

Hazardous Waste Management in China: Testing the Limits of the Rule of Environmental Law Colloquium 1: The Nature and Scope of the Problem

13 September 2000

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Hazardous waste disposal has been a serious problem for many U.S. business ventures in China. Companies currently face a situation where few if any treatment or disposal facilities meet company standards, forcing the short-term stockpiling of wastes. Inter-provincial controls on the movement of wastes limit receipt of the minimum volume of wastes necessary to make a state-of-the-art facility economically viable in any one province. These obstacles impede private investment in modern facilities and hinder the diffusion of treatment technology throughout China.

Past efforts by international companies to address this waste disposal and processing problem have not been successful. One effort to create a consortium of U.S. and other foreign companies that would have offered incentives to the “best of the worst” licensed facilities to undertake specific facility improvements failed. This failure stems from the lack of hazardous waste facility investment concentration in any single province in China.

Longer-term solutions to the paucity of treatment facilities and regulation are unlikely to be developed under the existing legal framework for hazardous wastes in China. Efforts to modify the Chinese legal regime to make it more amenable to inter- and intra-provincial waste management planning have become mired in the highly publicized issue of hazardous wastes being imported to some provinces under the false label of recycled materials. The Chinese news media often report stories of “unauthorized waste movements” from overseas. One of the most publicized stories was the 10-year jail sentence and \$60,300 fine imposed on a U.S. businessman in 1997 for importing to China roughly 238 tons of waste reported as “mixed waste paper,” but which actually consisted of paper and

medical waste. Such news stories generate indignation and have hindered legal reforms that would facilitate domestic waste movements and improve waste management in China.

Without sufficient disposal facilities, many domestic and some foreign-owned companies continue to use less-than-optimal state-approved waste sites. Moreover, U.S. and European investors who are unwilling to expose themselves to the future liability for contaminated soil at manufacturing sites are forced to treat what they can on-site and warehouse the remainder until a solution can be found.

Hazardous Waste in the Pacific Basin

Rapid industrialization throughout the Asia Pacific region is being accompanied by increases in the manufacture, transport, and consumption of a variety of chemical compounds. The scientific and technological basis for managing hazardous waste is growing, but the cost and the effectiveness of available methods for waste minimization, recovery, treatment, disposal, and cleanup in many Pacific Basin countries are not satisfactory at this time.

Purpose of the Pacific Basin Consortium for Hazardous Waste Research and Management

The Pacific Basin Consortium for Hazardous Waste Research and Management (Hereafter, the Consortium) was established in 1986 by a group of scientists and engineers and has grown to include representatives from 20 countries. The goal of the Consortium is to transfer knowledge of hazardous waste treatment and management to the developing world. Through collaborative research the Consortium works to identify, assess, and prioritize waste management problems

common to the Pacific Basin nations, and then promote research and demonstration of hazardous waste management technologies to solve the identified problems. The Consortium has worked to disseminate this research and transfer technology through conferences, workshops, and technical personnel training courses. These activities have led to the creation of a professional network of hazardous waste experts across the Pacific Basin countries. Membership in the Consortium is open to nongovernmental organizations and individuals from locations either on the rim or within the basin of the Pacific Ocean.

Hazardous Waste Surveys in the Pacific Basin

The broad network of experts has enabled the Consortium to conduct two detailed surveys of hazardous waste management in ten Asian countries, including China in 1992 and 1996. One of the major positive trends between 1992 and 1996 is that the number of countries opening and operating hazardous waste treatment sites increased from three to six out of the ten countries. It is hard to know the exact number and type of treatment, storage, and disposal facilities (TSDF) for hazardous waste in operation in China. Some of the existing and planned treatment facilities include:

- Shenyang's TSDF began operations in 1999 and it can process 20,000 tons per year. This TSDF evidently has a secure landfill and pretreatment systems in place;
- Shanghai's TSDF can process 10,000 tons per year landfill with an off-site cement kiln;
- Shenzhen created a commercial scale secure landfill in 1999, and the Shenzhen industrial waste treatment plant at the site reuses and disposes of industrial waste from the city for economic and social profit;
- A TSDF is planned for Xinhuang to collect and dispose of mercury waste from the entire country; and;
- In Beijing, the World Bank funded the feasibility and design work to build a hazardous waste management center to include an incinerator and landfill to process 10,000 EPB tons per year. This plan has possibly been scrapped and the center was dissolved into the Beijing environmental protection bureau. It is possible that the previous hazardous waste center plans will be built as a regional facility for the cities of Beijing and Tianjin.

Another positive trend is that most of these countries mandate waste manifesting and have laws on landfill siting and operations. Unfortunately, the enforcement of such rules is often weak. Additionally, all of the surveyed countries possess the ability to test for hazardous wastes in the air, water, and soil, but lack resources to do so. A third notable trend in these countries is that awareness and public concern of hazardous waste problems has increased. However, as the next section reveals, this concern has not yet translated into concrete enforced hazardous waste management in most of the countries, especially in the case of China.

One discouraging fact indicated by the survey is that most of the countries in the survey require companies to maintain on-site storage facilities for hazardous wastes. This is an unacceptable situation because companies cannot store such wastes indefinitely. These storage regulations have led some companies simply to abandon their sites and relocate leaving their wastes behind. In most of these countries the only other alternative to on-site storage is the co-disposal of hazardous waste with municipal solid waste because hazardous waste sites are not available. Due to unacceptable disposal options in China, foreign companies increasingly are forced to ship their wastes to another country for processing and disposal.

Only two of the ten surveyed countries had government service providers for certifying hazardous waste and only four of the ten governments investigated hazardous waste sites and mandated cleanup at unsafe sites. This low-level of certification and monitoring sadly indicates that these governments are not getting involved in hazardous waste issues. The speakers at the meeting all agreed that the insufficient development of the hazardous waste management system in China stems in great part from the lack of strong policy leadership.

Legal Framework for Hazardous Waste Management in China

While many outside observers believe that few if any laws exist that regulate activities involving hazardous waste in China, there is a significant body of solid waste management and disposal law in China. The Law on the Prevention of Environmental Pollution Caused by Solid Waste (Hereinafter, Solid Waste Act) was passed in 1995 and set up the statutory basis for hazardous waste management in China.

The Solid Waste Act can be viewed as an enabling statute for hazardous waste management in that it

contains some key provisions. The major shortcoming of the Solid Waste Act is that it was broadly drafted and lacks details on implementation and standards. For example, the Solid Waste Act mandates cradle to grave management of hazardous wastes, but how to track wastes and who should issue permits are not specified. The implementation of hazardous waste regulations will improve greatly when the Chinese government creates more detailed implementing laws. Some of the key details in the law for which implementing measures have been created include: 1) Article 44 which requires that identification labels be affixed at collection, storage, transportation, and treatment/disposal sites; and 2) Article 48 which provides authority for the imposition of hazardous waste discharge fees on those who do not comply with relevant environmental law in land filling hazardous wastes.

In the Solid Waste Act no detailed rules exist for the following important hazardous waste management provisions:

- Article 47 establishes a requirement that municipal governments must arrange for construction of facilities for the centralized treatment and disposal of hazardous waste;
- Article 49 requires that those operating treatment/disposal facilities apply for operation licenses; and,
- Article 53 stipulates that hazardous waste disposal sites must be cleaned up before being put to other uses.

China is between the rule of law and rule of authority in the area of hazardous waste management. The incomplete nature of the Solid Waste Law creates confusion at the local level and forces local EPBs to seek guidance from the State Environmental Protection Administration (SEPA) or the High Court when hazardous waste management disputes arise. The EPB's requests for advice usually come in the form of interpretive letters. Some of the most important interpretive letters are outlined below. In a striking break from past practice all of these letters are now being recorded and published openly. These letters are legal norm-creating documents that have begun to interpret in the Solid Waste Law and provide guidance for future legislation. Below is the list of some of the letters and other laws that have begun to fill the gaps of the hazardous waste legal regime in China:

- SEPA Interpretive Letter to Shenyang EPB in response to a question on what laws apply to the

illegal use of waste lead batteries (1997);

- SEPA Interpretive Letter to Shanxi, Yuncheng EPB Regarding Whether Evaporated Phenol is a Hazardous Waste (1998);
- SEPA Interpretive Letter to the Supreme People's Court on who needs to report information regarding the import of waste (1998);
- SEPA Interpretive Letter to the Fujian EPB Regarding Benzene-Free Shoe Adhesive (1999);
- Pollution Control Standard for Hazardous Waste Incineration (1999);
- Identification Standards for Hazardous Wastes (1996);
- National Catalogue of 47 Hazardous Wastes (1998); and,
- Article 338, 339 of the Criminal Law (1997).

