

# Examining China's "Growth"

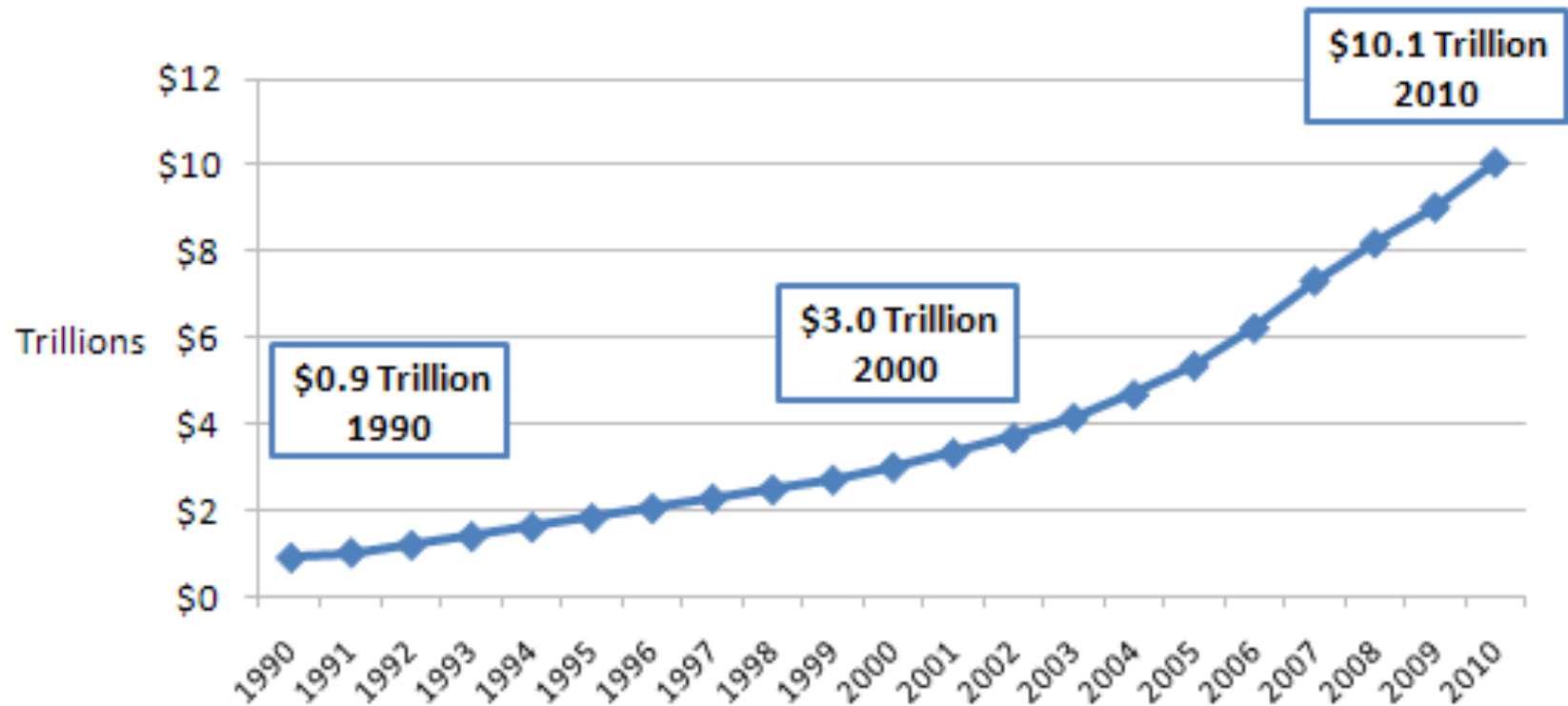
- Between 1990-2008, China's growth in terms of GDP is 422%, but in terms of Inclusive Wealth is 45% only

GDP per capita: 9.6%  
HDI: 1.7%  
IWI: 2.1%

- Source: *Inclusive Wealth Report 2012: Measuring Progress toward Sustainability*
- <http://www.ihdp.unu.edu/file/download/9927.pdf>

