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CHINA ENVIRONMENT SERIES

9

ISSUE 9, 2007



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China Responds to Environmental Health Challenges

Surf and Turf: Threats from Aquaculture and Animal Husbandry

Guangdong: Protecting Ecological and Human Health?

Clean Water, Clean Coal: Reports From the China
Environmental Health Project

Plus: Notes From the Field, Spotlight on NGOs



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COVER PHOTO

A fisherman examines his net for fish after casting it in the polluted waters of a tributary of the Huai River in Shenqiu County (Henan Province). After an hour's work, he was able to catch ten small bait fish with blisters on their bodies. It is reported that in communities along the Huai—one of China's most polluted rivers—there is a higher than normal rate of cancer, tumors, spontaneous abortions and diminished IQs.

Photo Credit: Stephen Voss, who can be reached at: steve@stephenvoss.com or www.stephenvoss.com

ABOVE PHOTO

A victory with no winner. After three years of fruitless appeals to the government to close the highly polluting Dianhua Paper Mill in eastern Inner Mongolia, Damulinzabu (pictured) led a group of seven herders in August 2002 in filing a lawsuit against the mill. The mill's untreated emissions contaminated the area's groundwater, decimated the surrounding grasslands, and sickened villagers. In 2004, Damulinzabu and his fellow plaintiffs were the first Mongolian herders to win such a suit. While the factory has moved, it left behind a thick black foul-smelling pool forcing villagers to abandon the area.

Photo Credit: Palani Mohan (Getty Images) for Circle of Blue. See a summary of the desertification story on page 62, which the China Environment Forum helped produce for Circle of Blue. Full story available at www.circleofblue.org.



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THE CHINA ENVIRONMENT FORUM

For ten years the China Environment Forum (CEF) has implemented projects, workshops, and exchanges that bring together U.S., Chinese, and other Asian environmental policy experts to explore the most imperative environmental and sustainable development challenges in China and to examine the opportunities for business, governmental, and nongovernmental communities to collaboratively address these issues. The networks built and knowledge gathered by meetings, publications, and research activities have established CEF as one of the most reliable sources for China-environment information and given CEF the capacity to undertake long-term and specialized projects on topics such as environmental health, food safety, water management, nongovernmental organization (NGO) development, and municipal financing for environmental infrastructure. The Wilson Center's Asia Program periodically cosponsors meetings with the China Environment Forum. The China Environment Forum meetings, publications, and research exchanges over the past year have been supported by generous grants from the U.S. Agency for International Development, Rockefeller Brothers Fund, Waters Corporation, and the U.S. Environmental Protection Agency. Jennifer L. Turner has directed the China Environment Forum since 1999.

ENVIRONMENTAL CHANGE AND SECURITY PROGRAM

Population growth. Water scarcity. Degraded ecosystems. Forced migration. Resource depletion. Pandemic disease. Since 1994, the Environmental Change and Security Program (ECSP) has explored the connections among these major challenges and their links to conflict, human insecurity, and foreign policy. ECSP brings policymakers, practitioners, and scholars from around the world to Washington, D.C., to address the public and fellow experts on environmental and human security. ECSP publishes and distributes 7,000 free copies of two annual journals—the *Environmental Change and Security Program Report* and the *China Environment Series*—in addition to publishing original research. ECSP's core activities are made possible by the generous support of the U.S. Agency for International Development's Office of Population and Reproductive Health. ECSP also receives support from the UN Environment Programme, the Carnegie Corporation of New York, and private individuals. ECSP is directed by Geoffrey D. Dabelko and is housed in the Woodrow Wilson Center's Division of International Security Studies, headed by Robert S. Litwak.

THE ASIA PROGRAM

The Asia Program was created in 1977 and has grown over the past two decades into one of the Wilson Center's largest and most active programs. It strives to provide a forum for examining current and important Asia-related policy questions in their broad historical and cultural context. The Asia Program's activities focus on China, Japan, the Koreas, South Asia, and Southeast Asia. Since 1999, Robert M. Hathaway has directed the Asia Program.

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INVENTORY OF ENVIRONMENTAL AND ENERGY PROJECTS IN CHINA

Available online at www.wilsoncenter.org/cef

FOREWORD

Jennifer L. Turner, Editor

In terms of environmental news stories coming out of China, this year of the fire pig would not appear to be a particularly lucky one. This year, China most likely surpassed the United States as the leading emitter of greenhouse gasses in the world (although the latter remains a bigger emitter per capita); the central government admitted that China had not met the previous year's laudable energy efficiency goals; Lake Taihu (the country's third largest lake) turned a florescent green with a toxic algae; an environmentalist who had for years had been advocating Lake Tai's protection was arrested and subsequently sentenced to three years in prison; the International Olympic Committee announced that while Beijing's air is cleaner than seven years ago it may not be good enough for endurance sports at next year's Olympic Games; and huge riverbank landslides occurred near the Three Gorges Dam, prompting the Chinese leadership to announce the need to relocate an additional 3 million people. What is striking about these stories is that most were reported in the Chinese as well as the western news media, which I see as a positive sign. Memories of the cover-ups surrounding the 2005 Songhua River benzene spill and fears of social instability from expanding protests over pollution problems nationwide have led to a somewhat more transparent discussion of environmental problems in China.