Enforcement of Hazardous Waste Laws in China

Despite the burgeoning legal regime, the enforcement of environmental laws in China lacks consistency. One area in which the Chinese government and public demanded better enforcement of hazardous waste controls are on imported wastes. Basically, concerns over public health and environmental security and "political" considerations associated with China's increasing foreign waste burden drive the public perception of hazardous waste. Political considerations have led to a prioritization to importing of wastes and less emphasis on domestic hazardous waste issues. The case against the U.S. businessman mentioned in the introduction has served to greatly politicize the topic of hazardous waste imports.

While not fully enforced, the major regulatory tools for hazardous waste management in China that exist in Chinese law include provisions for: 1) identification and labeling; 2) registration; 3) disposal and treatment controls; 4) classification measures on how various wastes are to be disposed; 5) transportation requirements; 6) storage and packaging; and 7) domestic transfer and importation.

The major obstacles and problems in China's hazardous waste management include: 1) lack of sound treatment facilities; 2) insufficient investment in waste disposal facilities; 3) enforcement capacity problems; 4) coordination among regions and agencies; 5) prioritization of environmental efforts; 6) gaps in implementing legislation/rules; and 7) awareness of the society limited.

Next Steps

For a truly effective national system of hazardous

waste disposal, Chinese leaders at all levels must create and enforce clearer coordination among provisions for the regulation of hazardous waste, non-hazardous waste, and chemicals management. Presently, there exists an enormous amount of red tape that impedes the shipping of hazardous wastes to the few centralized sites.

Better intergovernmental coordination on hazardous waste regulations and transportation could play a large role in spurring both public and private investment in waste management infrastructure. Moreover, both the government and society in China need better education on hazardous waste issues. Some of the educational needs could be met if more nongovernmental organizations and GONGOs (government organized

NGOs) became involved in the area of hazardous waste problems. With the entry to WTO, China needs to make importation of waste procedures uniform and pay equal attention to waste shipment both domestically and internationally. Hazardous waste is an important issue, but currently air and water issues are the environmental priorities for the Chinese central government. In short, hazardous waste problems will only be solved when they become a priority the Chinese government.

Beveridge and Diamond, P.C., the U.S. Council for International Business, and the Working Group on U.S. China Relations cosponsored this colloquium.

Mao's War Against Nature: Politics and the Environment in Revolutionary China

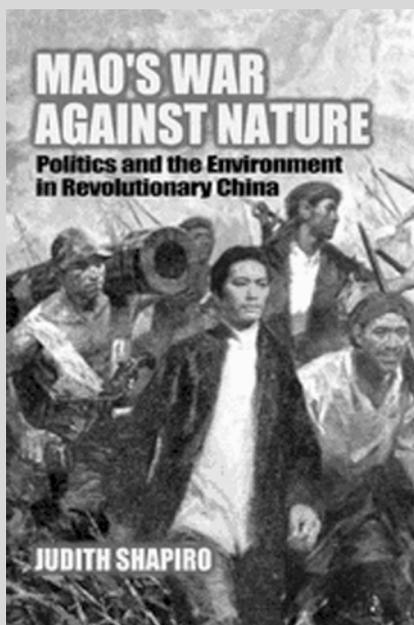
By

Judith Shapiro

Cambridge: Cambridge University Press, 2001

"In an illuminating and absorbing account, Judith Shapiro reveals how Mao's policies resulted in such massive environmental degradation that it clouds China's future despite current conservation efforts. Even today, countries often seem to subscribe to Mao's dictum, 'Man Must Conquer Nature.' China's mistakes offer important lessons for everyone, as this timely book so lucidly describes."

-George B. Schaller, Wildlife Conservation Society; author of *The Last Panda*



In clear and compelling prose, Judith Shapiro relates the great, untold story of the devastating impact of Chinese politics on China's environment during the Mao years. Maoist China provides an example of extreme human interference in the natural world in an era in which human relationships were also unusually distorted.

Under Mao, the traditional Chinese ideal of "harmony between heaven and humans" was abrogated in favor of Mao's insistence that "Man Must Conquer Nature." Mao and the Chinese Communist Party's "war" to bend the physical world to human will often had disastrous consequences both for human beings and the natural environment. *Mao's War Against Nature* argues that the abuse of people and the abuse of nature are often linked. Shapiro's account, told in part through the voices of average Chinese citizens and officials who lived through and participated in some of the most destructive campaigns, is both eye opening and heartbreaking.

Judith Shapiro teaches environmental politics at American University

Conservation Financing in China

11 October 2000

Changjin Sun, Research Center of Ecological and Environmental Economics

Chen Qing, The South-North Institute for Sustainable Development

Sheldon Cohen, The Nature Conservancy

This Working Group meeting was the third in a series that focused on environmental financing in China. This meeting included representatives from Chinese and U.S. nongovernmental organizations (NGOs) who are designing a conservation financing mechanism—a green investment fund—to be utilized in China. The purpose of this meeting and working lunch was to examine the merits of the green investment fund concept, identify next steps for advancing the fund, and identify additional team members to join in the feasibility study phase. The meeting included participants from the U.S. government, environmental NGOs, and multilateral organizations with broad expertise on China and/or conservation finance.

Currently, most of the environmental financing in China is done in the form of loans or grants from the Chinese government, bilateral aid, or multilateral organizations such as the World Bank and the Global Environmental Facility. The speakers believe there is a lack of self-sustaining finance mechanisms for conservation and clean technology development. The proposed green investment fund is meant to fill this gap.

The first speaker, Dr. Changjin Sun (from the Research Center of Ecological and Environmental Economics—a quasi-governmental group within the Chinese Academy of Social Sciences), presented an overview of the great need and opportunities for innovative environmental financing mechanisms in China. This introduction gave the audience an insight into how and why there is a considerable potential for his green investment fund to promote conservation work in Yunnan Province, which is one of the most biodiverse areas in China. The green investment fund would create a Special Conservation Zone, in which the green investment fund would aim to attract clean private investment and industries into Northwest Yunnan Province. (*Editor's Note: Please see Dr. Sun's article, "Paying for the Environment: The Growing Role of the Market," in this volume*)

Mr. Sheldon Cohen from The Nature Conservancy (TNC) highlighted his organization's current conservation project in Yunnan Province. This project is unique in China in that TNC, a U.S. NGO, has opened a joint project office with the Yunnan provincial government. The project has four areas of operation in Northwest Yunnan: 1) biodiversity protection, 2) cultural protection, 3) compatible economic development, and 4) regional planning and infrastructure. His presentation underlined how TNC will be able to assist in the implementation of Dr. Sun's



Changjin Sun

green investment fund once it receives government approval.

To address this potentially challenging topic of government approval, Mr. Chen Qing from the South-North Institute for Sustainable Development (a Chinese environmental NGO based in Beijing) provided the audience with a virtual tutorial on five different political and financial channels through which an environmental finance mechanism would have to pass to be established in the People's Republic of China. He ended his talk with an outline of how Dr. Sun's green investment fund could most effectively move through the political and financial approval process.

Drugs, AIDS and Alternative Development in Burma

12 October 2000

Ji-Qiang Zhang, W. Alton Jones Foundation

Chen Qing, South-North Institute for Sustainable Development

Chris Beyrer, Johns Hopkins School of Public Health

Intravenous drug users are China's largest population of HIV/AIDS casualties. The Chinese Ministry of Public Health states that 80.4 percent of new HIV cases in China have been detected in Yunnan, which is situated on the drug route from Burma. The speakers at this meeting—cosponsored by the Working Group on Environment in U.S.-China Relations, the Asia Program, and the Latin America Program at the Woodrow Wilson Center—addressed the growing threat the drug trade from Burma is having on human health and social stability in Burma and China. The meeting also highlighted a unique initiative by a Chinese environmental nongovernmental organization (NGO) to transfer environmentally sound agriculture technologies to farmers in the Wa Special District in northeast Burma in order to provide non-drug cultivation development alternatives.

The Wa District of Burma is an autonomous region within the Shan State that borders China and Thailand. This district has notably never been under the control of the Burmese central government. In fact, the Wa United Army fought the Burmese military government for years to prevent central government control. Ten years ago the Burmese central government and the Wa leadership signed a cease-fire, thus ending decades of war—a war that the Wa army predominantly funded by the production and sale of opium and heroin. The Shan State is estimated to be the source of 50 percent of the heroin sold in North America and the majority of heroin and opium in China.

