Commentaries

Charge to the Bush Administration: U.S. Interests in Energy Cooperation with China

By Kelly Sims

Energy policy should be a pivotal component of the Bush administration's agenda. California's electricity shortages, higher national energy prices, OPEC's persistent obstinacy, and the need to reduce the greenhouse gas emissions from the U.S. energy system are among the daunting challenges presently faced by the United States. The energy relations between the United States and major industrializing countries also urgently need attention. For compelling economic, security, and environmental reasons, it is in U.S. national interest to forge constructive relationships with these countries, and especially with the People's Republic of China (PRC). The Clinton administration recognized the need for energy cooperation with China but failed to articulate and implement a coherent and effective policy. Now the Bush administration has a fresh chance to strengthen the U.S. approach to China on energy matters.

Security Interests

A prosperous and stable China is not only good for the Chinese people but also for the rest of the world because internal volatility would most likely render China's government less reformist, less open to cooperation with other nations, and more prone to overreact to perceived threats. Energy can play a fundamental role in such stability because reliable energy supplies promote a country's perception of security. Energy directly affects personal well-being and satisfaction by providing basic services such as heating, cooking, and lighting.

Although the United States presently imports ten times more oil than China, Chinese oil imports are growing. The PRC became a net importer of refined oil in 1993 and a net importer of crude oil in 1996. Increased Chinese dependence on oil imports from the Middle East and the Caspian Sea regions may lead China's government to take steps to maintain assured access to sources of oil that the United States might find problematic. China might also act aggressively to control the energy resources located off its coasts in the South China Sea and Spratly Islands. Solutions that reduce reliance on oil are advantageous to both countries in that they would lessen the potential regional and international conflict over oil supplies.

China's energy development also poses more direct security concerns such as those related to its nuclear energy agenda. Currently, China possesses only a few nuclear reactors with just 2 gigawatts (GW) of capacity, but due to energy shortages, the government has announced ambitious plans to enlarge its capacity to 40 GW by 2020. Enlarging China's nuclear energy capacity would enable Chinese policymakers to pursue their intentions to commercially reprocess spent fuel (a pilot facility is under construction), heightening the risk of the proliferation of nuclear materials.

Economic Interests

The 1999 Permanent Normal Trading Relations (PNTR) agreement negotiated between China and the United States enjoys bipartisan support in the United States. China's faithful implementation of this accord and smooth entry into the World Trade Organization will depend on the steadiness and thoroughness of its domestic economic and political reforms. Political reforms will rely upon continued economic success, which in great part depends on responsible energy policies. Energy is still closely linked to industrial development and economic growth in China since the industrial sector presently consumes nearly 70 percent of the entire country's non-biomass energy consumption. However, China's economy grew twice as fast as its energy use in recent years, proving that economic growth can become less dependent on energy inputs.

Until the Asian recession, which began in 1997, demand for energy in China outpaced supply by as much as fifteen percent, indicating that energy shortages hindered Chinese economic activity during the last decade. The recent oversupply of energy in China is likely to swiftly disappear as the economy regains steam. China's energy consumption grew by as much as six percent annually during the mid-1990s. If this consumption growth continues at the same rate, China's energy use could easily *double* within twenty years, placing undue pressures on world energy supply if measures are not taken

to reduce demand. Seventy-five million Chinese still lack access to basic energy services like electricity. Therefore, as living standards improve—not only for the impoverished but also for the middle class—residential demand for electricity will rise due to acquisitions of appliances like refrigerators and televisions. One telling example of China's growing energy hunger is that there were only 500,000 televisions in China in 1978, but by 1997 this number had grown to more than 36 million.

China's burgeoning energy demand could also provide the United States with a number of economic opportunities. For example, the United States could substantially reduce its trade deficit with China through trade in energy goods and services. In 1999, power generation equipment was the largest American export to China. Given the tremendous growth projected for China's energy system, the United States should strive to become China's most trusted and reliable supplier of energy goods and services. Greater commercial cooperation between the two countries would permit American businesses to better understand and adapt to the Chinese market, hopefully enhancing market access. The recent decision to authorize the U.S. Trade and Development Agency to work again in China on energy, environment, and aviation safety-related business opportunities is a good start in this direction. China's market potential is enormous, particularly as it diversifies its fuel supply and embraces natural gas, renewable energies, clean coal technology, and continues its intensive campaign to improve energy efficiency.

Given the tremendous growth projected for China's energy system, the United States should strive to become China's most trusted and reliable supplier of energy goods and services.

Environmental Interests

China's environmental problems are severe. Nine of the ten most polluted cities in the world are located in China, a third of China's land is now affected by acid deposition, and Chinese pollutants are reportedly traveling across the Pacific Ocean to reach the Oregon coast (*Editor's Note: See fact sheet on the Wilson Center Web site for more facts on transboundary air pollution from China http://ecsp.si.edu*). The costs of environmental damage in China have been estimated to be equivalent to between 4.5 and 12 percent of China's annual GDP. Even if the United States is less immediately concerned with the state of environment and health in China, it must confront the fact that China is second only to the United States as a producer of climate-altering carbon dioxide, and its emissions are rapidly increasing. The United States currently produces about a quarter of the world's greenhouse gas emissions, and China emits about half that amount. Whether or not President Bush decides to support the Kyoto Protocol, if he accepts the science of climate change (which he should), a strategy must be devised to directly reduce greenhouse gas emissions in both countries that takes equity and fairness concerns into account. An ounce of prevention in energy development is worth a pound of cure. China is rapidly building a gigantic energy infrastructure and therefore accumulating expensive capital stock that will last a long time. If climate change proves to be as dangerous as many projections suggest, it would be exceedingly difficult to quickly transform China's energy system if its new energy infrastructure continues to rely so heavily on coal.

The Path Forward

The United States and China are the two largest energy-consuming countries in the world. Both depend on coal as a fuel for electricity production and industrial use, both have experienced regional energy shortages in recent years, have good renewable energy and hydropower resources, and are struggling to manage the environmental consequences of their energy use. Despite these similarities there are important differences as well. Unlike America, China has substantially improved its overall energy efficiency in recent decades. Moreover, China presently confronts much faster growth in its demand for energy, has far fewer oil and gas resources, and lacks affordable advanced energy technologies. Given their different approaches to energy management, there is much these two great powers could learn from each other.

Given the commonalties in energy challenges, as well as the security, economic, and environmental interests at stake in China's energy development, the Bush administration faces an acute choice at this time. Will the administration deliberately cultivate a friendship based on mutual energy interests or choose to live with an unpredictable competitor? Given the challenges before both countries, it would be infinitely more constructive for their leaders to focus attention and resources on

cooperatively developing solutions to their joint energy dilemmas.

