U.S. AND INTERNATIONAL NONGOVERNMENTAL ORGANIZATION ACTIVITIES IN CHINA

ALLIANCE TO SAVE ENERGY

http://www.ase.org

International Energy Efficiency Technology Assistance

Focus: Energy Efficiency Education Funding: U.S. Department of Energy (DOE) Schedule: Initiated 1997, Ongoing

Since 1997, the Alliance to Save Energy has held fifteen educational energy efficiency seminars in China, which focus on identifying energy-saving opportunities in industrial factories, residential buildings, hotels, hospitals and utilities. These seminars feature a day and a half of panel presentations from energy efficiency technology and service providers. Smaller group meetings between the companies and seminar participants are also arranged, in order to allow attendees to discuss specific questions about their technology needs. The Alliance held two seminars in 2004.

BLACKSMITH INSTITUTE

http://www.blacksmithinstitute.org

Organization Background: Blacksmith Institute is an environmental grantmaking organization whose work focuses on safeguarding human health through combating environmental pollution. Blacksmith Institute provides small grants, up to around \$10,000 per year, as well as mentoring programs, networking support, and general assistance to Chinese local government agencies and emergent NGOs.

Fubao Township Integrated Environmental Planning Project

Focus: Integrated Waste Management, Pollution Prevention Partners: Yunnan Environmental Protection Bureau (EPB) Funding: Blacksmith Institute Schedule: Initiated 2002, Ongoing

Based in Fubao township in the Lake Dianchi Basin (Yunnan province), this project aims to reduce pollution in Lake Dianchi through a collaborative effort with the Yunnan EPB, village environmental committee, and other local stakeholders to develop community-based, participatory and "sustainable" town planning. Blacksmith Institute hopes this township-level model will be replicated elsewhere in China. The project will continue through 2004, in conjunction with a new household organic waste collection program, and an organic fertilizer production unit to reduce dependency on chemical fertilizers.

Pollution Prevention in the Grasslands of Inner Mongolia

Focus: Pollution Prevention, Ecosystem Preservation

Partners: Greener Beijing

Funding: Blacksmith Institute

Schedule: Initiated 2002, Ongoing

Blacksmith Institute continues to support Greener Beijing's work in spearheading efforts to protect the grasslands of Inner Mongolia from the dual threats of illegal mining and industrial pollution. Greener Beijing already has assessed various polluted sites and proposed remediation strategies, provided legal assistance to local pollution victims, and raised public awareness of the issue through the media and the Internet. Their focus for 2004 was on preventing pollution from a large illegal paper mill through an intensive research project and developing advocacy programs to compel the government to take punitive action.

FOREST TRENDS

http://www.forest-trends.org/programs/pacific_rim.htm

Transforming China's Forest Impacts in the East Asian Region: Strategic Market Intelligence for Sustainable Forests and Livelihoods

Focus: Sustainable Harvesting, Conservation Research

Partners: Center for International Forestry Research, China Agricultural University, Chinese Center for Agricultural Policy, University of British Columbia, Chinese Academy of Forestry, FEDRC of the State Forest Administration, as well as many collaborators in countries exporting to China

Funding: Department for International Development, Ford Foundation Beijing

Schedule: Initiated 2002, Ongoing

The goal of this project is to help transform China's growing demand for timber into markets that improve livelihoods and enhance forest conservation in the East Asian region. Unfortunately, there is a tremendous lack of reliable market information, vision and strategy for harnessing these market forces for conservation and livelihood goals. This project seeks to: (1) increase awareness of the impact of current policies and consumption patterns on forests and local livelihoods; (2) strengthen regional networks and capacity to leverage policy and market reforms; (3) identify strategic leverage points where advocates can most efficiently effect change; and (4) begin to engage key policy and market leaders in transforming policies and markets. A second phase will more aggressively engage industry and government leaders to adopt reforms. The main intended beneficiaries of this project are the low-income forest dwellers and producers in China and East Asia, as well the private and public sectors in the region that will benefit from more sustainable use of forests and improved rule of law.

INTERNATIONAL CRANE FOUNDATION

http://www.savingcranes.org

Development of a Wetlands Site and Flyway Network - Conservation of the Siberian Crane and Other Migratory Waterbirds in Asia

Focus: Wetland Ecology, Nature Reserve Management, Capacity Building, Education, Community-based Conservation, Migratory Birds

Partners: State Forestry Administration

Funding: Global Environment Facility (GEF), United National Environment Programme (UNEP) **Schedule:** Initiated 2003, Ongoing

Site Level—In China five wetland sites have been identified as critical, including the Poyang Lake Basin, where 98% of the world's population of Siberian Cranes winter. The other four sites are national level nature reserves (Zhalong, Xianghai, Keerqin, and Momoge nature reserves) that protect important migratory habitat used by the Siberian Crane in northeastern China. The project addresses specific threats to each site, such as over-fishing and excessive water use, with an emphasis on involving local communities that live in or near the reserves in the development and implementation of management plans. Site activities include: (1) strengthening legal protection and enforcement within the reserves, (2) targeted research and monitoring, (3) capacity building for site management, (4) environmental education and public awareness programs, and (5) alternative livelihood projects for local communities.

National Level—The project undertakes specific actions to: (1) strengthen the national legislative policy and planning framework for wetland and waterbird conservation; (2) increase the capacity for international cooperation; and (3) undertake national activities that support site conservation, such as monitoring, training, education and public awareness programs. These activities in China will be coordinated with other national wetlands projects and programs.

International Level—This aspect of the project focuses on building capacity for the coordination of wetland networks along the flyways used by Siberian Cranes and other migratory waterbirds in Asia. These

networks will be carefully coordinated with other flyway conservation initiatives in the region, including the Northeast Asia Crane Site Network and flyway networks for shorebirds and waterfowl under the Asia Pacific Migratory Waterbird Conservation Strategy. Additional activities are occurring in Russia, Kazakhstan, and Iran.

