegal land use in the villages, and second by setting deadlines for the completion of the procedures. For several months no progress was made, as the fees that had to be paid for the procedures had not yet been determined. When in No-


November 2004 these fees were finally set, the worst rumors were confirmed as the fees and land rents were high. First enterprises would have to pay a land conversion procedure fee (banzhengfei) of CNY80,000 per mu (667 square meters), to be paid to the land bureau. Second, enterprises had to pay a lump sum for renting the land use right from the subvillage, which was set at CNY200,000 for a fifty-year period. In Jiacun village, which is in many aspects the richest of the three villages studied, more than two-thirds of the enterprises were reported not to be able to pay these new fees and rents. By the end of this research in December 2004, it seemed unlikely therefore that the campaign would actually be implemented according to plan. As one of the village leaders told me two months earlier: “If we want to maintain our current level of development and continue to develop in the future, we must and will find a way around the campaign.”

While in some of the cases studied, such as Kunming porcelain enamel factory and air pollution violations by restaurants, the 2004 pollution campaign brought no apparent change, it did seem for a while that it would have an effect on violations at Huafei and the SSF companies, both located on the Tanglang River. Extra nightly inspections carried out during the campaigns were finally able to detect the violations at these enterprises that had for a long time gone unpunished. As a result, the EPB fined the SSF factories and ordered them to halt production, and issued a CNY50,000 fine against Huafei and told the company that it would publicize the violation and the sanction. Huafei management was upset as it feared losing its good name and perhaps even investments from its American partners once word of their violations got out. The EPB used the factory’s anxiety to strike a deal. The EPB would not publicize the violation and sanction, in return for which the enterprise would set up its own SSF production and quit supporting the highly pol-

32 Due to time limitations the present research does not cover the period after November 23, 2004, in Jiacun. Therefore we do not know what has happened after this date.
luting, cheap, small-scale production. However, it seems that even in these two cases the campaign effects could not be sustained. First of all, nearly two months later, weeks after the campaign had ended, the SSF factories resumed production, even in broad daylight. This is a clear indication not only that the SSF companies could continue business as usual once the campaign had ended, but also that Huafei's promise to start its own SSF production had not affected these companies. A second indication of the campaign's failure to maintain success was that Huafei did not seem to live up to its promise of cleaning up its production process. Quite the contrary, the company initiated an expansion of its phosphor ammonium installations, enlarging production by 1.2 million tons a year. A State Environmental Protection Agency (SEPA) investigation of projects with a possible effect on the environment ranked Huafei's expansion as one of China's twenty worst new environmental hazards, stating that the company contained “hidden problems.”

The reason why campaigns had difficulty causing sustainable compliance at Lake Dianchi was that they were not able to provide a structural solution to the obstacles of regular law enforcement. Once a campaign ended, many problems remained as the bureaus lacked resources or support, local communities still depended on violating sources of income, violators were still powerful as dominant employers, and local governments still cared about maintaining economic growth and social stability, which some of the law's norms if fully enforced or complied with would endanger.

There are different ways to evaluate these campaigns. From a direct compliance perspective, as adopted mostly in this book, the campaigns were largely unsuccessful. While the campaigns mark a tougher stance on natural-resource violations, the temporary toughness does not overcome structural problems, as we saw, and is unable to create compliance. From a pragmatic perspective, the campaigns are the only way to deal with the existing violations, given China's present central-local relationships and the structural conflict of interests between short-term local livelihoods and long-term natural-resource protection. Using campaigns offers an incremen-
tal tool to address the worst violations that the regular enforcement system fails to address. From a symbolic perspective, the campaigns may be more successful than they seem at first glance. The campaigns may actually be a symbol of change, demonstrating that what was condoned for years must end. The symbolic function of campaigns may be enhanced because of their increasing use of public participation mechanisms creating awareness for law enforcement and natural-resource protection. From a rule-of-law perspective, one could argue that the campaigns are dangerous as they may set a bad example instead of a positive one. The constant conjuncture of weak enforcement followed by strong campaign enforcement makes the legal system as a whole less consistent. During campaigns, campaign objectives are more important than legal procedure. In addition, the campaigns are law based on politics, instead of China’s recent adoption of *Yifa Zhiguo* (governance based on law). Using campaigns to enforce normally nonenforced law may endanger the legal system as a whole and the beginning stages of a rule of law doctrine in China. A final perspective on the use of campaigns is a political perspective. One can wonder why, although China is losing land and pollution is damaging many interests, these problems have only recently received so much attention. Perhaps the answer