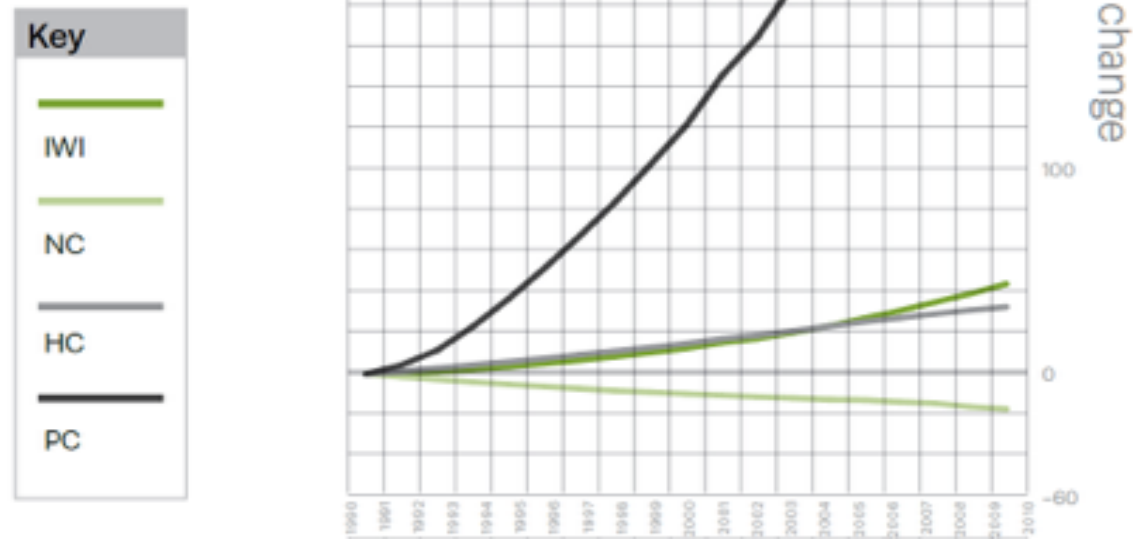
# Economic Growth in China

Gross Domestic Product (PPP) in Trillions of International Dollars

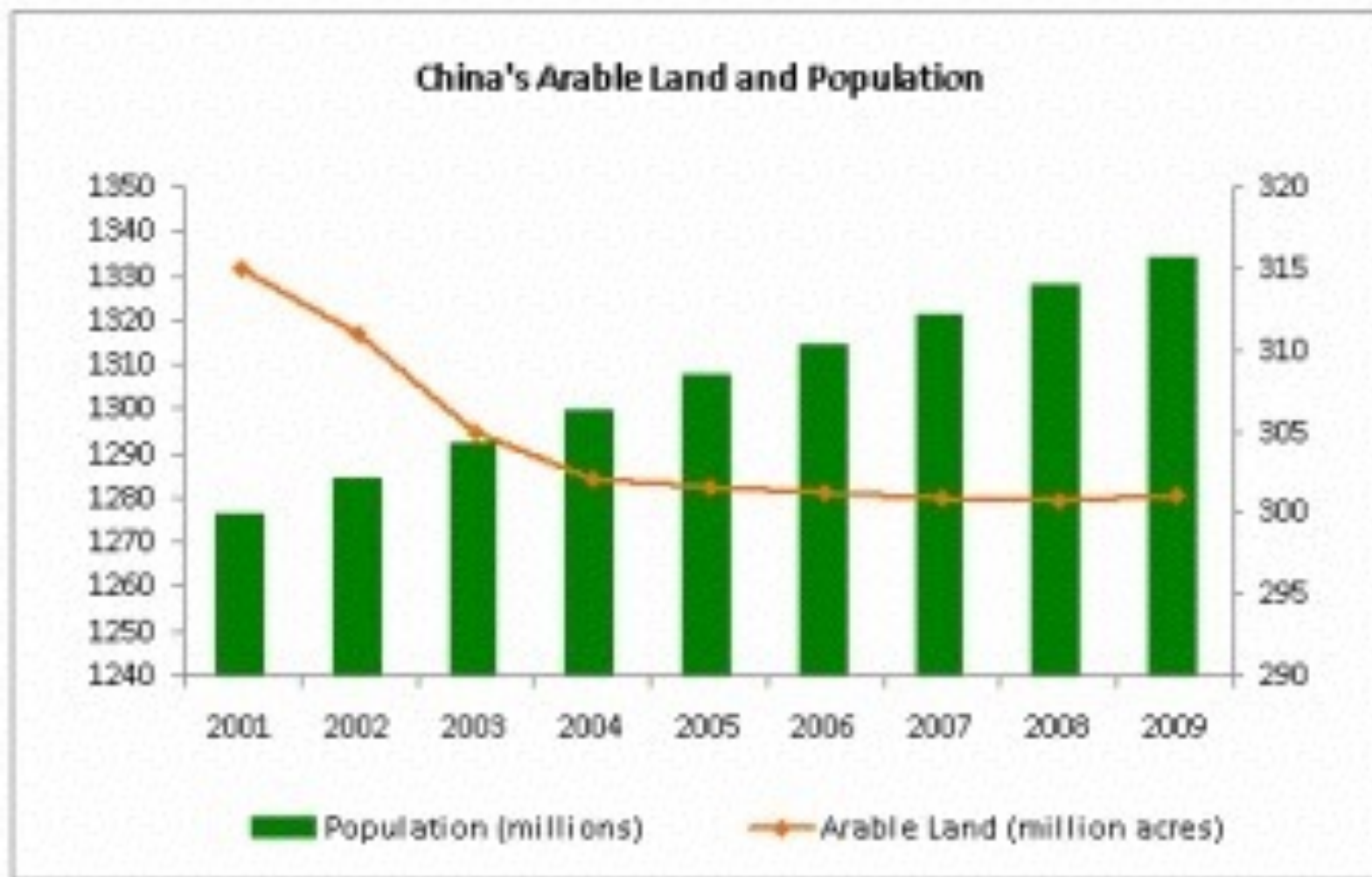


Source: IMF World Economic Outlook Database Oct 2010

Percentage change in IWI per capita and the three capital forms: human, manufactured, and natural capital, 1990–2008.