Despite the magnitude of the drug trade stemming from the Shan State, Dr. Ji-Qiang Zhang explained how little the local farmers have benefited from the extensive drug exports. Most grow poppy on 2-3 acres of land and sell it raw in the market to be processed elsewhere. Selling raw poppy earns these farmers approximately U.S. \$250 per year. In interviews with farmers, Dr. Zhang learned that most farmers appear to be unaware of the extent and impact of the drug's trade outside of Burma.

In conversations with Wa Autonomous District leaders, Dr. Zhang learned how they are now adopting policies to help the district move away from a drug-dependent economy. For example, the leaders are trying to attract businesses, such as casinos and restaurants, in efforts to stimulate the economy. Another ambitious policy promoting non-drug production in the Wa District is the transplanting of mountain villagers to farm areas in a valley near the Mekong River. In their new home the farmers are encouraged to grow grain and vegetable crops. It is in this valley that the South-North Institute for Sustainable Development—a Chinese NGO based in Beijing—is beginning a training program to teach villagers how to utilize a “four-in-one” household biogas technology for energy and fertilizer production. This technology, which consists of a biogas digester, a pigpen, a toilet, and a greenhouse, has already been proven successful in a county in northeastern China. This simple system is powered by solar energy and linked with an underground biogas digester. The system provides clean fuel and organic fertilizer, and generates heat for a vegetable greenhouse with low capital investment and minimal maintenance costs. Another component of the project is to promote better rice breeding technology and organic rice farming in the Wa District. These newer rice cultivation techniques will help to promote high yields in the area. Chen Qing explained that while the project is going to promote higher quality and higher yields of rice and supply biogas-generated power to farmers, more research is needed on how to alleviate poverty in the Wa District.

Chen Qing explained that worldwide condemnation of the Burmese government has limited the number of multilateral or nongovernmental organizations to operate alternative development aid programs in Burma. As such, Chen Qing's NGO is clearly unique in its efforts to fight poverty in Burma while enhancing economic sustainability in the region.

Dr. Chris Beyrer presented information on the extent to which HIV infections and drug use are impacting China and other countries surrounding Burma. Most of the heroin in China originates in Burma and HIV/AIDS infections have arisen along the trade routes. In this region, HIV infections among intravenous drug users are rapidly increasing. While his presentation did not offer optimistic predictions for a decrease in HIV/AIDS infections in China, Dr.

Beyrer's talk did reveal that the Chinese government has increased cooperative research and information sharing with international organizations on HIV/AIDS and drug use trends in Southwest China. This cooperation with international organizations is a significant shift from the 1980s when the Chinese government either ignored the disease or claimed that only foreigners contracted HIV/AIDS.

DISCOVERING THE DRAGON



WildAid and Chinese Government Cooperation Begins to Produce Results

Working with local partners throughout Asia to change consumer behavior, WildAid's award-winning Asian Conservation Awareness Program (ACAP) works through schools, newspapers and other media to reach millions of people to try to persuade them to stop buying endangered species products. WildAid believes that without an integrated approach addressing both enforcement and consumer demand, the rate of human consumption of many species will continue to climb rapidly upward, with disastrous effects on plants and animals in the wild.

In order to expand the understanding of vital wildlife and biodiversity conservation concerns in China, WildAid-ACAP is developing collaborative partnerships with Chinese government agencies; national and regional TV, radio, and print media organizations; Chinese celebrities; traditional Chinese medicine institutions; youth groups; and Chinese nongovernmental organizations.

By gradually building partnerships within China, WildAid-ACAP has already succeeded in launching a nationwide "New Millennium" children's painting competition, in partnership with *Xin Min Evening News*, Shanghai Oriental TV Station, and the Shanghai Wild Animal Park. WildAid-ACAP has also concluded a successful lecture series with Beijing University and is now exploring areas of collaboration with researchers from the School of Chinese Pharmacology and the Chinese Academy of Sciences.

WildAid-ACAP is already involved in pre-production work on a daily radio program, to be broadcast on Shanghai East Radio and moderated by the "Golden Micro" award-winning journalist Fang Zhou. In addition China Central Television's, Channel 1 has agreed to a primetime broadcast of WildAid-ACAP's biodiversity conservation documentary. Channel 1 is regularly watched by 84 percent of the Chinese population, about 900 million people.

For more information on WildAid-ACAP programming in China contact Richard Scharlat at scharlat@wildaid.org or Zoe Chen at acapchina@cs.com. On-line resources on WildAid-ACAP can be found at: www.acapworldwide.com and www.wildaid.org.

Chinese Academy of Social Science, Center for Environment and Development Delegation

25 October 2000

Zheng Yisheng, Institute of Quantitative & Technical Economics

Qian Yihong, Institute of Quantitative & Technical Economics

Zheng Yuxin, Center for Environment and Development

Li Chenggui, Rural Development Institute

Yan Lin, Center for Environment and Development

Five researchers from various institutions and centers within the Chinese Academy of Social Science who just completed a study evaluating environmental policy in China from 1995-2000 came to give brief presentations to the Working Group on Environment in U.S.-China Relations. The members of this delegation all have conducted research within the relatively newly created Center for Environment and Development. As the title of the center implies, the researchers undertake studies that link environmental and development policy. Some of the recent studies include: a) an overview of environmental policy in China between 1995-2000; b) modeling of CO₂ trends in China; c) the interplay between economic and agricultural policy; d) clean coal technology; and e) how environmental policy is impacting poor areas in China.

The last study was conducted by Qian Yihong and was published in a Center for Environment and Development report titled *The Environment and Poverty in the Asia-Pacific Area: Comparative Study of Eight Countries*. For this study, Ms. Qian traveled to rural areas of Guizhou, Shanxi, and Henan Provinces to gain an understanding of how environmental protection policies impact disadvantaged communities. She found that, in poor areas where environmental protection methods had been strictly enforced, large groups of people were deprived of valuable income generation methods and actually hurt by remediation measures.

For example, the Miao minorities of Guizhou live in a region recently declared a natural preserve. Traditionally, the Miao have used wood for construction of their homes. The new strict land conservation measures prevent poor Miao residents from harvesting any plants or trees from the forests for any reason. Ms. Qian recommended a reexamination of environmental policies to balance conservation needs with the needs of poor communities.



Zheng Yuxin

Editor's Note: For copies of this Environment and Poverty Study or information on the other policy studies, please contact Jennifer L. Turner at chinaenv@erols.com.

Pressing for Freedom: A Report from Hong Kong

27 October 2000

Yuen Ying Chan, Journalism and Media Studies Centre, Hong Kong University

Despite initial concerns that Hong Kong's 1997 handover to the People's Republic of China would lead to a clamp-down on press freedom in Hong Kong, journalists continue to be free to write and publish without official censorship, reported Yuen Ying Chan, a journalism professor at Hong Kong University.

For over 20 years, Yuen Ying Chan has been a New York-based journalist specializing in covering news relating to immigrants into the United States, Chinese donations to U.S. political campaigns, and political corruption in Taiwan, Mainland China, and Hong Kong. In 1998, she was invited by Hong Kong University to set up a Journalism and Media Studies Centre on their campus. In her public talk at the Woodrow Wilson Center she shared her first hand knowledge of press and academic freedom in Hong Kong since July 1, 1997.

Ying Chan reported that since the 1997 handover of Hong Kong back to the PRC, many international media organizations have moved their offices out of Hong Kong, for the city is no longer viewed as a place with newsworthy events. Notably, since the handover, Hong Kong has been relatively stable and much to the surprise of many China watchers the Hong Kong news media has remained free. There is no official media censorship, and Hong Kong is home to 16 major daily papers that portray a wide-range of opinions. Ying Chan is optimistic that full-fledged democracy is forthcoming in Hong Kong and commented that "the challenge is how to secure and institutionalize the freedom." Ying Chan stated that with the commitment of government and business in Hong Kong must build the necessary infrastructure to develop media laws, a code of conduct, and education initiatives for the news media. Hong Kong also must encourage the formation of civic groups to provide checks and balances on the news media.

The lack of professionalization of Hong Kong news media organizations and the paucity of citizen watchdog

groups are major hindrances to the formation of a fully accountable and independent news media. Many Hong Kong news media organizations are somewhat beholden to business interests in Hong Kong, which potentially skews their reporting. Moreover, despite the absence of crackdowns, there exists fear of Beijing's opinion that leads some journalists to self-censorship. During her talk she also spoke of the leadership crisis in Hong Kong and a recent event in which Hong Kong University's President was accused of submitting to local government pressure to limit academic freedom on campus. Ying Chan felt that the crisis was blown somewhat out of proportion due to the prevalent fear of Beijing intervention in academic and press freedom.

