

A large satellite image of the Earth, showing the Western Pacific and parts of Asia and Australia. The image is the background for the right half of the slide.

# China Ecological Footprint Report 2010

James P. Leape  
Director General,  
WWF International

**Joint Policy Research**  
Beijing, 11 November 2010

Technical Partners:





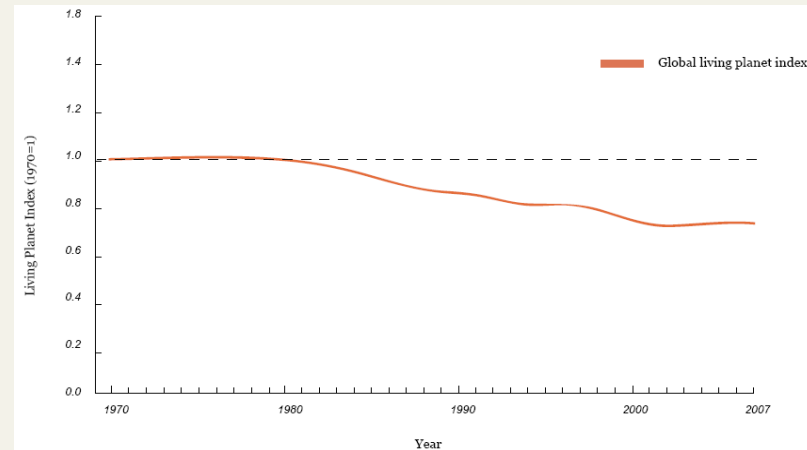
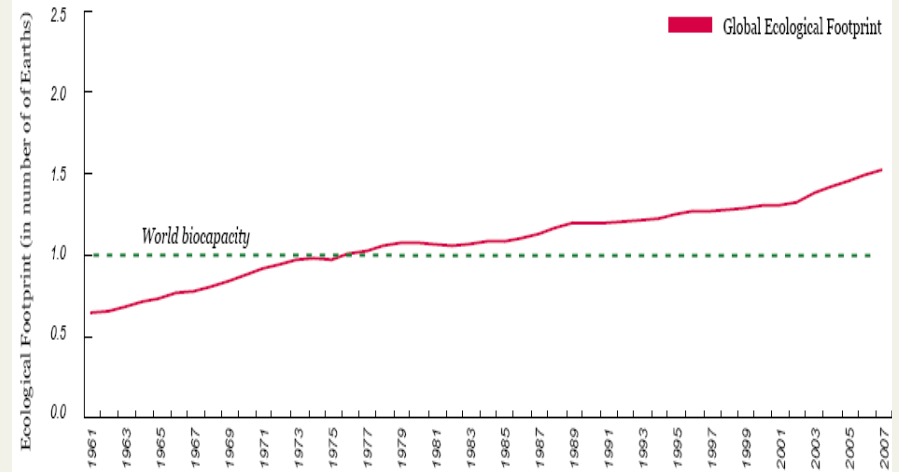
# Content

---

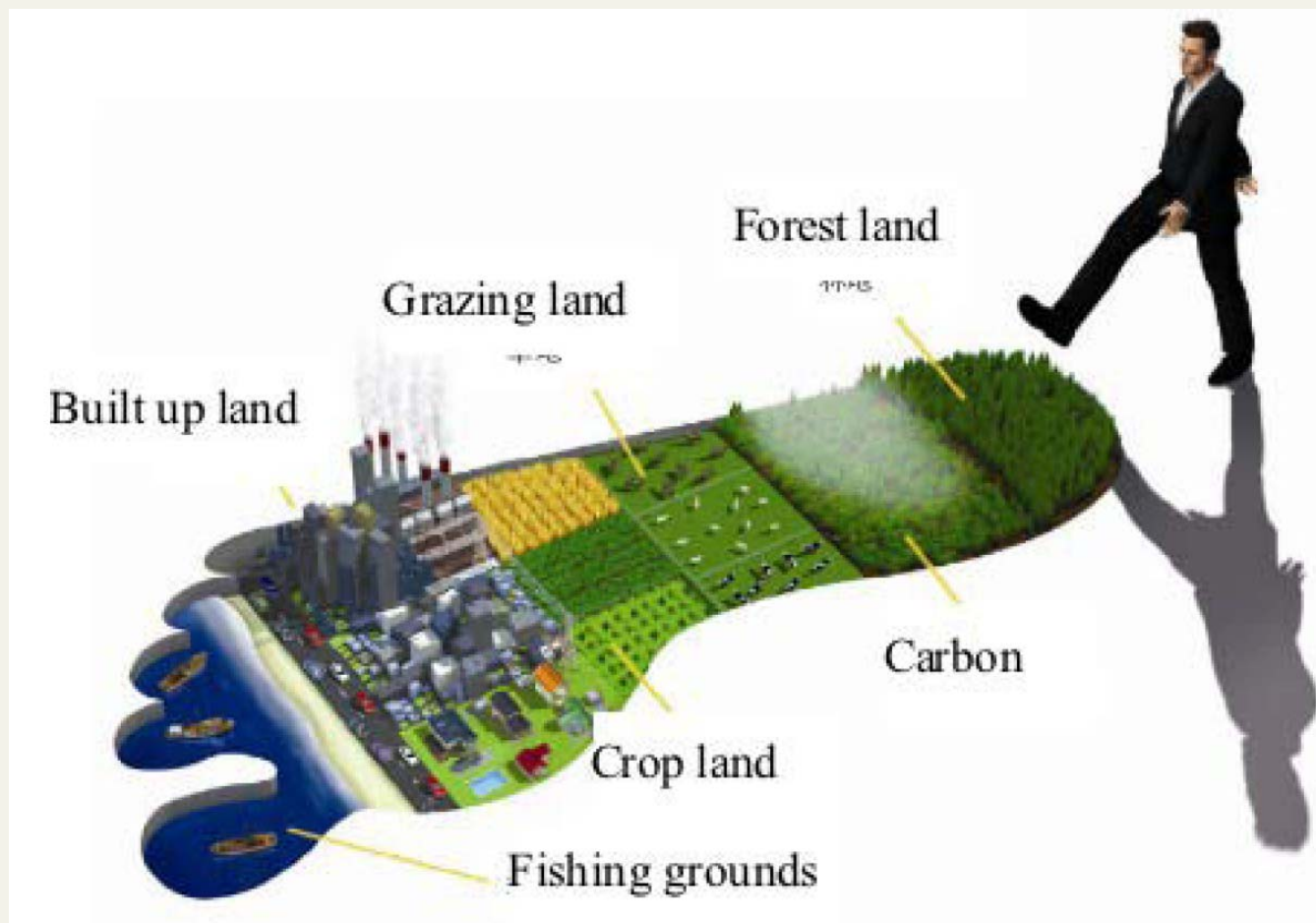
- Global Context
- Report Findings
- Policy Recommendations