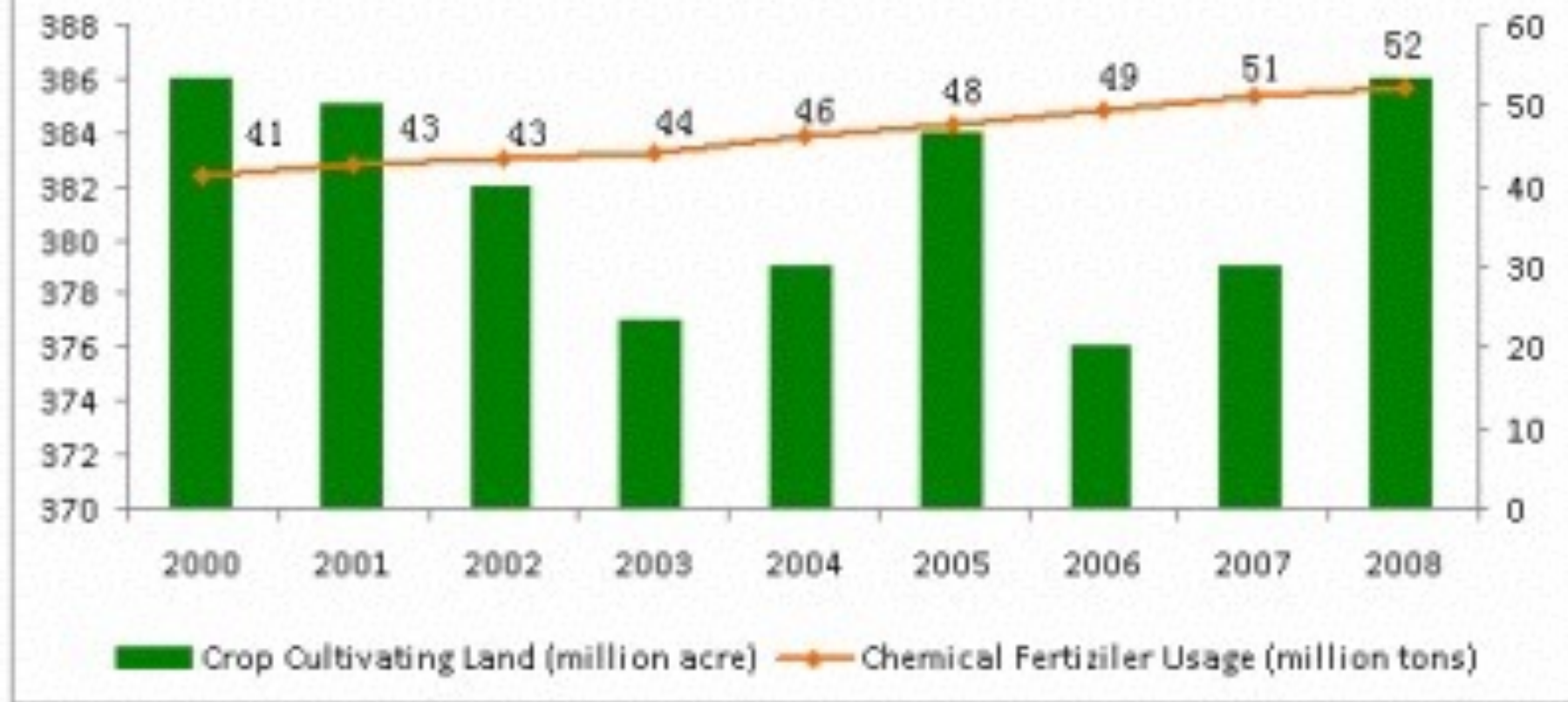


Source: *Inclusive Wealth Report 2012: Measuring Progress toward Sustainability*, p.46



*Source: National Bureau of Statistics