First and foremost, the Bush administration should devise and articulate a clear policy of energy cooperation. A simple declaration should be issued that plainly states a broad desire to cooperate with China on energy matters. Commercial, environmental, technological, and diplomatic energy cooperation could actually be a useful method to build confidence and trust between the new Bush administration and China's government. But stating intention is not enough. A comprehensive and strategic U.S. energy policy towards China needs to be implemented that takes into account all of America's vital interests. This overarching policy must be integrated into the daily work of the federal agencies including the Environmental Protection Agency, the Departments of Defense, State, Treasury, Energy, and Commerce, the Trade and Development Agency, and the U.S. Trade Representative's Office if it is to be effective. For example, if the Bush administration decides to support an expansion of natural gas infrastructure, energy conservation, and renewable energy use in China, then it must diplomatically push for such policies at high levels while providing low-interest loans and export assistance to relevant U.S. companies.

In contemplating its first concrete steps towards cooperation, the Bush administration could reconsider the current ban on bilateral aid to China in the energy sector. It should also ponder continued participation in the joint Oil & Gas Forum and the U.S.-China Forum on Environment and Development, although both are in need of rejuvenation. In the year 2000, an important report was issued jointly by the Chinese and American Academies of Science on cooperation in the energy futures of China and the United States (led by Richard Balzhiser of the Electric Power Research Council). One of their many practical recommendations was that a standing committee should be established between the two academies to facilitate joint energy research. This would help improve energy research and development cooperation between the two largest consumers of energy in the world. These steps would make achievement of the implicit goals outlined here more likely. Cooperative energy activities could make energy more readily available to China as it industrializes, widen market access for American energy goods and services, improve Chinese energy efficiency to reduce global competition for oil supplies, and limit emissions of air pollutants and greenhouse gases.

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China's Changing Carbon Dioxide Emissions

By Jeffrey Logan

China's energy consumption trends appear to have changed dramatically since 1996 (See Sinton and Fridley paper in this volume pp: xx-yy.). Chinese government statistics indicate that gross domestic product (GDP) expanded by approximately 25 percent between January 1997 and December 1999 while overall energy consumption declined by over 12 percent. These divergent trends, while still poorly understood, appear to have resulted in roughly a 20 percent reduction in the year 2000 carbon dioxide emissions compared to earlier forecasts. This short commentary summarizes earlier forecasts and compares them to trends over the past few years.

China is currently the world's second largest emitter of greenhouse gases. Carbon dioxide (CO_2) emissions, primarily from fossil fuel combustion, account for approximately 85 percent of the total emissions.[1] China's rapid economic growth, heavy dependence on coal, and inefficient industrial structure have raised concern that future emissions will offset reductions from other countries. Despite these concerns, it should be noted that 1999 per capita CO_2 emissions in the United States were eight times higher than in China.

Chinese and international experts collaborated on at least five major studies during the 1990s on greenhouse gas emission scenarios (see Table 1). One main goal in each study was to project baseline future energy use and associated carbon dioxide emissions and then to provide at least one alternative policy scenario resulting in lower emissions. Other objectives were to characterize present and future non-CO_2 emissions, discuss the potential impacts of a changing climate on China, and quantify impacts of climate policy on emissions of other pollutants such as oxides of sulfur and nitrogen. All studies used computational models to simulate interaction between the economic and energy sectors. The U.S. Department of Energy also produces annual updates for energy consumption and climate emissions in China; the Energy Information Administration (EIA) publishes these forecasts in the annual International Energy Outlook (http://www.eia.doe.gov/oiaf/ieo/index.html).

Forecasts of energy consumption vary between each study because of different assumptions about economic growth and structural composition, fuel use, technology diffusion, energy efficiency, environmental regulation, demographic trends, and other secondary issues. The World Bank study, for example, forecasted higher energy use than most other studies because it assumed GDP

Table 1 - Selected Sudies on Greenhouse Gas Emissions in China

Study Title	Abbreviation	Published
National Response Strategy for Global Climate Change: People's Republic of China (Asian Development Bank, ADB)	ADB	1994
China: Issues and Options in Greenhouse Gas Emissions Control (World Bank)	WB	1994
Incorporation of Environmental Considerations in Energy Planning in the People's Republic of China (United Nations Environmental Programme)	UNEP	1995
Asia Least-Cost Greenhouse Gas Abatement Strategy (ADB)	ALGAS	1999
China Climate Change Country Study (Tsinghua University)	CCCS	1999
International Energy Outlook (U.S. Department of Energy)	EIA	2000

growth would average about 8 percent between 1990 and 2020 compared to the approximately 7 percent estimate utilized in the other studies (see Table 2).

Each study translated the energy consumption forecasts into carbon dioxide emissions using carbon equivalent coefficients. There was some variation in the coefficients used, but in general they followed the Intergovernmental Panel on Climate Change guidelines.

The most striking observation from Table 2 is that carbon dioxide emissions in 2000 calculated from reported energy consumption statistics are significantly lower than the average value forecasted from these studies. The average forecast of carbon dioxide emissions in 2000 from fossil fuel use in the baseline scenarios from the five studies was 950 million tons of carbon. Based on energy statistics reported through 1999 (and estimated for 2000), carbon dioxide emissions in 2000 were approximately 724 million tons, or 24 percent less than the average of the forecasts. In examining the information row containing revised values for energy consumption and carbon dioxide emissions most likely some unreported energy consumption is occurring and that carbon emissions are also understated by the State Statistical Bureau.[2] Even using the revised estimates, carbon emissions are approximately 19 percent lower than earlier forecasts. Thus, these estimates indicate a significant drop in CO_2 emissions in China.

Each of the studies developed at least one policy scenario that could result in lower emissions. Typical policy options include energy efficiency standards, fuel switching, or promotion of carbon-friendly technologies. The average value of energy consumption for the all the policy scenarios in 2000 was 1535 MTCE. Without adopting specific measures to mitigate carbon emissions—and apparently without significant damage to its economy—China is already below this level, although clearly, future trends may change.

More research is needed to understand the apparent drop in energy consumption. China's accelerating shift to a market economy is clearly changing the nature of energy use in ways earlier forecasts did not anticipate. While the majority of reduction appears real, illegal coal mining may be distorting official statistics. In particular, researchers need to survey coal-mining areas that were

Table 2 - Forecasts of Energy Consumption and Carbon Emissions in China

	Primary Energy Consumption Million Tons of Coal Equivalent (MTCE)				Carbon Emissions Millions of Tons of Carbon (MTC)	
	2000		2020		2000	2020
	Coal	**Total**	**Coal**	**Total**		
ADB	1054	1491	1517	2435	907	1354
WB	1124	1561	2214	3301	987	2045
UNEP	1072	1505	1626	2545	1027	1636
CCCS	1169	1562	1982	2778	915	1584
ALGAS	1169	1562	2022	2920	915	1695
EIA	1127	1156	2296	3493		2091
Average	**1119**	**1535**	**1943**	**2912**	**950**	**1663**
State Statistical Bureau (SSB) Reported Energy Consumption[a]	805	1230	1345	2273	724	1265
SSB Revised[b]	863	1312	1441	2621	772	1401

reportedly closed to estimate how much illegal production might be occurring.