One strength of the Hong Kong news media is that many Hong Kong newspapers allow for vigorous political debate and even give a voice to Mainland China's dissidents. Although Hong Kong journalists must ask for permission to enter into Mainland China, they often travel there to report on stories. In addition, some Hong Kong journalists have built reporting networks with Mainland journalists, a practice discouraged by officials in the PRC. Ying Chan spoke highly of how the Hong Kong news media were producing positive changes in the PRC. She felt that Hong Kong news organizations should more actively promote engagement and exchanges with news media groups in Mainland China.

Editor's Note: This meeting was cosponsored by the Wilson Center's Asia Program and the Environmental Change and Security Project. After her lecture, Ying Chan was interviewed on DIALOGUE, the Wilson Center's radio program. The interview can be found at www.wilsoncenter.org. The Journalism and Media Studies Centre was a cosponsor of the "Forum on Green NGO and Environmental Journalism" that the Wilson Center organized in Hong Kong 9-10 April 2001.

Green NGOs and Environmental Journalism in Mainland China, Taiwan and Hong Kong

6 December 2000

Ng Cho Nam, The Conservancy Association, Hong Kong

Chang Hung Lin, The Society of Wilderness, Taiwan

Wang Yongchen, Green Earth Volunteers, China

Environmental activism in Mainland China, Hong Kong, and Taiwan has been growing considerably over the past decade. In early December, the Environment Change and Security Project's China Working Group brought seven environmental nongovernmental organization (NGO) representatives and journalists from Greater China to Washington, D.C. to give presentations on their work and to take part in study tour of local "green" organizations. On 6 and 8 December 2000, the group of seven gave presentations that highlighted how social, economic, and political factors have shaped the development of green nongovernmental groups and environmental journalism in each area. In addition to giving presentations in Washington, D.C., the seven speakers also helped the China Working Group coordinator design an NGO and environmental journalist forum that was held in Hong Kong, 9-10 April 2001.

During the 6 December 2000 meeting, environmental activists from three influential NGOs spoke about the development of civic groups and activities in the field of environmental protection in Mainland China, Taiwan, and Hong Kong. Ng Cho Nam, chair of the Conservancy Association spoke about the history and role of environmental NGOs in Hong Kong since late 1960s. The Conservancy Association is the oldest environmental advocacy and public awareness organization in Hong Kong, and since its inception many of its members have gone on to found other major environmental NGOs in Hong Kong. Wang Yongchen, who works as a full-time National People's Radio journalist in China, founded her own organization, Green Earth Volunteers. She believes that the news media in China can play a key role in public environment education. Chang Hung Lin, the General Secretary of the largest environmental NGO in Taiwan—the Society of Wilderness, explained that his organization is based on the philosophy that to protect

nature one must first understand it. The Society of Wilderness emphasizes field trips and environmental lectures to expand people's knowledge and appreciation of nature.

The Conservancy Association and Environmental NGOs in Hong Kong

Fifty five percent of Hong Kong's territory is made up of protected nature areas, countryside, parks, greenbelts, and one Ramsar Site. Moreover, animal and plant biodiversity is rich in Hong Kong. Despite this high percentage of protected areas, high population density, rapid economic development, and pollution pose continual threats to conservation in Hong Kong. Ng Cho Nam explained how in 1968, a group of environmental experts banded together to create the Conservancy Association, an NGO to address these pollution problems and advocate land conservation. The group's efforts against development in the Mai Po Marsh area led to the designation of the marsh as a Ramsar Wetland protection site. The mission of the Conservancy Association is to enhance the quality of life of Hong Kong citizens and to ensure that Hong Kong shoulders a regional and global environmental responsibility. The Conservancy Association focuses on conservation and development policy, waste management, energy, and greenhouse gas problems. In these issue areas, the Conservancy Association advocates appropriate environmental policies, monitors government actions, promotes environmental education, and takes a lead in community participation. This group has 15 full-time staff and a number of unpaid volunteers, and they run approximately 30 different campaigns a year.

In terms of policy advocacy and government monitoring, for the past ten years the Conservancy Association's Current Affair Committee meets weekly to discuss current environmental issues in Hong Kong. This committee regularly presents reports and

comments to the government and local news media. The Conservancy Association has grown over the years and has played an important role in environment policymaking in both the British colonial government and in the new Chinese administration after the handover. Members of the Conservancy Association sit on a variety of environmentally related government advisory committees. Though the Conservancy Association is viewed as conservative and low profile in Hong Kong, its organizational integrity and credibility is widely recognized through its consistent policies and stable professionals.

Approximately fifteen years after the Conservancy Association was formed, other environmental groups emerged in Hong Kong, most of which were formed by former members of the Association (e.g., WWF-Hong Kong in 1981, Friends of Earth-Hong Kong in 1983, and Green Power in 1988). The Association also has close connection with other green NGOs such as the Hong Kong Bird Watching Society, Greenpeace China, and the Hong Kong Marine Conservation Society. These long-standing connections help the Association succeed in uniting the environment community in various campaigns.

Environmental Education and the News Media in China

“Outsiders tend to view the Chinese news media as simply tool of the government, but notably environmental journalists are becoming very independent in their reporting,” noted Wang Yongchen, a full-time broadcaster at China’s National People’s Radio. She produces weekly environmental programs that enable her to help expand listeners a deeper understanding of environmental problems throughout China. For example, during the Yangtze River floods in 1998, Wang made programs on the complex causes on the floods. In addition to her radio work, Wang created an all-volunteer organization called Green Earth Volunteers in 1997. This network of volunteers carries out tree planting and other environmental educational activities.

Wang Yongchen believes the news media in China can play a key role in promoting environmental awareness and monitoring policy. On her radio program, she has started an environmental hotline that has come to play a monitoring role. One day she received a phone call about severe water pollution caused by a tannery in Hebei Province and she reported the problem to high-level government officials. In another case, a listener from Hangzhou City called to report

how some developers wanted to fill-in small lakes near the famous West Lake. This report prompted Wang Yongchen to call the local TV station in Hangzhou, which then made a program about the story. As a result, Zhejiang provincial officials were then forced to stop the development project.

Wang Yongchen also noted that the news media could be an efficient means to educate the mass audience on environmental topics by simplifying some of the complexities. However, many Chinese journalists also need education on how to report on environmental issues. Therefore, she and some other journalists created a monthly Journalist Salon, which hosts speakers to educate journalists on the science and policy of environmental problems in China and the world. Eventually this group of journalists wants to set up an environmental education library to provide resources for journalists to learn more about reporting on environmental and natural resource stories.

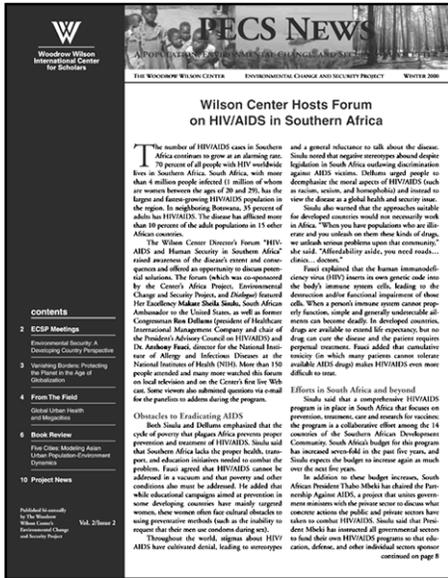
Regime Change and Environmental NGOs in Taiwan

Chang Hung Lin, the General Secretary of the Society of Wilderness (SOW) provided an overview of Taiwan’s natural resources and pollution problems. Although Taiwan is a small island, it is rich in natural resources and animal life. In terms of biodiversity the island is home to 60 mammal species, over 400 species of birds, and 50,000 types of insects—which include nearly 400 types of butterflies. Notably, sixty percent of the animals and plants in Taiwan are indigenous. Taiwan also hosts a diverse landscape of rich forests, mountains, coastlines, rivers, and volcanoes.

