



Getty Image

Lessons from a China Environmental Performance Index

*Yale Workshop on Third-Wave
Data for Environmental Policy in
China*

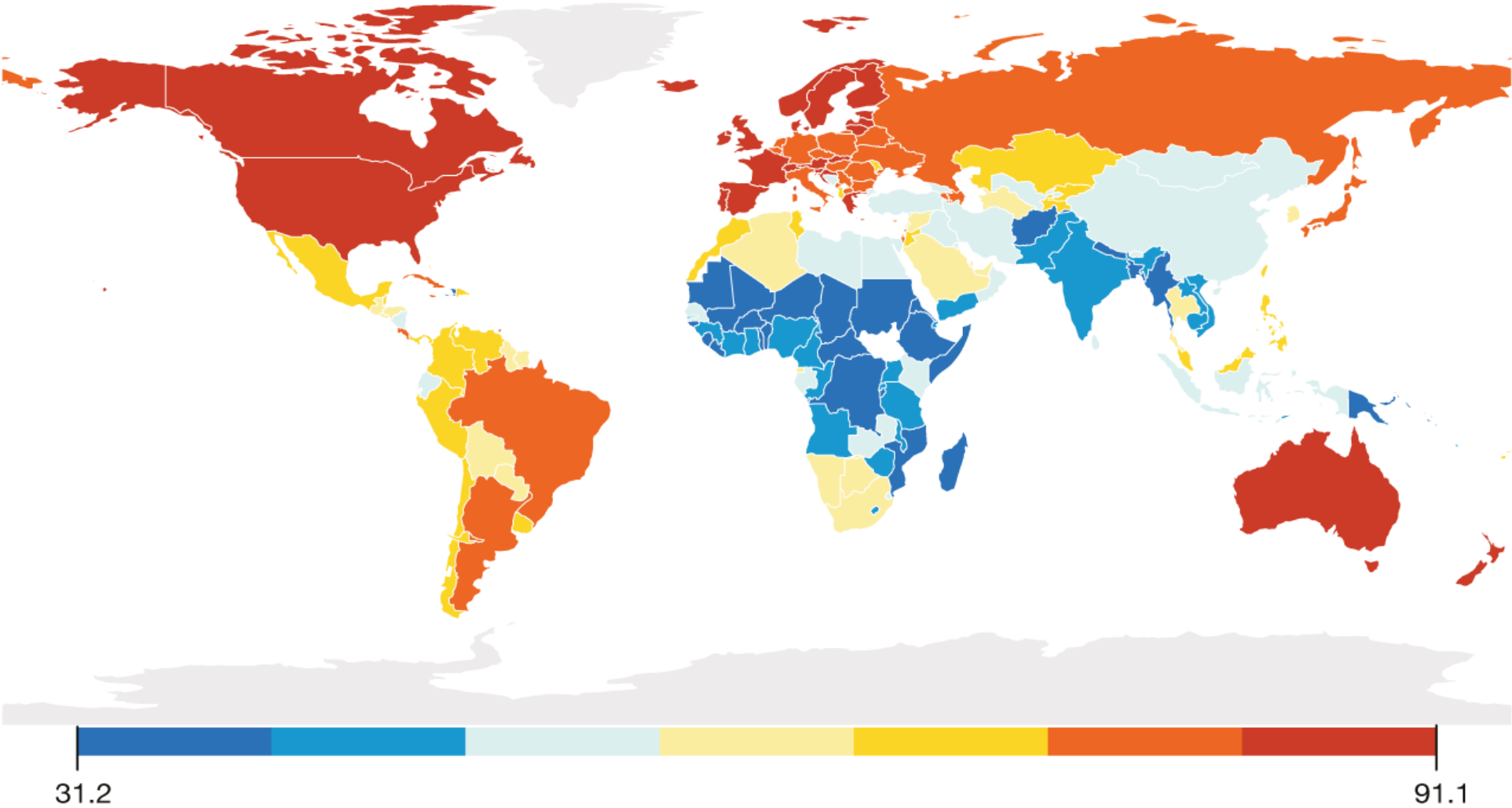
1 March 2016

Beijing, China

Figure 7: The 2016 EPI Framework includes 9 issues and 20 indicators. Access to Electricity is not included in the figure because it is not used to calculate country scores.