# State of the planet

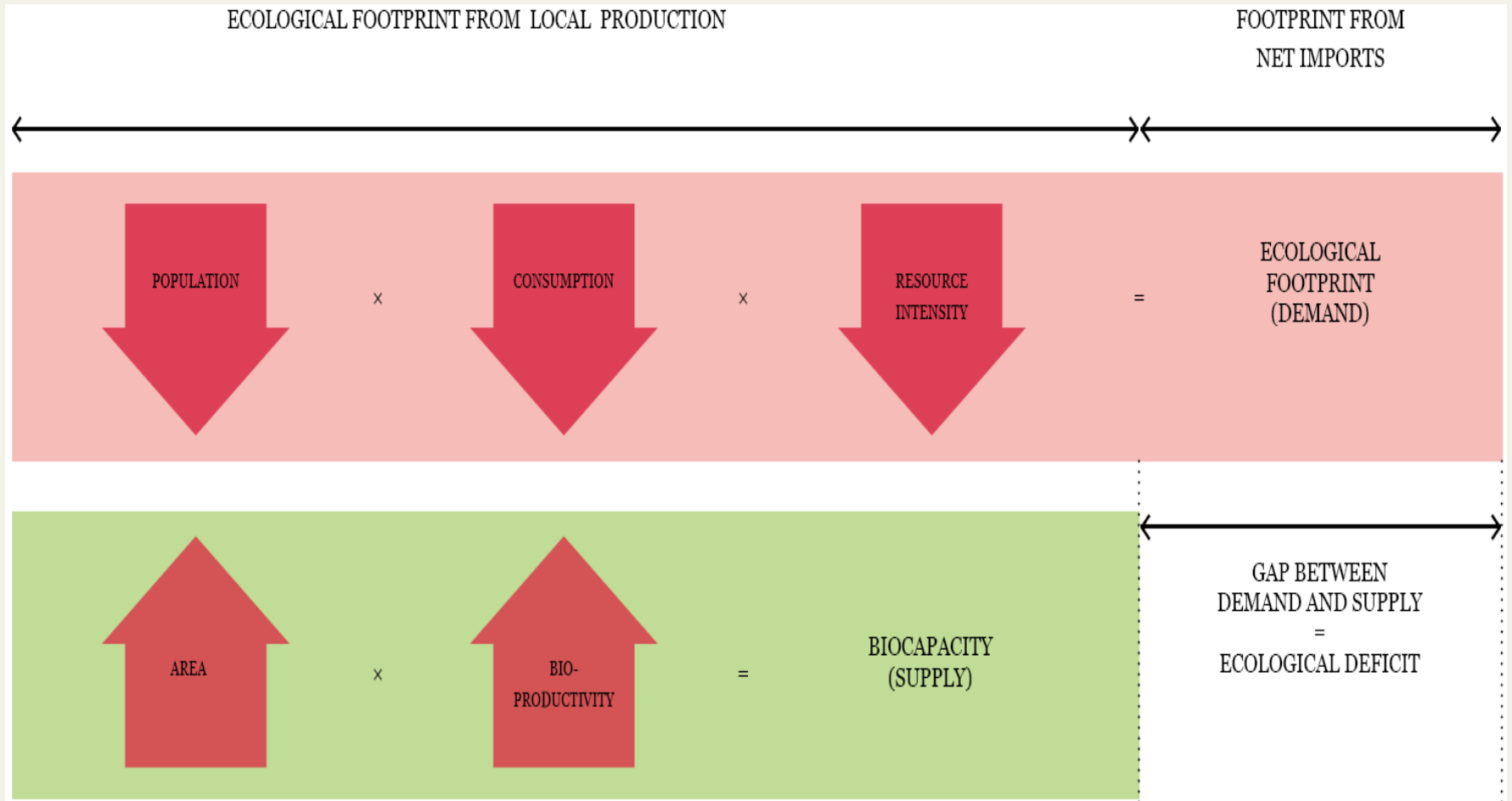
- Living Planet Index: 30% decline since 1970
- Global Ecological Footprint: +100% increase since 1966
- Humanity needs 1.5 Earths
  - global Ecological Footprint = 2.7 global hectares (gha) per capita
  - biocapacity = 1.8 gha per capita