of China; Ministry of Land and Resources; Reuters*

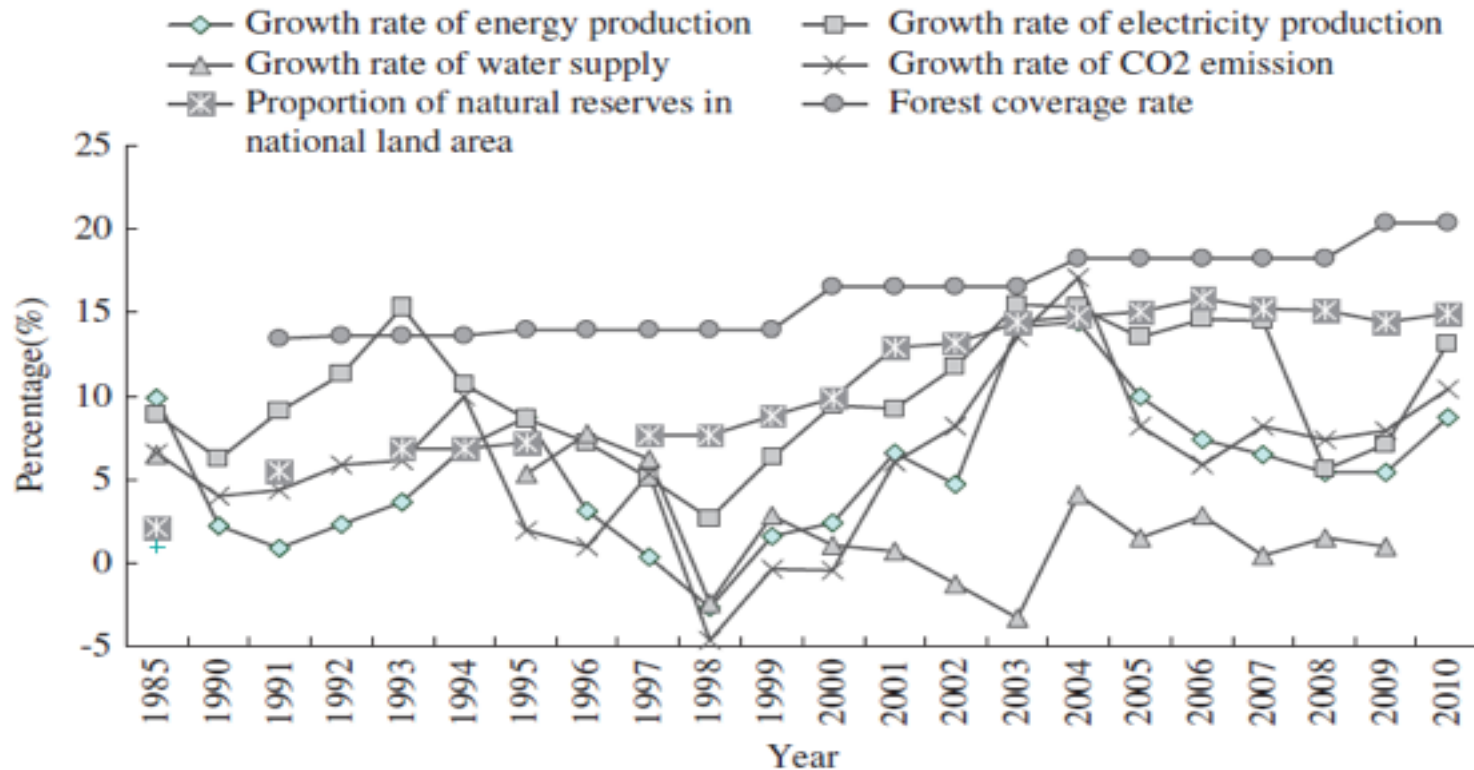
### Comparison Between Chemical Fertilizer Usage and Cultivating Land