China appears to have surprised both domestic and international experts by producing far less carbon dioxide than had been previously forecast. Unlike countries of the Former Soviet Union though, it has done so while maintaining relatively strong economic growth. Understanding the linkage between economic reform and energy consumption would help better predict future trends and focus limited resources on the most promising mitigation options.

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Endnotes

[1] Cement production contributes approximately 3.5 percent to total carbon dioxide emissions, while methane emissions from agriculture and energy production account for most of the remainder (CCCS 1999).

[2] For more details on these revised estimates, see Logan 2001.

[a] Reported energy consumption for 2000 is based on data published by China's State Statistical Bureau and preliminary statistics for 2000. Values for 2020 are projected from the reported data using energy growth figures in the CCCS report.

[b] Revised values assume that some unreported energy use, primarily coal, is occurring.

"Seeking Contradictions" in the Field: Environmental Economics, Public Disclosure and Cautious Optimism about China's Environmental Future

By Eric Zusman

I did not realize that my year of dissertation research in China would begin almost as soon as I walked off the plane at Beijing International Airport and boarded a taxi bound for my new home at Beijing Normal University. Weaving through a typically chaotic afternoon rush hour, two sharply contradictory sights appeared out of my window that left me perplexed about the China I was entering. The first was a community of homeless people, camped in makeshift tents beneath a highway bridge. The second was a crowd of Beijingers, streaming beneath the golden-lettered marquis of one of the most frequented retail outlets in the city—no, not McDonald's but the furniture superstore IKEA. In the four months since that taxi ride, I have found no need to struggle to "seek the contradictions in things," as the Maoist refrain once advised. Contradictions in modern China are omnipresent. They are not only noticeable in the juxtaposition between those without a permanent residence and those rushing to purchase residential furniture, they can also be found in my research of China's environmental policy. Specifically, there exists a stark contradiction between what is discussed and what feasibly can be applied to improve environmental quality in China today.

Painting China's environmental future as an exercise in contradictions might seem a rather pessimistic way to begin this assessment. I write this article, however, with cautious optimism for the future of environmental protection efforts in China. For in the brief time I have been back in China conducting environmental policy research, I have witnessed how future environmental policymakers in China are taking ownership of new ways to manage the environment. I have also seen signs that the balance between state and society with regard to pollution control might be changing.

Countless interviews and observations inform my thinking on this matter. However, my auditing of an environmental economics class at Beijing Normal University in 2000 and participating in a workshop on public disclosure in Zhenjiang, Jiangsu have been two of my more memorable experiences influencing my cautiously optimistic appraisal of China's environmental future. The core question, though, is whether the new market-based approaches to environmental policy, discussed in the environmental economics class, or attempts to institutionalize public participation in the pollution abatement process, discussed at the public disclosure workshop, will narrow or widen a fundamental divide. This is the divide between environmental protection policies that originated in free market, politically transparent, developed countries and their implementation in a partially reformed, less than politically transparent, developing China. I offer my analysis of the environmental economics class and the public disclosure workshop to illuminate a direction that China could head in the future.

Environmental Economics at Beijing Normal University

Nestled on the northwestern side of the campus of Beijing Normal University is the Environmental Science Graduate School. Following in the footsteps of China's elite universities such as People's University and Beijing University, which began to offer environmental economics in the early 1990s, Beijing Normal University's environmental economics class opened to first-year Masters students in 1999.

On my first day in class, my biggest concern was whether I would be able to comprehend the lecture. My Chinese language skills had atrophied considerably since I had taken my last Mandarin class five years ago. I soon discovered that my concerns were unwarranted. The terms raised in lecture were largely Chinese translations of the vocabulary one encounters in an introductory microeconomic theory class. Thus, once I realized that *gongji chuxian* referred to supply curve and *xuqiu chuxian* referred to demand curve, it was much easier to follow lectures on the behavior of profit-maximizing firms and other essential principles of free market economics. What was less familiar was the second half of the class, which moved from Adam Smith's invisible hand (*kanbujian de shou*) to the work of Pigou (*Bigu*) and Ronald Coase (*Kese*) to more recent efforts to bring tradable emission permits to China.[1]

More than the content, what struck me about class was how student assignments concentrated on applying theory. Graded work emphasized taking principles covered in class out to the real world. For example, one

of the more intriguing projects involved visiting a nearby public park and evaluating the park's environmental value by talking to patrons about their willingness to pay for tickets. Inside the classroom, there was also a sense that the best way to learn was to engage the materials and share ideas.

This connection between idea sharing and concern for how ideas might work in China was clearly evident during the liveliest group discussion of the semester. With two classes remaining, students were asked to divide themselves into groups based upon whether they were optimistic, pessimistic or neutral about the use of market-based instruments to regulate China's environment. Initially, the debate followed a set protocol; the optimist group spoke first, followed by the pessimist group, and then the neutral group. Yet, as the comfort level grew and as new ideas were hatched, the formalities of structured debate receded and an animated discussion ensued.

Watching the debate unfold was fascinating from both a participant's perspective and an observer's point of view. As a participant, the debate focused on whether China's partially reformed political and economic structures could adopt and effectively implement market-driven environmental policies. To oversimplify matters, the optimist group said yes, the pessimists said no, and the neutral group said sometimes in some places. I sat with the optimists for reasons that differed from my fellow classmates. As a somewhat detached observer of the debate and class more generally, it occurred to me that if market-driven policies were to work eventually in China, the next generation of environmental policymakers, administrators and planners must contemplate how these policies will meet China's needs. Clearly, just as in developed countries, theories of how total emission controls or tradable pollution permits should curb industrial pollution must be modified to suit on the ground conditions. Just as clearly, at least 15 students at Beijing Normal University and many other students in China, have already begun to contemplate where such theory meets practice.

Bringing Information to the People

Two short taxi rides and a 16-hour train ride from Beijing Normal University will take one many places in China, including the Yichuan Hotel in Zhenjiang, Jiangsu. On 17 December 2000, I made this journey to attend a workshop sponsored by the World Bank and the State Environmental Protection Administration (SEPA). The purpose of the workshop was to disseminate results from an industrial pollution, public disclosure project that had been implemented in Zhenjiang and Hohot, Nei Mengu since 1998. World Bank experts, SEPA officials, university professors and leaders from the Zhenjiang and Hohot Environmental Protection Bureaus (EPBs) convened the workshop, speaking to an audience of EPB representatives from more than 30 different cities throughout the country.

It was clear from the onset that the primary goal of the workshop was not merely to disseminate project results but to explain the purpose behind disclosing information. The workshop leaders argued that providing communities with information about the behavior of local enterprises creates societal pressures on the enterprises to become more environmentally responsible. It also creates indirect pressures on the local environmental bureaus to heighten their regulatory efforts. SEPA officials and their World Bank counterparts see public disclosure as the initial foray into the third stage of China's environmental policy development. The adoption of command-control policies and market-driven policies constituted the first two stages of this ongoing process. The conference leaders maintained that as China moves into this third stage of pollution control policy development the intent is not to use information to replace command-control or market-driven instruments but rather to strengthen these instruments, becoming what conference leaders envisioned as the third side of a pollution control triangle.