# Ecological Footprint

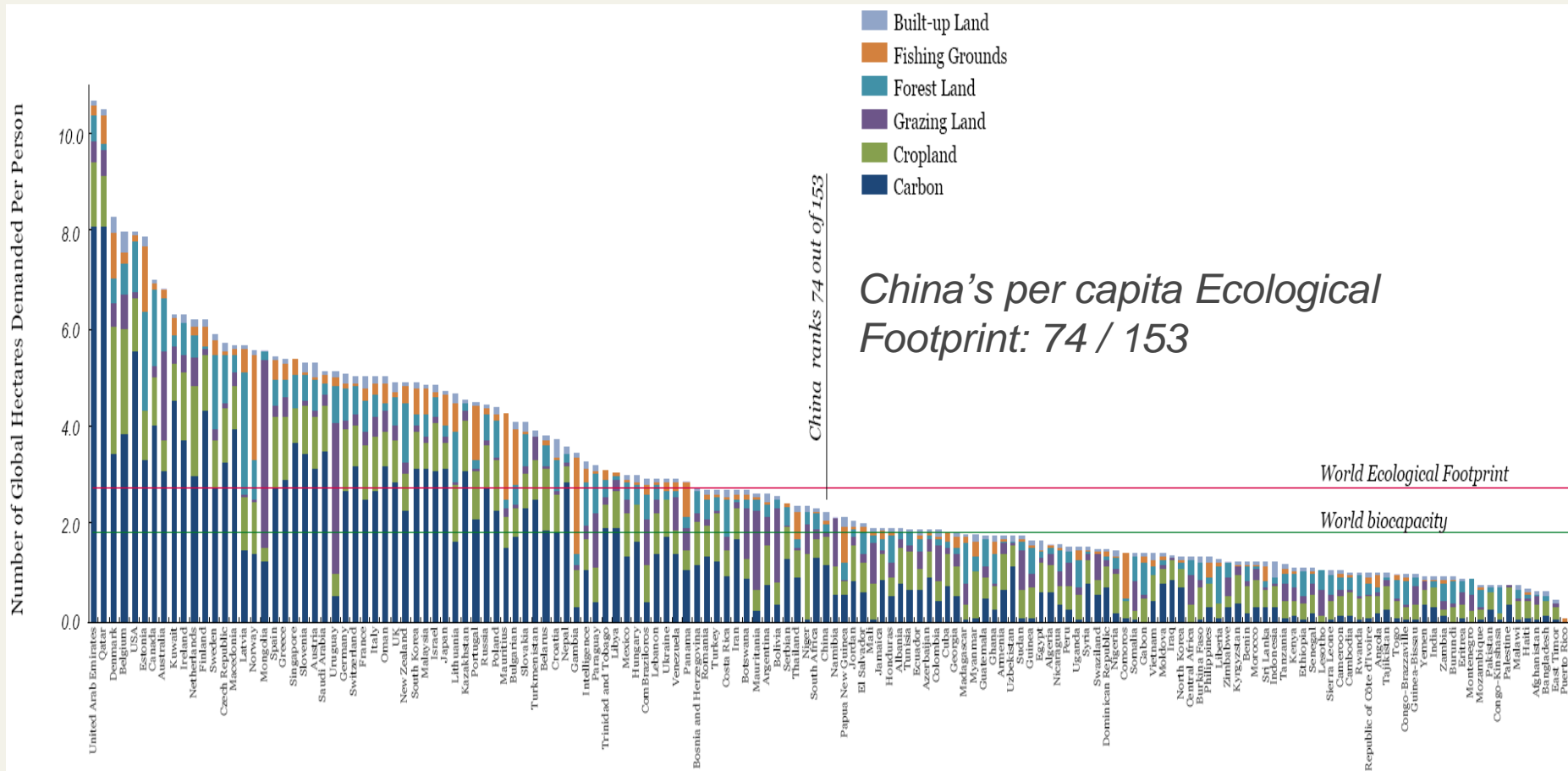


# Demand vs. Supply





# China in the World





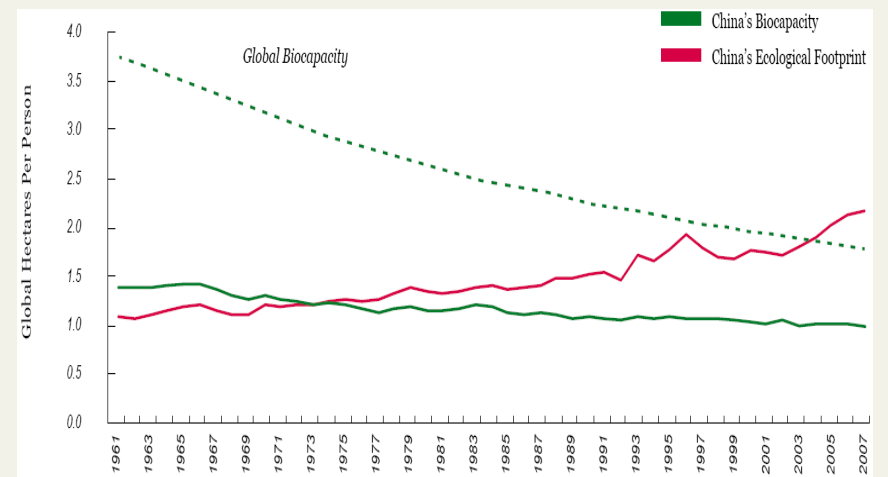
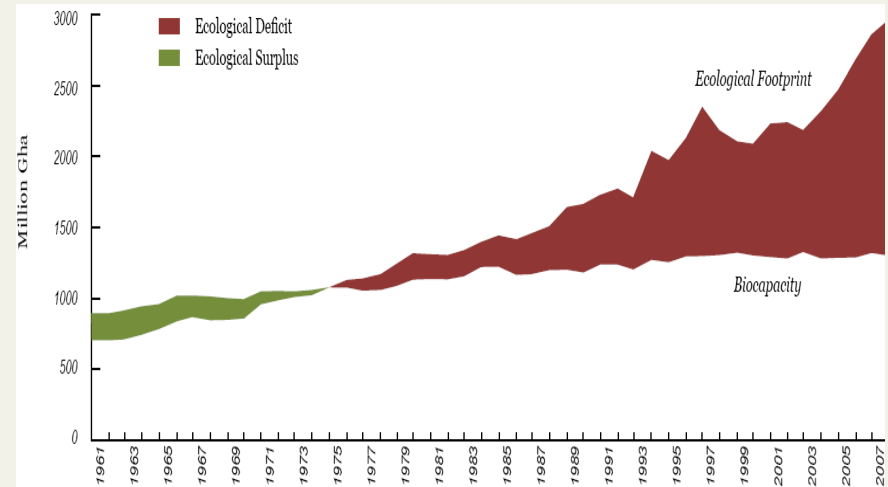