Source: National Bureau of Statistics of China

[http://www.faqs.org/sec-filings/110314/Yongye-International-Inc\\_10-K/](http://www.faqs.org/sec-filings/110314/Yongye-International-Inc_10-K/)

# Natural resources use and ecological protection in China 1985–2010

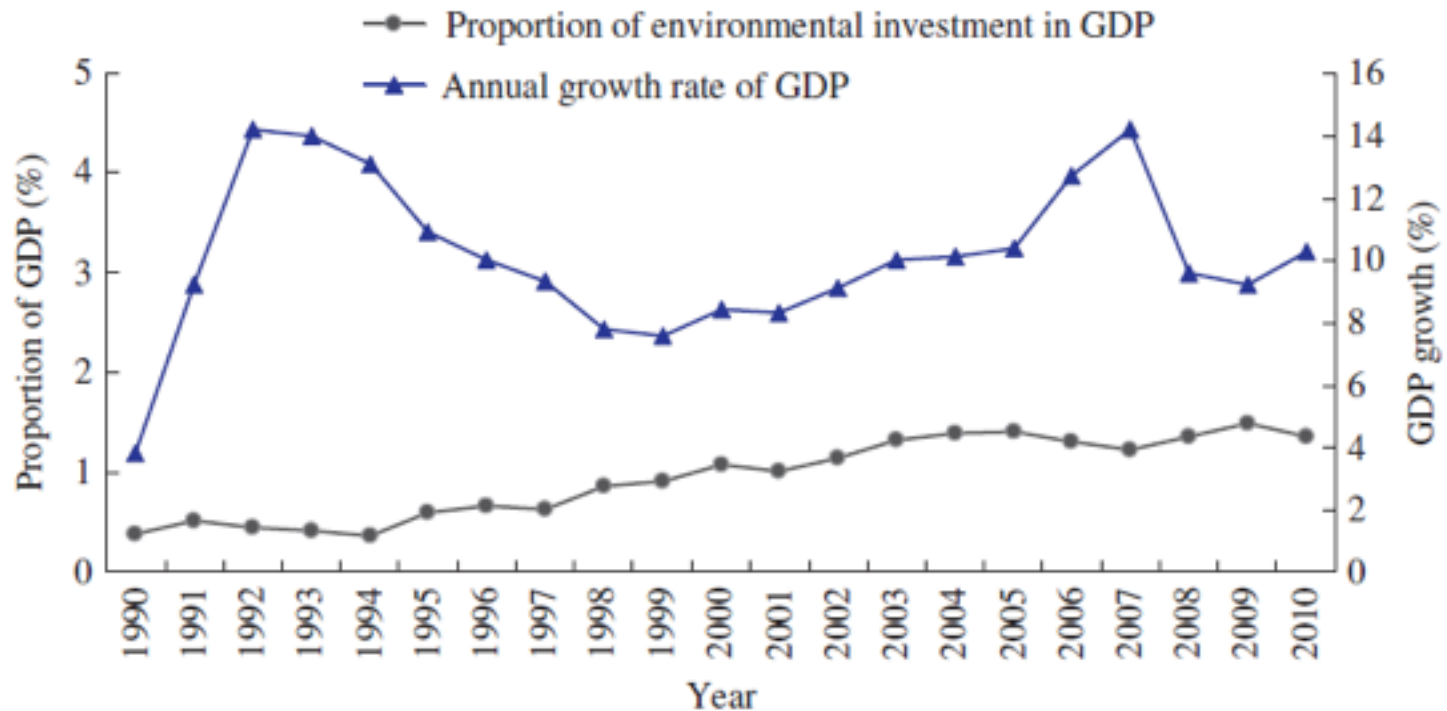


Sources:

China Environmental Yearbook Committee, 1992–2011; National Bureau of Statistics, 1986–2011.