Figure 24: Global 2016 EPI results range from a score of 31.2 to 91.1, with 100 being the best score and 0 the worst.



中国省级环境绩效评估专家研讨会

China Environmental Performance Index Experts Meeting

“Is it possible, given available data, to develop an environmental performance index that ranks all province-level administrative areas?”

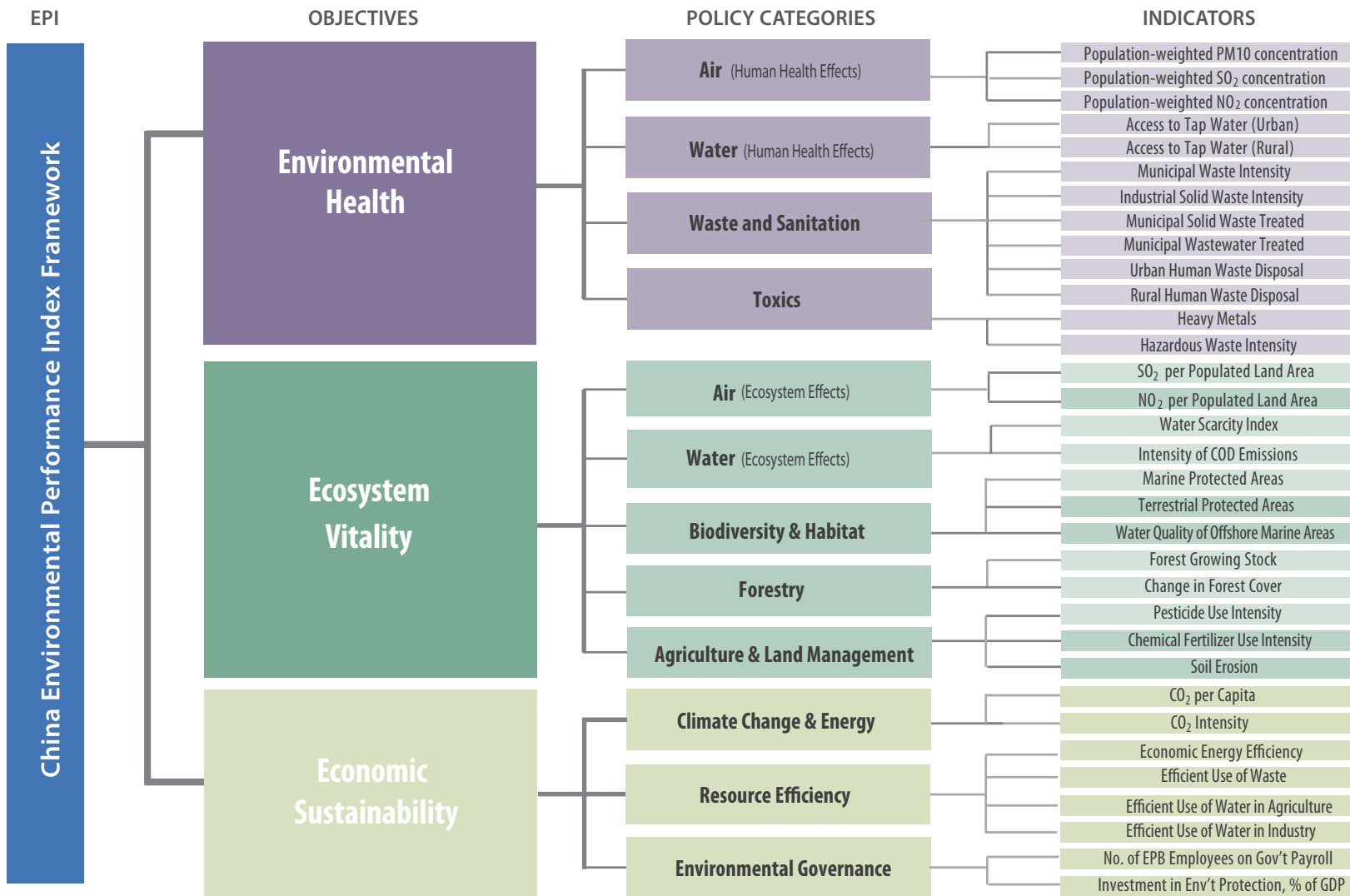


Methods

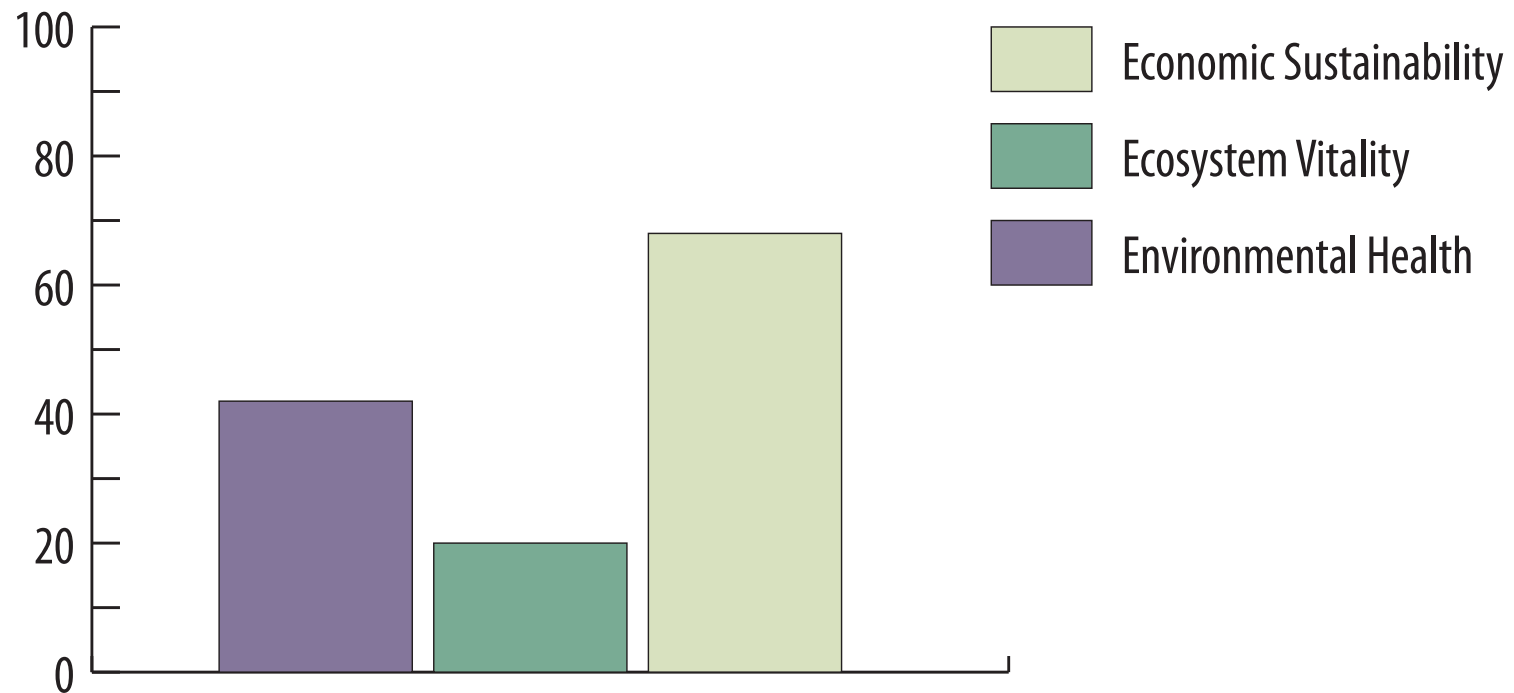
- ~ 50 experts in 3 expert workshops between 2008-2009
- 12 policy categories
- In-depth study of each policy category, including:
 - government's policy responses
 - current environmental statistical practices
 - how they compare with international best practices.