The workshop turned next to an explanation of the mechanics of the system in Zhenjiang and Hohot. The essential features of the information disclosure system were guidelines based on national and international environmental standards and a color coding systems that translated these guidelines into laymen's terms. For example, an enterprise in Zhenjiang with an extremely damaging pollution accident (*teda wuran shigu*) in the past year was automatically placed in the lowest environmental rating, the black category. If an enterprise had avoided an extremely damaging accident and had not exceeded pollution standards over the past year, it qualified for the next tier, the red ranking. Guidelines grew more stringent with each rung of the ranking system. After the rankings were completed for the major polluting industries in Zhenjiang and Hohot, the industries were informed and the results were released to the public via government circulars and the local news media. This color coding system significantly increases citizen access to information concerning local factory emissions. Future plans to increase the regularity of reporting are in the works as are plans to implement similar systems in 15 cities in Jiangsu Province.

According to an interview with a conference planner, well before the World Bank sponsored project senior officials in SEPA had recognized that public disclosure

could be a useful tool. What was lacking, was a mechanism that could efficiently disseminate information to Chinese citizens in a form that could be easily understood. SEPA also lacked the resources to build such a mechanism. While the World Bank provided the necessary funding, the key to the project's success was the mechanism's conceptual design. The implied and unstated point here was that making policies that unlock societal forces in China is a sensitive business. A fine line separates channeling society to strengthen the hand of the government and making government accountable to society. The former can be tolerated, while the latter cannot. The beauty of the public disclosure system for SEPA was that it adeptly harnessed societal forces to achieve state-sponsored goals without empowering society to the extent that the goals themselves or the officials charged with implementing them were challenged.

As the workshop proceedings came to a close, I began to ponder the differences between what I had witnessed in the two-day workshop and what I experienced on Tuesday afternoons in my environmental economics class. At one level, the two were completely different forums. The workshop in Zhenjiang was very much a content laden, top-down affair, with the audience listening and the leaders explaining. There was little exchange between the local EPB representatives and the officials in charge of the proceedings. Yet, at another more rudimentary level, the workshop and my class had much in common. They were both venues in which environmental protection concepts that originated outside of China were being offered, contemplated, and, in some minds, reconfigured to meet the needs of a China that is still partially reformed and less than transparent. The contradiction between theoretical discussions of new environmental policies and the feasibility of applying them is narrowing.

Before leaving Zhenjiang on my way back to Beijing, I wandered up the road from my hotel to catch some fresh air. On the way, I walked past a spinach field so verdant that it seemed ready to harvest itself. Shortly thereafter, I passed a group of farmers circling a rising plume of smoke that floated up from a pile of bicycle tires they were burning. It occurred to me then that in a decade many of my university classmates, as future environmental policymakers, might design a system that discloses information and possess the intuition to implement that system so future generations of farmers pause before starting such a fire. I remain optimistic that such a day might come and the contradictions in the field will be harder to find.

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Endnotes

[1] The class uses a textbook edited by Ma Zhong from Chinese People's University. Dr. Ma is one of the leading environmental economists in China. *Editor's Note: See Dr. Ma's discussion of SO_2 trading pilot projects in two Chinese cities in this issue of China Environment Series.*

Environmental Disputes and Public Service Law: Past and Present

By Anna Brettell

In the spring of 1973, the X* County Phosphate Fertilizer Factory went into operation in Hebei Province. The factory did not take any measures to prevent pollution, so in the course of production, it emitted large amounts of poisonous gases, which seriously polluted the fields of the X County Production Brigade at Y Commune. The pollution killed or damaged hundreds of acres of crops. The residents of the commune complained to their leaders, to the fertilizer factory, and to the X County Government, but their grievances went unanswered. Finally, in April of 1973, residents took matters into their own hands. A crowd of people went to the fertilizer factory and destroyed its electrical breakers in protest. The X County Party Commission declared the protest as a "counter revolutionary" act of sabotage. Several citizens were taken into custody, paraded around the county for seven days, expelled from the party, and given prison terms.

For years afterward, the X County Production Brigade appealed to provincial and national authorities to re-examine the case. Finally, in March of 1979, the Environmental Leading Group of the State Council requested that the Hebei Provincial Environmental Protection Bureau and the People's Court investigate the outstanding appeal. The joint investigative group found the original punishment of the brigade comrades as inappropriate, so it reversed the ruling. The jailed residents were released, reinstated in the party, and given compensation for their hardship. However, government leaders criticized the residents for using unorthodox methods of expressing their grievances. Thus, after six years, the wrongful case of "counter revolutionary sabotage" was rectified (*Huanjing Jiaofen Anjian Shili* 1989).

Over past two decades, increasing numbers of Chinese citizens have expressed their environmental grievances by complaining to local Environmental Protection Bureaus (EPBs) and other governmental agencies, or alternatively by initiating disputes and filing lawsuits. There are a number of reasons for this increase in complaints:[1]

1) Pollution levels have continued to rise and more people are being affected, so there are more people with environmental grievances.
2) The 1979 Environmental Protection Law (trial), and many more recent laws, legitimized enforcement actions and provided more legal protection to citizens who make complaints or file suites; it is therefore no longer "counter revolutionary" to take extreme measures to protect one's legal environmental rights.
3) In urban centers, some governmental officials have become more responsive to citizen complaints.
4) In larger cities, Chinese leaders have actually encouraged citizens to complain because it helps relevant authorities to implement and enforce environmental policies and laws.
5) In some areas, environmental education efforts and media stories have helped to increase citizen environmental awareness levels, so more people now see the damages caused by pollution not as "unavoidable by-product" of modernization, but as avoidable and "wrong."

In many urban areas, these five factors interact to create the perception that complaints and disputes will somehow make a difference. Some citizens are satisfied if their complaints remain just a part of the historical record. In many cases, citizen complaints are addressed and disputes are resolved free of charge through administrative mediation by local EPB officials.

However, the complaint and dispute resolution systems have "built-in" problems that leave room for local protectionism, corruption, and complacency. Sometimes, relevant authorities are too weak in relation to other governmental agencies to bring justice to a situation. It is often difficult for citizens to get the attention of officials at the next highest level of the administrative system. Upper level officials usually hand back environmental cases to the authorities at the local level, despite citizen claims that local authorities are unable or unwilling to resolve an environmental complaint or dispute. The courts are often the "last resort," even though since 1979 citizens legally have been permitted to take an environmental dispute to a court or to the local EPB. Citizens often lack the understanding of the court system, hesitate to utilize

**Editor's Note: To preserve the anonymity of the conflicting parties, specific location names are replaced with "X" and "Y."*

the courts for cultural reasons, or lack the financial resources to sue an offending industry, so the courts have not always been a feasible last resort.