33 With rule of law we here mean both in general the law’s meaningful restraints on government action, as well as the thin formal rational rule of law conceptions that require that the law should provide clear unambiguous procedures that should be applied in a consistent manner. Cf. with Brian Z. Tamanaha, *On the Rule of Law History, Politics, Theory* (Cambridge: Cambridge University Press, 2004); Randall Peerenboom, *China’s Long March Toward the Rule of Law* (Cambridge: Cambridge University Press, 2002); Rachel Kleinfeld, “Competing Definitions of the Rule of Law,” in *Promoting the Rule of Law Abroad, In Search of Knowledge*, ed. Thomas Carothers (Washington, DC: Carnegie Endowment for International Peace, 2006).

is that politicians truly wished to solve these problems and used the incidents to trigger changes not possible before. Moreover, more cynically and following Edelman, stakeholders may have used the growing urgency about pollution and arable land loss to attain goals not directly related to them. For the cases described here and for all of China’s political-legal campaigns, this line of argumentation holds attraction as most campaigns have been about enhancing the state’s vertical reach into the local bureaucracy. Boosting the legal system through campaigns serves this purpose, and social problems such as pollution, food security, corruption, crime, religious practices, copyright piracy, and disabuse of village power may all serve as fora for enhancing the center’s vertical reach.

**Conclusion: A Broader Look at Compliance and Enforcement**

Land and pollution regulation at Lake Dianchi has been a challenge. Given the incentives to break the law with the need for land, jobs, and products produced by polluting enterprises and the weak checks and balances either from law enforcement or from society, violations continue. At Lake Dianchi problems are intertwined as weak community pressure and weak enforcement are closely related to the direct and indirect dependency of local state and society actors on the violators as sources of income. To a certain extent this has meant that the goals of the law in protecting natural resources stand opposed to dominant local interests. Centrally organized law enforcement campaigns have tried to enhance state enforcement and thus break current local opposition to successful implementation. However, their efforts have proved to have limited effects or have had effects that could not be sustained. This was largely so

because the basic problem that the incentives for violation continued to dominate state and society actors could not be solved.

In order to deepen the understanding of these local findings and to analyze their contribution to existing knowledge, it is important to place them in a larger comparative context. First of all we need to know how these findings here compare with other studies on different areas of China. Second, the findings presented here as well as those in other studies about China need to be compared with existing theories about compliance and enforcement from other countries. Doing so helps deepen the understanding of findings analyzed here and adds data to such existing theories. Finally, a broader perspective of the future of natural-resource law compliance and enforcement at Lake Dianchi is warranted, analyzing to what extent there is hope for amelioration in the future.

The findings about why compliance and violation occurred at Lake Dianchi are largely similar to earlier studies about arable land loss and pollution in other parts of China.36 There are some noteworthy differences and new insights, however. First is the fact that existing studies about pollution violations have not looked at how important sources of local income have received less external pressure to comply with the law. They have not looked at the position of dominant employers, regulated actors who directly and indirectly provide a significant amount of income for people in a given locality. Second, existing studies have generally not looked at how local power configurations affect compliance and violation of law. Neither has there been attention to how village democratization has influenced arable land and pollution cases. Third, while this study, similar to other studies, found that small regulated actors were more likely to violate pollution law, such studies did not address how large enterprises have been able to use their economic power to violate the law with little risk.