China EPI Indicator Framework



Baseline data availability



No access to raw data

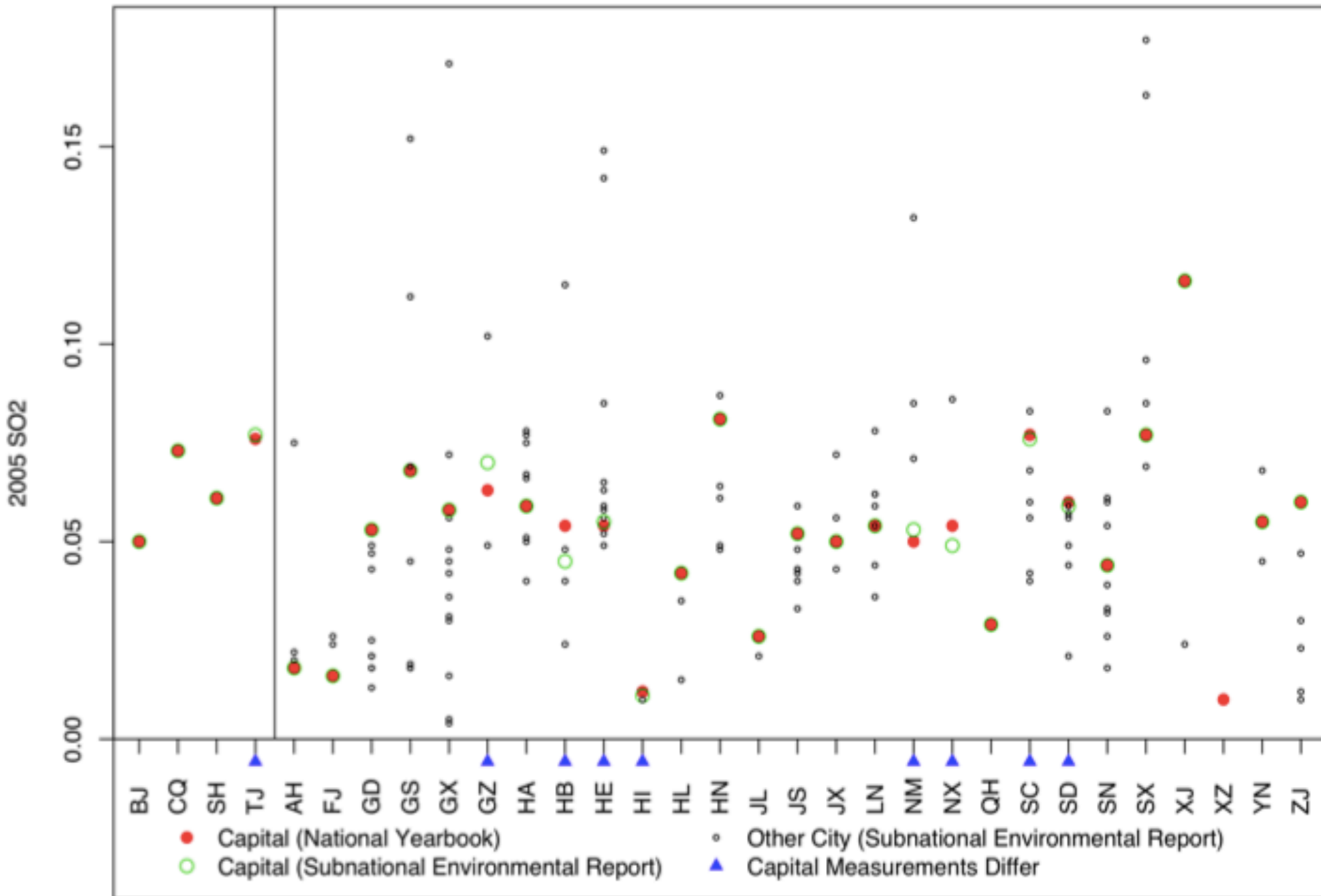
China EPI Marine Water Quality that meets grade IV and below IV, 2007



Provinces below 50th percentile are displayed with red color tones.

