

Environment and Health in China

Workshop Summary

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Old India Institute, Oxford University

Reported by:

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Seminar background

The British Inter-University China Centre, in association with the Environmental Change Institute and the James Martin 21st Century School hosted a half-day seminar to analyse and discuss the relationship between the environment and public health in China from a social science perspective. The seminar focussed on the socio-political, cultural and economic context within which the connection between environment and health is situated, and explored solutions to the challenges of reducing poverty in China while simultaneously protecting people's health.

Core Organising Team

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Dame Jessica Rawson, Professor of Chinese Art and Archaeology and Pro-Vice Chancellor at the University of Oxford gave the keynote speech on the complexities of China's geography, history and belief system, and how this impacts upon its environmental policies. In terms of geography, due to China's size, many people have little knowledge or personal experience of environmentally degraded areas. Nature is given little respect, with few having a desire to visit the wilderness. With land viewed only as a provider for the people, the cultural attitudes to landscape are very different to that of the west, where there is a tendency to protect and visit wild spaces.

China has a long successful history in farming and industry, and it is this success and rapid economic growth which has led to its environmental problems. The colonisation of large areas of land to feed the people via intensive farming methods is still a driving force, and a major direct conflict with safeguarding the environment. Likewise, the Chinese invention of mass production through the sub-division of labour provided the opportunity to produce high

quality goods cheaply on a large scale to feed the west with luxury goods. The massive consumption of wood and such for fuel has led to incredible environmental degradation, ongoing since the 10th Century.

When considering environmental problems in China, we should not overlook its belief system and approach to how the universe works. In the West the system of scientific development looks for causes, and has a sense of individual control and initiative; a focus on individual responsibility to deal with environmental disasters. However, in China there is more of a sense that society organises and runs itself; an empirical belief system constructed in such a way that there is no sense of empowerment or individual responsibility. There is a lack of searching for origin in this empirical belief system which Rawson feels affects China as a whole.

Rawson concluded that the West is impertinent to discuss China's problems without having considered its views and attitudes; all of which could be used constructively as a beneficial toolkit. Firstly, there is real opportunity to frame the environmental agenda in the systematic reduction of poverty. China is currently creating wealth at the same time as huge inequality, which they are keen to change, especially since it is a part of the Chinese belief system and the view of current government that there should be a good life for all. Secondly, those wishing to push China forward and into a more responsible environmental situation should provide advice and thinking in terms of the Chinese wish for harmony between man and the environment. The West cannot be authoritarian in this situation; rather they should communicate better in a language which China will understand.

Jennifer Turner, Director of the China Environment Forum at the Woodrow Wilson International Centre for Scholars, Washington, D.C. provided an overview of ecological and human health problems linked to water pollution. With water heavily relied upon for industry and farming and rarely treated before being returned to the watercourse, approximately 70% of the water in urban areas is contaminated, and 300 million people lack access to safe water.

The main drivers of water pollution in relation to intensive factory farming are:

- Nitrogen from feed additives: which produce 40 times more nitrogen pollution than industry
- Pesticides: China is the worldwide number one producer and consumer, and pesticide pollution of water from agricultural runoff is severe. Currently when rivers are measured for pollution there is no test for pesticides, only for toxic chemicals
- Poor waste water treatment: 90% of farms having no wastewater treatment facilities on site.

In industry, chemical plants are a major source of water pollution, with Chinas Environmental Protection Agency (EPA) finding that half of the 21,000 chemical plants in China are along the Yellow and Yangtze rivers near water drinking sources; clearly, peoples health is impacted as a result.

Municipal waste is probably the biggest source of water pollution. Nationwide only 40% of municipal waste is treated, with much higher figures in Beijing (probably due to the upcoming Olympic games in 2008). Waste treatment plants are installed in cities but rarely used, and the 2005 China EPA survey found that they are considered too expensive to run.

Health is constantly impacted by this lack of water treatment, with 30,000 children dying each year of diarrhoea related diseases, or hospitalised due to lead poisoning, which can lead to cancer. Turner discussed 'cancer villages' which are frequent in China, with groups of villagers suffering from cancers all caused by the same pollution problem. A Ministry of Health report claimed cancer was now the most lethal disease in China. The WHO also rated China 184 out of 190 countries in terms of peoples access to health care. The few urbanites able to purchase care cannot compare to the majority of Chinese who live in rural areas where there is little or no health care.

From 2005-07 there was a jump in cancer rates by 90% in urban and 23% in rural areas, linked to the increase in air and water pollution. Turner highlighted the significance of the Chinese government releasing these figures, and in 2006 the Ministry of Health and the EPA made an agreement to work together on health emergencies connected with environmental causes; the beginning of inter-ministerial cooperation.