The major environmental challenges facing Taiwan are intertwined with Taiwan’s political context. When the Nationalist Party (the KMT) began ruling Taiwan in 1949, they did not view the island as a permanent home. Because the KMT leadership stressed taking back Mainland China, little thought was made to promoting sustainable development or conservation in Taiwan. This short-term mindset has meant decades of unregulated urbanization and reckless land planning (Taiwan is second in world consumption of cement). Both private and public construction projects have not been required to protect the environment. Unregulated growth has led to the loss of most wetlands and many rivers have been given concrete banks and beds. Over development has also created deforestation that has led to severe soil erosion and flooding. Moreover, building on hills and mountains has created mudslides, which have destroyed homes and lives.

Pollution problems, especially in cities are very

Coming Soon - PECS News
Summer 2001



Featured event summaries in this issue of the PECS Newsletter include:

- ✖ The release of the 2001 IFAD Rural Poverty Report
- ✖ ECSP's screening of the documentary "Urban Explosion"
- ✖ Sir Crispin Tickell's presentation on Resource and Population Pressures.

severe. Chang Hung Lin noted that in cities "the air often looks like blueberry juice." Although Taiwan recently switched to unleaded gas, air pollution problems remain serious and doctors attribute the increased incidence of asthma air pollution (today one out of seven middle school children in Taiwan has asthma). Another urban environmental problem faced by Taiwan is garbage. Taiwanese produce nearly as much waste per person as in the United States, and Taiwan therefore faces extreme waste disposal problems. Previously, garbage was simply dumped in forests or burned openly. Today, there is a huge debate over whether to build incinerators in Taiwan. Many environmentalist groups oppose such incinerators and want to institute more recycling and conservation efforts.

Despite the large number of reports on air pollution, garbage, and human health dangers, the population in Taiwan remains very apathetic to the issues. Chang Hung Lin believes this is a clear sign of the lack of environmental education. SOW, was created to help promote environmental education and make the public aware of the dangers of over development and over consumption. SOW members stress that in order for people to care about the environment, they must learn about nature, and ideally, take trips out into the wilderness. Every year SOW holds over 300 events a year, which include field trips to mountains and bird watching walks. They also organize over 600 lectures and classes every year on a broad range of nature topics. SOW staff and volunteers also visit schools to work with children.

Green NGOs and Environmental Journalism in Mainland China, Taiwan and Hong Kong

8 December 2000

Nailene Chou Wiest, Journalism and Media Studies, Centre of Hong Kong University

Joyce Fu, Green Formosa Front, Taiwan

Hu Kanping, Green China Tima, China

Shi Lihong, Green Plateau Institute, China

On 6 and 8 December 2000, a group of seven environmentalists from Greater China gave presentations that highlighted how social, economic, and political factors have shaped the development of green nongovernmental groups and environmental journalism in Mainland China, Taiwan, and Hong Kong. In addition to giving presentations in Washington, D.C., the seven speakers also helped the China Working Group coordinator design an NGO and environmental journalist forum that was held in Hong Kong, 9-10 April 2001. During the 8 December 2000 meeting, two NGO environmentalists and two journalists spoke about the trends in environmental journalism and environmental movements in Mainland China, Taiwan, and Hong Kong.

Environmental Journalism in Hong Kong

In the fall of 2000 when the Hong Kong Environmental Protection Department canceled plans for a major railroad project that would have destroyed the fragile Long Valley wetland, major newspapers in Hong Kong declared in headlines “We Won!” Environmental groups in Hong Kong had waged a 12-month campaign to oppose this railroad project and this lively campaign stimulated a tremendous amount of news media coverage, the largest ever in Hong Kong’s history. While the final decision on the project is still uncertain, the environmental groups have shown their capacity to execute a successful conservation campaign with substantial support from the news media.

From the above case, Dr. Chou Wiest sees a trend of “greening” taking place within the Hong Kong news media. This increase in reporting environmental stories is part of a larger counter movement in which news media organizations are searching for more decent and high quality stories. In the post-handover era, Hong Kong news media organizations face a public less

interested in political issues and sated with the usual low quality reporting on sex, gossip, and crime. All the fifty Hong Kong newspapers, including the fifteen major daily newspapers, are struggling for compelling front-page stories.

While environmental stories have not become central news stories, many papers are increasing their coverage of pollution and conservation stories. *Ming Pao* qualifies as the greenest newspaper, for its editors have assigned three reporters to work on its *daily* green page! To attract audiences, green news often focuses on lifestyle stories about where to “find nature” on the weekend outings. News-you-can-use types of stories help educate readers on ways to save money and the environment through reducing, recycling, and reusing. Increasingly, the Hong Kong news media is reporting serious environmental topics, such as urban air quality, energy saving, wetland and coastal marine life conservation, and food issues. The topic of genetically modified foods has resonated strongly with Hong Kong citizens. Cross-border water and air pollution is another issue that has caught the public’s interest in Hong Kong.

While the amount of reporting on environmental issues has increased, Dr. Chou Wiest sees a number of challenges to quality of this reporting:

- *Lack of reporting experience.* Those journalists interested in environmental issues tend to be very junior reporters who lack experience and seniority at their papers and therefore must fight for editorial priority.
- *Few newspapers with special “green” pages.* It is challenging for journalists to get environmental protection stories printed in newspapers that lack a page dedicated to the environment.
- *Unsustainable coverage.* Readers and editors tend

to lose interest in environmental stories if the reporter is trying to cover long-running, complex environmental issues.

- *Lack of technical expertise.* Many journalists lack the technical expertise to report on complex environmental issues such as climate change and must grill experts to gain some background. Often these experts hesitate to talk with uninformed journalists, for the subsequent articles are frequently inaccurate.
- *Environmental elitism.* Sometimes reporters focus on experts and government officials and ignore and perhaps cannot even relate to the grassroots organizations and communities that often have the most intimate knowledge of local environmental issues. Dr. Chou Wiest believes environmental reporting should try to give voice to the voiceless.
- *Public relations parading as news.* Monsanto may issue press releases on genetically modified foods and present this information as pseudo news. In this case the challenge to the news media would be how to educate the public to understand the bias of such press releases.

The Journalism and Media Studies Centre (JMSC) at Hong Kong University has created an environmental project to help provide resources for Hong Kong journalists to improve their ability to report on environmental news. This Hong Kong University Centre was founded in September 1999 as a teaching and research unit with a mission to promote excellence in journalism and to foster Asian voices in the global media. The JMSC professors and reporters teach graduate and undergraduate courses on media law, and ethics, as well as hold seminars and workshops to help train local Hong Kong and Mainland Chinese journalists. The environmental journalism project aims to provide internet resources on environment reporting, do local media outreach, run workshops, promote networking, form a local chapter of society of environmental journalists, as well as to raise money for an annual award for Best Environmental Reporting.

Environmental NGOs in Taiwan

In 1997, 50 young environmentalists—including professors, journalists, doctors, engineers, and social activists—created the Green Formosa Front, which is an environmental nongovernmental, non-profit organization that strives to help develop grassroots environmental movements and promote environmental justice in Taiwan. Joyce Fu, the current General Secretary of the Green Formosa Front, presented an

overview of the environmental movement in Taiwan.

Beginning in the 1980s, all the Taiwanese social movements—which include environmental, labor, farmer, and student movements—became intertwined with the democratization movement. Before the democratic transition took place in the late 1980s, activists in these social and democratic movements often protected and clashed with the police. These early environment activists opposed the development policies of the ruling Nationalist Party (the KMT) and industries protected by the KMT, therefore the activists held sometimes violent anti-dumping, anti-nuke, anti-petroleum company, and anti-pollution protests.

With the increase in political freedom in Taiwan, environmental groups no longer had to rely on protest strategies to advocate their causes. Therefore, today many different kinds of environmental groups exist throughout Taiwan, ranging from urban-based public policy groups to grassroots community groups focused on conservation. There are also regional groups working on a single issue, such as the protection of one river or a certain species. All national groups are based in Taipei and most green organizations outside Taipei are grassroots groups. As perhaps a legacy of the united protests against the KMT in the 1980s, Taiwanese environmental groups often join together for specific campaigns. For example, there are over 100 groups working on forest conservation in Qilan mountain area to protect the blackface spoonbill. Linkages to the democratization movement also explain why some of the oldest green groups, such as the Taiwan Environmental Protection Union have strong connections with politicians, especially in the Democratic Progress Party. The Homemakers' Union and Foundation, one of the oldest green groups in Taiwan, has become very effective in terms of influencing news media and government policy. Not all groups lobby the government directly, for example the Society of Wilderness, the largest grassroots group with more than 5000 members and many local offices, devotes its energy to environmental education and eco-tours.