In 1999, a spirited individual created a non-profit organization to help empower pollution victims in the courts, called the Center for Legal Assistance to Pollution Victims (CLAPV), also known as the Environmental and Natural Resource Law Research and Service Center. This center, located in Beijing, receives about 100 calls per month from Chinese citizens around the country who have environmental grievances that, for one reason or another, have not been resolved at the local level. People call this non-profit center, which is partially funded by the Ford Foundation, to get free legal advice or to get help finding legal counsel. The center is the first, and so far, the only one of its kind in China.

The director of CLAPV, Dr. Wang Canfa, a man of boundless energy, created the center after he represented pollution victims in a court case, in which the victims lost millions of Chinese Yuan due to pollution damages, but only were compensated a few thousand Yuan. This insufficient compensation occured despite the fact that the polluting enterprise involved had broken the law. Dr. Wang, a lawyer and a professor of law at the Chinese University of Politics and Law, felt compelled to find a way to help the increasing numbers of citizens harmed by pollution to receive adequate compensation for their losses. Dr. Wang wanted to intensify the pressure on enterprises to take the safety of their communities and environmental laws more seriously.

One current case now going through the first appeals process involves an orchard farmer from Inner Mongolia. The farmer, Mr. Han, first called CLAPV complaining that his apple and pear trees had been killed in June of 1998 because of an air pollution accident at an upwind copper refinery. The desulfurization equipment at the refinery broke down, but the enterprise continued production for several days, which allowed a large amount of smoke and ash emissions containing extremely high levels of sulfur dioxide, as much as 46 times the regulatory standard, to disperse over several farms and orchards in the area. The local city government ordered an investigation into the accident. The environmental monitoring station confirmed that the levels of sulfur dioxide in the refinery's emissions exceeded standards, even when the desulfurization equipment was functioning properly. The investigators confirmed acute sulfur dioxide pollution damage at two of the closest orchards. However, investigators could not confirm that the trees in Mr. Han's orchard died because of the pollution. Mr. Zhang, the managing director of the polluting enterprise, therefore refused to take responsibility for the death of Mr. Han's trees or to pay him any compensation because Mr. Han's orchard was three kilometers away from the refinery, further than any of the other affected orchards.

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

The ensuing court battle grew in scope and became more complicated as time went on. By the time court actually convened in August of 2000, four different "expert examinations" of the damages to Mr. Han's orchard had been conducted. Two of the evaluations concluded that there was a cause and effect relationship between the pollution and the death of Mr. Han's trees. The other two evaluations concluded that the refinery was not responsible for the damage and therefore under no obligation to compensate Mr. Han. The last evaluation, which took place two years after the initial pollution accident in July of 2000, was requested by the city's Middle People's Court and concluded that pollution had not caused the death and other damages to Mr. Han's trees. This last evaluation attributed the death of the trees to bad management, fertilizer and water deficiencies, weak trees, insect infestations, dry rot, and other diseases. Largely because of this evaluation, the court ruled in favor of the defendant, Mr. Zhang. In an unusual judgment, the court ruled that Mr. Han had to pay all of the court and expert evaluation costs.

Mr. Han, with the help of CLAPV, has recently appealed this case to the Inner Mongolian Autonomous Prefecture People's High Court. Mr. Han's lawyer claims that the middle court acted improperly by dismissing the Forestry Science Institute's expert evaluation, which held that there was a cause and effect relationship between the pollution accidents and the death of Mr. Han's trees. Also, he claims that the evaluation requested by the Middle Court is full of inconsistencies and the Middle Court is biased in favor of the defendant.

At this time, the outcome of this particular case is not known, but the case does illustrate several interesting facets of Chinese environmental dispute resolution processes more generally. It is important that both parties were compelled to back up their claims with scientific evidence. Each party provided the court with scientific

evidence in equal amounts, specifically, each provided two expert evaluations. In China, science has much more weight in determining the outcome of environmental dispute cases than it has had in the past. The case, however, also illustrates that science is not always the objective bringer of truth; science is politicized and used to justify legal decisions. Despite the "messiness" the politicization of science brings to environmental legal cases, it will force the sophistication of scientific methods at the local level. The case illustrates the expanding "monitoring" role of the media. Also important in this case, is the fact that a non-profit organization located in Beijing is involved in a local case in Inner Mongolia. It signals a strengthening of non-governmental participation in Chinese society and non-governmental oversight of local governments. In other words, it marks the birth of public service environmental law in China. Lawyers who take environmental cases in China do not have the luxury of realizing huge economic payoffs for their efforts as lawyers sometimes do in the United States, thus Dr. Wang's success in helping to arrange legal assistance for victims of pollution is especially noteworthy.

The center is becoming relatively well known in China, however, many pollution victims do not yet know about the center. For instance, there is a large group of farmers in Taiyuan City, Shanxi Province who have been involved in an environmental dispute since the mid-1980s over air and water pollution from coal dust generated by the Number Two Thermal Power Plant. These farmers could use CLAPV's assistance.[2] The Taiyuan farmers claim that the power plant dumped piles of coal dust next to a river, which eventually contaminated their crop fields. They also claim air pollution emissions have killed or damaged scores of crops. For years, the farmers complained about the pollution to the city EPB and other government organizations. The authorities cleaned up the river, but the plant did not pay any compensation to the farmers. Continuing air pollution problems raised tensions over the plant and in 1998, the farmers requested that the provincial EPB mediate the dispute. The provincial EPB tried to mediate the dispute, but the effort fell apart after the power plant refused to pay compensation to the farmers. The plant claimed it did not have the money to pay compensation.

To this day, the Taiyuan Number Two Thermal Power Plant dispute remains unresolved, but the farmers continue to request help from the provincial EPB. The EPB representative says there is "*meiyou banfa*" (nothing can be done), particularly since the plant is not a "*zhongdian*" (a priority) with the provincial government. The farmers have few options left to settle the problem through mediation or administrative means. The next step would be for them to complain to the provincial level People's Congress or to the State Environmental Protection Bureau in Beijing. The courts offer another option, but the farmers say they do not have enough money to file a lawsuit.

The farmers in Taiyuan could use a good environmental public service lawyer, but efforts to introduce them to the Center for Legal Assistance to Pollution Victims have as of yet been unsuccessful. Although he is unknown to the farmers, Wang Canfa is their advocate. Wang Canfa has a vision for CLAPV that includes strengthening the capacity of China's environmental protection and legal systems by holding training workshops on environmental law enforcement for relevant professionals, and promoting environmental public service law by learning about environmental dispute resolution processes in other countries and sharing that information with lawyers in legal networks throughout China.

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[2] The author learned about the continuing dispute in Taiyuan from newspaper articles and interviews with environmental protection officials in Taiyuan in the year 2000; notes are on file with the author.

Pictures from Green NGO and Environmental Journalist Forum 9-10 April 2001

Acting as an imaginary NGO, this group of workshop participants makes a pitch to the environmental journalists to cover their campaign to save the Black-necked Cranes. From left to right: Chen Manli (Homemakers' Union and Foundation, Taiwan) Sun Dehui (Black-necked Crane Association, China), Lin Sheng Zong (Eco-Conservation Association, Taiwan), Sun Yan Jun (Tianjin People's Radio Station, China), Lin Maw Nan (Wildbird Federation, Taiwan).