For the enforcement of natural-resource protection law, the

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36 For an overview of such studies, see van Rooij, Regulating Land and Pollution in China, ch. 6.
present study confirms many findings from existing studies concerning other parts of China emphasizing that weak enforcement arises out of local protectionism, a lack of resources, and close relationships between the enforcement agents and the regulated actors.\textsuperscript{37} There are two main differences, however, between existing studies and the present findings. First, this study has sought to understand why local protectionism exists, finding that it occurs because local governments, enforcement agents, but also local communities have condoned the violation of norms that if complied with could affect dominant sources of local income. Second, this study has looked at the effect of political campaigns, a phenomenon not yet studied for natural-resource protection law enforcement. Campaigns studied here are examples of Chinese political-legal campaigns. These campaigns have been used to enhance the implementation of law in China.\textsuperscript{38} Given the weak regular enforcement that exists in certain areas of law, such campaigns may be necessary to overcome local resistance. However, their effect may be limited as long as structural problems and power relations are not addressed. In addition, their political and ad hoc character stands opposed to a long-term process of rule-of-law formation.

The findings here can also be compared with studies about regulatory compliance and enforcement from other both Western and non-Western countries. A first central conclusion such comparison brings forward is that compliance, the main objective of regulation, results from a convergence of variables related to the regulated actor itself, law enforcement, social pressures, and stimuli from the market. While existing research from Gunningham et al. and the World Bank is optimistic that such convergence can be attained,\textsuperscript{39}

\begin{itemize}
  \item\textsuperscript{37} Ibid., ch. 12.
  \item\textsuperscript{38} For a more detailed discussion of this phenomenon, see van Rooij, "China’s War on Graft.”
\end{itemize}
the case of Lake Dianchi shows that when regulation opposes vested local economic interests and powerful stakeholders, an opposed convergence to violation may develop that is difficult to address through stricter laws and stricter enforcement. At Lake Dianchi the economic context affected enforcement agents, local communities, local governments, and regulated actors in such a way that violation rather than compliance resulted. This happened despite efforts to strengthen legislation and law enforcement.

Lessons from other countries teach that unless there are social pressures and economic incentives for alternative behavior, compliance will be difficult to attain. We do not believe, however, that compliance can be attained without a basic level of state law enforcement. Enforcement inspections, when successfully carried out, produce the basic information necessary for alternative regulatory approaches, whether they include public disclosure, fees, or tradable rights. In addition, only state enforcement can successfully pressure truly bad apples, i.e., socially unresponsive firms, over which social and market pressures have little influence. Comparative research teaches that within the convergence of community pressure, market incentives, and state enforcement, especially community pressure can be an important driver toward compliance, more stringent legislation, and enforcement. However, in contexts such as that of Lake Dianchi, this will only happen if there is either a local community independent of the violating activity that is edu-


41 van de Bunt, Organizational Crime; Braithwaite, Crime, Shame and Reintegration, 136.

cated and organized enough to initiate action or a nonlocal, independent, and well-organized social organization that is politically and legally able to pressure violators toward compliance. The local community influences the effect of social responsiveness on compliance. In contrast with existing studies claiming that higher social responsiveness leads to greater compliance, Lake Dianchi demonstrates that in contexts in which local communities support norm violation, higher social responsiveness leads to more noncompliance.

Another more theoretical conclusion is that complexity challenges successful law enforcement. Studies from other countries have found that successful law enforcement needs to be flexible, combining accommodative approaches in which cooperation is sought with the regulated actor with more stringent deterrent measures against bad apples. In order to operate successfully with such flexibility, and make the right choices and find the right methods to accommodate to or deter the regulated actor, enforcement agents need to understand why regulated actors comply with or violate the law. The study of Lake Dianchi has demonstrated how complex compliance behavior is and that it is highly case-based, depending on a set of internal and external variables not easily understood. In such a context of complexity, the lack of enforcement resources precludes solid empirical knowledge. This obstructs enforcement agents’ understanding of the behavior of regulated actors, necessary to find the balance needed for good law enforcement. Even if regulated actors can be understood, it is difficult to translate such knowledge into successful enforcement strategies because of the dilemma that adaptation to widely differing circum-