Studies of Waterbirds, Water Levels, and Aquatic Food as a Basis for Conservation of Threatened Wetlands at Poyang Lake

Focus: Wetland Ecology, Hydrology, Nature Reserve Staff Training Partners: Poyang Lake Nature Reserve, Jiangxi province Funding: Convention on Migratory Species (CMS), Global Environment Facility (GEF), the Felburn Foundation, the Charlotte and Walter Kohler Charitable Trust Schedule: Initiated 1998, Ongoing

Poyang Lake is one of the most important wintering areas for migratory waterbirds in Asia, with 98% percent of the global population of Siberian Cranes, 60% of White-naped Cranes, 50% of Swan Geese, and tens of thousands of egrets, spoonbills, swans, geese, ducks, and shorebirds wintering at the site. The Poyang Lake Nature Reserve (PNR) is located in the northwest corner of Poyang Lake, and covers 6% of the total area of Poyang Lake basin. The population and distribution of Siberian Cranes are affected by food resources that are, in turn, affected by water quality and quantity in the lake. Since 1998, ICF has been working with the PNR in a study of the relationships among water levels, cranes, and their aquatic food plants. As part of this study, ICF and PNR have completed three aerial surveys to estimate the population and distribution of wintering bird species. In 1999, researchers began collecting data, studying crane habitat use, as well as sampling vegetation, tubers, water levels and water quality. In addition to providing scientific information for the management of the existing reserve, the study will help to inform plans to mitigate the impacts of hydrologic change on the wintering waterbirds and to create additional protected areas.

Migration Study of Black-necked Cranes in Southwest China

Focus: Migration Study, Wintering and Breeding Ecology, Environmental Education

Partners: National Bird Banding Center, Yunnan Forestry Department, Chinese Academy of Sciences-

Kunming, Yunnan Normal University

Funding: Mr. Sam Evans, Hamill Family Foundation

Schedule: Initiated 2004, Ongoing

The two-year study combines research on the migration and ecology of the threatened Black-necked Crane with environmental education activities geared toward students in China and the United States to raise awareness of cranes and their conservation needs. The world population of Black-necked Cranes is estimated at about 7,500, including over 3,000 in the eastern and central populations in Yunnan and Guizhou provinces. Through this study, up to ten cranes will be banded with satellite transmitters or PTTs (platform transmitter terminals), which will transmit location data to satellites that in turn will transmit the data to participating researchers, allowing them to determine the bird's migration routes and important staging, stop-over, and nesting locations. Researchers will visit stopover and summer sites to examine the habitat used by the cranes. As the migration data are collected, results will be transferred to participating schools in Yunnan, Beijing and the United States. Combined with basic information on Black-necked Cranes and the regions they inhabit, the migration data will form the basis of Flying with Cranes (See ICF Web site), an Internet-based activity that will be available in both Chinese and English. Local educators will also develop a school curriculum on Black-necked Cranes and their conservation for rural schools in northeast Yunnan.

Participatory Nature Conservation and Community Development at Cao Hai Nature Reserve

Focus: Nature Reserve Management, Poverty Alleviation, Community Development, Partners: Cao Hai Nature Reserve, Guizhou Environmental Protection Bureau, Guizhou Forestry Bureau Funding: Ford Foundation, ICF member contributions Schedule: Initiated 1994, Ongoing. For over a decade ICF has worked with the Chinese government to integrate community development and wildlife conservation at Cao Hai Nature Reserve in Guizhou province. The project, which focuses on the participation of local villagers in the design and implementation of conservation and rural development programs, has become a model for nature reserve management in China. The project, cooperating with the Trickle Up Program of New York, first provided small grants to poor villagers and then set up revolving loan funds among groups of farmers. From 2002-2005, a grant from the Ford Foundation set up a training program, in part led by the farmers, to teach others interested in reserve management and rural development about participatory methods used at Cao Hai. ICF has involved the schools closely in efforts to spread knowledge about natural resources and their parents in active conservation efforts. During 2005, as the reserve is transferred from the Guizhou Environmental Protection Bureau to the Guizhou Forestry Bureau, ICF is assisting with planning the next steps for community involvement in conservation at Cao Hai.

An Environmental Education Process that Involves Local Communities with Wetland Reserve Management in China

Focus: Environmental Education, Nature Reserve Management Partners: Beijing Brooks Education Center

Funding: The Henry Luce Foundation

Schedule: Initiated 2003, Ongoing

ICF is working with Chinese educators and nature reserve staff on environmental education programs focused on the importance of wetlands to people, cranes, and other wildlife, as well as the effects of human use on the continued survival of these wild resources. The program targets local communities within and near five nature reserves in China and one reserve in Russia that are key habitats for cranes, with the goal of involving local populations in the protection and management of wetland resources. The project trains reserve staff in participatory methods, involves local people in identifying education needs, and collaborates with local teachers in designing activities and materials that address wetland and resource issues from the perspective of local people in order to meet their needs. Education programs include summer/winter camps for children from nearby villages, school curricula for use by teachers in local schools, and strategies for student and adult conservation action. These programs are closely integrated with management, research, and community development activities at the reserves. Location or project activities includes: Poyang Lake Nature Reserve, Jiangxi Province; Zhalong and Naoli River Nature Reserves, Heilongjiang Province; Cao Hai Nature Reserve, Guizhou Province; Xianghai Nature Reserve, Jilin Province; Muraviovka Park, Amur Region, Russia

China-Russia Environmental Summer Camp Exchange Program

Focus: Environmental Education

Partners: Naoli River Nature Reserve, Muraviovka Park (Russia), Heilongjiang General Bureau of State Farms

Funding: Cracid Breeding and Conservation Center, Henry Luce Foundation

Schedule: Initiated 2000, Ongoing

In northeast China and far eastern Russia, ICF is working with local educators and conservation professionals to develop lasting ties between students and teachers through an annual summer camp exchange program. The camps occur in alternate years in two nature reserves located near the border between China and Russia. Both wetland reserves are surrounded by agricultural lands and provide breeding and migratory resting sites for cranes and other waterbirds. Camp activities focus on experiential learning through outdoor activities and lectures that encourage the students to explore their natural surroundings. The activities further focus on problem solving and team-building skills, which develop a basis for critically evaluating and proposing solutions for environmental problems. Local teachers and other representatives of nearby farming communities help in the design of these programs that emphasize resource issues from the perspective of people sharing these wetland areas with the cranes. Location of

project activities includes: Naoli River Nature Reserve, Heilongjiang Province, China and Muraviovka Park, Amur Region, Russia

Small Grants for Crane Research and China Crane News

Focus: Crane and Wetland Research, Dissemination of Research Results
Partners: China Ornithological Society
Funding: Cracid Breeding and Conservation Center, Contributions of ICF members
Schedule: Initiated in 1997, ongoing.