Guizhen He, Yonglong Lu, Arthur P.J.Mol, Theo Beckers. 2012. 'Changes and challenges: China's environmental management in transition', *Environmental Development* 3, pp25–38.

## China's GDP growth rate and proportion of pollution control investment in GDP 1990–2010



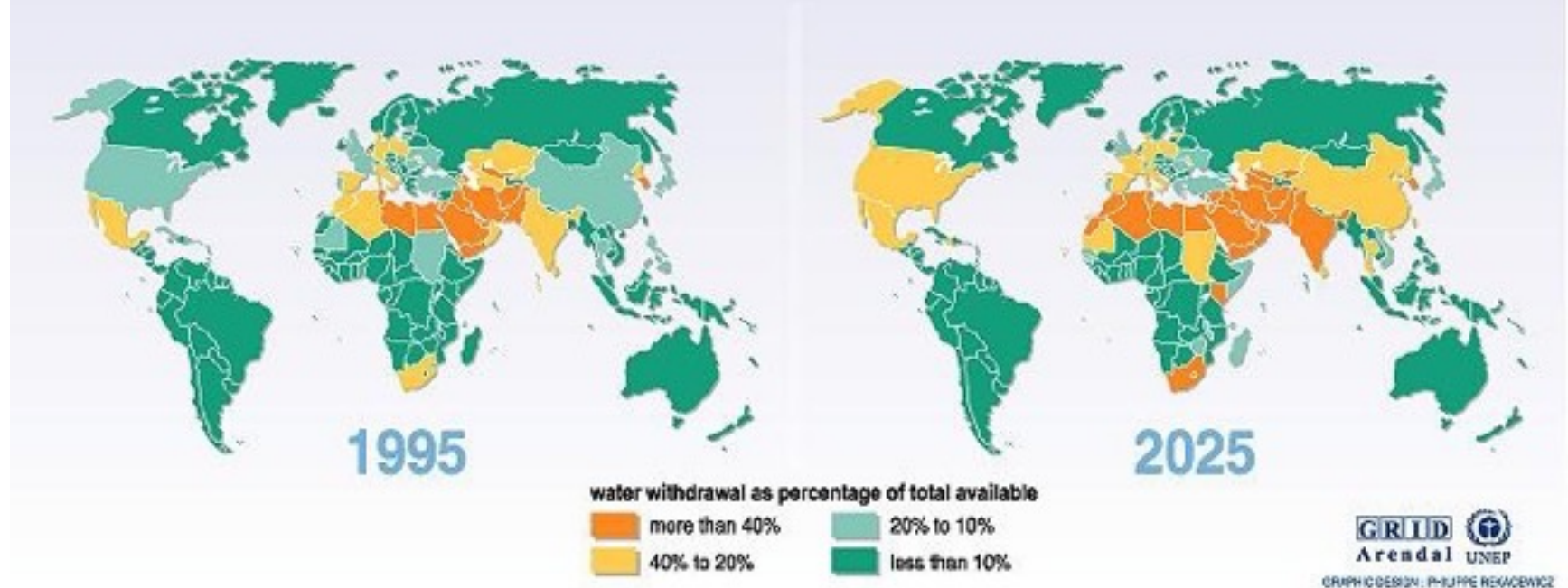
Sources:

China Environmental Yearbook Committee (1991–2011).

Guizhen He, Yonglong Lu, Arthur P.J. Mol, Theo Beckers. 2012. 'Changes and challenges: China's environmental management in transition', *Environmental Development* 3, pp25–38.