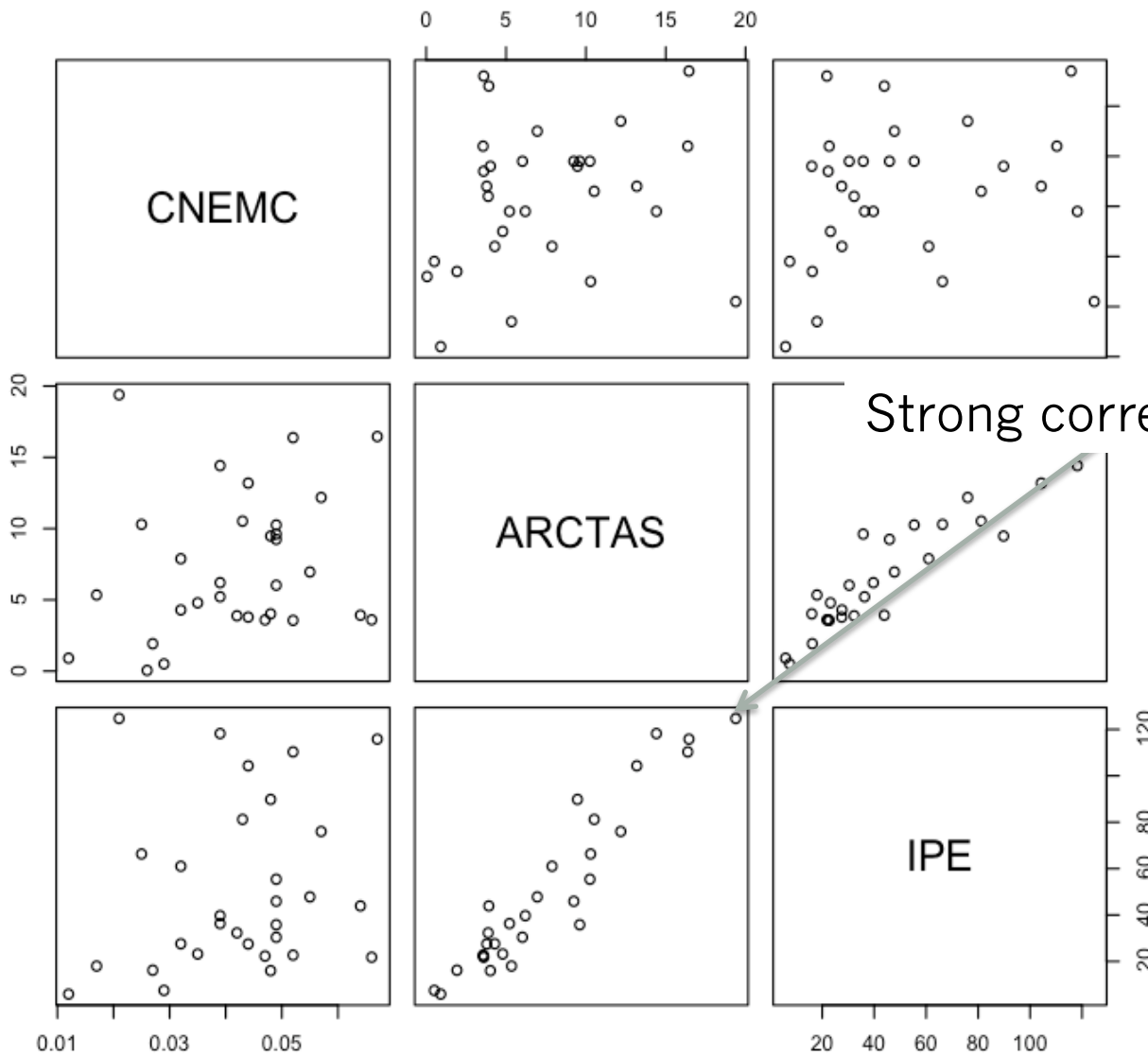
Discrepancies in Data Sources

2005 SO2 Data from National and Subnational Sources

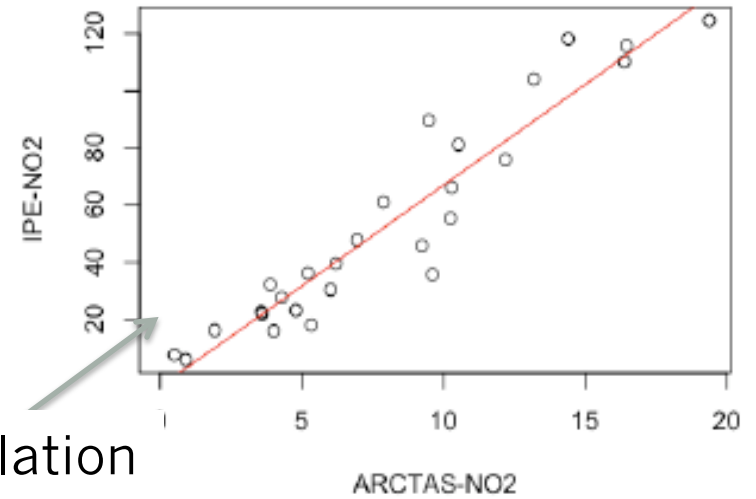


Initial Data Exploration

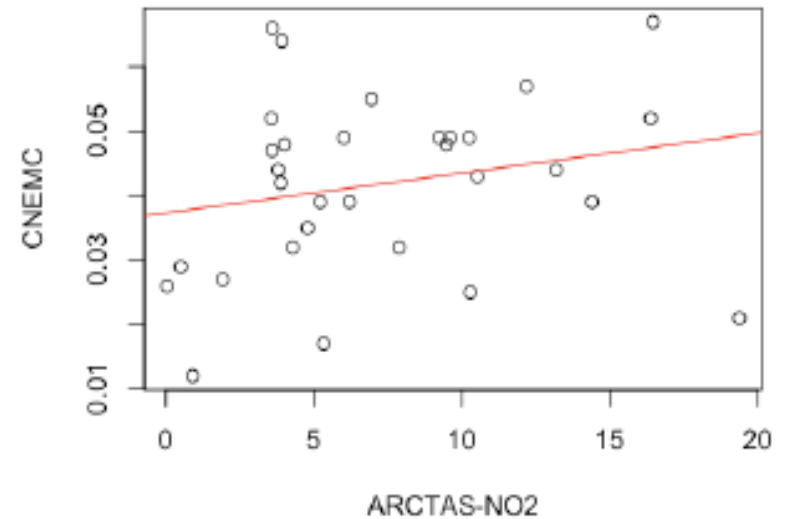
Pairs Plots of Raw NO2 data



Comparison of ARCTAS-IPE NO2 Data



Comparison of ARCTAS-CNEMC Data



Air pollution

- China National Environmental Monitoring Center (CNEMC)
- AQICN
- IPE Pollution Map
- Shanghai Qingyue Open Data Center
- Data in rural areas is lacking

Water

- China Environmental/Urban Construction/Health Statistical