ICF supports the work of the Crane and Waterbird Specialist Group of the China Ornithological Society to promote crane research and the development of professional networks focusing on crane and wetland conservation in China. Through this effort, ICF supports a small grants program that annually provides one to three grants (\$1,500 each) to Chinese researchers to investigate topics related to conservation of cranes or their habitats. *China Crane News* is a semi-annual journal that provides opportunities for researchers and reserve managers to publish their research, monitoring results, and management practices. The journal, published in both Chinese and English, focuses on topics such as crane research, population surveys, conservation actions, captive breeding, habitat management, and environmental education in China. The journal aims to encourage communication and collaboration involving Chinese and foreign specialists.

INTERNATIONAL FUND FOR ANIMAL WELFARE IN CHINA

http://www.ifaw.org

Organization Background: Since the International Fund for Animal Welfare (IFAW) began operating in China in 1994, the organization has been devoted to cooperating with government agencies, nongovernmental organizations, and scientific research institutes by providing funds and technical assistance to help promote the protection of wild and domestic animals.

"Doctor Dog" Animal Companion Therapy Project

Focus: Animal Welfare, Environmental Education

Partners: Local schools, hospitals, nursing homes, kindergartens, orphanages, rehabilitation centers, and homes for troubled youth and the elderly

Schedule: Initiated 1998, Ongoing

IFAW created the "Doctor Dog" project to create greater public understanding and tolerance towards companion animals in Asia and to help improve people's physical and psychological health. Accompanied by their owners, dogs that have passed strict physical and temperament examinations are regularly brought to visit people in hospitals, nursing homes, schools, and half-way homes. The animals' visits stimulate patients mentally, physically, and emotionally and often draw out responses that doctors, nurses and caretakers cannot. Hundreds of disabled children and adults in Asia have learned how to better communicate and empathize with others by feeding, petting and interacting with their newfound animal friends. The "paws-on" experiences of IFAW's "Doctor Dog" canine volunteers reinforce a growing body of scientific study showing that contact with companion animals can relieve stress and improve physical and psychological health. At present, IFAW is working with the Education College of Beijing Normal University to conduct research on the "Doctor Dog" project. The research will investigate whether interactions with Doctor Dogs have qualitative and quantitative effects on the physiological and psychological wellbeing of handicapped children.

Saving Tibetan Antelope from Extinction

Focus: Biodiversity Protection

Partners: Wildlife Trust of India (WTI), State Forestry Administration (SFA), the State Environment Protection Administration (SEPA), the Forestry Police Bureau, CITES China **Schedule:** Initiated late 1990s, Ongoing

IFAW helped reveal the large scale poaching in the Tibetan antelope (chiru) range in the late 1990s by facilitating the first international conference in Xining, where the Xining Declaration was drafted calling for international corporations to stop the trade in antelope pelts. IFAW also helped draft the first resolution on Tibetan antelope conservation, adopted at the CITES Conference of the Parties 11 in Nairobi, Kenya. IFAW's efforts in protecting these rare animals in the desolate plateaus of western China include: (1) supporting local nature reserves and forestry police in Qinghai-Tibet plateau in their anti-poaching and habitat protection efforts; (2) conducting a global investigation of illegal trade and markets for shahtoosh; (3) producing public awareness materials to educate consumers; and (4) urging government agencies in charge of endangered species management to enhance law enforcement involving the "headstreams" of the illegal trade, circulation channels and consumer markets. In May 2001, IFAW and the Forestry Police Bureau jointly organized a training workshop for Tibetan antelope protection and law enforcement in Nanjing. Over 30 forestry police from Qinghai, Xingjiang, and Tibet participated in the workshop. Motivated by its success, the State Forestry Administration (SFA), the State Environment Protection Administration (SEPA), the Forestry Police Bureau, CITES China, and IFAW have continued to co-host the annual workshop since 2002. The workshops have: (1) provided a platform to share and exchange experiences with Tibetan antelope protection, (2) further consolidated the quadrilateral ties among the nature reserves in the three provinces, (3) soundly enhanced the anti-poaching enforcement efforts, and (4) effectively preserved the wildlife habitat and biodiversity of the Qinghai-Tibet Plateau. In addition, IFAW, with the assistance of Wildlife Trust of India (WTI), has contributed an enormous amount of human and financial resources to conduct a revealing investigation of illegal chiru pelts in the international market. The resulting report of the investigation, "Wrap Up The Trade" (www.ifaw.org/ifaw/dfiles/file_17.pdf), was launched at simultaneous press conferences in Beijing, New Delhi and London.

Preventing Human/Animal Conflicts; Protecting Asian Elephant Habitat

Focus: Biodiversity Conservation

Partners: Yunnan Forestry Bureau, the Simao Prefecture government

Schedule: Initiated 2000, Ongoing

About 250 Asian elephants live in the tropical rain forests of Yunnan province, China. As accelerating human activities such as deforestation and agriculture have decreased the elephants' living space in Yunnan and fragmented their wild habitat, conflicts between wild elephants and local farmers have escalated. To help address human-elephant conflicts and preserve the Asian elephant population, IFAW, in cooperation with the Yunnan Forestry Bureau and the Simao Prefecture government, started the Asian Elephant Protection (AEP) Project in July 2000. The project consists of three major components: rural community capacity development, scientific research, and environmental education:

(1) By providing micro-credit loan assistance to the rural communities, the project encourages local farmers to actively seek alternative crops, reduce agricultural activities in the forest and respond to the government's policy of reclaiming land for forest instead of farming so that elephant habitat can be preserved. Alternative farming activities have increased the income of local communities and upgraded their ability to redeem losses caused by elephants, thereby easing tensions between humans and animals.