The *China Environment Series (CES)* has never been a headline-chasing journal, rather one that attempts to delve into China's environmental and energy challenges more deeply and highlight promising trends and opportunities for collaboration with China on these issues. In this spirit, this *CES* delves into the issue of environmental health, which parallels a major new China Environment Forum (CEF) initiative—the **USAID-supported China Environmental Health Project (CEHP)**, which began in October 2006. Our primary task under CEHP is helping Western Kentucky University scientists **Chris Groves** and **Wei-Ping Pan** do community outreach and disseminate information regarding their environmental

health work on coal in Anhui Province and on karst water issues in China's southwest. Under CEHP the CEF team has been producing numerous research briefs on environmental health issues in China that are posted on our website. Moreover, this year most of our monthly CEF meetings have focused on environmental health and/or "green" public participation in China. Please see the special report in this issue for more information on CEHP activities.

Another new CEF initiative—**Bridge to Safety: U.S.-China Partnerships on Food Safety**—began in the fall of 2007, thanks to a grant from **Waters Corporation**. Under this initiative we are putting on a series of meetings and creating a special report focused on China's food safety challenges, which are not simply due to poor food processor monitoring, but also linked to the country's growing pollution problems. This year also marked the beginning of what CEF hopes is an ongoing partnership with **Circle of Blue** (www.circleofblue.org) to design and produce multimedia web-based stories on freshwater challenges in China. This issue's Feature Box, "Driving Through the Desert of Sand," introduces the first of these collaborative stories.

For those of you who are wont to skip around journals, I would strongly recommend you to at least first read the opening feature article by **Xiaoqing Lu** and **Bates Gill**, for it anchors *CES 9* by providing an important overview of current policymaking, NGO activities, and scientific research around the issue of environmental health in China. They see incredible challenges for China to address environmental health problems, but provide some direction on important next steps. **Kaleb Brown** and **Stephanie Renzi** take their environmental health analysis down to the provincial level, pondering whether Guangdong has the potential to be a vanguard for addressing pollution and related human health threats in China. My assistant **Linden Ellis** and I wanted to refocus some of the current attention on China's food safety problems away from exports to what we believe are

bigger environmental and health concerns within China stemming from unsustainable and unsafe practices in the country's animal husbandry and aquaculture sectors, areas ripe for international cooperation to make China's food production more sustainable and safe.

Air pollution, being perhaps the most visible of China's environmental problems, figured prominently among our commentary writers, and they all highlight research that begins to fill the major environmental health research gaps identified by Lu and Gill in the opening feature article. In the first commentary, **Chad Futrell** describes not merely the ecological and human health problems stemming from China's rapid desertification, but also illustrates how growing sandstorms are sparking regional cooperation. In a similar vein, **Christine Loh** discusses how the dire air quality problems in the Pearl River Delta are catalyzing cooperation between the Hong Kong and Guangdong governments. **Kong Chiu, Yu Lei, Yanshen Zhang,** and **Dan Chen** introduce the applied studies the U.S. Environmental Protection Agency has been doing in China to link energy and greenhouse gas reduction measures to concrete health benefits. **Chris Nielsen's** piece describes the extensive air and health work being carried out by the Harvard China Project, research that lays the foundation for stronger air pollution policies in China. **H. Dean Hosgood, III** introduces some vital research taking place around what is the fourth largest cause of death in China—indoor air pollution. **Peter Koehn** rounds out the air pollution discussion pondering the health benefits of reemphasizing bicycle use in China.

While air pollution is clearly a major health threat in China, a larger one is most likely the growing water crises—from both scarcity and pollution. Two pieces in this issue focus on water. First **Laurel Meng Lelan Miller** and **Samantha Jones** delve into the sources and health threats of Beijing's increasingly contaminated groundwater, on which the city depends for nearly 70 percent of its drinking water. **Baohua Yan** presents an intriguing story of how environmental education at a school for migrant children can plant the seeds for addressing water pollution in marginalized communities in China.

I am pleased to include three commentaries that look at Chinese NGOs—long a major focus of *CES*. **Wu Fengshi's** article on the growing involvement of grassroots groups in HIV/AIDS policymaking

highlights the potential of other health groups becoming active in environmental health issues. Drawing on her work with Greenpeace China, **Jamie Choi** discusses the deleterious impact of the electronic-waste trade and “recycling” on communities in southern China. In his commentary, **Wen Bo** introduces some Chinese activism calling for more transparency in the construction of nuclear power plants, which he believes is laying the groundwork for an emerging anti-nuclear movement. Other articles focusing on China's green civil society are scattered throughout the publication in the Spotlight on NGO Activism Boxes—succinct stories and anecdotes that provide important insights into grassroots and international NGO activism in China. In this issue we highlight **Pesticide Eco-Alternatives Center, Green Camel Bell, Green Anhui, Shanghai Green Oasis, Green Hanjiang, Tai Lake Defenders, A Child's Right, China's Roots & Shoots Program under the Jane Goodall Institute, Natural Resources Defense Council's China Program,** and the **International Institute for Rural Reconstruction**. Please do take a peek at our Feature Boxes, which are short nuggets of information on various organizations (e.g., International Energy Agency's China activities) and issues (e.g., air pollution in Urumuqi, green banking, and tiger protection).

Our **Inventory of Environmental and Energy Projects in China**, which has been a core activity of CEF throughout our ten years of activities, has become so big that this year we focused only on the international NGO groups. Please view it on our website and we promise to compile extensive Chinese NGO and U.S. government inventories next year.

In addition to all of the dedicated contributing authors, I wish to express my gratitude to my new assistant and *CES* managing editor **Linden Ellis**, who kept her sense of humor as we juggled our editing, research, and meeting activities. I also am indebted to my ever-growing battalion of research interns—**Natalie Baer, Debbi Lee, Samantha Jones, Mayu Suzuki,** and **Yang Yang**—who helped immensely in editing, coauthoring on boxes, and researching extra facts for this publication. I close with the grateful acknowledgement that this issue of the *China Environment Series* was made possible by generous support from the **Rockefeller Brothers Fund** and the **U.S. Agency for International Development**.