- Ministry of Housing and Urban-Rural Development
 - National Black and foul water pollution inspection platform: <http://www.hcstzz.com/>
- Thematic Database for Human-earth System 人地系统主题数据库
 - <http://www.data.ac.cn/zrzy/G01.asp?name=&pass=&danwei=>
- Shanghai Qingyue Open Data Center

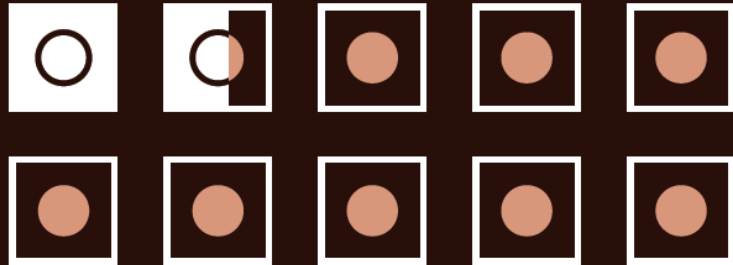
Biodiversity and Habitat

- China Environmental Statistical Data 环境数据统计
- Nature Watch by Shanshui Conservation Center
- Map of Life (MOL)
 - http://species.mol.org/species/map/Perdix_daurica
- Satellite data – EarthEnv
 - <http://www.earthenv.org/streams.html>

Climate Change

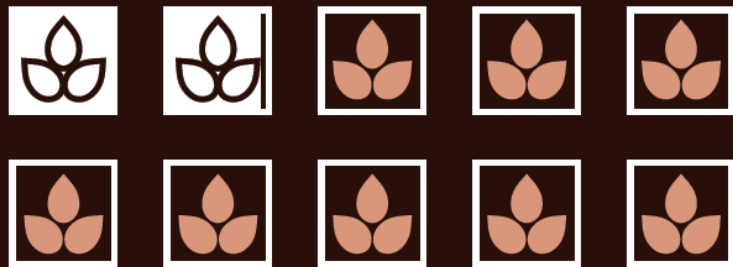
- China Climate Change Info-net 中国气候变化信息
 - <http://www.ccchina.gov.cn/list.aspx?clmId=65>
- Climate and Resources Database 能源资源数据库
 - <http://www.data.ac.cn/zrzy/G32.asp?name=&pass=&danwei=>
- World Resources Institute CAIT

Soil



16.1%

surveyed points
exceed pollution limits



19.4%

points surveyed on
arable land exceed
pollution limits

Cd
cadmium

Ni
nickel

Ar
arsenic

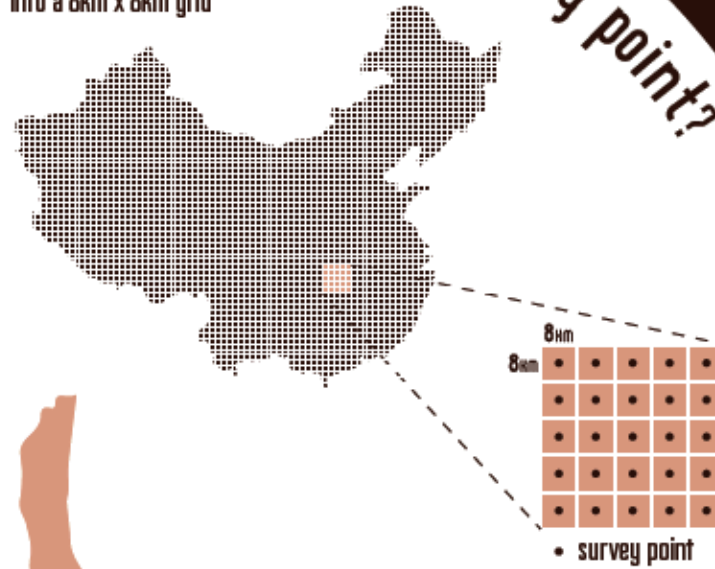
83 %

surveyed points
contaminated with
inorganic chemicals

Soil

what is a survey point?