(2) By researching the elephants' diet and studying their roaming tracks, the project identified the need to build artificial niter ponds in the forest in order to fulfill the elephants' need for salt and lure them away from farmland and villages.

(3) The project's technical education components provide the villagers with training in agricultural technologies, safety education, animal protection, and elephant habitat conservation. The project also launched various environmental education activities in local villages and schools. Through the AEP project, IFAW has motivated local people to participate in wildlife protection, and a model of harmonious coexistence between humans and wildlife has been established.

As a result of cooperation between IFAW and local agricultural and forestry departments, the Simao Prefecture government promulgated a hunting ban in 2001 prohibiting hunting within a five-year cycle. In 2003, IFAW expanded its AEP program area to Nangunhe, Xishuangbanna and Lancang prefectures,

where a variety of field research projects have been implemented including a habitat survey, population monitoring, and a behavioral study. IFAW has established an Asian Elephant Monitoring Network within the Asian elephant range reserves to effectively monitor their movement. Applying the successful model in Simao, IFAW will protect more elephants in a much wider area in southwestern China. In order to fight against transboundary poachers, IFAW funds the improvement of conditions for patrol stations and for the establishment of new ones. With IFAW's support, local forest police have enforced armed patrol along the border regularly, which greatly deterred the poachers in the border area. IFAW is now working with relevant local governments and rural communities to implement the community development project, aiming to explore new approaches to cultivate harmonious relationship between people and animals alone the border area.

Reaching Out to Cats and Dogs/Helping Build a Companion Animal Rescue Center

Focus: Animal Welfare, Encouraging Humane Treatment of Animals

Schedule: Initiated 1993, Ongoing

IFAW's Companion Animal Rescue project funds organizations that shelter companion animals, provide veterinary care and spay/neuter programs, and advocate for more humane policies for companion animals. Since 1993, IFAW donations have supported numerous companion animal rescue groups in China. The Fund also has promoted companion animal adoption through newspapers and magazines. In 2005, IFAW worked together with 5 local shelters to establish the Beijing Animal Re-homing Center (BARC) to help them build a platform for better communication between local rescuers and potential adopters, which will promote the rescued animal adoption and enhance public awareness of animal welfare. IFAW also provided funding for the construction of a shelter at the Beijing Human and Animal Environmental Education Center (BHAEEC), the first major nonprofit organization dedicated to companion animal rescue in China. IFAW provided the center with facilities, pet food, veterinary services, and training assistance. Through its support of this model rescue center, IFAW expects to: (1) demonstrate high international animal welfare standards, (2) increase the number of rescues of companion animals in distress, and (3) promote animal welfare legislation in China. When SARS broke out in China in the spring of 2003, IFAW worked intensively to dispel the rumor that dogs can carry SARS virus, issuing BHAEEC and many other domestic rescue organizations emergency relief funds, which helped save hundreds of dogs and cats all over the country. IFAW also proactively advocates responsible animal re-homing in China and has developed a series of protocols for assessing sheltered dogs physically and psychologically to help them adapt smoothly to their new homes. As the leading organization in animal welfare in China, IFAW has been involved in and working systematically in the promotion of dog regulation in Beijing since 2000. IFAW appeals for more scientific, reasonable and humane dog keeping regulation in Beijing through various channels, including media coverage, public petition, and various IFAW projects. The current Regulations of Beijing Dog Keeping Management were passed at the 6th meeting of the 12th Municipal People's Congress Standing Committee in September 2003 and came into effect in October 2003. The registration fee is cut down to \$121 for the first year in key management districts and \$60.5 for the subsequent years. The owners can enjoy half price for the first year registration if their dogs are spayed/neutered.

Rescuing Birds of Prey

Focus: Animal Welfare, Environmental Education

Partners: Beijing Normal University

Schedule: Initiated 2001, Ongoing

Every year, large numbers of migrating raptors return to Beijing and encounter a new man-made environment, where they often suffer injures including broken wings, trauma, and bone fractures. To introduce ideas, concepts and experiences from other countries and to help improve wildlife rescue in China, IFAW and Beijing Normal University jointly established the Beijing Raptor Rescue Center (BRRC) in December 2001. As a designated nonprofit wildlife rehabilitation center approved by the Beijing Forestry Bureau and operating under the guidance of international animal welfare standards, the BRRC has provided medical treatment, care and rehabilitation to more than 1,300 injured and sick raptors over the past four years, using cutting-edge bird rescue and relief techniques. BRRC is now considered to be a center of

specialization and excellence throughout the country, and is the busiest wildlife rescue agency in the Beijing area. To mobilize support from the public, staff at BRRC organizes public education activities related to laws, ecology, and bird rescue methods, and encourages people to appreciate and protect birds.

Rescuing Black Bears, Supporting Research on Alternatives to Bear Bile

Focus: Preventing Cruelty to Animals

Partners: Local Governmental and Nongovernmental Organizations

Schedule: Ongoing

At present, over 9,000 black bears are kept in bear farms for bile extraction. Bear bile products are produced for traditional Chinese medicine and are subject to blind market promotion. Promoting bear bile, especially for nonessential products, threatens wild bear populations in China and other countries. IFAW has worked with government agencies and nongovernmental organizations to close down the worst bear farms, establishing a bear sanctuary in Panyu, Guangdong Province, where care is provided for rescued bears. Non-evasive behavioral and health monitoring of the bears are employed to aid their recovery from longterm bile extraction techniques. In addition, IFAW commissioned and funded a group of traditional Chinese medicine (TCM) experts and researchers to find substitutes for bear bile, inviting a noted TCM professor and a board of experts who are in charge of management and supervision of medicine in China to attend the third International TCM Conference held in London in 2001. At the conference, they presented views on the development of TCM from the perspective of protecting biodiversity and enhancing the management of medicine made from endangered species. In 2004, IFAW launched an "herbal garden" at the bear sanctuary to demonstrate a variety of authority-recommended herbal alternatives to bear bile. To promote animal welfare awareness in China, an education program is being developed to address schoolchildren, government officials, TCM professionals, and the general public. Thus, the sanctuary is no longer simply a shelter for Asiatic black bears; but it is also a base from which to advocate animal welfare policy to the general public.

International Fund for China's Environment

http://www.ifce.org

Capacity Assessment of Environmental NGOs in Southwestern China

Partners: None

Focus: NGO Capacity Building

Funding: Critical Ecological Partnership Fund, Conservation International, \$32,000

Schedule: November 2003 to March 2004

IFCE held a series of workshops and case studies to evaluate the capacity of and climate for environmental NGOs in southwest China, identify areas needing work, and develop appropriate improvement strategies accordingly. Project reports were published, providing detailed information on the needs of NGOs in the areas of funding, project management, and capacity building.

China-U.S. Symposium on Environmental Change and Sustainable Development in Dry Lands Focus: Dry lands workshop

Partners: Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academic of Sciences

Funding: Chinese Academic of Sciences, \$20,000

Schedule: May 2004

Scientists from China and the United States shared their latest research results and explored possible areas for future cooperation in land management and resource conservation in dry lands. Issues addressed at the symposium included degradation of dry lands from global climate change and other human activities,

methods for monitoring and assessing degradation in dry lands, policies and technologies for converting farmlands to grasslands, forestry and wildlife management, and socioeconomic studies of land degradation and development in dry lands.

International Partnership for China's Environment

Focus: Environmental Business Networking Partners: U.S. Commercial Services, Chinese Environmental Industrial Association Funding: Individual environmental firms in United States and China, \$56,000 Schedule: Initiated May 2004, Completed May 2005

China is rapidly becoming the world's largest market for advanced environmental technologies and infrastructure services. To meet this great demand, U.S. and international firms are establishing branch offices in China and/or developing joint ventures to supply environmental technologies and services to the local Chinese market. IFCE created the International Environment Partnership for China (IEPC) to identify and publish environmental project opportunities and provide business linkage services and activities in China and abroad for Chinese and foreign firms and local governments in China. IEPC will act in partnership with local private sector firms, in China and abroad, to facilitate the transfer of advanced and appropriate environmental technologies to projects and businesses in China seeking environmental expertise. IPCE will also act in partnership with U.S., Chinese and foreign government agencies seeking to promote the application of and investment in environmental technologies in China.

Natural Resources Defense Council: China Clean Energy Project

http://www.nrdc.org

ACCORD21 Building Demonstration Project

Focus: Energy Efficiency

Partners: DOE, Chinese Ministry of Science & Technology (MOST), Lawrence Berkeley National Laboratory (LBNL)

Funding: W. Alton Jones Foundation and MacArthur Foundation

Schedule: Initiated 1999, Ongoing

Natural Resources Defense Council (NRDC) continues to coordinate the energy efficient new building demonstration project in Beijing. The 130,000 square foot office building, located inside the southwest third ring road in downtown Beijing, will house the offices of the National Research Center on Technology for Sustainable Development and the Administrative Center for China's Agenda 21. Currently, NRDC is coordinating the completion of an energy-efficient demonstration and learning center located on the second floor. The center will conduct training sessions and workshops for building professionals and students and will exhibit the current best technologies and design strategies, as well as promising future alternatives. The Council is developing a protocol that will track and measure the energy savings and greenhouse gas reductions resulting from integrated design strategies. NRDC is working with DOE and MOST to develop appropriate restrictions for greenhouse gas reductions from Chinese buildings. Thus far the demonstration building is realizing approximately 50% energy savings, exceeding the project goal of 30%.

Coal-Based Syngas Polygeneration Strategy for China's New Power Plants Focus: Climate Change, Energy Efficiency Partners: Princeton University and relevant central government departments of China Funding: The Blue Mood Fund Schedule: Initiated 2003, Ongoing China is projected to build approximately 35 percent of the world's new coal power capacity over the next 30 years, and its carbon dioxide emissions are expected to double under a business-as-usual scenario. Along with energy efficiency and renewables, one promising clean coal technology—coal gasification-based polygeneration with CO₂ capture—has the potential to help China considerably slow down carbon emission growth while allowing the country to continue to pursue economic development. Working with Chinese experts, the NRDC project has examined technical, regulatory and institutional barriers to the development of polygeneration in China and is proposing recommendations to the government on how to remove them. NRDC also has helped provide inputs to China's new mid- to long-term science and technology development plan now under way. The project continues to promote international and domestic collaborations in China in the development and demonstration of this technology.

Controlling Power Plant Emissions

Focus: Emissions Control, Clean Power

Partners: China Research Academy for Environmental Sciences, Regulatory Assistance Project, and Massachusetts Department of Environmental Protection

Funding: The China Sustainable Energy Program of the Energy and Packard Foundations; W. Alton Jones Foundation

Schedule: Initiated January 2001, Completed

NRDC and its partners assisted China in controlling power plant emissions through the use of outputbased Generation Performance Standards (GPS), which limit emissions per kilowatt-hour of electricity produced. This approach levels the playing field for more efficient, less polluting facilities, especially in a competitive power market. The first phase of the project involved a comprehensive analysis of the potential applicability of the GPS approach to China. In the second phase, China's State Environmental Protection Administration conducted three pilot projects—in Zhejiang, Shandong and Shanxi provinces—to test whether an output-based GPS approach could work at the national level.

Demand-Side Management (DSM) in China

Focus: Energy Efficiency, Clean Power

Partners: State Power Company Economic Research Institute, Beijing Energy Conservation Center, Jiangsu Provincial Economic & Trade Commission, Shanghai Economic Commission, State Grid Company DSM Instruction Center, and Shanghai Energy Conservation Supervision Center

Funding: The China Sustainable Energy Program of the Energy and Packard Foundations

Schedule: Initiated January 2001, Ongoing

China is poised to build on the successful DSM experience in Jiangsu province, which has pioneered DSM over the past several years with the assistance of NRDC. Over the next several years, NRDC-led teams will work in Shanghai and Jiangsu on research and development of regulatory and policy recommendations on such issues as: (1) the formation and operation of specialized provincial DSM funds; (2) assessment of DSM opportunities in the industrial, commercial, and residential sectors; (3) development and implementation of DSM programs designed to yield the maximum cost-effective savings achievable in key sectors of opportunity; and (4) resource allocation and regulatory practice. The scope of the DSM program design process will ultimately include all aspects of program design, such as the type, structure and level of financial incentive and other (e.g., technical) assistance to be offered participants; marketing approaches to attract segments of the target audiences; efficiency thresholds to determine eligible measures and equipment; administrative, diagnostic and quality control procedures; the number and kinds of customers eligible to participate; and specifications, protocols, and timing for process and impact evaluation.

Energy Efficient Building Codes

Focus: Energy Efficiency

Partners: Research Institute for Standards and Norms, Ministry of Construction, Chinese Academy of Building Research, LBNL, Shanghai Energy Conservation Supervision Center, Shanghai Pacific Energy Center, Shanghai Construction Commission, Chongqing Construction Commission, Chongqing University,

Chongqing Association of Energy Efficiency in Buildings, Shenzhen Municipal Design Research Institute, and Shenzhen Construction Commission

Funding: DOE, China Sustainable Energy Program of the Energy and Packard Foundations

Schedule: Initiated 1999, Ongoing

NRDC and LBNL are assisting China in the development of a national commercial building standard as well as residential building energy standards for two of China's three major climate zones, the Hot in Summer, Cold in Winter Zone, which covers the entire Yangtze River Basin, and the Hot in Summer, Warm in Winter Zone. Once work is completed on the commercial building standard, NRDC will participate in the revision of the Heating Zone residential standard. If implemented successfully, these standards are expected to reduce greenhouse gas emissions by approximately 150 million tons per year. Working with LBNL and the Ministry of Construction, NRDC is now launching a major effort to ensure that the standards are properly implemented. NRDC is also serving as a consultant to the Global Environment Facility to develop technical standards for energy efficient lighting in buildings, which are being integrated with the public buildings standard.

Fuel Cell Vehicle Development and Commercialization

Focus: Emission Control, Sustainable Transportation

Partners: Shanghai Municipal Economic Commission, Tongji University, Jiaotong University, Energy Research Institute of the National Development and Reform Commission, South-North Institute for Sustainable Development, and Taiwan Institute for Economic Research

Funding: W. Alton Jones Foundation, China Sustainable Energy Program of the Energy and Packard Foundations

Schedule: Initiated 2001, Ongoing

This project supports the development and commercialization of fuel cell vehicles in China, a key R&D objective of China's Tenth Five-Year Plan. NRDC and its Chinese partners organized three conferences on fuel cell vehicle (FCV) development and commercialization in China with the goal of raising awareness in Chinese policymakers and the public as to the significance of FCV technology to China's sustainable development. The conferences were successful in catalyzing collaboration between Chinese and foreign companies and institutions. NRDC also helped develop detailed policy recommendations on FCV commercialization, as well as a short public education TV program on FCVs broadcast by China Central Television.

Green Building Standards and Organizations

Focus: Green Building Policy

Partners: Ministry of Construction, Ministry of Science & Technology, Municipalities of Chongqing,

Shanghai & Shenzhen, and numerous private sector companies and NGOs

Funding: General NRDC funds

Schedule: Initiated 2002, Ongoing

In addition to the regulatory push of mandatory standards and regulations, NRDC is working to help China promote voluntary market-pull programs in green buildings that go beyond minimum standards. In the United States, NRDC chairs the green building rating system called LEED, developed by the U.S. Green Building Council. NRDC is working with the Ministry of Construction and the Ministry of Science and Technology to adapt and translate LEED to fit China's needs. NRDC is also working to develop voluntary green building promotion councils at the local and national level throughout China. It helped Shanghai develop its Green Building Promotion Council, the first such voluntary green building council in China. NRDC is working with the Ministry of Construction to organize an international Intelligent and Green Building conference in 2005. This conference will help kick off a national level Green Building Promotion Council under the Ministry of Construction. In Chongqing, NRDC has been asked to be an international adviser to the municipality's Energy Efficient Building Promotion Council, which will be expanding its scope to also include green buildings. Finally, NRDC has held a number of workshops and seminars in the municipality of Shenzhen to promote the LEED green building standards and to recommend the development of a local voluntary council and engage in municipal green building demonstration programs.

Green Olympics

Focus: Green Buildings

Partners: U.S. Department of Energy, Lawrence Berkeley National Laboratory, Tsinghua University, Beijing Science & Technology Commission, and Chinese Ministry of Science & Technology,

Funding: General NRDC Funds

Schedule: Initiated 2002, Ongoing

NRDC co-chairs two working groups that are part of a Sino-U.S. agreement to promote an energy efficient and green Olympics in Beijing. NRDC works with U.S. and Chinese counterparts to develop green construction standards for Olympic venues, and is helping organize green and energy efficient building demonstration projects to support the 2008 games.

Improving the Energy Efficiency of External Power Supplies

Focus: Energy Efficiency

Partner: China Certification Center for Energy Conservation Product

Funding: China Sustainable Energy Program of the Energy and Packard Foundations.

Schedule: Initiated 2003, Ongoing

Power supplies are the ubiquitous black boxes that are used in consumer and office electronics products to convert incoming AC power to the DC power needed to operate these devices. Unfortunately, most of the power supplies used are relatively inefficient and convert a sizable fraction of the valuable incoming electricity to waste heat. NRDC estimates that the United States can reduce its electricity consumption by one to two percent simply by moving to more efficient power supplies. As more than 75 percent of the world's power supplies are manufactured in China, NRDC is working closely with the Chinese CECP (Certification Center for Energy Conservation Product) to improve the efficiency of these objects through development of a performance specification and product label. China will benefit from finished products that incorporate more efficient power supplies because they consume less electricity and will help slow down the need to construct additional power plants and as a result improve local air quality. As many of the power supplies are exported and are incorporated into finished products such as cell phones and computers, similar electricity savings, as well as economic and environmental benefits will result worldwide.

THE NATURE CONSERVANCY CHINA PROGRAM

http://nature.org/wherewework/asiapacific/china/

Yunnan's Great Rivers

Focus: Biodiversity Protection

Partners: Over fifty partners including: State Environmental Protection Administration; State Forestry Administration; Yunnan Provincial Government (Provincial Planning Commission, Environmental Protection Bureau, Department of Forestry, and other provincial bureaus, departments, and related county and prefecture offices); Tsinghua University; Institute of Forestry Planning and Design; South-North Institute for Sustainable Development; Center for Biodiversity and Indigenous Knowledge; Southwest Forestry College; Institute of Botany and Institute of Zoology, Chinese Academy of Sciences; Kunming Institute of Botany; Kunming Institute of Zoology; U.S. National Park Service; Missouri Botanical Garden; International Snow Leopard Trust; International Crane Foundation; Conservation International; RARE; Dragonair; CLSA; and McKinsey & Company.

Funding: Global Environment Facility, Starr Foundation, Sall Family Foundation, Goldman Foundation, Packard Foundation, UN Foundation, Blue Moon Fund, Ford Foundation, International Community Foundation, General Motors Corporation, Citigroup, HSBC, Agilent Technologies, Asia Conservation Trust, and private donors. Co-funding for projects is often provided by the Chinese government through various agencies at the local, provincial and national levels.

Schedule: Initiated 1998, Ongoing

Together with the Yunnan Provincial government and over forty partner agencies, The Nature Conservancy (TNC) completed a comprehensive eco-regional plan for the Yunnan Great Rivers Area in April 2001. At that time, the Conservation and Development Action Plan for Northwest Yunnan was also completed and incorporated into the Yunnan Provincial Government's Tenth Five-Year Plan (2001-2006). In implementing this plan, TNC is collaborating with government and academic partners at all levels, as well as local communities, to create conservation site plans to: (1) protect the area's unique biodiversity, (2) reduce or eliminate threats to the area's biodiversity, and (3) promote sustainable development. TNC is working at five action sites in areas in northwest Yunnan: Laojunshan, Shangri-la, Meili, Lashihai, and Gongshan (Nujiang). Conservation area plans integrating resource and tourism management are being developed at all sites. Tsinghua University and the U.S. Park Service are primary partners in developing plans to minimize the effects of unplanned and unmanaged tourism development on biodiversity. TNC also has initiated multi-site strategies to reduce threats to biodiversity from fuel wood use for household energy, unsustainable collection of non-timber forest products and alpine plants, unplanned and unmanaged tourism, and overgrazing. An innovative project called Photovoice gives local villagers cameras to record their culture, concerns, and natural resource use, informing TNC work and government policy. In 2002, at the request of former President Jiang Zemin, TNC expanded the scope of its biodiversity protection work to the national level and established the China Country Program. An office in Beijing was opened to work in close collaboration with central government agencies, research institutes and other national-level partners on a range of national policy issues including: (1) a national conservation plan which will set national priorities for protecting and managing areas of high biodiversity and ecological services value; (2) the revision of China's Nature Reserve Law and Environmental Assessment Regulations; (3) efforts to combat the importation of timber from illegal sources; and (4) global climate change and carbon sequestration strategies.

OXFAM AMERICA - EAST ASIA REGIONAL PROGRAM

http://www.oxfammekong.org http://www.oxfamamerica.org

China Programs-Upper Mekong

Focus: Watershed Management, Participatory Development

Partners: Green Watershed; Lashi Township Government; Lijiang County Government; and Culture and Gender Research Center, Lijiang

Schedule: Initiated 2000, Ongoing

Oxfam America's East Asia Office (EARO) Mekong River Basin Management Program is focused on the Mekong Region with an overarching emphasis in securing residents' right to water, their access to sustainable livelihoods, and participatory decision-making processes around development projects. In 2000, EARO initiated a watershed management project in Lashihai, Lijiang County, Yunnan, in which the food security needs of the upland Yi and lowland Naxi have been met through the implementation of a micro-credit project and the creation of a participatory Watershed Management Committee (WMC). Participants on the WMC are local villagers, village leaders, and township and county government officials from various sectors. The second phase of the project (2002-2004) has focused on: (1) building a fisheries association to address rights and responsibilities around fisheries management; (2) establishing a micro-watershed management initiative in Xihu village; and (3) promoting upland Yi sustainable management and environmental education initiatives and training around advocacy and dialogue with local government officials. Exchanges have been made between Lashi villagers and government officials in Kunming, China.

Green Watershed

Focus: Watershed Management

Schedule: Initiated 2002, Ongoing

Green Watershed seeks to develop and promote integrated watershed management concepts and practices among government officials and communities in order for sustainable practices to be realized in western China. In 2004, Green Watershed finalized their first strategic plan and will focus primarily on watershed management research and best practices, advocacy on water policies, and building the capacity of the Lashi Watershed Management project (above) as a best practice case for multi-stakeholder initiatives in China. Oxfam America also works closely with a number of other local groups and academics in China to support cross-regional learning around water governance, sustainable management and participatory development. Exchanges are supported to ensure regional collaboration and learning; Oxfam recently supported Chinese partners to attend the River for Life Meeting in Rasi Salai, Thailand.