# Key findings

China Ecological Footprint  
Report 2010

# China vs. World

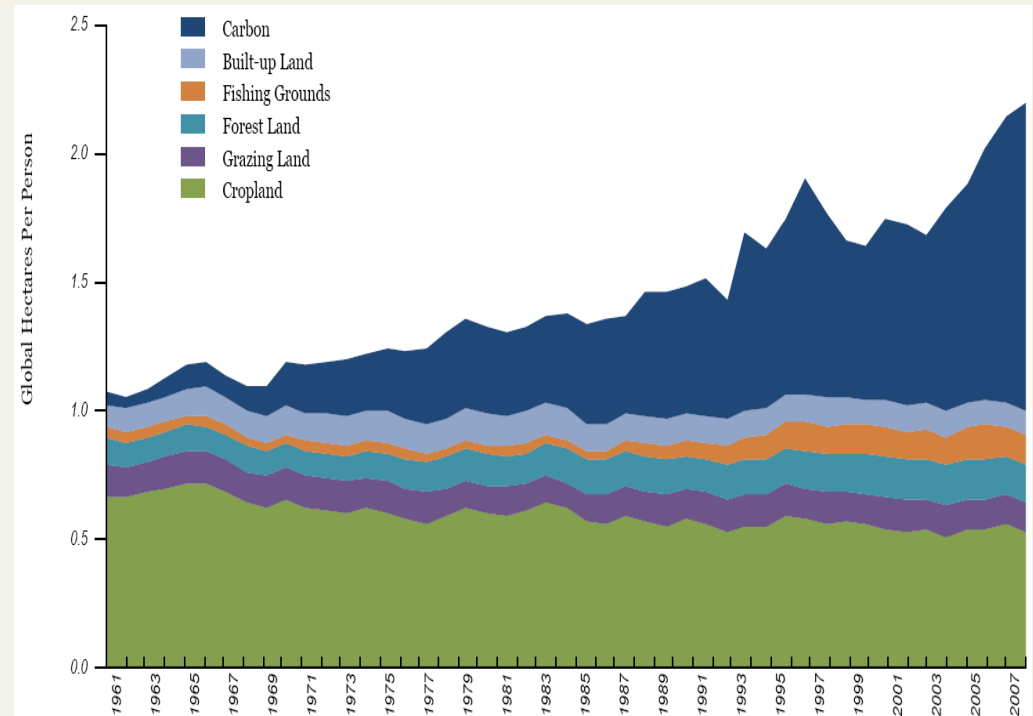
- In 2007 Ecological Footprint per capita in China = 2.2 gha < 2.7 gha global average, but 2.2 times of its biocapacity
- If everyone lived like a Chinese, humanity would need 1.2 Earths, while humanity as a whole is using 1.5 Earths
- In 2004 China exceeded sustainable level of biocapacity on a global scale, some 30 years after the global sustainability threshold was breached





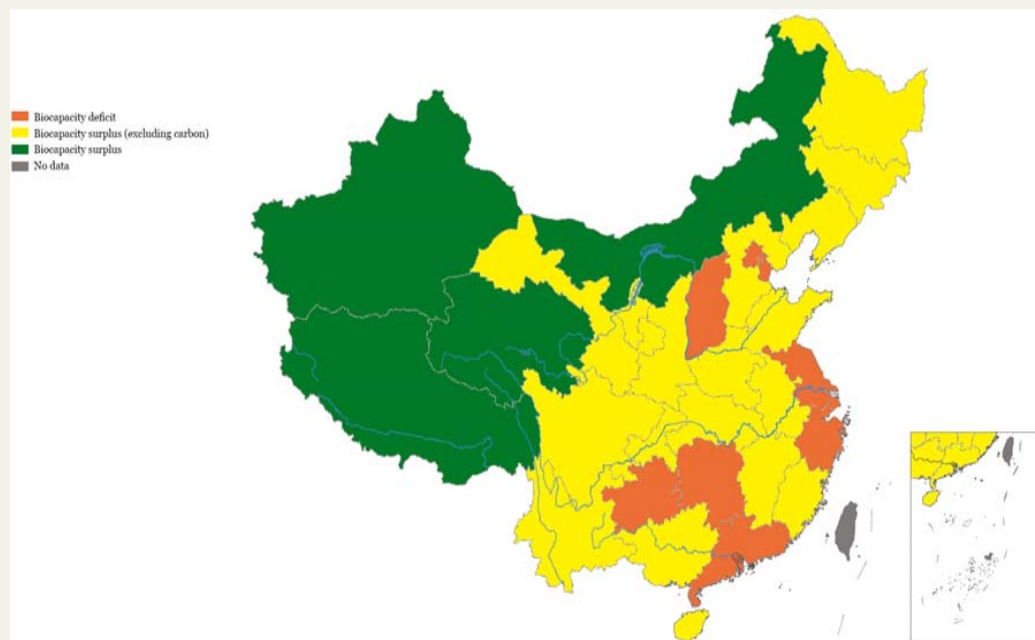
# Footprint composition

- Carbon footprint vs. Ecological Footprint on per capita basis
  - largest component (54% of Ecological Footprint in 2007)
  - fastest growing component (in 2007 it was 22.9 times of 1961's)