65 Green NGO staff and journalists from Mainland China, Taiwan and Hong Kong attended the groundbreaking forum in Hong Kong.

On the second day of the forum, Chang Hung Lin, General Secretary from Taiwan's largest environmental NGO, the Society of Wilderness, co-chaired the NGO Capacity Building Workshop with Lu Hongyan, the founder of the Environmental Volunteers Association (Mainland China).

Clues and Cues

By Humphrey Wou

Every October, on the Jade Dragon Mountain in Yunnan China, tens of thousands of wild flowers sprout in the high meadows before the snow melts. Spurts of bright color enliven a stark white landscape at ten thousand feet above sea level. The sight would stop a photographer in his tracks. I would not have witnessed this annual wonder last winter had I not accepted an invitation to attend an Earth Day environmental conference in Beijing in April 2000. Likewise, I would not have discovered the fledgling green movement in China.

The conference was a gathering of Chinese environmental nongovernmental organizations (NGOs). One of most the unforgettable people I met at the conference was Yang Xin. Yang Xin's extensive facial hair made him look quite bohemian, an appropriate look for a man striving to save the highly endangered Tibetan antelopes. Yang established an NGO, Green River, to study the habitat of this elusive animal in the Tibetan plateau. The Tibetan antelopes are slaughtered by machine guns for their extremely valuable wool. Six years ago, Yang heard a story about an anti-poaching patrolman who was gunned down by eighteen poachers. The patrolman's corpse was found frozen in place in the sub-zero weather with his handgun pointing out at the enemies. Yang had a conversion experience after learning of this heroic tale, and he began traveling around the country to preach his dream to any willing listeners. I was a very willing listener indeed and I sat there sobbing while he was telling his story.

So what is his dream? He plans to build a monitoring station and conduct scientific studies of glacier recession, desertification, water pollution, and deforestation in the Tibetan plateau. He will begin his studies in July of 2001 and in five years will have a baseline for scientists, environmentalists, and the government to utilize in devising conservation strategies for this area. His undertaking is an ambitious, holistic approach to saving an endangered species. I wondered why Yang's work has not gotten more notice from western foundations. The reason is simple: he does not speak English and he is in Chengdu, far away from Beijing, which is the city that attracts the attention of most foreign funders. Environmental activists in China who do not speak English and are not based in Beijing have little chance of being known by the western environmental community. It should not be that difficult to find a solution to this tiny dilemma.

Seven months later, I was back in China again. Far from Beijing this time, I was on a one-man crusade to locate hardworking and motivated individuals like Yang, who possess brilliant visions and whose stories remain untold in the West. I arrived in the province of Yunnan, armed with only two phone numbers and no appointments. Therefore, I crashed meetings and made cold calls. The first meeting I invited myself to was a combined effort of the Dutch and German governments, The Nature Conservancy, and some Chinese environmentalists (many were government representatives) to create an umbrella network on the Internet. Although I was grateful for the contacts I made at this meeting, no one was able to point me to any grassroots NGOs. Dead-end.

Luckily, one of the two phone numbers I had belonged to a Chinese American, Andrea Quong. She was working in Yunnan doing her own interviews with some environmental NGOs. She had just returned from a visit to a group that operates in a mountain region to protect the black-necked cranes. These endangered birds would winter in the mountain region and eat the crops in the fields. Local farmers did not know these birds were a protected species and shot them as they would wolves, foxes, or any other pests. This slaughter of the cranes would have continued had a nature photographer not discovered the plight of these birds two years ago. He pulled a dozen friends together and formed "The Volunteers' Association for Black-Necked Crane Protection in the Zhaotong Prefecture of China" (The names of Chinese NGOs are their mission statements!). This group buys corn to feed the birds and educates the locals to care for them. Moreover, they have set up clinics to treat injured birds; they produce a newsletter that looks better than the local papers; and they bring visitors on bird-watching trips. The dozen founders have expanded to one hundred and forty due-paying members. This group is a great success story! But, when I started calculating the membership income versus the expenses of buying corn for bird feed, I realized some members were making up the difference out of their own pockets. I called one of the leaders and asked a few more questions and expressed my support. Because of the limitations of time and distance, I could not visit them, but I have a keen appreciation for what these non-computer savvy and non-English speaking folks are doing for the cranes.

Two days and many interviews later, and again through Andrea's recommendation, I met another lone green warrior, Wang Xiao Gang, at a French café. He had a shaved head, a cropped goatee, and his wiry frame was bursting with energy. He reminded me of the legendary Chinese hero the Monkey King. In spite of the many incredible things he later told me, I found him delightfully modest. When we met that day Wang had not yet registered his green work as an NGO. However, the lack of official status had not prevented him from doing what he thought he ought to do for the environment. For example, when he saw that a new airport was scaring away migratory birds, Wang approached some local farmers and suggested they build a wetland as a bird sanctuary. He picked up a shovel and showed them how to create a small dam to fill the land with water. Birds started coming after a year. When he saw how the Bai fishermen, an impoverished minority, were over fishing a mountain lake and earning only U.S. $2.50 per day, Wang helped bring in foreign tourists. Now the fishermen can supplement their income by performing their traditional songs and dances for the foreign visitors. Ultimately, Wang's main goal is to create a 32-hectare protection park in a mountain area in Yunnan Province to save the 167 endemic species and more than 600 rare species of plants from extinction. There will be a botanical garden and a cultural museum to make up for the lost income from logging and wild herb harvesting. Since returning to the United States, I have learned he has registered as a French NGO, because his French girlfriend and partner believed that it would be more beneficial to have a European registry. Nothing this guy ever does is conventional.

Although I was slightly disappointed with the *quantity* of NGOs I found on my trip, the *quality* of their endeavors far exceeded my expectations. I left Yunnan with a great sense of accomplishment, and I owe it all to one person, Andrea Quong. Andrea was my medium, or conduit. She channeled her discoveries and connected me with the right folks. If not for Andrea's tips, I could not have related the stories of these grassroots groups since they are not even on the radar screens of the Chinese environmental community. Another clue to understanding Chinese NGOs: messengers are crucial to the message, and obviously not all messengers are equal. Andrea was able to give me exact leads and she did not have an agenda to promote. Maybe one way to stimulate the growth of grassroots activities is to construct an infrastructure of such conduits.

While my intention was to locate non-English speaking grassroots groups far away from the Chinese capital, one of my most fascinating discoveries was in Beijing. Ma Jun is an inspiring English-speaking journalist who works as an editor of the *South China Morning Post* (*SCMP*) Web site in the Beijing bureau. In 1999, he wrote an impressive book called *China Water Crisis* (*Zhongguo Shuiweiji*), in which he blends ancient and contemporary history, scientific studies, water law and policies, poetry, and human stories into a coherent thesis on China's growing water dilemmas. The breadth and the depth of his knowledge were mind-boggling to me. I had expected that meeting him would be a highlight of my trip, but did not know just how rewarding it would turn out to be. Ma, a conservatively dressed, tall, vibrant man, was easy to talk to. We soon began to discuss what he was going to do after the success of his book. He explained to me that he was not interested in forming an NGO. He had been very busy setting up his *SCMP* office, but with his work calming down, he believed he would be able to do more with the book. Sure enough, a month after my interview with him, I learned he three TV producers had contacted him with interest in making documentaries of his book. He was also making plans for his first visit to the United States in January 2001. Perhaps the book and TV shows will stimulate awareness in China on sustainable water practices.

