

GLOBAL ENVIRONMENTAL INSTITUTE 2008 ANNUAL REPORT



About the Global Environmental Institute

The Global Environmental Institute (GEI) is a Chinese based non-governmental, non-profit organization founded and headquartered in Beijing in March of 2004. Currently, it has offices in Sichuan Province, Yunnan Province, Tibet Autonomous Region in China and Colombo in Sri Lanka.

Mission

Our mission is to design and implement market-based models for solving environmental problems in order to achieve development that is economically, ecologically, and socially sustainable.

Vision

We envision a healthy and diverse world, a world in which society, the environment, and the economy develop in harmony.

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World Bank

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Letter from GEI's Executive Director

Dear Friends,

2008 marks GEI's full transformation into a "think tank." As a think tank, GEI assumes the role of an independent, nongovernmental third party organization promoting the establishment and enforcement of environmental policies and encouraging communication and cooperation between China and the US in combating climate change.

"In 2008, we successfully held two informal meetings between climate change policy makers from China and the US. And, as an outcome of the two dialogues, a delegation from China's National Development and Reform Commission (NDRC) went to California to participate in the "Global Governors' Climate Summit," organized by governor Arnold Schwarzenegger. Sohu Green reported on the event!"

——Wu Shuang, Climate Change Program Officer at GEI

2008 also marks the first year GEI has brought biogas technology that has been proven successful in China to another developing country. GEI's success in Sri Lanka has laid the foundation for our future application for funding from the Chinese government for the implementation of additional biogas projects outside of China. GEI hopes to use this funding to bring mature renewable energy technology, like biogas, to other developing countries as a means of combating global climate change.

Finally, in 2008, GEI expanded its training programs for China's high-level

"In 2008, we conducted a series of trainings on biogas digester construction in five of Sri Lanka's nine provinces. After the trainings, 23 trainees became proficient in biogas digester construction. In total, 56 digesters were constructed, among which the smallest was 10m³ and the largest was 60m³!"

——He Yeyun, Sustainable Rural Development Program Officer, GEI's Sri Lanka Office

policy makers, began capacity building programs for young and innovative rural entrepreneurs and continued to implement sustainable development programs in rural communities, which received praise from experts, project participants and society at large.

As a pioneering Chinese NGO implementing projects beyond China's borders, GEI hopes to make a greater contribution to global environmental protection efforts. We are grateful for all the support we've received, both from institutions and individuals, and we hope that you can continue to offer us your support in the future!

Thank you!

With our sincere gratitude,

GEI's Executive Director :



GEI's Projects: An Overview



2005

Energy Efficiency Financing: Clean Development Mechanism	
for China's Cement Industry	
Sustainable Rural Development Project in China	
CDM for Forest Recovery	2007
CDM Training for NGOs	2007
Commercial Demonstration of Small Combined Heat and	Sustainable Rural Development Project in China
Power	Conservation Incentive Agreements in China
Bus Rapid Transit Technical Network	Guidelines for Chinese Forestry Enterprises Operating Overseas
Feasibility Study for the Implementation of Forestry	Sustainable Development Training for High-Level Policy Makers
Conservation Concessions and Sustainable Development in	GEI-Auto Project on Energy and Climate Change (APECC) Partnership
China	GEI-Worldwatch Institute (WWI) Partnership
Conservation Incentive Agreements in China	Sri Lanka Biogas Commercialization
Guidelines for Chinese Forestry Enterprises Operating	Capacity Building on Business Opportunities for CDM Projects in China
Overseas	GEI-Greenriver Partnership: Three Rivers Migration Study
Sustainable Development Training for High-Level Policy	Five Household Cooperative
Makers	Identifying Opportunities and Key Stake Holders to Mitigate the Energy and Environment
GEI-Auto Project on Energy and Climate Change (APECC)	Problems in Southern China
Partnership	Integrated Policy Package for Overseas Chinese Enterprises
GEI-Worldwatch Institute (WWI) Partnership	Marketing Tools for Energy Efficiency Investments in China's Metallurgy Industry

2003

Energy Efficiency Financing: Clean Development Mechanism for China's Cement Industry CDM for Forest Recovery

2004

Energy Efficiency Financing: Clean Development Mechanism for China's Cement Industry Sustainable Rural Development Project in China CDM for Forest Recovery CDM Training for NGOs Commercial Demonstration of Small Combined Heat and Power Bus Rapid Transit Technical Network

2006

Sustainable Rural Development Project in China Commercial Demonstration of Small Combined Heat and Power Conservation Incentive Agreements in China Guidelines for Chinese Forestry Enterprises Operating Overseas Sustainable Development Training for High-Level Policy Makers GEI-Auto Project on Energy and Climate Change (APECC) Partnership GEI-Worldwatch Institute (WWI) Partnership Sri Lanka Biogas Commercialization Capacity Building on Business Opportunities for CDM Projects in China GEI-Greenriver Partnership: Three Rivers Migration Study

2008

Conservation Incentive Agreements in China Sustainable Development Training for High-Level Policy Makers GEI-Worldwatch Institute (WWI) Partnership Sri Lanka Biogas Commercialization GEI-Greenriver Partnership: Three Rivers Migration Study Five Household Cooperative Identifying Opportunities and Key Stake Holders to Mitigate the Energy and Environment Problems in Southern China Integrated Policy Packages for Overseas Chinese Enterprises Marketing Tools for Energy Efficiency Investments in China's Metallurgy Industry Sustainable Community Conservation Agreement in China Sustainable Rural Entrepreneurship Training Eco-Entrepreneurship Training U.S.-China Track II Dialogue on Climate Change Lao-China Cooperation Center for Sustainable Land and Natural Resources Management Sustainable Rural Development in Tibet

Major Events in 2008

January 15, 2008:

The "Integrated Policy Package for Overseas Chinese Enterprises" received an official response from the Department of Policies, Laws and Regulations at the Ministry of Environmental Protection. A copy of the response letter is provided at right.

August 18, 2008:

GEI and the National Land Management Authority of the Lao People's Democratic Republic signed an MOU on the "Lao-China Cooperation Center for Sustainable Land and Natural Resources Management" project.

September 27, 2008: GEI held a Symposium on "Marketing Tools for Energy Efficiency Investments in China's Metallurgy Industry."

May-August, 2008

Under the guidance of project experts at the "Sustainable Development Training for China's High-Level Policy Makers" project, teachers at the Party School of the Central Committee of the C.P.C. (CPS) were able to complete a survey of cities within 10 provinces nationwide, which served as valuable first-hand information for developing the training materials on sustainable development at the CPS. Below: CPS teachers converse with rabbit breeders in Sichuan.

July 21-23, 2008 GEI's "US-China Track II Dialogue on Climate Change" held its first round of dialogues.

September 10, 2008:

"China Business News" released a report on the "Research on Environmental Policies of Investment and Aid Overseas (first draft)," an important component of the "Integrated Policy Package for Overseas Chinese Enterprises."

September 12, 2008: "China Daily" released a report on the

"Research on Environmental Policies of Investment and Aid Overseas (first draft)."

October 18, 2008:

GEI's "US-China Track II Dialogue on Climate Change" held its second round of dialogues.

GEI's "Conservation Incentive Agreements"

October 22, 2008:

November 17, 2008:

The Department of Policies, Laws and Regulations of the MEP consulted with the MOC about the "Research on Environmental Policies of Investment and Aid Overseas (first draft)," the project's interim output, and discussed issuing guiding documents on the Policy Research (first draft), which laid a solid foundation for the future publication of GEI's Guidelines for Environmental Conduct Overseas.

December 2008:

The objectives of the "Sri Lanka Renewable Energy (Biogas) Project" were fully reached, marking a new phase in the project. (Please see full text for details.)

October 4-6, 2008:

Sri Lanka's Ministry of Livestock Development held an exhibit on Sri Lanka's livestock industry and agriculture, in which the biogas systems installed by GEI served as new and innovative technology brought in by the Ministry. The biogas systems were well received by attendees of the exhibit. Right: GEI project officer He Yeyun and Head of the Ministry's Breeding Department Dr. Piyadasa Wasantha introduce GEI's biogas system to a curious attendee.

October 28, 2008:

GEI's "Conservation Incentive Agreements" project received a nomination for the Ford Motor Company's "Protection of the Natural Environment Award" in the amount of RMB10,000 (USD1,449).

November 18 and 19, 2008:

中华人民县和国际建保护部司品

GEI participated in the Governors' Global Climate Summit, a joint conference organized by California governor Arnold Schwarzenegger as well as other American governors. As a major output of the two meetings held on the "US-China Informal Track II Dialogue on Climate Change" project, China's National Development and Reform Commission (NDRC) sent an observer delegation to the summit. Right: Mr. Gao Guangsheng, NDRC climate council and Chinese government representative (second from left) takes part in a small group discussion during the summit.

Objectives and Approaches in 2008

GEI's objectives for 2008 include:

- Encouraging the Chinese government to establish policies supporting sustainable development when regulating its overseas enterprises.
- Developing channels for bilateral communication and cooperation on climate change between the Chinese and American governments.
- Expanding and replicating China's renewable energy (biogas) technology in Sri Lanka as a stepping stone for expansion to other developing countries.
- Seeking out ways to increase the use of energy efficiency technologies and decrease the consumption of fossil fuels in China's high-energy consuming industries and regions.

GEI's Approach

GEI believes that environmental problems must be resolved alongside social and economic problems, particularly in developing countries like China. Solutions to environmental problems can be difficult to implement in developing countries, where they often seem to interfere with economic development. Therefore, GEI put forward an innovative solution that is using market mechanisms to improve the livelihoods of local communities and at the same time guarantee the healthy development of biodiversity systems. In order to realize our objectives for 2008, we have adopted the following approaches:

- Conducting research on the environmental behavior of China's overseas enterprises and constructing a platform for cooperation with government departments and policy research institutions. In doing so, GEI aims to encourage government policy legislation, enactment of demonstration projects and expand the potential for and influence of policy implementation on China's overseas investment and aid.
- Establishing informal dialogue between the Chinese and American governments through "track II diplomacy" and, after the two countries reach a consensus on their fundamental objectives on climate change, encouraging formal dialogue between the two governments.
- Studying and mastering mature, Chinese-developed renewable technology, such as biogas, as well as conducting demonstration projects on this technology in Sri Lanka. With the support of local governments and local Chinese embassies, GEI seeks to expand and replicate Chinese renewable technology, particularly biogas, in other developing countries.
- Analyze energy consumption, environmental problems, relevant policies, energy-efficiency technology and the potential for commercial development of China's high energy-consuming industries and regions, in order to help these industries seek out energy-efficiency technologies and feasible methods of reducing their reliance on fossil fuels.

Sustainable Rural Development Program

GEI's Sustainable Rural Development program seeks to incorporate successful commercial models into the development of rural communities. The program focuses on renewable energy and organic farming in rural areas and on helping farmers integrate into the greater market as a means of raising income and protecting the local environment.