Most environmental groups depend on part-time staff, volunteers, and members for support. The Green Formosa Front is unique in that it is the only green group in which its founders went through the student movement in the 1980s and chose NGO work as their full-time profession. The Green Formosa Front has 15 staff (7-8 full time) and some volunteers, but they do not spend time on developing membership. The majority of the group's funding comes from governmental grants and other competitive grants. They

accomplish their grassroots and environmental justice objectives through research projects, protests and campaigns, and work with local community groups.

In most cases the Green Formosa Front works with partners—community groups, government offices and/or other environmental NGOs—to carry out their research, protest, and community projects. In one current project that focuses on organic fertilizers, they work with a research lab to test for heavy metals in soil. With the support of the Taiwanese Department of Agriculture, they also are trying to bring farmers together with the organic fertilizer producers.

The Green Formosa Front also organizes campaigns criticizing specific policies and government officials. In one recycling policy case, they sued corrupt Environment Protection Administration officials in court. Three years ago they also started a campaign to persuade the Taipei City government to begin the pay-by-bag policy, in order to teach the public the take on the true cost of garbage disposal. In Taipei, this policy led to an increase in recycling from 2.3 percent to nearly 40 percent. The Green Formosa Front's policy advocacy work even has gone beyond Taiwan's borders. Specifically, in 1998 the Green Formosa Front staff went to Cambodia to collect proof that Formosa Plastics had exported mercury-contaminated waste. This issue not only brought the Green Formosa Front some international attention, but also empowered the group to push for better industrial waste policies in Taiwan.

Environmental Journalists in Mainland China

Hu Kanping is an editor and journalist for the *Green China Times*, one of the two national daily newspapers that focus on environmental issues, and he also works on a China Central Television (CCTV) program called "Green Space" that focuses on environmental journalism. Outside of his news media work, Hu Kanping is also a member of two major environmental NGOs in China—Friends of Nature and Green Earth Volunteers. Hu Kanping is a perfect example of how many environment journalists are deeply involved in the environment movement in Mainland China.

Across China there are 8000 different media organization — 2,400 newspapers, hundreds of TV and radio stations, and countless magazines. Truly environment new media forms are, however, as rare as

pandas. According to Hu Kanping, there are only two environmental newspapers: the *China Environment News* and the *China Green Times*. The *China Environment News* was created 16 years ago and is under the auspices of the State Environmental Protection Administration. *Green China Times* was created 14 years ago and they are affiliated with the Forestry Ministry.



(Left to Right) Wang Yong Chen, Hu Kanping, Joyce Fu, Shi Li Hong, Nailene Chou Wiest, Jennifer Turner, Ng Cho Nam, Chang Hung Lin

The content of the newspapers is related to the activities and mission of their affiliated government agency. Notably, these two papers are restricted from reporting beyond the work of their supervising agencies.

The *China Environment News* focuses predominantly on waste and pollution regulation problems and has a circulation of 200,000 readers. The *Green China Times* reports on forests, biodiversity, grasslands, and natural resource management for 100,000 readers, most of who work in government and research centers that focus on environmental protection. In the last 4-5 years the *Green China Times* has been working to expand its readership to the broader public by creating a more colorful, less technical weekend edition. While the *China Environment News* has also created a weekend publication, both papers face the challenge that the current low level of environmental awareness means there is not enough demand for such green journals. Hu Kanping stated that many people in China do not even understand the concept of environmental protection.

The awareness of environmental protection is, however, growing among Chinese journalists who have begun to create environmental NGOs and thereby are becoming a force for pushing environmental awareness. For example, one of the founders of the Friends of Nature used to be an editor for a public education magazine. Wang Yongchen, the founder of Green Earth Volunteers works for China's Public Radio. Sherry Liao, founder of Global Village Beijing, does a lot of work

with CCTV. Shi Lihong, the founder of Green Plateau Institute, was formerly a *China Daily* reporter. These and other journalists are not only very active in participating in environmental activities they are also working to help educate their peers about environmental journalism.

No news media is completely free of governmental interference in Mainland China, but reporting on specific environmental issues does not face restriction. While it is encouraging to see individual new media people promote green reporting, it remains a question if such reporting is biased. It will be important for the Chinese news media to develop a quality “beat” for environmental journalism within regular papers and news programs.

Environment NGOs in Mainland China

Shi Lihong, founder of the Green Plateau Institute, briefly introduced the importance and challenges of promoting environment protection in northeast Yunnan. This area is internationally recognized as an important biodiverse area. The Worldwide Fund for Nature has named this region one of the 200 most important eco-regions in the world. Moreover, many international environmental organizations, such as The Natural Conservancy, have been working in the region. The ecological wealth contrasts sharply with the poverty facing over 50 percent of the mainly ethnic Tibetan population in the area. These Tibetans support themselves through semi-agricultural activities, animal husbandry, and consumption of old growth forest. The Lisu minority in the area still is practicing slash and burn agriculture. Pressure on the area’s forests has been exacerbated by the state-owned timber industry that began cutting trees in this area in the 1970s. As a result, over half of forests in this area have been cut by the timber industry. In light of the poverty in this area it is not surprising that local government officials prioritize economic growth and infrastructure construction over protecting trees

The high level of poverty and increasing pressures on the natural environment led Shi Lihong and her husband to create the Green Plateau Institute with the goal of exploring ways of promoting sustainable development in this region. One of the Institute’s projects is a community-base natural resources conservation and development pilot project in the remote mountain village Naren. The villagers currently harvest trees from the forest for heating, cooking, and house building. The Green Plateau Institute is attempting to help the local people enlarge their small

hydro station to use as an alternate energy source. Shi Lihong is also seeking an eco-architect to help redesign the traditional Tibetan houses, which currently use 200 cubic meters of timber per house, to use less wood and to become more energy efficient, while still maintaining their traditional appearance.

The Green Plateau Institute also has organized teacher-training workshops with the support of Hong Kong’s Conservancy Association. The first environmental education workshop helped the teachers realize the beauty and importance of their eco-region. Shi Lihong’s group also has given small grants to the teachers to carry out some environmental education activities in their schools. Shi Lihong and Xi Zhihong hope to expand their environmental education activities beyond teachers and establish a Yunnan Environmental Journalists Association.

As the only Chinese environmental NGO in this region, the Green Plateau is also playing a role as a watchdog group for wildlife protection ranging from reporting cruelty to caged bears to training villagers to stop illegal poaching of snub-nosed monkeys. Other types of their wildlife activities include surveys and studies. For example, they recently completed a survey on the monkey habitat in the region and soon they will undertake a study on the impact of imported grass species on local grass species. Another campaign the Green Plateau Institute has undertaken is to help promote the conservation of Meili Snow Mountain. They initiated and facilitated the “International Workshop on Conservation and Development of Meili Snow Mountain,” which culminated in the drafting of a petition letter to prohibit mountaineering on this mountain in order to protect its fragile ecosystem.



Environmental and Energy Cooperation in Northeast Asia

2 February 2001

Selig S. Harrison, Woodrow Wilson Center

Yearn Hong Choi, University of Seoul

David J. Jhirad, Formerly U.S. Department of Energy

By 2015, Northeast Asia will be consuming seven million barrels of oil per day (a total of 27 percent of the world's petroleum), which will put the region in direct competition with the United States for importing markets, ultimately impacting world gasoline prices. Political friction among Northeast Asian nations over energy resources presents potential security concerns, but Mr. Selig Harrison, from the Woodrow Wilson Center, suggested that in Northeast Asia's market-driven economies, the economic benefits of energy cooperation are very high and should prompt these countries to cooperate. Mr. Harrison highlighted three important opportunities for energy cooperation in Northeast Asia: 1) cooperation in developing a natural gas pipeline grid from Russia to North and South Korea; 2) jurisdictional cooperation with oil and liquid natural gas (LNG) reserves; and 3) Development of a regional nuclear power organization. Former U.S. Department of Energy official, David Jhirad pointed out the importance of creating a sustainable market of clean energy investment to reinforce security confidence in the region. Lastly, Dr. Y.H. Choi, from the University of Seoul, reviewed general trends in regional environmental cooperation in Northeast Asia over the past two decades, and concluded that both governmental and nongovernmental efforts should be enhanced to promote effective implementation of regional environmental agreements and projects.

Opportunities for Regional Energy Cooperation

Energy hunger, expanding economies, and growing environmental concerns have prompted Northeast Asian countries to explore the construction of natural gas pipelines as a pollution-free energy source. Japan, South Korea, and Taiwan already consume 75 billion cubic meters of LNG and as China enters the market demand for LNG will double over the next decade. The only way to transport the gas from Siberia to the Northeast Asian markets would be to establish a region-wide pipeline grid. Recent pipeline construction

discussions among China and the two Koreas are perhaps the first steps to setting up such a regional cooperative institution for natural gas.