I have told the stories of three men, Yang, Wang and Ma, the brightest and best of those I interviewed. All of them have clear visions of what they want to do. Yang and Wang are registered NGOs and Ma is just a lone gunman. They are like athletes in a race: Yang is in the first stretch of a long race; Wang is waiting for the gun to sound; and Ma is just warming up and is not even sure if he wants to be there.

My journey to China rewarded me with many friends and great insights. Yet, instead of coming home with answers, I brought back more questions. If we in the western environmental community want to help China's fledging green movement, how can we make the greatest impact? There are Chinese green groups that impact large populations as the ones in Beijing do. Other groups work out in the wilds with fragile ecosystems and rural communities like those in Yunnan. It is heartening to see how the environmental movement in China is a mixture of young, energetic spontaneous groups and some mature and well-directed groups. What can we do to ensure long-term survival of NGOs in a country that has few philanthropic institutions? This is a complex and perhaps impossible question to answer today. It would be more useful to adopt a short-term focus and ask how we can lend immediate practical assistance to green groups, such as financial support, capacity building, informational resources or cross-cultural exchange. At this moment, even

Call for Papers
Feature Articles and Commentaries for the Woodrow Wilson Center's *China Environment Series* Issue 5

The editor of the *China Environment Series* invites submissions for feature articles (20-25 double-spaced pages) and commentaries (2-4 double-spaced pages) for the 2002 issue.

Feature article themes of particular interest include:
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wiring money into China is no small feat, not to mention questions of financial accountability, the language gap, cultural differences, and work-style variance.

Perhaps the harder question is whether modernizing or westernizing China's grass roots could be potentially destructive. An old Chinese fable describes an eager farm boy who tries to hurry the growth of his planting by pulling on the sprouting grains. The conclusion of the story is easy to guess. However the application of the fable's lesson is not always clear. How do we help build confidence and capacity, rather than big egos; foundations, rather than pedestals inside the NGO community in China? How do we avoid the temptation of trying to be act like Miracle-Gro? The environmental grassroots people I talked to were a wonderful mosaic of enthusiastic visionaries, like wild flowers springing up after winter. Can we take cues from them, without adding, subtracting, categorizing, and shaping them into a uniform bouquet?

Humphrey Wou is based in San Francisco and is a passionate traveler who has a keen interest in grassroots environmentalism. He can be contacted at HUMSF@aol.com

The Changing Context for Taiwanese Environmental NGOs

By Sean Gilbert

Over the last two decades, environmental nongovernmental organizations (NGOs) in Taiwan have made tremendous progress in raising the profile of environmental issues. The roots of Taiwan's organized environmental movement go back to the early 1980s and are intertwined with the development of the democracy movement. During this time period, the ruling Nationalist Party (the KMT) heavily restricted political activity. Ironically, environmental and social issues were viewed as non-political, so people working on these issues could meet and organize with some degree of safety. As a result, many of the people in the Taiwanese democracy movement also became involved in environmental activities. The early environmental movement became a loose coalition of individuals representing a broad range of social and political concerns. Notably, this coalition later served as a key part of the foundation of the Democratic People's Party (DPP) in the early 1990s.

Since the lifting of martial law in 1987, the list of registered environmental groups in Taiwan has grown to over 300 organizations. Most Taiwanese NGO groups only have one to three full time staff who are supported by a core of volunteers, including academics who provide technical expertise. A handful, such as the Homemaker's Union, the Wild Bird Society, and the Society of Wilderness have several thousand members, but most groups do not have a large membership base. In the early days of the environmental movement, organized activities focused on protests of polluting factories and maintained a confrontational flavor into the mid-1990s. As part of such campaigns, NGOs have joined together to form umbrella groups or networks based around specific issues. Examples include the coalition established to fight against the fourth nuclear power plant and the Ecological Protection Alliance. This alliance is an umbrella organization of over twenty NGOs that have joined together to organize on conservation issues. Today, Taiwanese NGOs focus on organizing activities such as recycling drives, organic agriculture exhibits, or protests rather than think tank-style public policy research. A few environmental NGOs actively lobby on proposed legislation, but typically do so in an ad hoc fashion as opposed to part of a long-term research and lobbying agenda.

Entering into the new millennium, environmental groups now face a substantially changed social and political environment. Democratization in Taiwan has generally made individual government agencies weaker and it is therefore harder for environmental NGOs to target a single agency and demand change. Equally important, the middle-class has emerged as a major force in politics. While environmental quality is a concern, many voters also want stability and are often uncomfortable with protest tactics that have been common among many of the green groups. Government agencies are increasingly sensitive to public sentiment, and are responsive to pressures by NGOs to the extent they are perceived to be in step with voter concerns.

In the new political environment in which voter opinion is the key political driver, the greatest challenge facing the NGO community is democratizing the environmental movement. For the last twenty years, the NGO environmental movement has been led by a small core constituency spread across Taiwan. Green NGOs now need to begin to communicate more effectively with the center of Taiwanese society on a national level and to find ways to involve them in NGO activities. Some groups, such as the Society of Wilderness that has designed its program around interactive educational activities including lectures, eco-tourism, and volunteer-led projects, have already moved in this direction. Likewise, several of the large groups in the South have chosen to decrease their protest activities and focus on public education to build a political base.

In addition to expanding their social mandate and establishing themselves as speaking for the "center" of Taiwanese society, environmental NGOs must face two other key challenges in the future: finding increased funding and building their professional capacities. With regards to funding, most environmental organizations rely on a combination of government projects and contributions from a small group of core members, and are therefore limited in the type and range of activities that they can undertake. Despite the large number of foundations in Taiwan, very few offer money to NGOs and funding is typically directed towards those with an educational focus rather than advocacy objectives. Corporate donations are a highly controversial issue for many groups.

Another key goal for environmental NGOs is building their professional capacities. Several senior NGO leaders see a need to "become more professional" in order to create more effective, sustainable organizations with broader outreach capacity. The term has different meaning

for everyone, but areas that have been raised include: internal management/administration, technical expertise (such as engineering and environmental science), and public relations/communications.

In less than two decades, environmental NGOs have made tremendous strides to create a broad range of groups and to raise consciousness regarding the environment within Taiwan. As these NGOs move their organizations into the mainstream and strengthen their capacity, they will be creating a more promising future for the environmental movement in Taiwan. Nevertheless, these green groups will have to enter uncharted territory as they seek to build on their progress of the last 15 years.