With regard to water scarcity, nationwide China per capita has one quarter of the water

resources of the world, but in northern China this is one tenth. Alongside the problems for agriculture, grasslands have been destroyed over years through development and economic reforms, resulting in increased sand storms which cause respiratory illnesses. Exacerbating water scarcity are mineral mining developments designed in 1998 to increase the wealth of Chinas poor inland regions. The effects in Inner Mongolia, alongside a 22% increase in GDP since 2005, are depleting aquifers, water pollution, and population growth from new towns, further depleting resources and sanitation.

Turner pointed out that Chinas water pollution is driven by economic reform. The booming economy achieved through the transfer of power to local governments, who issue regulation targets and laws, have limited ability to enforce, as their role is also to protect their industries; the government itself is an essential cause of pollution. This is not their aim, but they have prioritised economic development and are now realising the associated economic costs to clean up pollution from industry and farming. There are estimates that 8-12% of GDP goes to paying the costs of environmental pollution.

Turner noted optimism of the situation improving with progressive thought and action in China, even within the government, through growths in the use of market mechanisms such as CO2 emissions trading. Turner felt that something of more help in China would be the better use of information disclosure projects such as the pilot study 'Green Watch' set up by the World Bank; a colour-coded system for industries used by the public and media to highlight the pollution level of each factory; a useful way to keep a check on factories and to get information to the public and media.

The Ministry of Water Resources now have goals for water saving and industrial use, and have revised their national water law, giving more power to river basin commissions in attempts to enforce water conservation.

In the spirit of encouraging public participation, in 2003 the EIA law was revised to have public hearings for EIAs. Also international environmental NGOs over time have become harder-hitting in China, working on energy issues, and water more recently. Chinese environmental NGOs are finally being given a platform, and the biggest growth of civil society groups are green groups.

Wang Canfa, Lawyer, Director of the Centre for Legal Assistance to Pollution Victims, and Professor at the Chinese University of Political Science and Law, Beijing presented research on public nuisance disease litigation in China. He began the first environmental NGO in China, which provides a helpline for pollution victims.

Wang's Centre for Legal Assistance set up a Public Nuisance Disease (PND) programme in 2002 attempting to aid pollution victims. In China, public health is a very sensitive subject, so when considering litigation measures the words 'public nuisance disease' are not used, but replaced with the vague term 'environment and health issue'.

Litigation cases meet many difficulties, but due to the Centre's assistance, there have been some cases which get a positive result. The cases with a chance of winning have similar characteristics: usually the damages are small; those initiating the lawsuit are few; the health damage was caused by an environmental accident; the judges were aware of the concept of environmental justice; and the case was reported through various media channels. Examples given of cases which went to court and won compensation were: the suing of a real estate company for noise pollution; air pollution from exhaust gas; noise pollution leading to suicide; and a chemical factory which poisoned of 407 pupils.

Cases which prove difficult to resolve are often where: there are many claimants; the defendant is a large company able to pay-off the government rather than go to court; where there was intervention by local government; the damages were not affirmed by science; and the cases were not reported in the media.

Further discussion of the role of media in relation to environmental health highlighted that the media are now reporting on PND, with the Chinese government allowing international reporting, such as China Central TV, a 24 hour English language news channel with increased coverage of world events in addition to its China focus. These are media developments which the Chinese people are welcoming of.

PNDs covered by the media include reports on the victims of lead poisoning from nearby factories, and of cancer villages. Although now often reported by the media, the PND victims rarely go to court for justice, instead asking the local government to deal with damage issues.

To better deal with the difficulties of litigation cases in PND, Wang recommended the following steps:

- highlighting the importance of human rights and the right to legal representation in China
- a special law to resolve PND legal disputes through negotiation or the courts
- the set-up of an environmental monitoring system to confirm pollution in areas affecting victims, strengthening their case in court
- appropriate standards set for court case investigations and the consideration of PND cases
- the establishment of a PND fund to encourage claimants of legal assistance
- legal training of judges and lawyers on PND litigation, and
- the enhancement of media reporting to ensure human rights and justice.

Event organisers

The British Inter-University China Centre www.bicc.ox.ac.uk

The British Inter-University China Centre (BICC) is a joint venture between Oxford, Bristol, and Manchester Universities, focussed on becoming Britain's leading centre for research and teaching on China and Chinese language through the expansion of undergraduate and postgraduate teaching of the Chinese language and Chinese studies, facilitation of original research and dissemination and outreach activities, particularly, but not exclusively, in the UK.

Environmental Change Institute www.eci.ox.ac.uk

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