Mr. Harrison views the peaceful resolution of jurisdictional disputes as key to the success of energy cooperation in Northeast Asia. Some of the current jurisdictional 'hotspots' include the Yellow and the East China Seas. The current dispute stems from a lack of an agreement on the Yellow Sea meridian line. Without a consensus on the meridian, North and South Korea cannot begin effective dialogues with China over Yellow Sea gas and oil reserves. Japan has avoided gas exploration in the East China Sea, as reserves tend to be primarily rich in natural gas, not oil (which is one of Japan's primary means of energy generation, second only to nuclear power). However, as China's energy needs have skyrocketed over the past six years, Chinese companies have begun drilling closer to waters claimed by Japan in the East China Sea. Such drilling has angered the Japanese government and strained relations between the two powers.

Mr. Harrison outlined the following key nuclear problems facing Northeast Asia: 1) the lack of nuclear waste disposal sites and a clear region-wide disposal policy; 2) the need for a mutual inspection system of plutonium and uranium stockpiles; and 3) the possibility of an arms race in Northeast Asia. To ensure nuclear security in Northeast Asia and to avoid an arms race in the region, Mr. Harrison suggested an increased American involvement in monitoring and mediating nuclear issues in region.

Dr. Jhirad stated that developing regional clean energy sources and infrastructure could serve to promote energy security in the region by reducing the current dependency on Middle Eastern oil and by deepening interdependency among Northeast Asian countries. However, security concerns alone will not necessarily attract sustainable investment to build a regional energy infrastructure in Northeast Asia. In order to create successful energy cooperation, a market for energy

efficiency and energy supply projects must be created. Instead of relying on clean energy projects funded by multilateral institutions, the countries in the region should work together to create a large market for clean energy investments in areas such as LNG, natural gas, and renewables. By joining together, the countries in the region could attract investors on a massive scale to supply initial capital and help share development risks with local energy producers. It will be crucial to convince investors that supporting regional clean energy investments—such as a regional LNG grid—would be a safe investment that would enhance economic development in the region.

Trends in Environmental Cooperation

While energy cooperation in Northeast Asia has become more promising in recent years—spurred primarily by economic interests—environmental cooperation is developing more slowly, said Dr. Choi. Currently, regional cooperation on environmental issues operates on a volunteer basis with little funding. Despite the modest steps so far, the institutions and discussion forums created in the 1990s have succeeded in raising the awareness and knowledge of environmental problems in Northeast Asia.

Beginning in 1985, the UN Economic and Social Commission for Asia and the Pacific (ESCAP) initiated a regional ministerial conference on environment and development in the Asia Pacific. This large forum (attended by ministers from 47 nations) has provided opportunities for Northeast Asian ministers to meet and create cooperative institutions. In the 1990s, South Korea began taking an active role in promoting environmental cooperation in Northeast Asia, serving as the environmental mediator between China and Japan. For example, in 1992, South Korea (under ESCAP) was the catalyst for the creation of the program called the Northeast Asian Sub-regional Programme on Environmental Cooperation (NEASPEC). NEASPEC meetings and demonstration projects have focused on three issues: 1) regional air pollution; 2) ecosystem management; and 3) capacity building (e.g., information exchange, education, and joint research on regional environmental issues).

Japan has also initiated some of the cooperative efforts, including ECO-ASIA, in which Northeast Asian governments meet to discuss long-term solutions to enduring environmental problems in the region. ECO-ASIA activities include a Long-Term Perspective Project and ECO-ASIA NET. Both of these institutions promote the dissemination of scientific information on regional pollution issues in order to help in the design of domestic and regional environmental policies. In 1994, the UN Environmental Programme began the Northwest Pacific Action Plan (NOWPAC), which is a regional seas program focuses on marine-related energy, security, and environmental concerns. In these regional meetings, three problems have emerged as key areas for cooperation:

- *Acid Rain.* Pollution from excessive coal burning in China is causing acid rain problems in Japan and the Koreans. Some of this pollution is even reaching the western coast of the United States;
- *Nuclear waste disposal.* The East China Sea now serves as a dumping ground for Russian nuclear waste; and,
- *Marine pollution.* The most serious marine pollution is in the East China Sea from water flowing out of the Yangtze and Yellow Rivers.

The proliferation of meetings and agreements on regional environmental cooperation have not yet led to many joint projects among the Northeast Asian countries, but these new institutions are creating the foundation for future cooperation. Dr. Choi believes that the effectiveness of these regional environmental institutions depend in great part on the commitment of China to undertake conservation and pollution control efforts—both independently and in cooperation with neighboring countries. In order for these regional institutions to become fully empowered, the leaders and general public in the region will need to recognize the importance of environmental cooperation. In terms of funding problems for cooperative efforts, Dr. Choi believes that instead of the current voluntary system, member nations should supply a certain percentage of their GNP to regional pollution control and conservation projects.

Great Wall Across the Yangtze

20 March 2001

Ellen Perry, Director and Producer of Great Wall Across the Yangtze Documentary

Frederick Crook, The China Group

Ronald L. Marlow, U.S. Department of Agriculture

In 1994, the leadership in the People's Republic of China ordered the damming of the Yangtze River with a massive wall of concrete and steel. If completed, China's Three Gorges Dam would become the largest hydroelectric and flood control dam in the world. Capable of supplying China with nearly 11 percent of its energy needs, the dam also would help prevent floods and facilitate safer navigation in the upper and middle reaches of the Yangtze River. To China's leaders, the Three Gorges Dam will propel the nation's economy into the 21st century. But the dam will also submerge riverbank villages and towns, forcing over a million people to leave their homes forever. To many critics the real motive behind the dam extends beyond the power and flood control needs. They believe government leaders view the dam as a symbol of China's emergence as a major technological and economic superpower. Environmental and human rights advocates who oppose the dam argue the project's potential costs far outweigh the proposed economic and symbolic benefits. Many international lending agencies have refused to finance the project, citing poor construction plans, disregard for the relocatees, and lack of environmental concern. Despite opposition, however, construction of the dam continues.

A balanced overview of the complex dam debate and the history of the Three Gorges region are presented in an hour-long PBS documentary titled *Great Wall Across The Yangtze*. As part of the 2001 Environmental Film Festival in the Nation's Capital, the Environmental Change and Security Project at the Woodrow Wilson International Center for Scholars hosted a free screening of the film on 20 March 2001. A panel discussion, including the film's director, followed the screening.

The Film's Story

Filming without government authorization, filmmaker Ellen Perry crafted a documentary to uncover the unique heritage and beauty of the Yangtze River and to understand the profound changes the dam will

bring to China's people, the environment and the archeological sites in the region. Director Ellen Perry began the post-film discussion by admitting that she "did not have permission to shoot this film, and everything [in the film] was complete guerrilla footage." For months she walked around in areas where there were no tourists and interviewed villagers. Although she could not enter some areas with newly resettled people from the Three Gorges Dam area, local officials did not stop her any other time. Her freedom in filming was enhanced by the fact that everywhere she "turned there was someone offering assistance, both in the United States and in China...[Moreover] after the film, top government officials for the first time are speaking out [about the dam] with a sound of doubt."

In the film, some Chinese officials and organizations such as the International Rivers Network raised concerns about embezzlement of funds and corrupt officials ignoring safety measures in the dam's construction. Corrupt officials often divert funds targeted for relocated families, which complicates the already challenging task of resettling entire villages. However, the corruption scandals are beginning to gain news media attention in China, which suggests that top officials are at least aware of the construction and resettlement fund problems. While stopping the construction is not an option, the film poses the question whether completion of the dam will become a fiscal and ecological catastrophe. Ms. Perry also stressed that the United States should be open to helping China avoid some of the pollution problems stemming from the dam.

An American Parallel

Ronald L. Marlow, a National Water Management Engineer at the Natural Resources Conservation Service, placed the Three Gorges Dam in a comparative context by providing a brief overview of large dam projects in the United States. Similar to huge development projects in the western United States during economic and

industrial boom years, China's large-scale public works projects tend to be more a product of grandiose dreams of leaders than sound economic, developmental, and environmental judgment.

During a recent U.S.-China water resource conference, which Mr. Marlow attended, Chinese officials explained their aspirations to replicate the type of infrastructure development that took place during the Roosevelt era. "President Roosevelt saw bridges, parks, highways, and of course dams, as essential to the development of the great American economy...and he wanted to be remembered as the great developer of all time."