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Rural Development Institute

Rural land tenure rights and practices are important determinants of both economic development and sustainable land use practices. In China, where nearly three-quarters of the population resides in rural areas and agricultural land remains the most important asset for the vast majority of rural households, land tenure rights have undergone massive changes over the past twenty years. The first stage of China's recent rural land tenure reforms was marked by the transition from communal farms to family farms with the introduction of the Household Responsibility System (HRS) in the 1980s. The HRS reforms led to substantial increases in overall agricultural productivity and in the living standards of Chinese farmers. Nevertheless, land use rights to collectively owned land have continued to remain short-term and insecure. This land tenure insecurity has discouraged farmers from making investments to increase productivity and to engage in environmentally sustainable farming practices.

In recent years, the Chinese government has identified rural land tenure insecurity as one of the most important constraints to rural development, and has initiated a second round of rural land tenure reforms with the adoption of the 1998 Land Management Law. The goal of this massive reform effort is to provide China's nearly 200 million farm households with secure, long-term and clearly defined legal rights to their land.

Under a grant from the World Bank Institutional Development Fund, the Rural Development Institute (RDI) and the Development Research Center of the State Council (DRC) have provided technical assistance to Chinese legislators and policymakers in support of these rural land tenure reforms. Legal and policy recommendations have been developed on the basis of household-based rural fieldwork conducted by RDI and DRC researchers throughout China, as well as analysis of comparative approaches to rural land tenure reform. In current projects, RDI will provide training to local officials on the implementation of rural land tenure reforms. Subsequently, research results will be disseminated as part of a national symposium to be held in Beijing. (*Editor's Note: Summaries of RDI's four projects can be found in this publication's NGO inventory*)

RDI's work in China is coordinated by RDI Staff Attorney Brian Schwarzwalder. Mr. Schwarzwalder can be reached at: brians@rdiland.org. The RDI Web site is http://www.rdiland.org.

Let a Thousand Muckrakers Bloom

By Ray Cheung

An environmental group's massive letter-writing campaign forces the government to ban logging in an endangered species' habitat. The group returns several months later and discovers the logging has continued. Its members call in an investigative television news program, which broadcasts the story on national TV and catches the attention of the nation's leader. Annoyed, the leader demands the logging stopped, and the unique habitat is saved.

This happened in China, where supposedly the news media is just a government mouthpiece. The story involved the golden monkey in the southwestern province of Yunnan. The environmental group Friends of Nature persuaded "Focus," a prominent national television show, to do the story. Premier Zhu Rongji saw it, and immediately ordered a halt on the logging activities.

The volume and quality of environmental reporting has been increasing significantly over the past five years in China. Television and print media throughout the country more regularly feature in-depth environmental coverage. The stories range from citizens suing the local government over lack of environmental law enforcement to worries about exposure from illegal zinc mining and the impact of industrialization in rural areas. These stories are now primetime and front page daily news in China. The Chinese news media are emerging as one of the world's greenest.

A survey conducted by Friends of Nature, the group behind the golden monkey drama, discovered that more than 47,000 environmental stories were printed in 75 of China's newspapers in 1999. On average, each newspaper featured more than two environmental articles a day while some papers even had separate environmental sections.

Two newspapers in China are devoted exclusively to covering the environmental protection and pollution issues. The *China Environmental News*, the official paper of the China's State Environmental Protection Administration, comes out six days a week. It has a circulation of more than 300,000 and a staff of more than 500 journalists. The *Green China Times,* affiliated with the Forestry Ministry, reports on forests, biodiversity, grasslands, and natural resource management in China. The *Green China Times* has more than 100,000 readers and like the *China Environmental News*, most of the paper's readers work in government and research centers that focus on environmental protection. Both of these newspapers are experimenting with weekend editions aimed at the general public, which will eventually expand their readership beyond government agencies.

So what has sparked this popularity of environmental journalism in China? Moreover, why is the government not only allowing investigative reporting on environmental issues but also encouraging it? The answer to the first question is simple. More than 20 years of relentless economic growth—an average annual rate of 10 percent—has pushed China's environmental problems into a crisis. China now has nine of the world's ten most polluted cities—each regularly has air pollution levels that exceed by tenfold the standard maximum proposed by the World Health Organization. Nearly 700 million Chinese lack access to clean water. China's forests are disappearing at the rate of 5,000 square kilometers every year. Nearly 28 percent of China's landmass has turned into desert and is useless for farming. China also will soon be the world's leading emitter of global greenhouse gases, overtaking the United States. No one in China can escape the reality of the environmental crisis. People everywhere, from the rural peasant to the new urban professional are complaining and demanding action. Most importantly, they want information.

Paralleling these trends of environmental degradation in China have been major changes in the infrastructure of the Chinese news media. The government is currently privatizing even more of the inefficient state sectors to free financial capital for investment and growth, particularly as China edges closer to admission into the World Trade Organization. Guaranteed funding for many government sectors—the Iron Rice Bowl of the Chinese socialist system—has ended. Notably, the news media sector was one of the first forced to become self sufficient and competitive. This new financial responsibility brought some editorial independence and license to news organizations.

Combine these forces with the seriousness of China's environmental problems, and it is easy to see why the Chinese news media are heavy with environmental news. But economics and environment quality alone do not explain completely why the Chinese news media have been able not to only break the bounds of government control but to become an environmental watchdog. The third and main reason is political.

Government corruption is the biggest threat to the

legitimacy of the Chinese Communist Party. To regain its legitimacy, the party has launched highly public crusades to expose and eliminate the party's so-called tainted elements. From the village party chief to provincial governor, party officials have been caught and even executed as examples to other would-be defrauders. The highest official to be executed was Chen Kejie, the Deputy Chairman of the National People's Congress, the legislative body of the Chinese government. In a highly publicized trial, Chen was convicted for taking the equivalent of 5 million U.S. dollars in bribes.

The Chinese public, however, is still not convinced of the party's sincerity to purify its ranks, so the Communist Party has looked for solutions and found one in the news media. Instead of simply using the news media as a propaganda tool, the party-state leaders allow them to expose the party's miscreants. By permitting this, the party believes it is protecting itself and is proving that only certain elements of the party are tainted and corrupt. It is these corrupt elements that are thus culpable for many environmental problems.

Though the Chinese news media have been given license to investigate some environmental stories and government corruption, limits remain. While local or regional misdeeds are fair game, stories critical of the central government or the party are not allowed. Coverage of such deeply political issues is controversial. For example, reporting critically on the Three Gorges Dam project is still prohibited. One story notably unreported in China is that the vote to approve the Three Gorges Dam was the narrowest victory ever in the Communist Party's history. Issues with national sovereignty implications, such as the Kyoto Protocol calling on nations to reduce their carbon emissions, are also off-limits.

China's news media has a long way to go before becoming truly independent. However, it is changing fast with environmental reporting leading the way. As L.P. Lau, editor of chief of the popular newsmagazine *Zhongguo Zhoukan* remarked in a recent interview: "On environmental issues, the Chinese government, media and society have common interests and goals. Even though there are political sensitivities, environment can be the building ground for trust between the government and the media…There is much to be optimistic about."

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