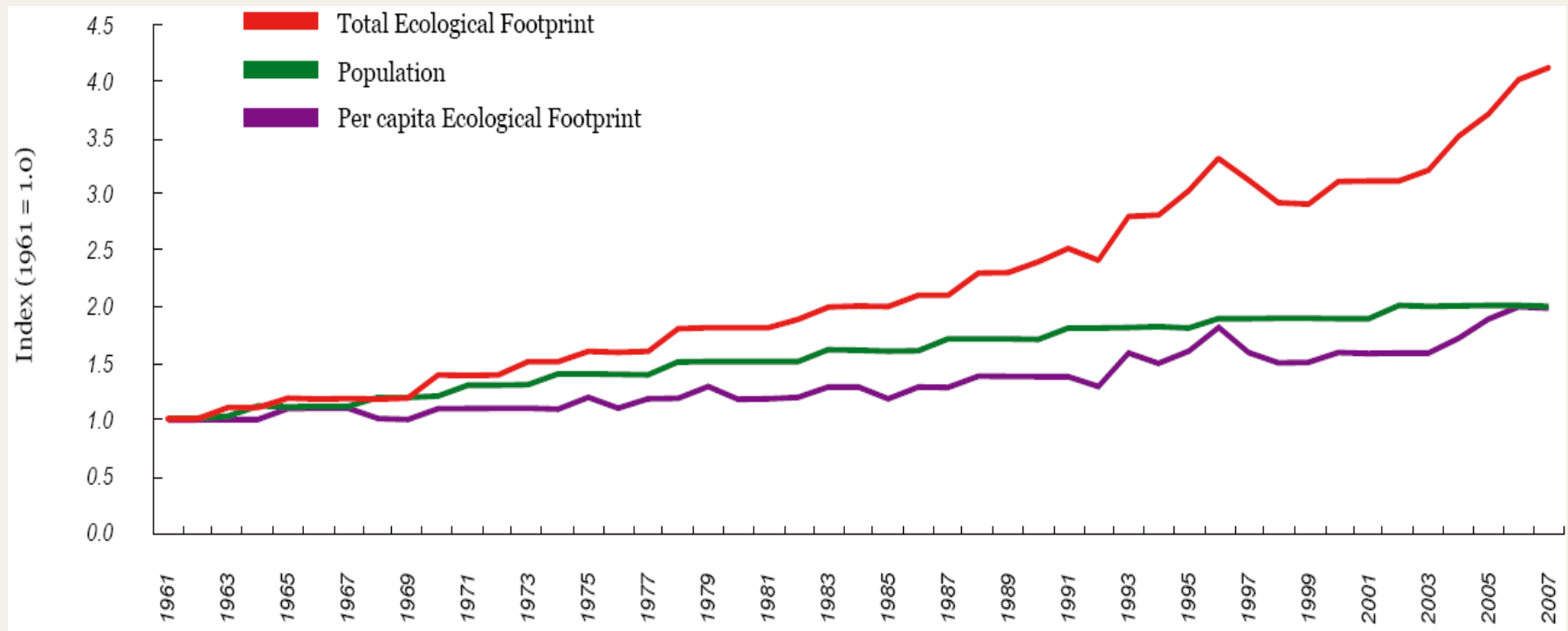


# Footprint distribution

- 4 provinces with ecological surplus
- 30% of provinces with ecological deficit have absolute deficit and 70% relative deficit (lack sufficient carbon absorption land area while no deficit on land use types)
- Ecological Footprint and biocapacity unevenly distributed