After four years of project activity, GEI's model of using market mechanisms to address environmental problems, and, specifically, its promotion of biogas and organic agriculture as an integrated mechanism for resolving economic and environmental challenges to rural communities, has shown measurable success in China and other developing countries. In 2008, the program team continued its activities in Tibet and Sri Lanka.

Sustainable Rural Development in Tibet

Background

The Tibet Autonomous Region lies on the Tibet-Qinghai plateau, and is well known as "the roof of the world." However, because of its geographical location, its biodiversity teeters on a knife-edge, with a delicate ecosystem highly susceptible to damage. Additionally, with its glaciers serving as the source for three of the world's major river-systems (Yellow River, Yangtze River and Mekong River), climate change in Tibet can have potentially catastrophic effects on a major area. Balancing development with environmental protection and conserving Tibet's unique biodiversity is not only of practical importance to China, but also of great importance to the entire world.

However, because of Tibet's low level of economic development, people's living standards remain relatively low. After conducting research in the region, GEI discovered that local farmers use yak manure as their primary source of fuel. The gases released by combustion of the manure have not only had harmful effects on the atmosphere, but have also affected the air indoors, posing a threat to locals' health. Thus it has become imperative to accelerate the pace of modernization, construction and growth in residents' living standards through environmentally friendly means.

GEI, as a Chinese NGO concerned with the challenge of environmental protection and offering sustainable solutions to that challenge, has closely followed Tibet's environmental, social and economic development. Based on the success of GEI's "Biogas and Organic Agriculture" project in Yunnan Province, GEI has decided to implement a similar "Sustainable Rural Development in Tibet" project.

Objectives

The project is aimed at protecting the environment of the Tibet Autonomous Region, raising the living standards of local residents and promoting sustainable development.

Methodology

In order to increase the income of local residents and guarantee protection of local biodiversity, the project team designed a practical operating model that combines livestock breeding, organic agriculture and biogas. Livestock such as yak and sheep generate large amounts of manure, and constructing biogas digesters using this manure as raw material can help raise the living standards of local residents. The project team also helped farmers construct greenhouses and plant healthy, organic vegetables using biogas slurry as a natural fertilizer. Additionally, the project team helped local residents establish a farmers' cooperative to assist in the sale of local agricultural products.

Project Timeframe

December 2006~November 2009

Activities in 2008

Due to political unrest in Tibet in March and the devastating Sichuan earthquake in May, project activity at biogas digester construction sites in Duilongdeqing, Linzhou and Nimu counties was delayed.

August: The project team conducted biogas, vegetable cultivation and commercial operations trainings in Naba, Wujinmai and Nimu villages.

October 6: Dangxiong County in Lhasa experienced a magnitude 6.6 earthquake. GEI had originally planned to implement household biogas projects in seven households in Baiguo Town, Nimu County. However, due to the close proximity of Baiguo Town to the earthquake's epicenter, project work had to be halted indefinitely, and, given the small timeframe for project completion, the project team was forced to implement the biogas projects in other villages in Nimu County not as heavily affected by the earthquake. Moreover, because of winter temperatures, concrete casting of biogas digesters could not be completed; project work was ultimately delayed until spring 2009.

September and October: In order to guarantee safe usage of biogas in the future, the project team conducted trainings in Duilongdeqing and Linzhou counties, where biogas digesters were constructed by GEI in 2007, and printing for a biogas operation manual translated into Tibetan was completed in October.

Due to winter temperatures, the project team's main work in November and December was in promoting safety for biogas construction and operation, translating and distributing the Tibetan biogas operation manual to local farmers and conducting related trainings.

Impact

The project team helped local residents at the project site to resolve fuel and pollution problems by constructing biogas digesters, providing a guarantee for local environmental protection and the health of local residents. The project team also constructed greenhouses to resolve the limited, seasonal supply of agricultural products, and protected farmland by using non-polluting, natural biogas slurry as a fertilizer. With this, farmers are not only able to eat fresh vegetables, but can also transport the vegetables to the wider market for sale through the farmers' cooperative.

Prospects

The project combines breeding, planting and biogas initiatives into one operating model,

which has gradually gained support and approval from the local government. While helping to raise the living standards of the local residents, the project has also guaranteed the environmental sustainability of the region.

"After the greenhouse was constructed, we were taught how to grow healthy vegetables. The annual income (of my family) increased by RMB5,000 (USD725). And for the last two years, the biogas digester has operated well, and I can save an annual gas cost of more than RMB600 (USD87)."—Ciren Dunzhu, from a demonstration household in Naba village, Duilongdeqing County.

Project Team:

CHEN Zhiping, HUANG Di, Ciren Luobu, Awang Cipei, HE Yeyun

Sri Lanka Renewable Energy (Biogas)

Background

Sri Lanka has no source of fossil fuel energy, and has traditionally imported all of its energy. Fuel for daily life activities is dependent on imported fossil fuel. However, due to the extremely high price of imported fuel, many families in Sri Lanka still rely on firewood for daily energy needs, leading to serious problems with illegal logging.

At the same time, the majority of rural households have a number of domestic animals. Although Sri Lankan legislation states that all households raising domesticated animals must deal with the animal waste and sewage independently, and families will receive legal punishment for pollution that is created. However, there is minimal infrastructure for waste management given the large scale of livestock-breeding throughout the country, leading to pollution of both groundwater and ecosystems.

Considering the current situation in Sri Lanka, one way to deal with the problems of environmental and water pollution from the raising of livestock, and to provide the local population with energy resources, is the construction of biogas digesters. In the 1980s and 1990s, Sri Lanka was heavily engaged in the construction of biogas digesters. However, because they were based on inefficient technology, biogas digesters built at that time did not generate much gas, and their construction required a large amount of cement and aggregate.

Moreover, the vast majority of rural households in Sri Lanka were unable to bear the construction costs. Thus, the promotion of biogas as a source of Sri Lanka's energy at that time was unsuccessful.

GEI, as a Chinese NGO, has, since its establishment, been committed to expanding the use of Chinese expertise in other developing countries to promote common development. Based on the success of GEI's sustainable rural development projects in China, it was able, in 2006, to open a project office in Sri Lanka. The first task of the office was to carry out a feasibility study. After obtaining approval from the Sri Lanka cabinet in 2007, GEI began the preparations for its Sri Lanka Renewable Energy (biogas) project together with Sri Lanka's provincial governments. The project has become the first project initiated by a non-Sri Lankan NGO that has gained support and cooperation from the Sri Lanka government since its independence in 1947.

Objectives

The project is aimed at improving the environment of Sri Lanka and the quality of life of local residents, and promoting sustainable development.

Methodology

By cooperating with the Sri Lanka Ministry of Livestock Development (MLD), GEI has introduced to Sri Lanka Chinese models that have been proven effective, and promoted the use of clean energy (such as biogas) in Sri Lanka. GEI was responsible for the introduction of new biogas technology and new cookers; the MLD was responsible for selecting rural households, and providing the households with subsidies for sand, cement, and stone for construction; households were responsible for providing labor and room and board for technical staff.

Project Timeframe

December 2007 - April 2009

Activities in 2008

In 2008 the project team delivered a series of trainings in five of Sri Lanka's nine provinces. Twenty three trainees have become technical experts capable of constructing biogas digesters on their own. The project team also built 56 biogas digesters, among which the smallest is 10m³ and the largest 60m³.

August: "Sri Lanka Green Gas Development Co., Ltd", incubated by the project, was established. The company continues to scale up the renovation of biogas digesters in Sri Lanka. Through this commercial operation, the biogas construction in Sri Lanka can be sustainable.

October 4-6: The MLD organized an exhibition on animal husbandry and agriculture. The biogas digesters built by GEI were introduced by the MLD as new and advanced technology, which was warmly received by the locals.

December: The project team successfully completed the project objectives and has started in the preparation work for the project's next phase, which will turn its focus to helping Sri Lankan villagers, companies and government grow and sell organic vegetables. The project team conducted surveys of the situation of vegetable planting and sales and has preliminarily chosen partners and pilot sites for vegetable planting. GEI and the MLD have signed an initial cooperation agreement.

Impact

Having brought Chinese expertise on biogas to another developing country, GEI became the first Chinese NGO to implement a project outside of China. Presently at the project sites in Sri Lanka the project has achieved its initial goals. Livestock waste, which used to cover the roads around project areas, has virtually disappeared, significantly improving the surrounding environment. The use of biogas as a means of fuel helps the local households save significant expenses on daily fuel. The slurry generated from the biogas digesters, an organic fertilizer, is cheaper and more environmental friendly than chemical fertilizers. The crops fertilized by the slurry are more nutritious and healthier than other crops. Households with biogas digesters now use slurry as fertilizer, and those who do not have biogas buy slurry from other households. Moreover, the use of biogas has allowed households to reduce their use of firewood as a fuel source for cooking; women, who do most of the cooking in Sri Lankan culture, especially enjoy the health benefits of no longer inhaling the gases released in wood burning. Use of biogas for cooking reduces cooking time, thus cutting back on labor required. Biogas is used in nearly every kitchen at project sites as fuel for lighting, and local villagers hope to expand the use of biogas lighting. In sum, the project has substantially raised the quality of life in a majority of rural households covered by the

project.

In Sri Lanka, GEI's promotion of biogas received a great deal of praise from all sides. The Sri Lanka National Bureau of Standards published the standard for biogas digester construction in Sri Lanka based on GEI's biogas technology. Subsequently, the MLD issued the manual for biogas use in Sinhala (Sri Lanka's most widely spoken language). Due to the success of the project, farmers' demand for biogas digesters has continued to increase. The MLD has already established funding for the construction of biogas digesters in rural areas, and has requested that every province, according to its financial ability, set aside matching funds in support of advancing the construction.

The project has garnered high praise from the Chinese Embassy in Sri Lanka and the External Resources Department at the Sri Lanka Ministry of Finance because of its impact on local energy needs, the local environment as well as people's livelihoods. Both supported GEI's recommendations that the project team apply for Chinese government funding in order to scale up the project.

Prospects

The success of the first phase of the project has demonstrated that GEI's new biogas project can have a tremendous beneficial impact on Sri Lankan society and environment. The project team will push forward the second phase of the project in cooperation with local governments and enterprises for the production and marketing of organic vegetables.

Furthermore, the project team plans to scale up the biogas construction to the whole of Sri Lanka by applying for Chinese government funding to construct an additional 5,100 biogas digesters, urging the Sri Lanka government to increase the subsidy funding for biogas construction, and at the same time applying for funding from other

foundations.

MLD Director Dr. Piyadasa Wasantha commented: "Through cooperation with GEI, we have been able to show that within one year, GEI's biogas technology and management has played a very big role in promoting renewable energy in Sri Lanka. I hope the GEI experts in Sri Lanka are able to scaleup the new biogas technology throughout Sri Lanka."

Project Team:

CHEN Zhiping, HE Yeyun

Additionally, in order to expand successful Chinese biogas technology to other regions, GEI published a Single Household Biogas Technology manual in four languages (Chinese, English, Spanish and Portuguese).

Both electronic and printed versions are available.

Global Environmental Institute 2008 Annual Report

Sustainable Rural Entrepreneurship Training

Background

The development of China's rural regions, particularly in the biologically diverse and sensitive southwest, has been a major interest of GEI's since its founding. Historical and geographic factors have left the development of southwestern China lagging far behind that of the country's wealthier eastern provinces, especially in rural areas. Although the region is gradually advancing its economic development through tourism and natural resources extraction, the lack of effective environmental and biodiversity protection measures has led to the large-scale destruction of the environment and loss to biodiversity. Over the past several years, GEI has been exploring more effective methods of helping residents in poor communities raise their income and guaranteeing that these methods are beneficial to each area's sustainable development. Towards this end, GEI came up with the concept of Sustainable Rural Enterprises.

The main mission of Sustainable Rural Enterprises are to raise rural residents' income through commercial management. These management activities should be based on the livelihood activities of local residents, and at the same time be beneficial to local biodiversity. Under this principle, GEI has developed a series of commercial expansion activities in Lijiang, Yunnan Province; Baoxing, Sichuan Province and Lhasa in the Tibet Autonomous Region, in order to help local residents develop their own unique agricultural products. These activities include organic vegetable cultivation in Lijiang and organic honeybee rearing in Baoxing. While these projects have had considerable success over the last few years, GEI discovered that the local workforce lacks personnel with experience in these areas. For this reason, we set up the Sustainable Rural Entrepreneurship Training (SRET) project to address this shortage.

Objectives

The SRET project, using the companies incubated under GEI's Sustainable Rural Development program and the business opportunities as a platform, is aimed at cultivating responsible entrepreneurs who have specialized management ability and can advance the cause of sustainable development.

Methodology

The training includes both in-class training and on-site application. The in-class training portions were conducted by American and Indian experts with rich experience in operating small-scale rural enterprises. The content of the classes included core enterprise management fields such as production management, sales and contract negotiations. Following the in-class training, the students engaged in

6-12 month internships at companies incubated by GEI, which gave them on site experience working in rural enterprises and improved their management capacity.

Project Timeframe

February 2008~December 2009

Activities in 2008

February: The project was formally launched, with project officers and collaborators devising a work plan and preparing teaching materials.

March: The project team recruited three students to participate in the project's first training in Lijiang, Yunnan Province, Experts from GEI-America, Environment Energy and Enterprise Ventures (India) and the Yunnan University of Finance and Economics talked about their experiences in developing sustainable rural enterprises as well as their expertise in production and operations management, financial management and marketing, taking the Lijiang Snow Mountain Organics Co. Ltd. (LSMO), incubated by GEI-China, as a study case. Representatives from other companies and NGOs working in Beijing, Xi'an and Yunnan Province also attended the training. After the training, students began 6-month to one-year field implementation projects in Lijiang and Sri Lanka.

September: The project team conducted its second training in Baoxing County, Sichuan Province. The main theme of the training was the operation of the Lüyuan Cooperative at the Fengtongzhai Nature Reserve incubated by GEI. Two students, along with members of the cooperative, took part in the training. In addition to attending in the training, the participants also discussed development models for farmers' cooperatives with the experts along with challenges in their future development. Following the training, the students remained in Baoxing to help members of the newly formed cooperative with management and other activities.

Impact

Conducting trainings has helped aspiring young rural entrepreneurs gain skills and expertise in enterprise management and has provided them with business opportunities and a venue to build experience. Additionally, it has helped small scale rural enterprises find talented personnel who understand the relevant technology and have good management skills.

Prospects

In 2009, the project team will continue to train management staff skilled in market formation.

Project Team

Biodiversity Conservation Program

GEI's biodiversity conservation program aims to spur the economic development of communities living near the buffer zones of nature reserves and resolve conflicts between biodiversity conservation and local economic development through perfecting and developing existing financial models. The project team encourages local governments and communities to adopt an environmentally responsible approach to economic development through mechanisms like the Conservation Incentive Agreements.

Through the "Guidelines for Chinese Forestry Enterprise Operating Overseas," the project team also aims to strengthen ties between the Chinese government, Chinese timber enterprises and Southeast Asian governments in promoting unified action on sustainable management of forests between NGOs and government institutions in the Southeast Asian region.

Conservation Incentive Agreements

Background

Ever since the "Dinghushan Nature Reserve," China's first nature reserve, was established in Guangdong Province in 1956, the number of nature reserves in China has multiplied rapidly. By late 2007, there were 2,500 nature reserves in China, accounting for 15% of China's entire land area. However, due to the complexity of nature reserve governance in China, nature reserves with a "protection first"¹¹ policy have been unable to obtain support from local governments, giving rise to environmental and economic conflicts between the management of nature reserves and communities living at their peripheries.

These conflicts between nature reserves and local communities are a common phenomenon. Most areas in China that are rich in biodiversity have communities living nearby, whose livelihoods often depend on extraction of resources from within the nature reserves. Furthermore, the rich biodiversity and natural resources found in China's nature reserves are magnets for ecotourism, mining companies and hydropower stations, which often cause significant damage to the ecological environment of the nature reserves.

If conflicts like these are not addressed, communities living near nature reserves will remain impoverished, and nature reserves will be unable to effectively carry out biodiversity protection work.

As a solution, GEI has begun to introduce an internationally recognized conservation mechanism known as the "Conservation Incentive Agreements" to China's nature reserves. The Conservation Incentive Agreements (CIA) are agreements signed by an environmental protection institution independent of the target nature reserve to carry out protection work in that nature reserve. The protection agency agrees to provide assistance to community development for residents living near the nature reserve, in return for residents' commitment to reducing or ceasing altogether in resource extraction activities.

In 2006, after completing two field surveys, GEI's project team chose the Fengtongzhai Nature Reserve in Baoxing County, Sichuan Province, as a pilot site for its first CIA project. Baoxing is a mountainous, rural county in which farmers own an average of one mu (0.067 hectares) of land. Clearly, agriculture alone cannot sustain local residents' livelihoods, many of whom turn to grazing and the collection of medicinal herbs as a means of generating income for their communities. Moreover, many of the residents extract firewood from the nature reserve for cooking and heating and engage in illegal logging and hunting activities that are difficult to regulate. The situation is made worse by numerous hydropower stations dotting the shores of the East River—which runs through the center of the nature reserve—changing the course of the river and threatening its ecosystems. In many ways, the challenges Fengtongzhai faces are a microcosm of biodiversity conservation efforts throughout China's nature reserve system.

^{1 : &}quot;Protection first" policies place priority on the protection of the environment over other objectives (e.g. livelihood development).

Objectives

Through the CIA project, the project team seeks to incorporate the Conservation Incentive Agreements mechanism into the management structure of China's nature reserves and reduce environmental pressure from livelihood activities of communities living in areas rich in biodiversity. At the same time, through implementation of the CIA, the team hopes to alleviate pressure on communities living at the boundaries of nature reserves.

Methodology

GEI and the management of the Fengtongzhai Nature Reserve signed an agreement on the transfer of protection rights and sustainable resource use, through which GEI obtained natural resource protection rights for the nature reserve's buffer zone. At the same time, GEI signed a biodiversity conservation and community development agreement with the Heping and Yanjing villages in the Fengtongzhai buffer zone, which effectively transferred limited extraction rights of natural resources to local residents and trained them in sustainable use of natural resources. In addition, GEI, together with the Baoxing County government and local hydropower companies, set up a credit union for local community development, to help with community activities such as rabbit and honeybee rearing and biogas digester construction.

As a non-extractive means of generating income for local residents, GEI introduced rabbit rearing and organic honey production to the two communities assisted by GEI's project, offering trainings, rabbit pens and honeybee hives for residents in addition to the funding provided by the credit union.

Project Timeframe

January 2006~June 2008

Activities in 2008

In late 2007, southern China faced its worst blizzard in 50 years, which had major effects

on GEI's rabbit and honeybee breeding activities in Baoxing County.

Early 2008: The project team brought residents of the Fengtongzhai countryside together to purchase 50 new beehives. The residents were more eager than the previous year to contribute to the purchase of the beehives. Building on experience from the previous year, the project team altered the breeding model from scattered breeding over a large area into a single standardized collective breeding model. Under this new model, the newly purchased beehives will be placed at a single site within the project area, with three to five experienced beekeepers taking turns to watch over the hives. The project team also helped set up a system for management and delegation of responsibilities and payoffs for the breeding program.

February: The project team set up biogas maintenance teams for three villages in the Fengtongzhai buffer zone (namely Heping, Qingping and Yanjing villages), responsible for maintaining the 103 biogas digesters GEI helped the local communities to construct. The biogas maintenance teams were selected from participants in the training program on biogas construction and maintenance organized by GEI and the county government. Each three person team is responsible for maintaining biogas digesters in their own village. The maintenance teams are service-oriented, and largely self-financed, with residents covering the cost of materials and the villages and Fengtongzhai Town offering certain subsidies to the teams.

Late March: The project team conducted a statistical survey of the blizzard disaster area and set aside a specific disaster relief fund.

May: A magnitude 8.0 earthquake hit northern Sichuan Province, with the epicenter located close to GEI's project sites. GEI's project suffered serious damage, particularly the rabbit-breeding program. Around 80% of the bottom level rabbit pens collapsed, killing a vast majority of the rabbits. For the second level rabbit pens, around 50% of adult rabbits were killed, while 30% of infant rabbits were killed, with varying levels of damage between pens. More seriously, many pregnant female rabbits' fetuses were killed. In addition, 40 honeybee hives were submerged under mud-rock flows. Farmers' morale was also heavily affected by the earthquake damage. In response, GEI staff and advisors donated a total of RMB30,050 (USD4,420), to be used for earthquake reconstruction work.

July: The project team helped the community form the "Fengtongzhai Lüyuan Farmers' Cooperative." The cooperative is a newly formed commercial entity that enjoys priority treatment in terms of registration and taxation. As an initial model of a socially responsible community enterprise working in a biodiversity rich area, the Lüyuan Farmers' Cooperative operates on a low profit, smallscale basis, carrying out organizational and training work for community development, and helping communities establish a commercial product chain for planting and breeding activities.

July 14-30: The project team traveled to Fengtongzhai to help with reconstruction work in the project areas most heavily affected by the earthquake. Besides giving the disaster relief fund to the community, GEI also invited experts in biogas digester repair to repair damaged biogas digesters, and brought China's "rabbit king," Mr. Ren Xuping to the communities to conduct trainings on rabbit rearing for residents.

August: The project team began searching for additional financial support for the project. On October 22nd and 28th, the project won, respectively, the "Lenovo Innovation Award" issued by the World Bank, which included a total of RMB16,000 (USD2,319) contribution to the project, and the "Protection of the Natural Environment Award" issued by Ford Motors, which included a prize of RMB10,000 (USD1,449). These contributions will be used in a new project to provide post-earthquake support to the communities being helped by the old project, and also to scale up and improve the project model. GEI hopes that this new project, entitled "Sustainable Community Conservation Agreement in China", can serve as an inspiration, and as a precedent, for similar projects in the future, especially those that offer policy suggestions to the Chinese government.

Impact

The 103 biogas digesters constructed by GEI have reduced the annual felling rate in the Fengtongzhai Nature Reserve by around 500,000kg and have helped to reduce greenhouse gas (GHG) emissions by 577 tons.

Although the blizzard and earthquake disasters of 2008 had a major impact on project activity, GEI's community breeding projects experienced measurable success: RMB6,250 (USD906) was raised in honeybee production, 1,000 rabbits were bred for meat and the 105 residents who participated in the breeding programs were able to raise their annual incomes by RMB326 (USD47).

Prospects

The second stage of the Conservation Incentive Agreements project, the "Sustainable Community Conservation Agreement in China" will be formally initiated in 2009. The project expands community activities carried out during the CIA project, optimizes the commercial sales chain of products and promotes the concept of CIA at the management and legislative levels of nature reserves, providing a foundation for the CIA's incorporation into China's "Nature Reserve Law."

Project Team

WANG Aimin, CHEN Mingjie

Guidelines for Chinese Forestry Enterprises Operating Overseas

Background

Illegal logging is a global problem that affects forest certification, timber felling, processing and trade. The term "illegal logging" itself is interpreted differently from country to country, and there are a wide variety of standards and targets for certification, which has made international action against illegal logging all the more difficult.

In addressing this problem, GEI's forestry team brought forth the idea of establishing a system of standards for forest protection within trade regions, effectively a unified management system to be used between resource providing countries, producer countries and consumer countries. Only with such a system in place can cooperation between NGOs and government agencies in response to illegal logging take place

Objectives

The "Guidelines for Chinese Forestry Enterprises Operating Overseas" project focuses on timber and logging activities of Chinese overseas enterprises. It is intended as a guideline for Chinese overseas enterprises engaging in silviculture activities abroad. More broadly, the guidelines help to halt illegal logging, protect the biodiversity of the world's forests and respond effectively to climate change.

Methodology

The project team, in collaboration with the Silviculture Department of China's State Forestry Administration and the Policy and Management Institute at the Chinese Academy of Social Sciences drafted the "Guidelines for Sustainable Overseas Silvicuture for Chinese Enterprises," and cooperated with the State Forestry Administration (SFA) and Ministry of Commerce (MOC) for the joint release of the guidelines.

Project Timeframe

November 2005~June 2008

Activities in 2008

After the SFA and the MOC released the "Guidelines on Sustainable Overseas Silviculture for Chinese Enterprises" (the Forestry Guidelines) in 2007, GEI began its work promoting the Forestry Guidelines. In late February 2008, the SFA officially approved the pilot case for the Forestry Guidelines, and the Afforestation Department at the SFA sent a notice to timber and forestry enterprises through provincial level forestry offices. In response, GEI helped the SFA set up standards for pilot enterprises, and offered pilot enterprises training on silviculture technology.

In June, the Forestry Guidelines were formally published by the SFA's publishing house. The Forestry Guidelines provides a standard for Chinese enterprises' overseas silviculture activities.

The Chinese version of the Forestry Guidelines can be downloaded at: http://www.geichina.org/_upload/file/Guide_silviculture_CHN.pdf The English version of the Forestry Guidelines can be downloaded at: http://www.geichina.org/_upload/file/Guide_silviculture_EN.pdf

Following publication of the Forestry Guidelines, GEI contacted the governments of Laos, Cambodia, Vietnam, Myanmar, Russia and several countries in Africa to look for a place to launch a pilot project. GEI, with support from China's Ministry of Environmental Protection (MEP) and the SFA, has worked in close cooperation with the Cambodian and Lao governments in regulating the environmental behavior of Chinese overseas timber companies and in searching for a demonstration project for the Forestry Guidelines.

Outside of project related activity, the project team has been closely involved in activities related to Forest Law Enforcement and Governance (FLEG) and Forest Law Enforcement, Governance and Trade (FLEGT), particularly activities related to the FLEG in Europe and East Asia. Starting in 2007, the project team has participated in NGO activities organized by the Asia-Pacific office of the International Union for the Conservation of Nature (IUCN). During the FLEG conference held in Khao Yai, Thailand in October 2008, GEI called for cooperation between NGOs and government institutions in the Asia-Pacific region on the foundation of the Forestry Guidelines, which was received well by conference participants. GEI has been working with IUCN in setting up a regional action network in the Asia-Pacific region.

On November 17-27, the forestry project team traveled to Cambodia. During that time, the team visited the Department of Agriculture, Forestry and Fishing, the Department of Environmental Protection, and local and international NGOs (NGO Forum and AFSC respectively). The project team presented drafts for the pilot projects of the Forestry Guidelines to related institutions. The drafts received warm support from the Cambodian government and other related institutions. At the same time, the project team visited with China Everbright Timber, a Chinese timber company operating in Cambodia, who expressed enthusiasm for the guidelines. GEI is currently discussing the specifics of a potential pilot project with Everbright.

Impact

The Forestry Guidelines provides a basis for self-regulation for Chinese enterprises engaging in overseas silviculture, to fulfill the broader goal of protecting biodiversity of the world's forests.

Prospect

On the basis of the project, GEI began implementing the "Integrated Policy Package for Overseas Chinese Enterprises" in 2007. A more detailed description of the IPP project can be found on page 28.

Project Team

WANG Aimin, CHEN Mingjie

Energy and Climate Change Program

The Energy and Climate Change program at GEI promotes the development of clean energy and energy efficient enterprises through exploring market-oriented solutions. GEI hopes to increase the efficiency of fossil fuel use through the commercialization of clean energy and energy saving technologies, exploring new commercial and financial models and incubating sustainable enterprises. GEI believes that society as a whole needs to participate in adaptation to and mitigation of climate change. For this reason, GEI aims to strengthen ties between all sectors of society and promote cooperation between the government, enterprises and NGOs in response to climate change.

Identifying Opportunities and Key Stake-holders to Mitigate the Energy and Environment Crisis in Southern China

Background

In 2007, China set a target for the per unit GDP reduction of energy intensity by 20% by the end of its 11th 5 Year Plan. Based on the national requirements, Guangdong Province is required to reduce its energy consumption per unit GDP by 16%. Guangdong tops the ranks in energy efficiency among China's provinces, second only to Beijing (and excluding Taiwan, Hong Kong and Macau). However, Guangdong's rate of energy consumption is also among the highest in the country. In 2006, the per unit GDP (one unit = RMB10,000) energy consumption for Guangdong Province was 0.771 tons of standard coal equivalent (tce), at the lead among China's provinces. Thus, in order to reach the target of 0.66 tce per unit GDP energy consumption, Guangdong faces a difficult goal tantamount to another 16% reduction on the basis of 2005 figures.

Meanwhile, Guangdong Province still faces a grave energy shortage. As one of the most developed of all of China's provinces, Guangdong's economy remains at a stage of rapid urbanization and industrialization, with energy needs rising constantly. In 2006, 78.8% of Guangdong's energy came from outside of the province. This energy shortage is becoming a bottleneck for Guangdong's economic development. Industrial energy conservation and increasing energy efficiency are imperative in resolving this bottleneck.

Objectives

The mission of the project is to investigate feasible methods of reducing fossil fuel energy consumption in Southern China and to promote energy conservation and emission reduction in the Southern China region, particularly in Guangdong Province.

Methodology

Through collaboration with major local participants, among whom include government and research institutions, enterprises, financial institutions and NGOs, the project team conducted indepth research on Guangdong's environment and energy consumption. The team also examined related policies and projects, and surveyed the results of policies and projects currently being implemented in Guangdong to promote energy efficiency and renewable energy. The project team also discussed policies and market channels for scaling up energy efficiency and renewable energy projects, and analyzed the short and medium term commercial development potential for energy efficiency and renewable energy.

Project Timeframe

September 2007~November 2008

Activities in 2008

R March: The project team completed a report on "Analysis of Energy Saving Potential in Guangdong's Major High Energy Consuming Industries." The report analyzed the capacity for energy conservation, investments needed and amount of emission reduction possible in Guangdong's cement, steel, glass, ceramics, chemicals and thermal energy industries. In addition, the project team discussed the progress of the project with the Environmental Investments Bureau of the Trade and Economics Committee, the Association for Comprehensive Natural Resources Usage and the Energy Conservation Center of Guangdong Province. The project team also set plans to collaborate with those organizations to collect data on enterprises and production lines. In doing so, GEI will make the analysis of Guangdong's energy saving potential more precise and concrete so as to lay the foundation for actual energy saving projects in Guangdong.

May: GEI signed an agreement with the Guangdong Energy Conservation Center to collect concrete energy consumption data on Guangdong's steel and cement industries and analyze the possible environmental effects of and funds needed for energy conservation technology. This data will offer statistical support for implementing these energy conservation projects, and will be beneficial for attracting funding and technology for those projects.

July and August: The project team collected information on 23 energy conservation projects that will potentially be implemented in Guangdong's steel and cement industries (14 projects in the steel industry, 9 in cement), and did an analysis of the economic and environmental impacts of these projects. The information and the analysis will help to attract investments and technologies to implement specific energy-saving projects in Guangdong.

November: The "Identifying Opportunities and Key Stake-holders to Mitigate the Energy and Environment Crisis in Southern China" project was officially completed.

Impact

The surveys conducted over the course of the project will help investors and enterprises gain a better understanding of the market potential and concrete needs for energy conservation in high consuming industries. In the future, this will help attract the funding and technology needed for implementing concrete energy conservation projects, and promoting energy conservation and emission reduction efforts in Guangdong Province.

Prospects

With the "Identifying Opportunities and Key Stake-holders to Mitigate the Energy and Environment Crisis in Southern China" project as its foundation, GEI will seek out opportunities for implementing pilot projects for market development of energy conservation technology in Guangdong's high energy consuming industries (particularly steel and cement). If all 14 projects planned for energy conservation in the steel industry and all 9 projects in the cement industry can be successfully implemented, GEI can help Guangdong Province reduce carbon emissions by an annual 4.6 million tce and 6.3 million tce respectively.

Project Team

CHEN Shiping, TIAN Haizhen

Marketing Tools for Energy Efficiency Investments in the Metallurgy Industry

Background

The production capacity of China's steel and nonferrous metals industries has risen rapidly following the explosive growth of China's economy over the last few decades. By 2006, Chinese steel production had already reached 34% of the world's total. However, the industry has remained well below international standards in terms of energy consumption. This high energy consumption has made the Chinese steel industry the highest energy consumption has had a major influence on the cost of Chinese steel products, making Chinese steel companies less competitive internationally.

In 2007, the Chinese government set a 20% energy consumption reduction target to be realized by the end of the nation's 11th 5-Year Plan. In this context, the steel industry faces not only mounting internal pressure to minimize costs for energy consumption reduction, but also immense external administrative pressure from the government to enact energy consumption reduction measures. Clearly energy saving will be a formidable task for the industry in the future.

With a wealth of technology at its disposal for reducing fossil fuel consumption and greenhouse gas (GHG) emissions, the metallurgy industry has an enormous potential for energy saving. For example, through strengthening resource management and making use of energy saving technology, the industry has a wide range of measures available to lower energy consumption for unit products, balancing the increase of the cost brought about by the increase of energy prices, expanding the space for profit and creating energy saving steel enterprises.

In actual operation, financial institutions need to participate in the initial investment for energy saving projects. However, due to the high transaction costs of energy efficiency projects, lack of technology specialists in the field and insufficient experience in implementing energy efficiency projects, such institutions tend to shy away from energy efficiency projects.

For these reasons, GEI initiated a research program on "Marketing Tools for Energy-Efficiency Investments in the Chinese Metallurgy Industry." The metallurgy industry covers a broad scope, encompassing both the steel and nonferrous metal industries, among which, the steel industry has the highest total energy consumption rate. The GEI project focuses primarily on the steel industry.

Objectives

The main goals of the project are to research feasible financial models for implementing energy efficiency projects in the steel industry and to construct a platform for discussion between the steel industry and potential investors. Through market mechanisms like the Energy Service Company (ESCo) and the Clean Development Mechanism (CDM), GEI aims to promote clean energy technology. The program aims to increase the enterprises' competitiveness in the steel market and use market mechanisms to promote innovation in energy saving among steel enterprises, and in this way help realize the sustainable development of the Chinese steel industry.

Methodology

The project team conducts research on the steel industry, selecting applicable technologies and analyzing the applicability of the CDM to the steel industry and the feasibility of the ESCo model to the operation of the steel industry. The team also conducts analysis on the economic feasibility of some of the clean energy technologies in the project.

Project Timeframe

July 2007 - December 2008.

Activities in 2008

March: Through a survey and selection process, the project team decided to focus its research on three energy saving technologies, namely variable speed drive, waste heat recovery and coke dry quenching. Specifically, this involved an analysis of the economic feasibility of the technologies, as well as an exploration of their market potential and related commercial financing models.

May: The project team completed a legal report on ESCos. The report included the following: an analysis of the legal status of ESCos; national policy orientation, laws and regulations in the energy service field; a feasibility analysis of foreign investment in China's energy service industry; a study of examinations of the establishment of ESCos, the set of policies in the energy service field as well as regulations set by the Guangdong

provincial government on ESCos.

TK. September 27: The project team held a symposium on "Marketing-Tools for Energy-Efficiency Investment in the Chinese Metallurgy Industry." Over 50 people from the Chinese steel industry, ESCos, investors, NGOs and the media were invited to discuss opportunities for energy conservation and energy efficiency in the Chinese steel industry and its market potential in the face of increasing global pressure from climate change and dwindling energy supplies. The conference helped to set up a commercial platform for marketing tools for energy efficiency investments in the Chinese metallurgy industry, for Chinese

steel companies, investors, technology providers and related institutions. It offered new opportunities for collaboration and provided effective channels for the realization of sustainability in the Chinese steel industry.

Project-related research was completed in September 2008. Based on the results of the initial surveys and subsequent research, the project team compiled the project report. The report included an in-depth analysis of the current status of energy efficiency in the Chinese steel industry, relevant energy-saving technology, the ESCo model and the feasibility of CDM in the Chinese steel industry. This report, along with the legal report on ESCos completed in May, provided an important foundation for the commercial prospectus for the three technologies chosen for the project.

Additionally, the project team published an article in the China Development Brief entitled "GEI: A Commercial Innovation Model for Energy-Saving." The article can be found on the China Development Brief's website at: http:// www.cdb.org.cn/ngo_talkview.php?id=497

Impact

The project team has conducted research on the overall situation in China's steel industry and the status of energy conservation within China's steel industry. The team has done major research on energy efficiency, technology and the feasibility of CDM for energy efficiency technology in the steel industry.

Prospects

Based on the research conducted for the project, GEI will look for opportunities for pilot projects for implementing marketing tools for energy efficiency in the steel industry. In doing so, GEI will make use of market mechanisms to promote energy efficiency innovation in the steel industry in order to help the Chinese steel industry achieve sustainable development.

Project Team

CHEN Shiping, TIAN Haizhen

US-China Track II Dialogue on Climate Change

July 21-23: GEI's "US-China Track II Dialogue on Climate Change" held its first round of dialogues.

Background

At present, global warming, resulting from the release of greenhouse gases (GHGs) has had grave impacts globally, including the shrinking of the icecaps on the north and south poles, the melting of the world's glaciers, the reduction of wetlands, rising sea-levels, acidification of the oceans, the degradation of coral reefs, increasingly frequent sudden inclement weather phenomena, decreases in the availability of agricultural products, changes in species' migration, etc. The mounting problems caused by climate change have prompted positive action from the world's countries, including China and the United States.

As the world's two greatest GHG emitters, if China and the United States do not manage to cooperate effectively in response to climate change, it will seriously impede international efforts combating global warming. Each country's environmental and energy policies have a major influence on the success of efforts to fight climate change, and as such, it is extremely important for the two countries to understand and coordinate each other's environmental and energy policies in order to bring about international treaties on climate change.

While both governments have been pushing for dialogue on the problem of climate change, because the Bush administration lacked a cohesive policy to respond to climate change, and because the new American administration had not made any announcements by early 2008 on its climate policy, effective cooperation that emphasizes dialogue between China and the United States, avoiding misunderstandings and policy risks between the two governments is as imperative as it is challenging.

GEI hopes, to cooperate with the Carnegie Endowment for International Peace (CEIP), a well-known U.S. based NGO, to increase understanding and construct a mechanism for mutual cooperation between the US and China and to construct a nongovernmental channel for exchange between government officials and business leaders from both countries. For this purpose, GEI launched the "US-China Track II Dialogue on Climate Change" project in late 2007. At present, GEI has reached an agreement with the CEIP to work together to promote dialogue and cooperation between the two countries over the next

two years.

Objectives

The project is designed to encourage high-level policy makers in China and the United States to conduct effective dialogue and communication, promote mutual understanding, and seek out areas for cooperation.

Methodology

By collaborating with renowned American NGOs and think-tanks, and inviting China's national policy makers on climate change, leaders from the U.S. Congress (both parties), senior consultants for U.S. presidential candidates (both parties) as well as governors from various US states to conduct dialogue, GEI seeks to construct an unofficial channel for exchange. At the same time, the team will research Chinese and American policy on climate change and energy to provide thorough information, policy analysis and suggestions for those participating in the dialogues, and to further discuss the foundations for building trust and understanding on climate change between the two countries. The team will also invite representatives from the U.S. commercial sector, cultivating American investors' interests in investing in China's environmental and energy efficiency markets, and promote energy efficiency technology transfer between the US and China.

Project Timeframe

January - December 2008 (Phase I)

January 2009 – February 2010 (Phase II)

Activities in 2008

July and October: The project team held two informal meetings on climate change between China and the US. In addition to introducing policies, actions, regulations and targets for responding to climate change, both sides also put forth preliminary plans on policy information exchange, joint technology research and development and technology transfer. Moreover, both sides stressed the importance of discussion on the feasibility of dialogue between the central and federal governments, the promotion and technology research and development (R&D) and state-province level cooperation on low carbon economies. Those attending the meeting suggested that the Chinese and American governments sign a "Memorandum of Understanding (MOU) between the US and China on Climate Change," which will serve as an overall framework for cooperation on climate change between the two countries.

November 18-19: As one of the major results of the two informal meetings, China's National Development and Reform Commission (NDRC) sent a delegation of observers to take part in "the Governors' Global Climate Summit," a joint conference held by California governor Arnold Schwarzenegger and other American governors. GEI, along with Sohu Green, reported on the summit, which can be seen on Sohu's website at: http://lvse.sohu.com/s2008/ggcs2008/ and at GEI's website at: http://geichina-org.blog.sohu.com/.

Impact

Through up-close and sincere exchange, policy makers from the two countries reached an important consensus on the necessity of fighting against climate change and the possibility of adopting actions to reduce GHG emissions. They also solidified trust in the continued development of policy dialogue and clarified the key areas for cooperation in technological development and transfer. The project team was also able to persuade both governments, particularly the new American administration, to pursue a pragmatic policy towards one another, and to guide China-US relations towards a stable and constructive partnership and ultimately encourage effective global agreements on climate change.

Prospects

Through informal activities organized by NGOs, GEI will encourage the new American administration to begin formal dialogue and negotiations with the Chinese government as soon as possible, in order to reach the "MOU on Climate Change Between the United States and China." The team will also compare and analyze both governments' climate policies, so as to offer suggestions to policy makers in both countries. Finally, the team will also push for substantial cooperation on technological development, clean technology and resource extraction as well as state-province level dialogue, so as to lay the foundation for the development of regional low carbon economies.

Mr. William Chandler, Senior Associate and Director for Energy and Climate Program at the Carnegie Endowment for International Peace, has pointed out: this project "was designed to identify high-priority actionable projects and activities for U.S.-China climate cooperation. This cooperation is necessary to allay concerns on both sides that participation in a global climate treaty would be futile without the participation of the other."

Project Team

WU Shuang, TIAN Haizhen, GUO Benchi, REN Peng

California governor Arnold Schwarzenegger held a dinner party with the China delegation, and shook hands with GAO Guangsheng, Climate Council at the National Development and Reform Comission.

Dr. LU Guoqiang, Division Chief for International Cooperation of the Climate Council at the NDRC, described China's policies and efforts in curbing greenhouse gases at the "Experts' Group Discussion for GHG Emissions Reporting."

On the evening of the 17th, governor Schwarzenegger welcomed the Chinese delegation to a dinner party. The governor shook hands and conversed with GEI's executive director Ms. JIN Jiaman.

Environmental Governance Program

The Environmental Governance program at GEI is aimed at encouraging the Chinese government to establish and enforce environmentally friendly policies. Its primary approaches are in developing environmental protection and sustainable development curricula for government leaders, cooperating with government and financial institutions to establish environmental regulations for overseas enterprises, encouraging environmentally and socially responsible behavior among Chinese overseas enterprises and encouraging host countries to establish relevant policies and mechanisms for their enforcement.

Sustainable Development Training for High-Level Policy Makers

Background

Beginning in the 1980s, China's economy began to develop at a rapid pace. However, China's initial emphasis on increasing GDP led many in the government to overlook environmental problems that began to emerge. In recent years solutions to these problems are becoming more and more urgent to China's policy makers, who see pollution, deforestation and environmental degradation caused by extraction of natural resources and other activities as major bottlenecks in China's future economic development.

For a long time economic growth has remained the overriding "truth." Some local policy makers still hold economic development as the sole priority in the coming decades; local policy makers are far from reaching a consensus on how to balance economic development with environmental protection. To a large extent, public policy is shaped by values, and in this sense it is vital to cultivate environmental values among leadership, particularly local leaders. In 2006 a survey published by the Shanxi Environmental Protection Bureau showed that 93.31% of people think environmental protection and economic development should proceed simultaneously, but surprisingly as many as 91.95% of mayors and director generals of bureaus believe that efforts to increase environmental protection will negatively affect economic growth¹. Thus, it is especially important to instill these values at the Party School of the Central Committee of the C.P.C. (CPS), the highest-ranking training institute for Chinese government officials, for realizing sustainable development throughout the country.