A perfect example of the Roosevelt administration's philosophy was the Grand Coulee dam, said Mr. Marlow, adding that the Coulee is the 1940's American "equivalent" of the Three Gorges Dam. Under the direction of the U.S. Army Corp's of Engineers, plans were set for a huge dam to be built along the Columbia River, in efforts to provide much needed power generation to the country's interior. There were voices of dissent expressed from the project's onset, which mirror the sentiments of the opponents to the Three Gorges Dam. For example, the then president of the American Society of Civil Engineers said that the Coulee was a "grandiose project of no more usefulness than the pyramids of Egypt." Evidently, President Roosevelt felt that was a good a reason as any to build it. Despite opposition, by September 1941, the Grand Coulee dam was in place and the power benefits were great. Mr. Marlow stressed, however, that like the Coulee before it, there is no way to know whether the long-term benefits of the Three Gorges Dam will outweigh the detriments.

A Look Ahead

Dr. Fred Crook, director of The China Group, a Washington based consulting firm, concluded the post-film discussion. Referring to China's ancient doctrine known as the mandate of heaven, Dr. Crook suggested that opposition to the dam might be falling on deaf ears. Those who rule in China have a belief that with

the position of ruler comes a responsible to provide food, security, and in the case of the Three Gorges, water and energy to their people. As such, it is unlikely the dam will be stopped.

Instead of continuing criticism of the dam, Dr. Crook questioned what the United States and other countries would do now that the dam is inevitable. He suggested that the United States focus on other major water problems China is facing and move to cooperate with the Chinese to help alleviate the great potential for water catastrophes. Some of the major water challenges facing China include:



Ellen Perry

- *Over pumping of ground water in the North China Plain.* The North China Plain is one of the driest regions in China and farmers continuously pump deep wells that lower the water table and deplete available groundwater sources. Dr. Crook commented "the magnitude of inevitable water shortages is going to make this Three Gorges Dam project pale in significance."

- *Water quality problems in the Yangtze River Basin.* Agricultural fertilizers are a major source of fresh and ground water pollution in the Yangtze River Basin as in other parts of China. If agricultural and industrial pollution feeding into the tributaries above the Three Gorges region is not reduced, the reservoir behind the dam will become seriously toxic.

- *Water export.* China is a major exporter of water, and with a high number of trans-boundary rivers originating in the northern plain that flow south to China's neighbors, possible upstream pollution from the Three Gorges reservoir could send unwanted pollution to China's neighbors.

- *Westward expansion and water shortages.* As China expands urban centers westward, developing and maintaining clean water sources will become increasingly important. "If they really want to develop western China, [Chinese officials] really need to think carefully, because water is the limiting factor," he concluded.

PESTICIDE ACTION NETWORK NORTH AMERICA (PANNA)

Promoting Ecologically Sound Pest Management in World Bank Projects

PANNA works closely with partner grassroots organizations in developing countries to monitor and evaluate the impacts of World Bank projects on their communities, agricultural systems, and surrounding environments. PANNA's initiatives aim to empower rural communities to promote safe and ecologically sound development alternatives, and promote greater participation by civil society while increasing accountability and transparency for World Bank projects. To achieve our goals, PANNA promotes creative and strategic collaboration among farmers, grassroots groups and policy advocates, as well as between NGOs in developing and developed countries. Our activities begin on the ground with local partner groups training farmers in participatory monitoring and evaluation. Farmers investigate and analyze the ecological, agricultural, health, social and economic impacts of World Bank projects in their areas. Then they develop recommendations and advocacy strategies on how best to improve project implementation (when feasible); how to revise project goals and redirect their course (when the communities consider it desirable); or how to halt misguided projects entirely (when necessary).

Goals for the China Project

- ◆ Reduce reliance of farmers on pesticide and promote alternatives.
- ◆ Ensure the needs of targeted communities are met by development projects.
- ◆ Develop methodologies that government agencies can use to empower communities to improve their welfare and reduce environmental impacts.
- ◆ Develop an understanding of how China's agricultural and political systems, including community rights to control natural and social resources, impact the potential for pesticide reform.

Main Activities in China

- ◆ Identify World Bank projects that are a monitoring priority (e.g., pesticide use).
- ◆ Conduct preliminary research and meet with World Bank staff, local governments, farmers, community groups and village leaders to learn about projects.
- ◆ Devise a participatory monitoring process in consultation with farmers and local research consultants.
- ◆ Conduct monitoring by developing survey tools and training and supervising community monitors.
- ◆ Develop local and national advocacy strategies in context with local/national social and environmental concerns.
- ◆ Analyze results and discuss, in informal consultations, with farmers and local advisory councils.
- ◆ Organize local workshops for farmers, local officials, and technicians to share and discuss project results, and facilitate appropriate community responses by assisting community in drawing up recommendations to improve project.
- ◆ Organize a provincial seminar for farmers to present findings to World Bank and government officials.
- ◆ Work with appropriate World Bank and government officials to ensure implementation of farmers' recommendations and conduct regular follow-up surveys to evaluate progress.
- ◆ Document and publicize results of local monitoring to local and national organizations and governments.

Assuming that ongoing activities in China effectively promote the primary goals for the China project, PANNA would like to see a new agricultural development paradigm in China that includes:

- ◆ The integration of local knowledge with scientific information and experimentation to form an ecologically-based pest management system adapted to local conditions.
- ◆ Community participation, including access to information and incorporation of social and gender equity, in design, implementation and evaluation of projects.
- ◆ Effective government and World Bank mechanisms to ensure their accountability towards local communities.

*For more information visit <http://www.panna.org> or contact:
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The Hengduan Mountains: China's Hotspot Conservation International

The Hengduan Mountains, which stretch from the Southeast corner of Tibet through Western Sichuan and extend into Central and Northern Yunnan, represent one of the 25 hotspots identified by Conservation International. Together, these hotspots hold more than 60 percent of the world's terrestrial biodiversity on just 1.4 percent of the land surface. The Hengduan Mountains, one of the world's most biologically rich regions, are home to more than 8,000 species of higher plants, of which 25 percent are endemic, and more than 300 mammal species, including giant panda, golden monkey, snow leopard, takin, and white-lipped deer. Extreme topographic and climatic variations, and the isolation of the numerous steep peaks and ridges, contribute to the region's very high species diversity and endemism.

Years of poor management and unsustainable resource use, however, have taken a heavy toll on the region's biodiversity. Because of logging and fuel wood collection, forest cover in Sichuan fell from more than 30 percent in 1950 to less than 15 percent in 1998. Overstocking of yaks, horses, goats, and sheep has resulted in severe damage to some pastures. As a result, about 5 percent of the species in the region have become extinct over the past few decades and another 20 percent face imminent extinction. The Hengduan Mountains form the headwaters of the Yangtze, Mekong, and other major rivers originating in China. Urgent action is needed to conserve this biological hotspot, which is of national, regional, and global importance.

There exists a need to balance economic growth and environmental protection in the Hengduan Mountains through the expansion and better management of protected areas, mitigation of the negative effects of mass tourism, and the promotion of businesses that both create jobs and reduce pressure on the region's remaining biodiversity. Founded in 1987 and currently working in 32 countries, Conservation International (CI) believes that China can take advantage of the window of opportunity created by the 1998 government-mandated logging ban to achieve the above sustainable development goals. CI's mission—to conserve the Earth's living heritage and demonstrate that human societies can live harmoniously with nature—is shared by many in China and has encouraged a dialogue among CI and Chinese government officials and researchers.

This dialogue led to the signing of a memorandum of understanding in October 1999 by CI and the Sichuan provincial government at a workshop in Chengdu, which brought together participants from central, provincial, and county governments, provincial research centers, and conservation organizations. This agreement commits CI to collaborate with local and national governments, local communities, and businesses, in efforts to strengthen biodiversity conservation in the Hengduan Mountains. CI's long-term strategy in the region aims to:

- Help the government achieve its goal of expanding protected areas based on the best available biological and socioeconomic data.
- Help local communities develop conservation-friendly businesses that both boost incomes and protect the environment.
- Facilitate a dialogue between the research community and the provincial government to integrate biodiversity conservation into development planning.

As a first step, CI is facilitating a conservation priority setting exercise to identify the critical spaces and species that need protecting. This exercise, which is scheduled to end in December 2001, will be followed by an implementation phase focusing on strengthening protected area management and the design of biodiversity corridors to link protected areas.

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