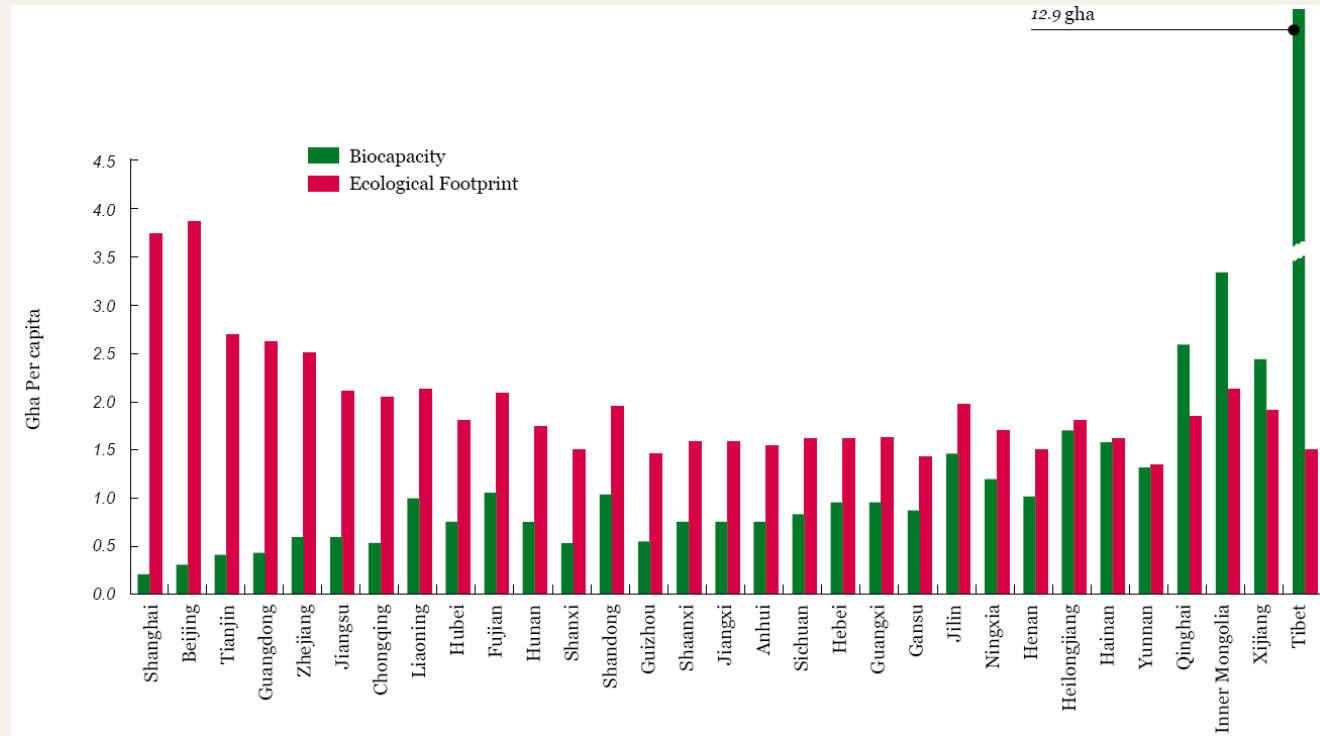
# Footprint vs. Population



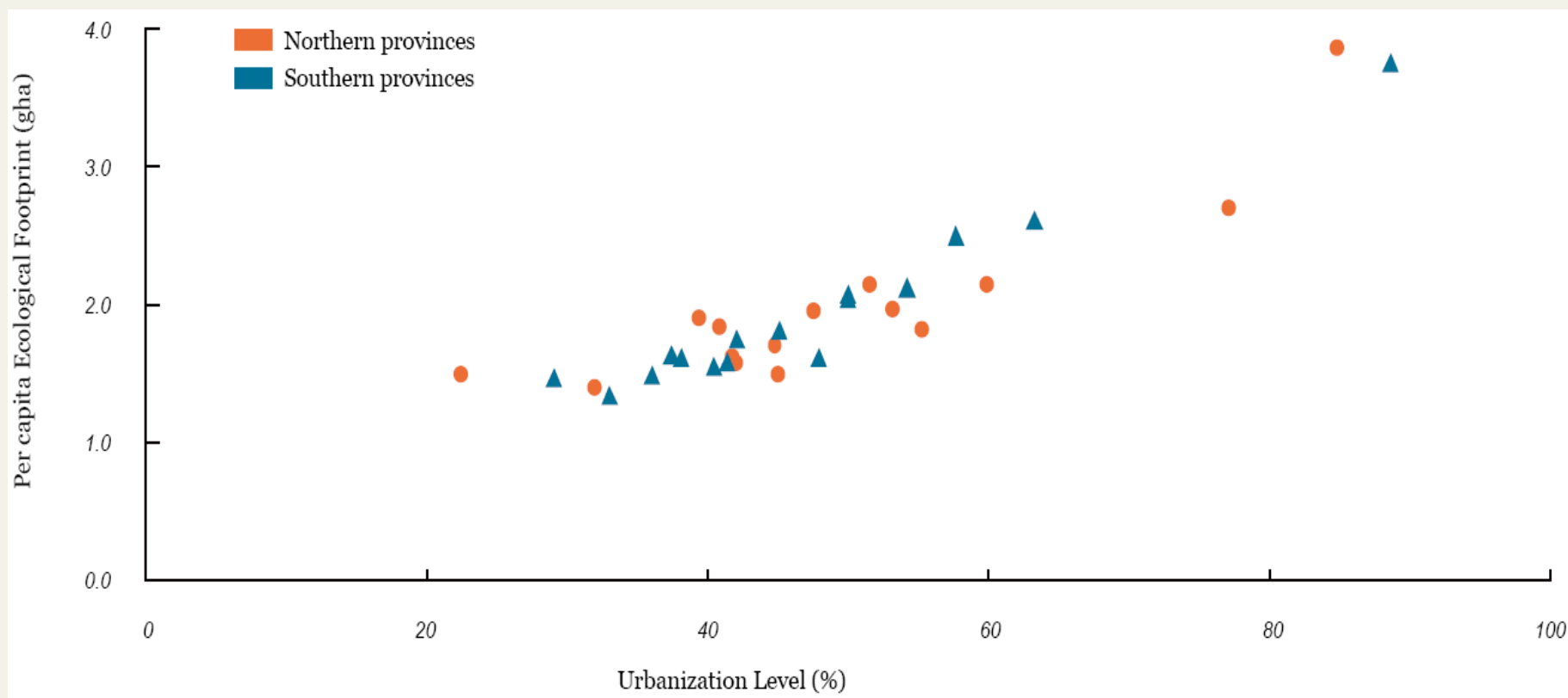
- Since 1961 both China's per person Ecological Footprint and population doubled = four-fold increase in total Ecological Footprint.

# Footprint & Biocapacity in provinces

Top 5 provinces in terms of per capita ecological deficit in 2008: Shanghai, Beijing, Tianjin, Guangdong and Zhejiang.