Can we help Chinese policy makers use limited resources responsibly, coordinating both sustainable economic and environmental development? Is it possible for the national level policy makers to access advanced international development mechanisms, while adapting to China's unique circumstances? GEI's Sustainable Development Training for High-Level Policy Makers Project creates solutions to such problems.

Objectives

The project is aimed at assisting the CPS in developing teaching materials for high-level government officials related to the environment and sustainable development through combining various advanced foreign and domestic mechanisms. These training materials assist policy makers in the development and implementation of environmental policies, which help policy makers with the sustainable use of China's limited resources and in the coordination of economic development and environmental protection.

Methodology

GEI has worked in cooperation with the CPS to select 22 of the school's best teachers for a combination of foreign and domestic research training. These teachers, under the guidance of the project experts, will prepare a set of environmental and sustainable development teaching materials. The teaching

materials will be combined into the CPS' curriculum for the training of senior government officials.

Project Timeframe

July 2006 - July 2008 (Phase 1)

Activities in 2008

Tr

March: Funded by the British Embassy, the project team officially launched the course on climate change. The course supplements the project's previous four courses, which included material on environmental policy, sustainable energy, rational urban growth and sustainable development in rural areas.

May 26: "The Academic Exchange Workshop for the Environment and Sustainable Development" was held at the CPS. At the meeting, several project experts presented their research on China's energy, urban planning, rural environment, as well as sustainable development issues to the CPS teachers. The teachers exchanged ideas with the invited experts on the four topics and listened to experts' suggestions on improving the draft teaching materials.

May - August: Under the guidance of the experts, the CPS teachers completed national research in cities within 10 provinces. Through the research, the teachers gained a deeper understanding of the policies and measures that provincial governments have made on energy, climate change and sustainable rural development. Through on-theground research, the teachers were able to collect valuable first-hand information for developing the teaching materials.

July: The first phase of the project was successfully completed. Achievements include the drafting of teaching materials, the formation of a team of CPS teachers trained in sustainable development, the improvement of teachers' knowledge of related subjects, and the foundation of a new teaching system for the CPS.

September: The project team delivered an application for the project's second phase to the UK's Department for Environment, Food and Rural Affairs (Defra) and obtained Defra's approval in principle. Phase II is a continuation of Phase I and will incorporate the results of Phase I. It will help the CPS teachers develop a formal set of teaching materials that can be used for the training of senior government officials on the environment and sustainable development.

Impact

Although the project does not directly impact the economic and social development, it helps central and local government officials coordinate economic development with environmental protection. With the formation and teaching of the materials, about 1,600 high-level government officials will use the training materials each semester. Through the development and implementation of the various sustainable development methods taught in the course, the central and local government decision-makers can make a positive social and economic impact.

Prospects

The CPS will pass the teaching materials and experiences down, through its nationwide teaching network and cooperation agreements with the Provincial Party Schools (PPS) in different regions, to more than 30 PPSs. Adopting the method of training-of-trainers, the CPS will help the PPSs develop their own pilot programs and case studies for sustainable development policy models based on problems facing local communities. The government officials in 2,800 counties, belonging to the 30 plus PPS's. will be trained.

Project Team

FU Huahui, HUANG Wenyan

^{1 :} Jia Feng. Be Both High Efficient and Fast Developing: China's Green Compass[J]. World's Environment, June 2006

Integrated Policy Package for Overseas Chinese Enterprises

Background

In recent years, with the accelerated pace of economic globalization and China's reform and opening up policy, the Chinese government has begun implementing a "Go Out" strategy, encouraging Chinese enterprises to invest overseas. Investment from Chinese overseas enterprises spurs on economic development in host countries, providing employment opportunities and, to a large extent, improving the living conditions of local people. However, some companies overlook the environmental impacts of their resource extraction projects, which have led to major environmental problems in the host countries, jeopardizing the image of China as a responsible power.

If China's overseas enterprises are unable to address the impacts of resource extraction on the environment and resources, it will affect not only the development of the host countries but also China's economic development and its image worldwide, making China's future overseas investment and aid programs all the more challenging, and even endangering the safety of Chinese people around the world.

The question is, thus, how China can move forward with the "Go Out" strategy and at the same time establish itself as both a regionally and internationally responsible leader. In other words, how can China avoid, or at least minimize, the risk in terms of financial, political, and the personal safety of overseas staff, and generate political, diplomatic and social benefits for overseas Chinese enterprises? What can be done to ensure that overseas Chinese enterprises invest in the host country in a way that will have a favorable impact on the environment and resources, and provide multiple benefits to all stakeholders? These are urgent questions that need to be answered.

In response, GEI initiated the "Integrated Policy Package for Chinese Overseas Enterprises" (IPP). GEI hopes that by investigating the environmental and social impacts caused by the overseas investment of Chinese enterprises, from the standpoint of existing policies, laws, and regulations both at home and abroad, a set of norms for environmental behavior (including a financial and credit guide) can be established for overseas Chinese enterprises.

Objectives

The project aims to develop a comprehensive set of guidelines for Chinese companies to improve their environmental impact overseas. In implementing the IPP project, GEI seeks to work alongside local NGOs in some of the hottest areas for Chinese overseas investment—which are also among the richest areas for biodiversity in the world—in doing trainings on the guidelines and case studies by selecting pilot companies to follow the guidelines.

Methodology

GEI works with the Environmental Planning Institute (EPI) at China's Ministry of Environmental Protection (MEP), along with the University of International Business and Economics (UIBE) to develop

"Research on Environmental Policies of Investment and Aid Overseas" (Policy Research) as well as the "Guidelines on Environmental Behavior for Overseas Chinese Enterprises" (the Enterprise Guidelines) which covers foreign investment, foreign aid, and green financing. Following the study on environmental policy tools currently available to China, including Environmental Impact Assessments (EIA), Payments for Ecological Services (PES), Conservation Incentive Agreements (CIA) and Corporate Social Responsibility (CSR), GEI will look to integrate these policy tools into a single environmental policy toolkit. The relevant government departments will then promote these tools and integrate them into national policy to encourage Chinese overseas enterprises to adopt these policies. At the same time, local governments will be aided in establishing land management and environmental protection policies.

Project Timeframe

June 2007 – December 2010

Activities in 2008

November 12, 2007: GEI launched the "Integrated Policy Package for Overseas Chinese Enterprises."

January 15, 2008: The MEP gave an official response to the project. The response letter expressed the MEP's full approval of the project, and showed enthusiasm for the development of the "Guidelines for Environmental Conduct"

Overseas."

January 23: GEI, the UIBE and the EPI, along with the Department of Aid to Foreign Countries at the Ministry of Commerce (MOC), jointly held a symposium on the Enterprise Guidelines. Participants discussed the progress and results of the projects. Officials from the MOC participating in the conference expressed their full support in the preparation of the Enterprise Guidelines.

February 27: The Department of Policies, Laws and Regulations at the MEP sent a letter to the Department of Outward Investment and Economic Cooperation and the Department of Aid to Foreign Countries at the MOC requesting their full support and cooperation. The letter illustrates growing support from the Chinese government for the project.

March-April: Sponsored by the Organization for Economic Cooperation and Development (OECD), the project team participated in writing the "OECD Investment Policy Review 2008, China: Encouraging Responsible Business Conducts".

From June 24-29, the OECD invited the project team to participate in a seminar entitled "Chinese Government Encourages Companies to Fulfill Their Corporate Society Responsibility" at OECD

headquarters in Paris. There the project team delivered a speech on how GEI, with cooperation from the Chinese government, helps companies fulfill their environmental responsibilities.

As an important component of the IPP project, the Policy Research was completed in late June 2008. To further improve on the study, the project team held a "Symposium on Environmental Protection Policy Research for China's Investment and Aid Overseas" on July 25 in Beijing. Experts and scholars from the MEP, the MOC, the Ministry of Foreign Affairs (MFA), the China Federation of Industrial Economics (CFIE), Peking University, and UIBE, held intensive and in-depth discussions. The participants spoke highly of the development of the project, pointing out the importance and timeliness of the study, offering constructive comments and suggestions on policy and operational structure.

Reports of the draft guidelines were printed in China Business News on September 10, 2008 and China Daily on September 12, 2008.

Continuing after the selection of the 2007 Innovation Award for Green Banking, on October 11, 2008, the project team was invited to participate in the 2008 Green Banking Innovation Award, to discuss the selection criteria for the award. In mid-October. "The Economic Observer" announced that it would again include GEI as part of the eight NGOs selected for the 2008 Green Banking Innovation Award. These NGOs also issued a joint annual report on environmental responsibility of banks so as to encourage China to standardize its banking loan system and to enhance environmental responsibility and corporate social responsibility in bank loans. The Green Banking Award has major influence on China's foreign investment and loan system, and the Green Loan portion of the award serves as important reference material for the Enterprise Guidelines.

November 12-15: On behalf of GEI, a project team member was invited to deliver a lecture at a seminar entitled "Chinese Companies' Corporate Social Responsibility (CSR) and Challenges", held by Oxfam Hong Kong. Experts in various fields were brought together to examine the fulfillment of social responsibilities by China's state and private-owned enterprises and financial industries, and to predict future trends. The attendees also evaluated contributions from NGOs in participating in and monitoring companies' fulfillment of their social responsibilities. The seminar created an information-sharing platform

for future cooperation and action on CSR in China.

November 17: The Department of Policies, Laws and Regulations of the MEP consulted with the MOC about the Policy Research (first draft), the project's interim output, and discussed issuing guiding documents on the Policy Research, which laid a solid foundation for the future publication of GEI's Guidelines for Environmental Conduct Overseas.

December 13: The project team held a meeting to discuss publication of the Policy Research. The Research will be published by the Chinese Environmental Science Publishing House, and will be used as a reference during trainings for host countries and case studies.

Impact

This project will urge the Chinese government to regulate overseas Chinese enterprises' environmental behavior and corporate social responsibility, which will not only protect the environment of host countries but also ensure the sustainable development of Chinese enterprises. It will also encourage host countries to speed up and strengthen environmental law enforcement and governance. In addition, the project will improve China's image as a responsible power, so that China can continue to cooperate with other countries on economic and environmental projects.

Prospects

After the Enterprise Guidelines is published, GEI will select project demonstration sites in Southeast Asia and Africa, to support overseas Chinese enterprises in making use of the IPP. The IPP will be used to regulate their environmental conduct while working with host countries to ensure balanced environmental, economic and social development. At the same time, GEI will, along with local NGOs, assist host countries in developing relevant environmental norms, laws and regulations. In the long run, the IPP will help developing countries strengthen environmental law and enhance governance capacity.

"This project is very timely and is a necessary service for government decision-making." – An official at the Department of Policies, Laws and Regulations of the Ministry of Environmental Protection

Related Projects

Please see the Guidelines for Chinese Forestry Enterprises Operating Overseas on page 18 and 19.

Project Team

ZHI Yingbiao, KONG Linghong

Lao-China Cooperation Center for Sustainable Land and Natural Resources Management

Background

Laos, a sparsely populated country located in Southeast Asia, is rich in natural resources and biodiversity. With the pace of globalization accelerating rapidly, countries rich in natural resources, like Laos, are beginning to reveal their market potential. In this light, Laos is attracting attention from around the world. Nevertheless, while its potential is great, it faces many challenges on its road to development.

With its growing development needs and increasing foreign investment, Laos faces unprecedented pressure to effectively manage its land and resource use and protect its environment. In 1940, Laos' forest coverage was 16.478 million square hectares, around 70% of the country's total land area, while in 1995, forests only covered 12.345 million hectares, or around 53.9% of the country's total land area. By 2005, forests occupied only 48% of the country's total land area, with only 11 million square hectares.

In recent years, having recognized the threat to its biodiversity posed by foreign investment, the Lao government established 18 nature reserves within the country, and established a regulation in 2004 stipulating that all timber companies operating within the country must plant a minimum of five hectares

of trees annually. These measures are able, to a large extent, to curb illegal logging. However, due to an incomplete legal framework on logging, and because nature reserves only occupy around 10% of Laos' area, the practice of illegal logging has become commonplace.

GEI believes that if the Lao government wants to realize sustainable development, there needs to be effective communication between government bodies, particularly the ministries of land management and of environmental protection. In order to do this, existing policies and regulations addressing land and resources management must be integrated and capacity building, system design and infrastructure for national land and natural resource management must be improved.

Over the last several years, GEI has focused on providing policy suggestions to the Chinese government on environmental protection and sustainable development, and has shown demonstrable success in this effort. Both Laos and China are developing countries striving to develop sustainably and protect their environments. For this reason, GEI is helping the Lao National Land Management Authority (NLMA) improve its capacity building by implementing the "Lao-China Cooperation Center

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for Sustainable Land and Natural Resources Management," a sustainable development policy project.

Objectives

The "Lao-China Cooperation Center for Sustainable Land and Natural Resources Management" project (the Center) aims to establish a mechanism for training and cooperation in order to assist the Lao NLMA in establishing regulations on land and resources management and conducting capacity building. In doing so, GEI looks to improve the Lao government's overall land and resources management capacity, in order to encourage sustainable land use and resources development, environmental protection, stabilization of ecosystems, protection of biodiversity, socio-economic equality and community development in Laos.

Methodology

Through helping the Lao government apply for funding for the Center's establishment, the project team aims to conduct capacity building for the Lao government and help the Lao government realize sustainable land use and effective management of land and natural resources and enact targeted management of forestry, mining and wetland resources, rural and urban planning as well as foundational construction for roads and hydropower stations.

Project Timeframe

June 2008 - June 2009

Activities in 2008

First half of 2008: GEI held a discussion with the NLMA and the secretary of the prime minister of the Lao People's Democratic Republic on the topics of sustainable national land management and institutional capacity building.

July 3: GEI held a project meeting with Zhejiang University, the Environmental Planning Institute at the Ministry of Environmental Protection (MEP), the Information Center at the Ministry of Land and Resources (MLR), the China Institute of International Studies (CIIS), the University of International Business and Economics (UIBE) and members of the Lao government to begin planning on the project.

July 5 – August 11: GEI, in cooperation with the above parties, compiled a project proposal for the Lao-China sustainable land and natural resources management, in preparation for GEI's discussions with the Lao government during its visit to Vientiane.

August 14 –19: GEI held a feasibility meeting on the "Lao-China sustainable land and natural resource management" project with Zhejiang University, CIIS, the Policy and Law Department at the MEP and the Lao NLMA. Participants agreed to help the Lao government apply for aid from the Chinese government for the Center's establishment. August 18: GEI signed a Memorandum of Understanding with the NLMA on the Center project. Both sides reached a consensus on the purposes of the Center, which focuses on the Lao government's midto-long term goals for sustainable land and resources management.

August 18: The project team made an official call to the Chinese ambassador to Laos, Pan Guangxue, and commercial attaché Chen Hangao, to talk in depth on the planning for the Center. Ambassador Pan and attaché Chen acknowledged the importance, urgency and feasibility of the project and offered helpful suggestions to the project team.

September 24: The project team helped the Lao government put together an English and Chinese project-proposal, which was submitted to the NLMA. This laid the foundation for the project's official launch by the Lao government and its application for Chinese aid.

December 24: The Lao prime minister's office approved the proposal for the Center, and sent a letter to the Chinese ambassador's office in the hopes of obtaining Chinese overseas aid.

Impact

The Center project will not only help the Lao government improve its land and resources management capacity and realize sustainable development, but will also encourage positive change in China's overseas aid and increase the innovative capacities of Chinese NGOs in implementing projects on China's overseas aid.

Prospects

Through the Center project, GEI hopes to help the Lao government improve its land use and environmental policies, establish an information system for land use planning, enact resources management capacity training and implement demonstration projects for integrated management of resources (e.g. hydropower, mining, urban planning, highway construction, etc.).

In addition, the project will serve as a case study for GEI's "Integrated Policy Package for Overseas Chinese Enterprises" Project. GEI will work in cooperation with the Lao government to realize sustainable use of natural resources, and at the same time conduct case studies and demonstration projects on the environmental behavior of Chinese enterprises operating in Laos, to provide a concrete foundation for the "Guidelines on Environmental Behavior for Overseas Chinese Enterprises," which can eventually serve as an example for other ASEAN countries.

Project Team

ZHI Yingbiao, KONG Linghong

Partnership Program

GEI's Partnership Program assists international NGOs with environmental protection projects in China while, at the same time, providing a platform for Chinese organizations and leaders to interact with and learn from the environmental efforts of organizations outside of China. This program works to integrate environmental and economic problem-solving in China by building local and international collaboration among government agencies, institutions, private enterprises, and non-governmental organizations in addressing environmental issues,

Background

"Three Rivers" refers to China's Yangtze River, Yellow River and Lancang River (This name refers to the portion of the Mekong River located within China's borders). Located in the hinterland of the Tibetan plateau, the source region of the Three Rivers has an area of 140,000km². Its average altitude is 4,500m, with ethnic Tibetan herdsmen as its main residents.

The herdsmen have traditionally relied on yak and sheep herding on natural grasslands as their primary source of livelihood. On average, each household requires 100 heads of sheep and around a dozen yaks, with sheep requiring three hectares of grassland per head and yaks requiring nine. As a result, each household requires large areas of grassland for herding and herdsmen live independently in roaming family units spread widely apart, rather than in settled villages.

Due to recent increases in temperature along with decreases in rainfall in the source region, degradation and desertification of the grassland have become serious problems. Meanwhile, populations of herdsmen have been steadily increasing and their increased use of automobiles has driven up costs of living dramatically. Only a substantial increase in the number of yaks and sheep can satisfy the local people's development needs. These increases, however, seriously threaten the ecosystem's capacity, which is no longer able to support the population's growing needs through herding alone. Increasing temperatures, decreasing rainfall and overgrazing have resulted in serious degradation and desertification of the grassland, which continues at a rate of 2 percent per year. Pushed upward in elevation by environmental factors, the herdsmen have already reached the 5,500m vegetation barrier—the last pasture for the herdsmen.

The Chinese government has begun to realize the dangers posed to the ecological environment in the

Three Rivers source region. In 2000, it established the Great Three Rivers' Source Nature Reserve in order to protect the vegetation of the grassland and the area's rare wild animals. In addition, it is implementing a resettlement plan for the nomads who live within the reserve. These nomads will move to the new migrant villages, located in towns and cities, built with government funding.

While the resettlement policies will help to rehabilitate the vegetation of the grassland, it will also pose a series of problems to the livelihoods of the herdsmen.

Prior to resettlement, local herdsmen are equipped with the skills required for grassland herding. They are accustomed to the difficult climate of the region. They face no competition from the outside, and their lives are relatively stable. They sustain their own livelihoods and live happily. Cash exchanges are very rare. After migration, however, the herdsmen live in new villages, in close quarters with other local households. Far from their homelands and herds, and surrounded by culturally different peoples, they are required to learn new skills and find new means of livelihood. This is no easy task, as their education level is low and they have no other working skills beyond herding. Some of them cannot understand Mandarin. Most of them find it hard to adapt to the cash economy and life in the towns, making it difficult for them to take up job positions. This can often cause resettled people to feel frustrated, seeing no recourse available to them but to wait for government aid.

GEI and the Sichuan Greenriver Environmental Protection Organization (Greenriver) started the Three Rivers Migrant Study Project in 2006, working to conduct an in-depth five-year study of this relocation project to record the migration process, as well as the attendant social, economic, and environmental consequences.

GEI-Greenriver Three Rivers Migration Study

Objectives

To gather data and experiences for neighboring areas and/or future similar migration projects through an in-depth onthe-ground study, recording the migration process, as well as the attendant social, economic, and environmental consequences, as an observer; and analyzing the reasons and influences of the successes and failures of the migration.

To influence China's policy on ecological migration and reduce the negative effects of migration. GEI and Greenriver will also make suggestions for local sustainable development.

Methodology

The study investigates: the current state of and changes occurring in local grassland ecology; the implementation of the migration policy; the effects of migration upon local communities; migrant education; levels of protection of traditional cultures and; relations among ethnic groups.

While Greenriver conducts the fieldwork, GEI provides fundraising and technical assistance to develop the organization's capacity to implement this project. After integrating the research findings and a final research report, the team will give suggestions to the governments to help them adjust and improve their migration policies. In the future, GEI will work with the area's local government and residents to reduce the negative impacts of migration and provide consultation on sustainable community development initiatives.

Project Timeframe

2006-2010

Activities in 2008

Following last year's broad survey among the migrants and nomads in the Three Rivers source region, the research team conducted the third round of the in-depth surveying from July 25 to August 15 2008. The team selected 18 urban and rural migration sites and interviewed over 100 nomads, local officials, development workers and NGO representatives involved in the relocation process. After the investigation, the team classified the data and finished the third annual project report.

GEI-NRDC: Research Project on China's Efficient Use of Coal

In 2008, GEI and the Natural Resources Defense Council (NRDC) launched the "Research Project on China's Efficient Use of Coal." As the focus of the collaboration, the project team analyzed the current energy situation in China and the environmental problems facing in the coal electricity and coal chemical industries, especially the process of coal liquefaction. The research project brought forth sustainable solutions to these problems, and, as a result, the project team submitted a policy recommendation to the Chinese Ministry of Environmental Protection.

Market Transition of GEI's Projects

Incubated Companies

GEI has been committed to finding and promoting project models that can push forward sustainable economic development and at the same time address environmental problems. From GEI's perspective, the success of a project depends primarily on whether social, environmental and economic activity can be sustained well after project completion.

In order to reach this objective, GEI seeks out ways to encourage and put into effect methods of ensuring self-sustainability of each project during the project's design and operation stages. GEI provides energy efficiency technology for enterprises and financial resources for that technology. We offer clean energy and organic agriculture projects for farmers and train them in organic farming techniques so that they are able to turn environmental protection projects into profitable enterprises. Beijing Future Prosperity Resources and Hi-tech Co., Ltd., Lijiang Snow Mountain Organics Co., Ltd. and Dalian East Energy Development, Ltd. were incubated by GEI on this foundation.

Beijing Future Prosperity Resources and Hi-tech Co., Ltd.

Beijing Future Prosperity Resources and Hi-tech Co., Ltd. (FP) was registered in July 2006. Its main task, besides continuing the commercialization work undertaken during GEI's projects, is in helping small companies in areas rich in biodiversity or where local biodiversity is threatened to promote their unique, local and environmentally friendly products, and facilitating their entry into high-end markets. Additionally, FP is involved in other related activities such as the construction of biogas digesters and delivering related trainings.

As a socially responsible enterprise, FP hopes to cooperate with other such enterprises in the future, to help the local communities develop their economy and at the same time achieve economically, socially and ecologically sustainable development.

Lijiang Snow Mountain Organics Co., Ltd.

In 2004, GEI began its sustainable rural development project in Huangshan Town, Yulong County in the Lijiang Prefecture of Yunnan Province, bringing biogas construction equipment and greenhouses to local Naxi villagers as well as helping them cultivate organic vegetables and construct a 50 mu (8 acre) organic farming base. Additionally, GEI obtained organic certification for 1,340 mu (220 acres) of farmland, providing a foundation for the future expansion of the organic farming project.

Because the farming base is located in a remote rural area, residents lack access to the organic vegetable market, making the sale of the organic products all the more difficult. The Lijiang Snow Mountain Organics Company Ltd. (LSMO), with FP as its primary investor, was founded in March 2007 to help the farmers sell their organic produce and establish a name for Lijiang organic produce.

Since the company's foundation, residents' income has been raised considerably. By the end of 2008, Lijiang organic products were beginning to gain a reputation around China, with one distributor expressing strong interest in setting up an exclusive sales office in Hong Kong.

By December 2008, the LSMO had helped local villagers in the sale of 36 kinds of organic products, which totaled up to nearly 90,000 kilograms.

Dalian East Energy Development Corporation

Since its establishment, GEI has had a strong interest in the energy efficiency potential of China's industrial sector, particularly in the commercialization of clean energy technology.

Through continuous research and implementation, GEI developed an innovative model for commercializing energy efficiency and emission reduction projects, with the Energy Service Company (ESCo) as the main operating body. At the technological end, GEI has worked together with the Dalian East Energy Engineering Corporation, a well-known waste heat recovery enterprise in the domestic cement industry. From the financial end, GEI has put similar projects together into one package in order to attract more investors. At the same time, GEI took advantage of the current stage in the development of the Carbon Emission Reductions (CER) market to incorporate the Clean Development Mechanism (CDM) into the model in order to maximize benefits to investors (and purchasers of CERs).

On this basis, on June 6, 2006, GEI established an ESCo that combines financing, technology and international carbon trading—namely, Dalian East Energy Development Ltd. (DEED). The company is aimed at promoting clean production in China, improving the efficiency of energy use, reducing emission of pollutants and developing and operating on-site waste energy recovery power generation and other forms of clean energy. The company is currently focused on exploring the potential for waste heat recovery on the cement production line as well as investing in construction. At present, the company has invested in three waste heat recovery projects in the cement industry, whose collective capacity is 25MW, and can save an annual 60,000 tons of standard coal equivalent (tce), or the equivalent reduction of 140,000 tons of carbon emissions. After resolving initial problems, the company is now accelerating the pace of investments and construction, maximizing both the environmental and market benefits of waste-heat recovery.

2008 Financial Report

GEI Balance Sheet

Assets	Beginning of Year (Jan. 1, 2008)	End of Year (Dec. 31, 2008)
Current Assets	589,825.18	598,710.13
Fixed Assets	17,029.92	16,971.85
Total Assets	606,855.10	615,681.98
Liabilities and Net Assets	Beginning of Year	End of Year
Total Current Liabilities	36,492.44	1,795.97
Long-Term Liabilities	0.00	0.00
Total Liabilities	36,492.44	1,795.97
Net Assets	Beginning of Year	End of Year
Non-Qualifying Assets	570,362.66	613,886.01
Restricted Assets	0.00	0.00
Total Net Assets	570,362.66	613,886.01
Total Liabilities and Net Assets	606,855.10	615,681.98

GEI Business Activities

(In US \$)

(In US \$)

Income	Non-Restricted	Restricted	Total
Incl.: Donations	732,222.35		732,222.35
Services	65,335.14		65,335.14
Other	855.07		855.07
Total	798,412.57		798,412.57
Expenditure			
Incl.: Expenditure of Business Activities	757,768.46		757,768.46
Interest	-2,879.24		-2,879.24
Total	754,889.22		754,889.22
Movement in Net Assets	43,523.35		43,523.35

GEI Sources of Funding

GEI Project Funding

GEI Staff Interns and Volunteers

Staff

WANG Wenxing **Director General**

夏夏生活。 Communications and Program Officer

佳护地城,我的的是住。

It's our responsibility to protect the planet JIN Jiaman Executive Director

快出しよ! Live a happy life! ZHANG Rongping

- 尽己之力 気がやず I'll do my best to protect the earth WANG Lei
- Communications Officer (Joined GEI in 2008)

keep it sustainable !

Douglas WHITEHEAD **Communications Officer** (Joined GEI in 2008)

FU Wei Accountant

GEI 是我们温暖的家心 GEI is our home.

BAI Jie Administrative Assistant

计表林温暖地球的 让与陪花者不再是

Let the forests warm the earth's heart. and the dream of a green earth come true.

下・代人の梦想

WANG Aimin

Biodiversity Conservation Program Officer

Biodiversity Conservation Program Assistant

每天忙碌而刻实。

Every day is busy and meaningful

TIAN Haizhen Energy and Climate Change Program Officer (Joined GEI in 2008)

微美素值的地球人! Be a responsible citizen of the earth!

GUO Benchi Energy and Climate Change Program Officer (Joined GEI in 2008)

随心雨纤。 Follow your heart

WU Shuang Climate Change Program Officer (Joined GEI in 2008)

减倍做人 Be faithful **REN Peng** Climate Change Program Officer

住文更落,水更法,注着个人有常多女 [2].

Make the sky bluer and the water cleaner, to give everyone a dignified life.

ZHI Yingbiao Environmental Governance Program Officer

Mun of work war source and go the state 2121 Bizuceppur uspung un selus contro

There are difficulties at every stage of life I choose to face them.

Cirenluobu Sustainable Rural Development Program Assistant Tibet Office

Former Staff (Resigned from GEI in 2008)

失败也是威功!

Find success in failure!

KONG Linghong **Environmental Governance** Program Officer

Serve society!

CHEN Zhiping Sustainable Rural Development Program Officer

专世界案介角湾的人民国为教幻的工作 唐到嘉兴时那是丧最有成就感的时刻.

I feel a great sense of achievement when our work makes the lives of local people in some remote areas of the world a bit happier.

HE Yeyun Sustainable Rural Development Program Officer Sri Lanka Office

愿都 621 提供机会建成考示到西藏好保事主。 成将尽一边保護之为保护的戴加蓝天日主

Thanks to GEI for giving me the opportunity to participate in protecting Tibet's environment. I will do my best to protect Tibet's blue sky and white clouds.

HUANG Di Sustainable Rural Development Program Officer Tibet Office

HAN Haicui Sustainable Rural Development Program Assistant Lijiang Office

Awangcipei, Sustainable Rural Development Program Assistant Tibet Office

Interns

Million - to - one chances crop up nine times out of ker.

Julia HARTER (Germany)

A man can bit many dones, but he does t thuly but walt he gives up and does hert try again.

Yumin YEH (United States)

Volunteers

Kate DEANGELIS (United States)

Lila BUCKLEY Assistant Executive Director

Emmy KOMADA **Communications Officer**

CHEN Shiping Energy and Climate Change Program Officer

FU Huahui **Environmental Governance** Program Officer

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Advisors (in alphabetical order)

Partner Organizations

(in alphabetical order)

Bill CHANDLER	President, Transition Energy Company Area of Expertise: Energy Efficiency and Financing	(
LI Liyan	Office of National Coordination Committee for Climate Change	F tl
	Reform Commission (NDRC) Area of Expertise: Energy and Clean Development Mechanism	E
MA Zhong	Director of Environmental Studies Center, Renmin	E C
	Area of Expertise: Environmental Economics	E
QIAN Jingjing	National Resource Defense Council Area of Expertise: Science and	E
	Technology	h
QIN Xiaoli	Associate Group Publisher, IDG & Reed Business Information	e C
REN Zhenhai	Academician of the Chinese Academy of Engineering Area of Expertise: Atmospheric	L N
	Environmental Science	Ν
WANG Hansheng	Chinese Academy of Engineering Area of Expertise: Atmospheric	N
	Environmental Science	6
WANG Yanjia	Tsinghua University Area of Expertise: Energy and Climate Change	N C
WANG Yi	Policy Management Institute, Chinese Academy of Science Area of Expertise: Environmental Policy	(([
XIONG Lei	Senior Editor at Xinhua News Agency, Former Executive Editor of China Features	S
ZHANC Liiup	China Institute of International	L
ZHANG LIJUN	Studies Area of Expertise: International Relations	۲ t

Government Agencies

Party School of the Central Committee of he C.P.C.

Embassy of the People's Republic of China in Cambodia

Embassy of the People's Republic of China in Laos

Embassy of the People's Republic of China in Sri Lanka

Embassy of the People's Republic of China in the United States of America

Information Center of the Ministry of Land and Resources of the People's Republic of China

Local Governments (Tibet, Sichuan, Yunnan)

Vinistry of Environmental Protection

Ministry of Commerce

National People's Congress Environment and Resources Committee

National Development and Reform Commission

Office of the National Coordination Committee for Climate Change, National Development and Reform commission

State Forestry Administration

Ministry of Livestock Development, Sri Lanka

National Land Management Authority of the Lao People's Democratic Republic

Enterprises

Beijing Organic Food Co., Ltd.

Chang De Ding Xin Energy Service Company

Dalian East Energy and Engineering Development

Environment Energy & Enterprise Ventures Private Limited

Goldman Sachs

The Export-Import Bank of China

Transition Energy Company

Tsinghua Venture Capital Management.

International Organizations & Academic Institutions

Carnegie Endowment for International Peace

Chinese Academy for Environmental Planning at the Ministry of Environmental Protection

China Institute of International Studies

College of Land Management at Zhejiang University

Conservation International

Energy Conservation Center, Guangdong Province

Institute for Environmental Governance and Policy at the China University of Political Science and Law

Institute for Nuclear Energy and New Energy Technology at Tsinghua University

Institute of Policy and Management at the Chinese Academy of Sciences

National Resources Defense Council

Oxford University

Pacific Northwest National Laboratories

The Nature Conservancy (China Program)

Tibet Development Fund

Tsinghua University

University of International Business and Economics

Worldwatch Institute

Developing Economically Viable Solutions to Environmental Problems

Global Environmental Institute (GEI)

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