



## News

# Bureaucracy fuels China's safe water problems

Published : Thursday, August 9th, 2012

By : Reuters

Category : Water

Region : China

Tags : urban planning, water security



The kind of top-down bureaucracy that can discourage communication and hobble some Western corporations is fueling widespread problems with China's water supply, with lessons for the rest of the world, researchers reported on Thursday.

So-called stovepipe bureaucracy — where different departments communicate with their own teams and managers but not with others that might be related — makes it harder for China to deal with critical water sustainability issues, the scientists wrote in the current edition of the journal *Science*.

The problems of ample supplies of safe, clean water in China are formidable, and may offer a preview for other developed and developing nations in a century where water has been dubbed “the new oil,” the resource on which civilization may turn.

“I think this is a big lesson for the rest of the world, because the world is facing the same problems that China has with the complex relationships among water, energy, land, food and other things,” said co-author Jianguo Liu of the Center for Systems Integration and Sustainability at Michigan State University.

He acknowledged that the stovepipe bureaucracy adds to the challenge over water sustainability in China.

Two-thirds of China's 669 cities have water shortages, over 40 percent of its rivers are severely polluted, 80 percent of its lakes suffer from eutrophication — an over-supply of nutrients, often a result of fertilizer run-off from farmland — and about 300 million rural residents lack access to safe drinking water, the researchers reported.

The authors praised China's commitment, made in January 2011, to spur water conservation and manage this crucial resource within this decade.

### Complex relationships

But the researchers said this commitment won't be enough unless disparate agencies learn to communicate and coordinate with each other. They described a web of government entities with seemingly contradictory missions, and actions that appear to go against one policy as they promote another.

“People don't communicate well and do not coordinate well and just try to achieve one goal at a time,” Liu said in a telephone interview.

Problems occur when these goals conflict and agencies fail to coordinate, he said. For example, growing more food often means using more fertilizer, which pollutes water. Producing more energy requires more water, which cuts down on the water supply for other uses.

Sometimes, conservation policies are ineffective, as when China's central government promulgated a policy in 2004 to stop building golf courses, which soak up quantities of water; since then, 400 golf courses have been built, the researchers said.

The government encourages urbanization, the report said, but protection of water supplies gets less attention compared to energy issues, even though water is absolutely essential to human life.

To solve these problems, the authors recommended focusing on increasing water efficiency along with work to understand the complex relationships among agencies and people with competing claims on water.

“Sometimes we understand (these relationships), but we have not communicated them to the managers, to the policymakers, to the general public,” Liu said.



## Featured Events

[▶ MORE](#)

**The Global Summit 2012: Co-Creating Our Sustainable Future**

15-17 August 2012 - LONDON

**China Green Manufacturing Summit 2012**

17-18 August 2012 - SHANGHAI

**Australian PV Solar Energy Conference & Exhibition 2012**

21-22 August 2012 - MELBOURNE

**Natural Products Expo Asia 2012**

23-25 August 2012 - HONG KONG

**2012 Frost & Sullivan Asia Pacific Green Excellence Awards**

06 September 2012 - SINGAPORE

**2nd Annual Solar Arabia Summit 2012**

16-17 September 2012 - RIYADH

**CSR Asia Summit 2012**

18-19 September 2012 - BEIJING

**Green Building & Retrofits Expo Asia 2012 (GBR Expo Asia 2012)**

19-21 September 2012 - BANGKOK

**1st Annual World Congress of Ocean**

20-23 September 2012 - DALIAN

**Renewable Energy World Asia 2012**

03-05 October 2012 - BANGKOK

## Featured Jobs

[▶ MORE](#)

**Senior Manager, Sustainability Performance Management**  
SINGAPORE

**Solar PV Sales Manager**  
JAPAN

**Field Marketing Manager**  
JAPAN

However, simply communicating with these stakeholders may not be sufficient in some cases, according to Liu, because "the policymakers and managers do not take this kind of scientific evidence into account in their decision-making process or their management practice."

Related News & Features

- Billion-plus people to lack water in 2050: study
- Push for water prices to match supply
- China to quadruple desalination capacity
- S'pore strives to be self-sufficient in water
- Rainwater harvesting would solve Mumbai's water problem

Related Opinion & Blogs

- The imperative for urban sustainability
- City water for all, by Peter Brabeck-Letmathe and Asit Biswas
- Smart energy policy may need brave but unpopular decisions
- Trading anti-pollution controls for low cost
- World Cities Summit: A business opportunity, showcase for the world

- Solar Cell Sales Manager  
SINGAPORE
- ESD Consultant (Team Leader)  
SINGAPORE
- Senior Manager, Finance & Administration  
SINGAPORE
- Chief Operating Officer (Closing: 26 August 2012)  
AUSTRALIA
- Natural Resource Management Officers (Melbourne)  
AUSTRALIA
- Natural Resource Management Officers (Regional Victoria)  
AUSTRALIA
- Principal Consultant/ WA State Manager  
AUSTRALIA

Add a comment

Name

Email

Your email address is kept private

Message

Post Comment

Sponsored Links

WIGID is an annual survey to gauge the evolution of the CSR profession in the Asia-Pacific region. More information and the survey can be found here.

Lead by example – one national laboratory. \$264 million energy savings.

Supporting Organisations