PACIFIC ENVIRONMENT

http://www.pacificenvironment.org

Strengthening China's Environmental Movement

Focus: NGO Capacity Building

Partners: Save China Seas Network, Dalian Wild Bird Society of Dalian, Green Eyes, Petroleum Environmental Network, Xinjiang Conservation Fund, Green Wild, Korean Federation for Environmental Movement, Happy Family of Taiwan, Dalian Sun Corp. Aquarium, Green Student Forum, Green Stone, Sea Turtle Restoration Project, WildAid

Funding: Global Greengrants Fund

Schedule: Initiated 2001, Ongoing

Pacific Environment is an international environmental organization that protects the living environment of the Pacific Rim through promoting grassroots activism, strengthening communities, and reforming international policies. Pacific Environment supports Chinese NGOs by providing groups with capacitybuilding support and campaign strategies, coordinating exchanges, conferences, and issue-based coalitions, allowing Chinese activists nationwide to share information and develop cooperative campaigns.

Marine Conservation Efforts

Focus: Mangrove Protection, Marine Pollution Prevention, Biodiversity Protection

Partners: Save China Seas Network, Dalian Wild Bird Society of Dalian, Green Eyes, Petroleum Environmental Network, Xinjiang Conservation Fund, Green Wild, Korean Federation for Environmental Movement, Happy Family of Taiwan, Dalian Sun Corp. Aquarium, Green Student Forum, Green Stone, Sea Turtle Restoration Project, and WildAid

Funding: Global Greengrants Fund

Schedule: Ongoing

Pacific Environment maintains a strategic focus around marine conservation. Thus far, Pacific Environment has successfully coordinated exchanges among Korean, Japanese and Chinese groups working on seabird conservation, helped create a national network of NGOs focused on mangrove conservation, and published a series of investigative reports on marine conservation issues. Currently, Pacific Environment is developing a campaign aimed at decreasing trade in endangered shark, through consumer awareness and government pressure. Pacific Environment has also helped establish the Save China's Seas Network, linking scientists, activists, and journalists through an information-sharing listserv.

WILDAID

http://www.wildaid.org

Active Conservation Awareness Program (ACAP)

Focus: Wildlife Protection

Partners: Over 80 celebrity and sporting Ambassadors (including Liu Huan and Li Ning), CNN International, Doordarshan in India, CCTV, StarTV, sina.com, 19 leading Chinese magazines, China Environmental Protection Foundation, *Beijing Youth Daily*, Shanghai Ocean Aquarium, Guangzhou Science Association, Hong Kong MRT rail network and Airport Express Shuttle, Chinese State Forestry Administration, J. Walter Thompson, and Chinese Wildlife Conservation Association **Funding:** Individual donations (\$1,000,000), Foundations (\$305,000), J. Walther Thompson (In Kind Donation, \$500,000), Chinese News Media Organizations (In Kind Donation, \$1,000,000) **Schedule:** Initiated 1996, Targeted Completion 2008

WildAid believes that the illegal trade in wildlife cannot be successfully addressed without reducing the demand for wildlife products. Since 1996, WildAid's Active Conservation Awareness Program has been working with governments, celebrities, communities, news media and other partners to reduce consumer demand for threatened wildlife products throughout Asia. In partnership with the international advertising agency J. Walter Thompson, WildAid has successfully worked with local groups across Asia to create and disseminate sophisticated, culturally appropriate and compelling messages to raise Chinese awareness of conservation issues, which is hoped to help curb unsustainable demand for wildlife. With the help of high-profile celebrities and innovative multi-media campaigns, ACAP's message, "When the Buying Stops, the Killing Can Too," reaches up to a billion people. Particularly noteworthy accomplishments of the program in China include:

(1) Distributing a conservation documentary via CCTV stations to an estimated audience of 100 million.

(2) Broadcasting public service announcements about conservation on multiple TV channels.

(3) Creating and hosting China's first National Conservation Awards in collaboration with the China Environmental Protection Foundation that was covered extensively in national and international news media.

(4) Signing a three-year agreement to provide content to Sina.com—the leading online media company and value-added information service provider for China and for Chinese communities worldwide with more than one hundred million registered users.

(5) Securing a three-year agreement to provide content to 19 leading Chinese magazine titles—all of which specifically target the new urban wealthy consumers.

(6) Securing an agreement with CCTV channels to provide wildlife protection programs.

(7) Receiving an invitation to organize a major wildlife-themed, nationally televised music concert in collaboration with CCTV and *Beijing Youth Daily*.

(8) Enlisting the direct personal support of China's top male singer, Liu Huan and Olympic Gold medal hero and highly successful businessman, Li Ning.

WORLD RESOURCES INSTITUTE (WRI)

http://www.wri.org

China BELL (Business Environment Learning Leadership)

http://bell.wri.org http://www.chinaeol.net/bell

Focus: Environmental Education for Business Students

Partners: SEPA Center for Environmental Education and Communications; National MBA Education

Supervisory Committee; Tsinghua, Peking, Renmin, & Fudan Universities; Dalian University of Technology; China Europe International Business School

Funding: GE Fund, Alcoa Foundation, Netherlands Ministry of Foreign Affairs, Boeing

Schedule: Initiated 2000, Ongoing

Today, there are 89 nationally accredited institutions that grant graduate business management degrees in China, a number that is steadily increasing. The number of top students enrolling in these schools is also growing, making them a critical point of intervention in the development of China's future business leaders. World Resources Institute (WRI)'s BELL project seeks to add environmental and sustainable management to these schools' curricula. The China BELL project: (1) trains and promotes networking among business school faculty; (2) publishes curricula; (3) supports course development; and (4) helps business schools understand changes in industry practice and skill needs that are relevant to curriculum development and research.

New Ventures China

http://www.new-ventures.org/china.html http://www.new-ventures.org.cn Focus: Sustainable Enterprise Development Partners: LEAD China Funding: Citigroup Foundation, Shell China, The Netherlands Ministry of Foreign Affairs Schedule: Initiated 2002, Ongoing

Though many people perceive economic growth, social stability and environmental protection to be at odds, Sustainable Growth envisions an alternative economic paradigm in which businesses succeed by strengthening their communities and preserving or restoring the local natural environment. Accordingly, New Ventures works with local partners to identify like-minded, promising start-up and scale-up enterprises, provide them with business mentoring services, and introduce them to potential investors.