43 van de Bunt, Organizational Crime; Braithwaite, Crime, Shame and Reintegration.
stances of regulated actors requires such a high level of discretion that it may lead to corruptive or co-opted law enforcement. Apart from the complexity of understanding the behavior and the interests of the regulated actor, there is the complexity of conflicting interests between those of the law and those of regulated actors and the local state and communities that depend on them. Such conflict of interests undermined law enforcement at Lake Dianchi. Adapting enforcement to such conflicting interests is difficult as either the goals of the law are followed, leading to unreasonable and thus unsustainable law enforcement that lacks local support, as happened in the campaigns, or law enforcement is locally acceptable but too weak to initiate the behavioral change sought by the law.

One can of course wonder why a balance is not struck between accommodative and deterrent enforcement, and why in Lake Dianchi’s practice there has been a conjuncture of extremes from regular to campaigns. The answer is that regulatory law enforcement may often have a political rationality as a result of political reactions to incidents or shifts in power, which precludes acknowledging the full complexity of the situation at hand. From the mid-1990s onward, China’s natural-resource protection law enforcement suddenly changed several times, from weak, vague, cooperative, and nonstringent to strict, specific, and stringent. These changes made the law and its enforcement more oriented toward limited goals and less oriented on the full complexity of the regulated issue at hand. Changes seemed to result from shifts in what powerful central leadership deemed important. In addition, changes occurred to some extent as a reaction to incidents, and in a manner widely publicized. Political leaders seemed to want to show their commitment to deal with incidents in a strong manner. The changes witnessed at Lake Dianchi thus had a political rationale. Comparison with other countries teaches that such a political rationale may often inform law enforcement and can explain rapid changes in enforcement.

For this term see Ich Snellen, Boeiend geboeid [Captivated captured] (Inaugural Lecture, University of Tilburg) (Tilburg: University of Tilburg, 1987).
strategies following disasters, enforcement scandals, economic crises and electoral changes, or other shifts in power. In these cases, instead of a rationale in which the full complexity of the issue at hand would be analyzed and addressed, a simplified political rationale to show willingness to deal with the incident at hand or react to the shift in power was dominant. Such simplified political rationale may help to soothe the public fear or anxiety related to the incident at hand, but may not help to enhance compliance. Following incidents and shifts in power, one enforcement strategy change may follow another, leading to regulatory conjunctures of different enforcement styles.

Meanwhile, natural-resource loss continues at Lake Dianchi. Our analysis above may seem to indicate that enforcement remains powerless to stop the ongoing construction on arable land and the pollution of air and water at places like Lake Dianchi. Is there hope for amelioration in the future? We believe there is, especially for pollution. For pollution, if China’s economic growth continues and especially if the already expanding service sector grows more important and if the local economy diversifies, the local economic interests will change. First, there will be more nonpolluting sources of income. This makes more stringent action against heavily polluting enterprises more acceptable. Second, the diversified economy will also decrease the influence of dominant employers, especially if rather remote regions such as the western side of Lake Dianchi are connected to Kunming through the planned highways. As a result more social pressure to clean up, similar to the Ningshi case, can be expected. Third, the ongoing professionalization, especially the recruitment of environmentalist enforcement agents, will lead to more resistance to local protectionism within the enforcement bu-

46 Stone and Edelman have detailed how such simplification takes place and what role elements of symbolic politics have in such a political rational, especially of a populist nature. See Deborah Stone, *Policy Paradox, The Art of Political Decision Making* (New York: Norton & Company, 1997) and Edelman, “The Construction and Uses of Social Problems.”
Fourth, this will be especially so when the then richer periurban dwellers around the lake realize that their raised economic standard of living is affected by a polluted environment. Fifth, and finally, increased enforcement and protest from local communities that thus results may in the end lead to a situation in which most comply with the law and the costs of compliance are no longer an exception but a rule also recognized by the markets that control the regulated firms. For arable land regulation, unfortunately, we cannot be as hopeful. We expect that China’s urbanization and industrialization will continue, and the goals of the law will remain opposed to the interests of most living in periurban areas, who will less and less depend on agriculture as a source of income.

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