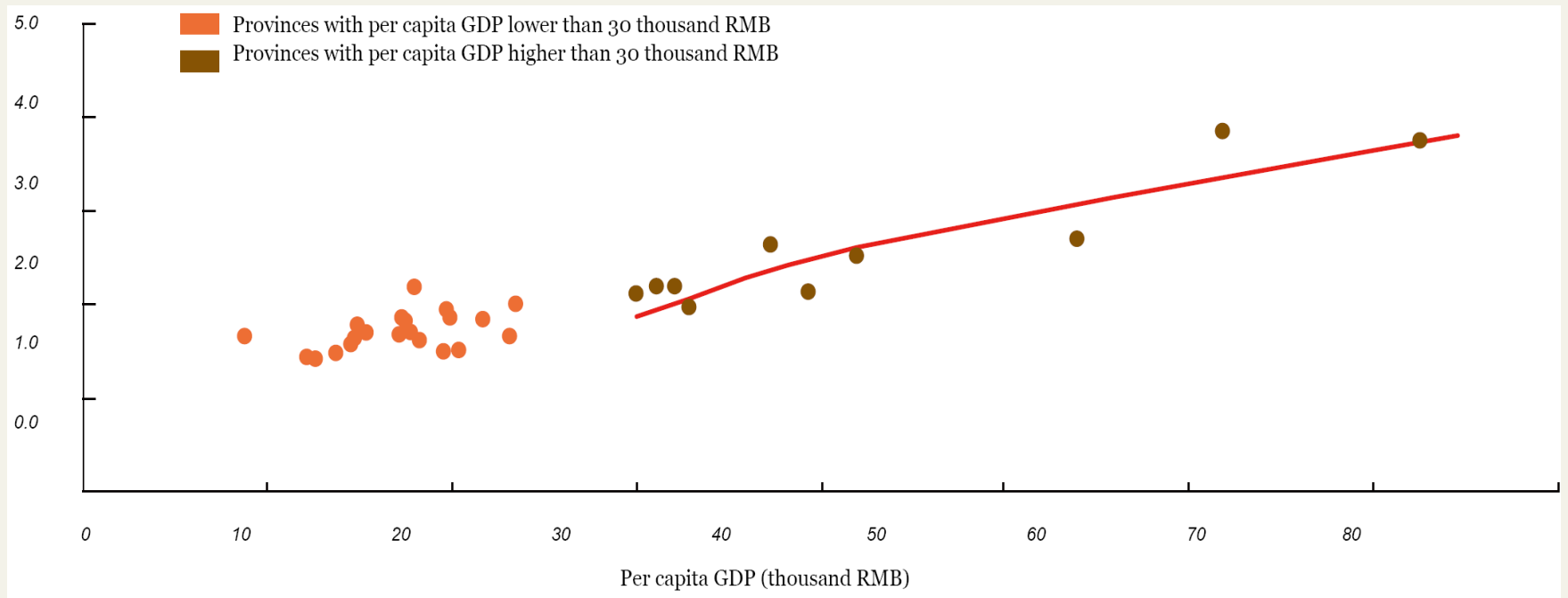


# Footprint vs. Urbanization



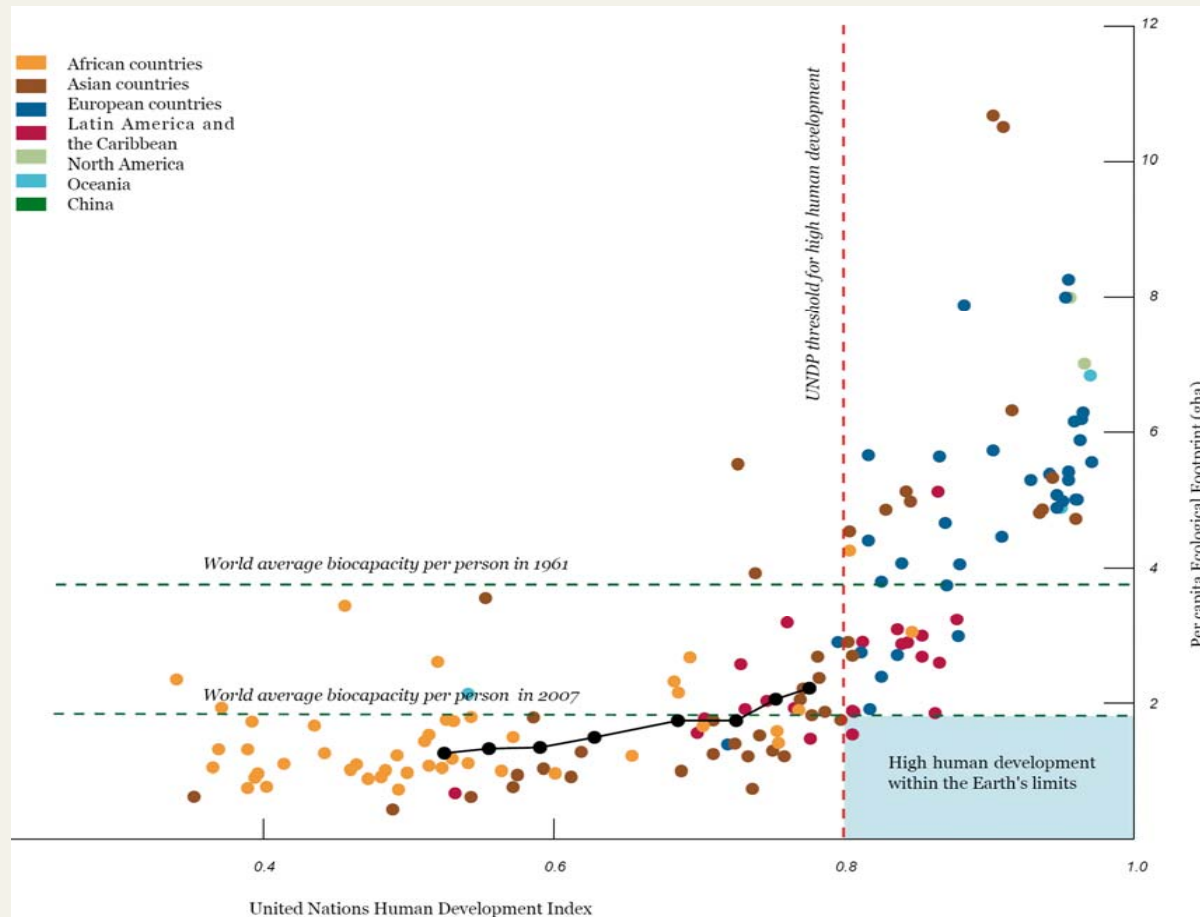


# Footprint vs. GDP



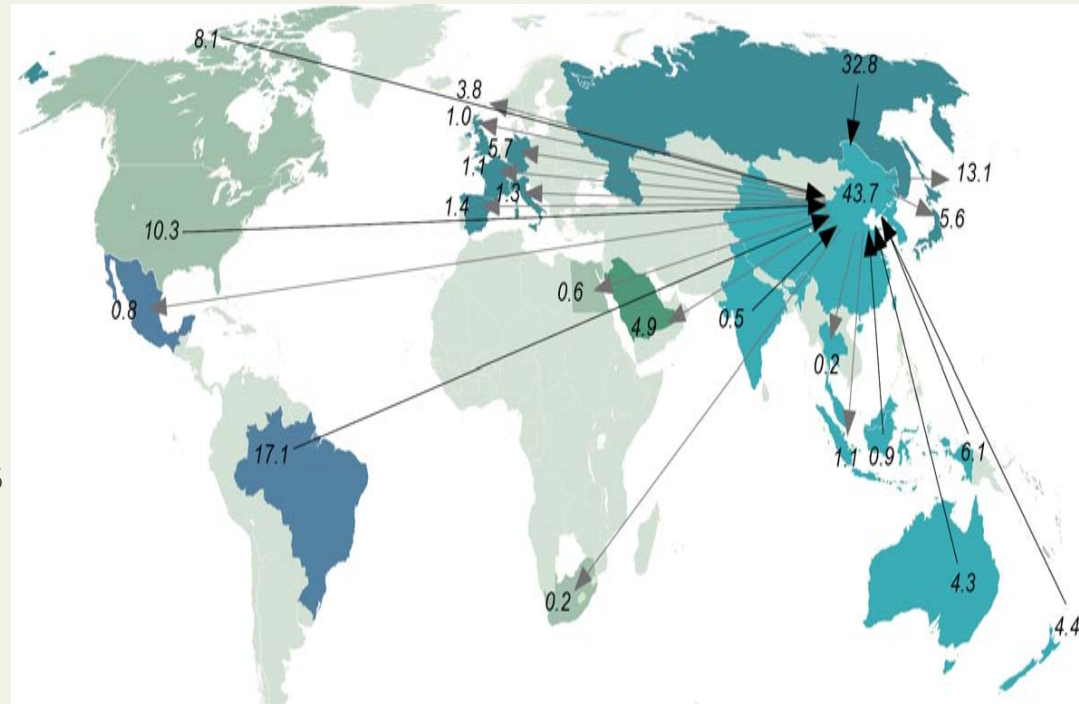


# Footprint vs. Biocapacity and Human Development



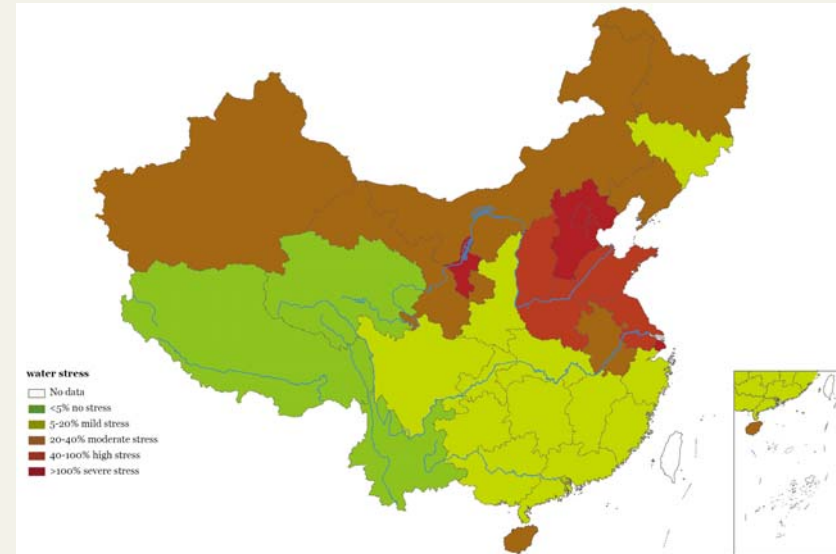
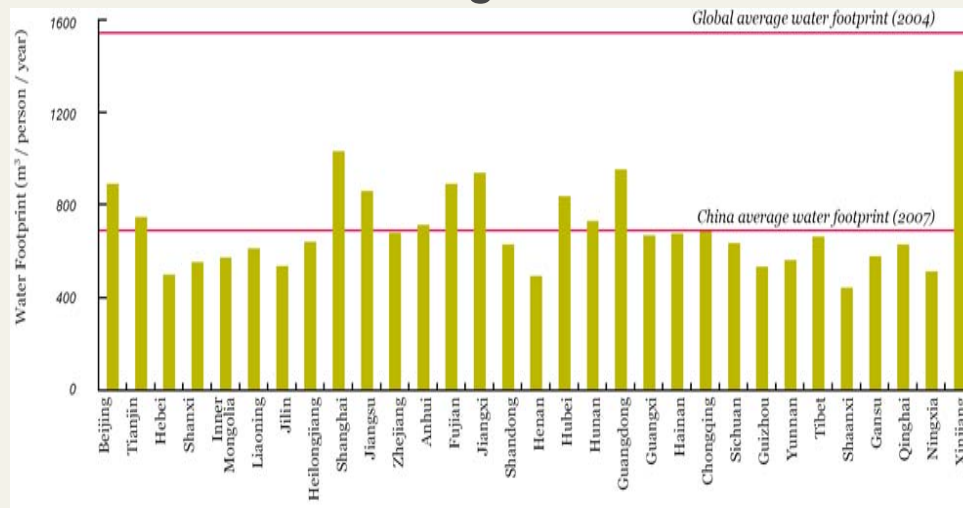
# Biocapacity Flows

- Net importer of resource-use biocapacity
- Carbon embedded in export products
- Part of China's carbon emissions are due to products consumed in other countries



# Water Footprint

- Water Footprint of Consumption per capita: 679 m<sup>3</sup>/y (2007) = 43% of global level (2004)
- Large variation across provinces
- Water stress mainly in northern and central China and downstream of Yellow and Yangtze rivers.





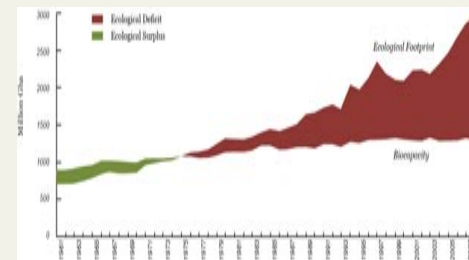


# Policy Recommendations

China Ecological Footprint  
Report 2010

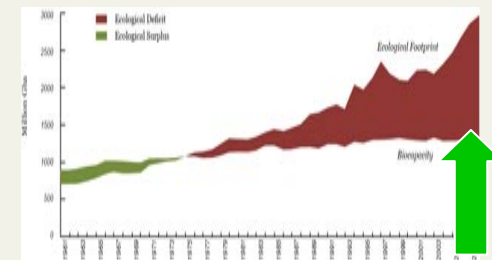


# 1. Measure 'Ecological Civilization'



Use the relationship between Ecological Footprint and biocapacity as one of the key indicators of progress towards an 'ecological civilization'

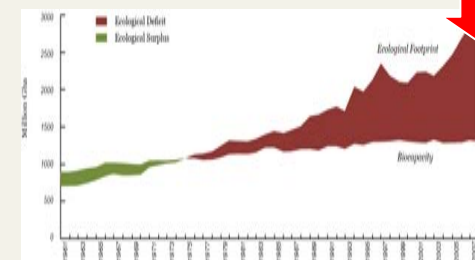
## 2. Increase Biocapacity



Strengthen ecosystem management and increase biocapacity

- Maintain healthy natural ecosystems for both human and other species, and preserve biologically productive lands
- Increase land productivity while leaving space for nature

### 3. Tackle carbon footprint



Reduce carbon footprint as a primary focus for decreasing ecological deficits

- Establish and promote a low carbon economy
- Focus on building low carbon cities/eco-cities in China's urbanization
- Promote sustainable consumption



## 4. Sustainable Trade for Footprint reduction

---

### Reduce ecological deficits through resource allocation

- Formulate a domestic trade policy to encourage appropriate biocapacity flows.
  - Eco-compensation schemes
  - Energy/resource tax
  - ...
- Encourage international cooperation to promote sustainable trade flows & lessen ecological impacts on China and other countries



# Thank you

---

James P. Leape, Director General, WWF International  
11 November 2010

---

[www.wwfchina.org](http://www.wwfchina.org)

**Welcome to the Report launch event at  
Hotel Novotel, November 15<sup>th</sup> at 13:30**

Technical Partners:

