



## **PROJECT REPORT**

### **Environmental Education Exchange: Mainland China and Hong Kong**

**August 2002**

## **Summary**

The natural environment is an increasingly important area of public policy in Mainland China and the Special Administration Region (SAR) of Hong Kong. Public awareness of environmental issues as well as international interest in environmental conditions in China is also growing.

There is an urgent need for dialogue on environmental issues between Mainland China and Hong Kong in order to share information and expertise, raise local and national awareness of issues and formulate long-term strategies for sustainable development. A key first step is establishing networks between environmental experts in Mainland China and Hong Kong.

Various academic/scientific projects between Mainland and Hong Kong scholars do exist, but they are by nature narrowly defined and there are not always opportunities to explore areas outside the focus of study. There are many more potential opportunities for the Mainland and Hong Kong to collaborate in protecting and restoring the environment, although this is a relatively new area of cooperation and has yet to be fully appreciated.

The way in which the Chinese nation, including Hong Kong, develops in the future and whether this development is sustainable will have enormous impact, not only for Chinese citizens but also for the rest of the world. Civic Exchange's environmental exchange project with Mainland China aims to play a role in fostering strategies for more sustainable development.

## **Civic Exchange Principles**

Civic Exchange has been guided by the following principles in developing the educational exchange program:

- Hong Kong needs to have a better understanding of developmental and environmental issues on the Mainland.
- At the same time, providing Mainland environmental experts with information about Hong Kong's development, particularly within the context of the Pearl River Delta and South China region, will result in greater mutual understanding
- The best way to initiate dialogue is for Hong Kong to reach out to Mainland experts and invite them to Hong Kong for first hand dialogue.
- Dialogue is a dynamic process that enables new insights and collaborative opportunities. Dialogue and collaboration are the most effective ways to improve understanding and also contribute to the process of nation-building under the "one country, two systems" policy.

## **Project Objectives**

Civic Exchange sought funding in 2001-2002 to bring a team of younger Mainland environmental experts to Hong Kong in order to kick-start a dialogue with Civic Exchange, other local groups and Hong Kong government officials. The aims of the visit were to:

- Brief the Mainland team on Hong Kong's environmental situation;
- Allow the team to meet key environmental decision-makers, opinion shapers, experts and green groups in Hong Kong;
- Share expertise about environmental issues on the Mainland; and
- Identify possible opportunities for collaboration with Hong Kong parties.

Civic Exchange invited a team of seven experts to visit Hong Kong between 15 and 19 July 2002. The team included professionals with expertise in various environmental fields, including air, water, ecology, economics and environmental policy. The team members were:

Dr. HE Kebin, Professor of Environmental Science & Engineering  
Director, Office of International Cooperation and Exchange  
Tsinghua University, Beijing

Dr. HU Tao, Director of Environmental Economics Program  
Policy Research Center for Environment and Economy  
State Environmental Protection Administration of China, Beijing

Dr. QI Ye, Professor  
Institute of Environmental Science  
Beijing Normal University

Dr. YU Gang, Professor & Deputy Head  
Department of Environmental Science & Engineering  
Tsinghua University, Beijing

Dr. WANG Guowen, Director  
International Exchange Center  
Logistics Management Research Center  
China Development Institute, Shenzhen

Dr. ZHANG Shiqiu, Professor  
Center for Environmental Sciences  
Peking University, Beijing

Dr. ZHANG Yuanhang, Professor  
Director, Center for Environmental Sciences  
Peking University, Beijing

## **Visitors Program**

The program for the 4½ day visit included a wide range of meetings and activities. The team visited a number of government departments and universities as well as some environmental facilities and sites in Hong Kong. The goal was to introduce Mainland visitors to the individuals and institutions that Civic Exchange considers to be significant in setting environmental policy for Hong Kong.

(a) Individuals and Organizations

Government and Legislative Council

The Mainland team met with government officials from the Environmental Protection Department, Planning Department, Sustainable Development Unit, Drainage Services Department, as well as the Legislative Council in order to have a better understanding of their work and function.

Green Groups

Civic Exchange organized an informal meeting for the team to meet representatives from a number of Hong Kong's green groups and exchange views.

(b) Important site visits

West New Territories Landfill (WENT)

The WENT Landfill is one of three strategic landfills in Hong Kong. It started operations in 1993 and handles around 6,000 to 7,000 tons of waste per day. There are 139 monitoring stations at the Landfill in order to ensure that safety and environmental standards are maintained. As waste management is an area of environmental protection, Civic Exchange believed it would be useful to Mainland visitors to understand this aspect of Hong Kong's waste management system.

Stonecutters Island Sewage Treatment Works

The Stonecutters Island Sewage Treatment Works facility started operations in May 1997 and is a core component of the Harbor Area Treatment Scheme (HATS). According to the Drainage Services Department, the facility provides chemically enhanced primary treatment with the goal of removing 70% of suspended solids and 35% of biochemical oxygen demand from raw sewage before discharging the effluent into Victoria Harbor. As this is a state-of-the-art facility, Civic Exchange felt that it would be useful for the team to visit the site and learn about Hong Kong's attempt to improve water quality in the Harbor.

Mai Po Reserve

Mai Po, which is located in the northwest New Territories and borders Deep Bay, was declared a Wetland of International Importance under the Ramsar Convention in 1995. Mai Po provides feeding and breeding habitats for diverse species of wildlife and also offers educational programs for the public. However, development along the Deep Bay coast on both the Hong Kong and the Shenzhen side has threatened the wetlands. Cooperation between Hong Kong and Mainland authorities on both environmental management and regional economic development is critical to saving the reserve. Civic Exchange believed that it was important for the Mainland team to visit Mai Po since it is an ecological site of key significance and because it is threatened by regional development.

(c) Presentation

On the last day of the visit, team members made presentations on the state of environment in the Mainland and shared their observations of the situation in Hong Kong. The purpose of these presentations was to provide Hong Kong people with a chance to understand what Mainland experts see as the main environmental issues for China and learn about strategies and programs to improve the situation. This was a rare opportunity for direct interaction since information about the environmental situation on the Mainland is usually filtered through the media.

The audience included key opinion shapers and decision-makers in Hong Kong who are interested in regional environmental issues. Around 100 people from various government

departments, the business community, academia and non-profit organizations attended the presentations.

Team presentations addressed a number of topics:

- Dr. Hu Tao focused on environmental economics and environmental policy, including the relationship between trade and the environment and the environmental implications of China's accession to the World Trade Organization (WTO). Dr. Hu also mentioned his research on market-based instruments for environmental protection, such as emissions trading, pollution charge policies and deposit-refund schemes for solid waste management.
- Dr. He Kebin's discussed his work on air pollution, especially urban air quality, regional air pollutants and an international comparative study of energy and air quality. Dr. He is conducting research on transportation related air pollution and particulates that influence urban air quality. Dr. He is also investigating urban policy integration for energy related issues in selected mega-cities in China, Japan, Korea and India.
- Dr. Qi Ye noted that he was impressed with the Hong Kong model of environmental management, which has been shaped by the fact that Hong Kong is an economically advanced and densely populated area. He observed that although Hong Kong has a history of environment degradation, it has been successful developing strategies to combat this degradation. Dr. Qi's areas of research include ecosystem management and modeling, climate change, the effect of regional climate change on terrestrial ecosystems, atmospheric carbon dioxide concentration and heterotrophic respiration in China's forest ecosystems.
- Dr. Wang Guowen talked about his research on logistics, including logistics policy, regional logistics development, logistics parks, cross-boundary logistics and supply-chain management implementation. In addition, Dr. Wang mentioned that the China Development Institute is currently conducting a survey to look at the attitudes towards environmental issues among residents in the Pearl River Delta area.
- Dr. Yu Gang's presentation focused on waste pollution control technology and POPs (persistent organic pollutants) control. These pollutants are toxic, persistent, liable to bioaccumulation and prone to long-range atmospheric transportation and deposition. POPs can cause adverse environmental and human health effects at locations near to and far from their sources. Dr. Yu noted that researchers at Tsinghua University are conducting application research of typical POPs.
- Dr. Zhang Shiqiu's presentation focused on environmental economics and policy. One of her research topics involves economic assessment of the environmental impacts of pricing policy. She is also interested in market-based instruments, especially pollution charges, levies and emissions trading. Other research areas include the relationship between economic development, poverty alleviation and the environment. Dr. Zhang tries to look at the environmental effects of poverty alleviation strategies and policies and the distributional effects of environmental policies.
- Dr. Zhang Yuanhang provided an introduction to his research on air pollution in China. Recent projects include capacity development for NO<sub>x</sub> pollution control in Guangzhou, a Pearl River Delta air quality study, source apportionment of aerosol in

Guangzhou, air pollution formation mechanism and source analysis in Beijing and air quality and its sources and sinks in the Yangtze River Delta.

The audience was interested in a number of key topics including emissions trading, transportation and fuel related policies, the environmental implications of the Beijing 2008 Olympics, environmental protection and food security in rural areas, grassland degradation and sandstorms.

### **Project Assessment**

The environmental exchange program initiated a dialogue on environmental issues between the Mainland and Hong Kong. The best way to maintain and deepen this dialogue is to find areas of collaboration. Two specific areas for collaboration have been identified to date:

- Hong Kong is beginning to examine emissions trading as a mechanism for managing regional air quality in South China. Civic Exchange is interested to work with Mainland scholars on understanding existing emissions trading pilot schemes in China.
- Hong Kong parties involved in organizing a team for the Air and Waste Management annual conference in San Diego, USA in June 2003 expressed an interest in the possibility of a joint Mainland and Hong Kong team. This possibility is being actively explored with the involvement of Civic Exchange.

Civic Exchange encountered some difficulties during the program planning and preparation stages. The primary difficulty was obtaining Hong Kong visas for the Mainland Chinese team. Obtaining a Hong Kong visa is often more difficult for Mainlanders than obtaining a visa for overseas travel. One of the original team members was unable to obtain a Hong Kong visa and had to cancel his visit a few days before the program started.