The surveyed area was split into a 8km x 8km grid



← --- **Manhattan: 87.5 km²**

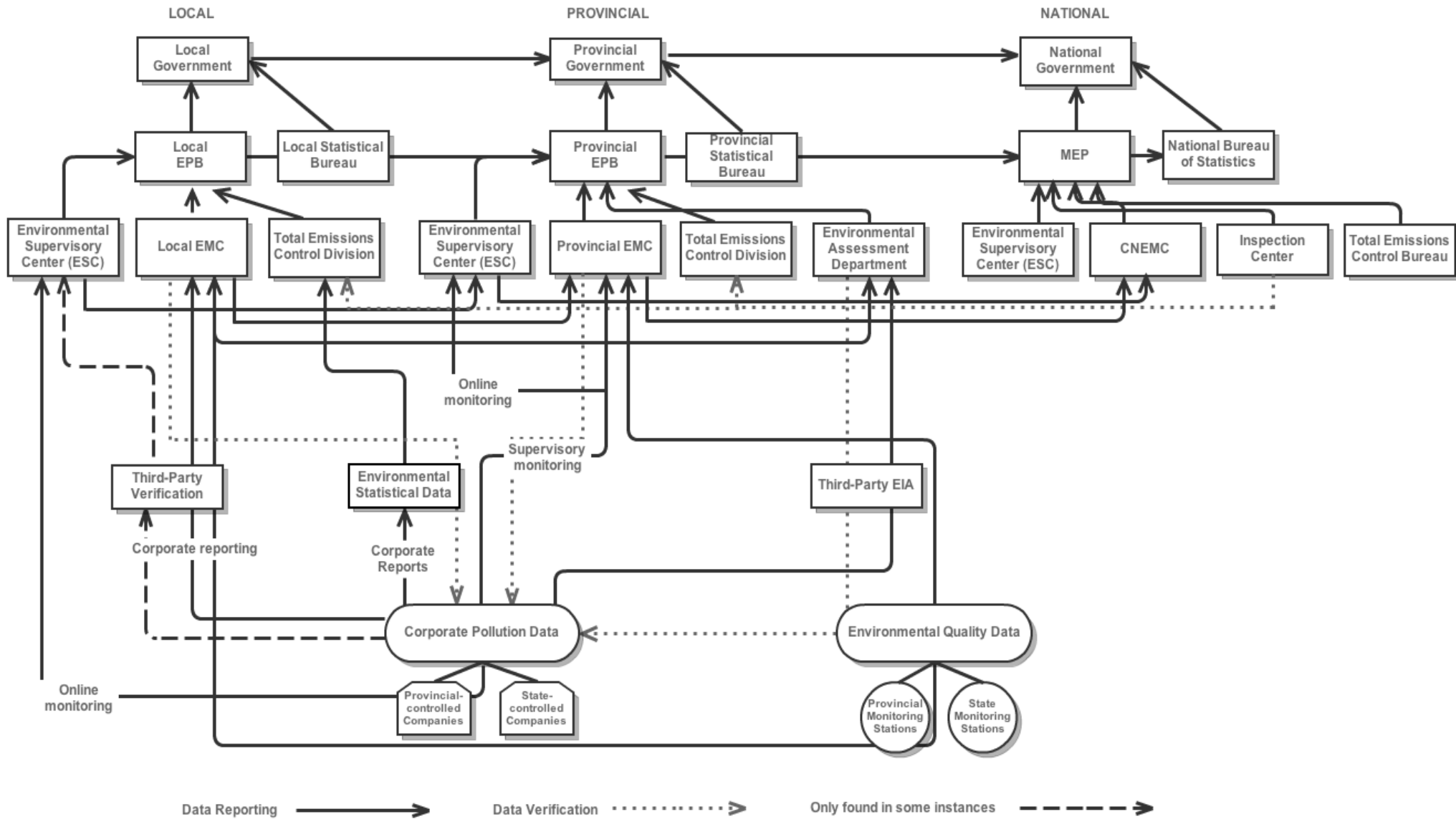
← --- **Sample Plot: 64 km²**

One point sample was taken for each sample plot. Homogenous conditions were assumed throughout each plot.

Reasons for Information Gaps

- Lack of institutional coordination

Map of environmental monitoring



重要环境信息参考

第8卷 第01期 (总第114期)

中国环境规划院

2012年1月16日

我院与耶鲁大学合作研究项目“**结而无果**”
建立与国际接轨的省级环境绩效评估体系还有较大差距

王金南 曹颖 曹东 曹国志

结而无果,
“bears no fruit”

环境绩效指数。目前，项目已经完成，主要结论如下：

1、本项目是中国第一次在国家层面上开展省级环境绩效指数研究的项目，但项目终而无果。此项目定位于研究层面。目前，项目完成了《中国环境绩效指数 (CEPI)》报告 (中英文版)，深入分析了中
国30个省、自治区、直辖市¹2006年在环境健康、生态系统活力、经济可持续性3个政策目标12个环境政策类别所面临的主要问题以及所采取的主要政策措施。但是，这项研究并没有给出30省市区一个综合的环境绩效指数及排名。从衡量研究项目成果的传统指标来看，本研究项目是一个“**结而无果**”或“**失败**”的项目。

2、本项目主要探讨了构建中国省级环境绩效指数的思路与方法。
在项目研究中，首先对中国构建省级环境绩效指数

失败,
“failure”