## Freshwater stress

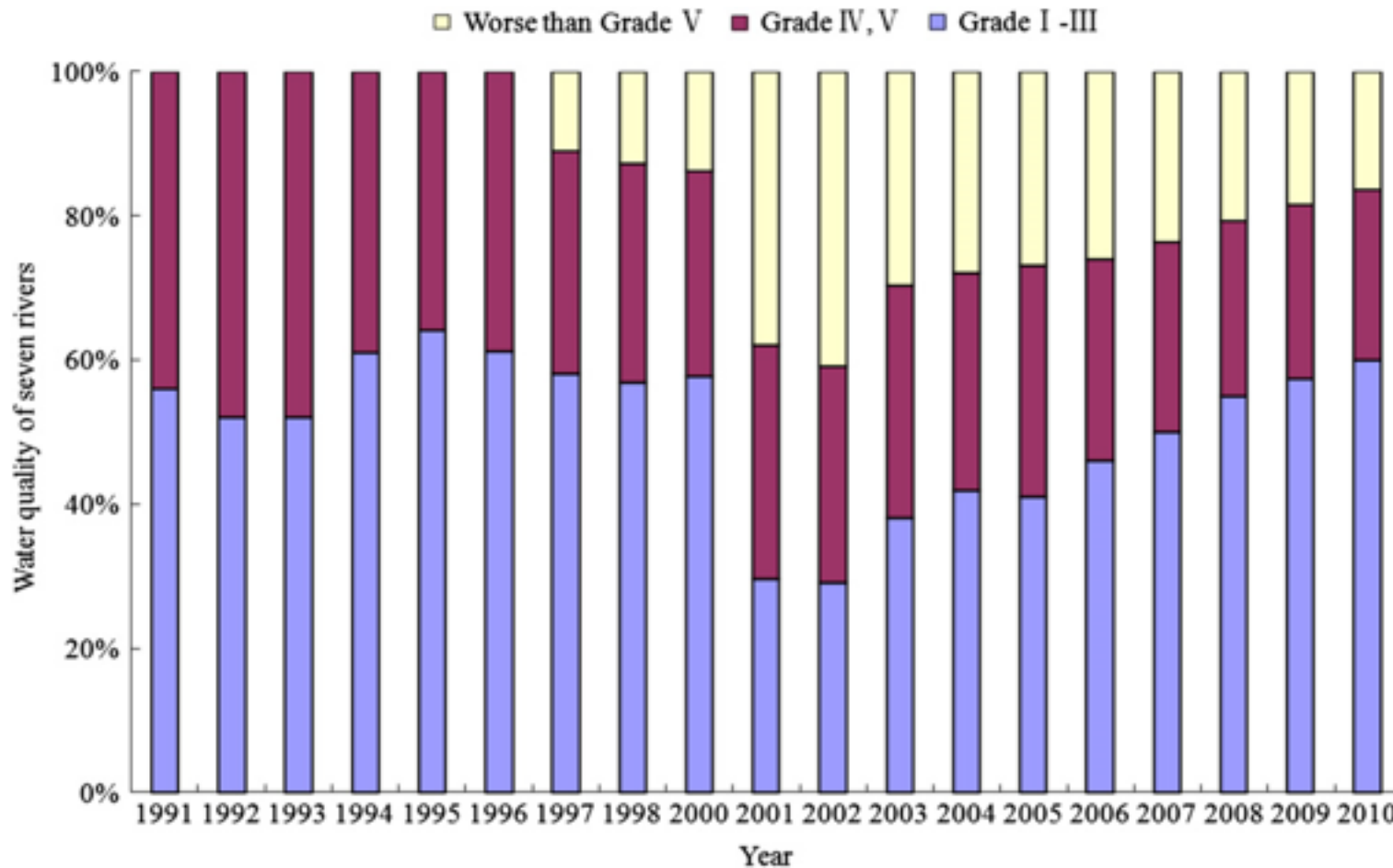


Source: Global environment outlook 2000 (GEO), UNEP, Earthscan, London, 1999.





## Water quality of seven rivers (Yangtze River, Yellow River, Pearl River, Songhua River, Huaihe River, Haihe River and Liaohe River) in China, 1991–2010.

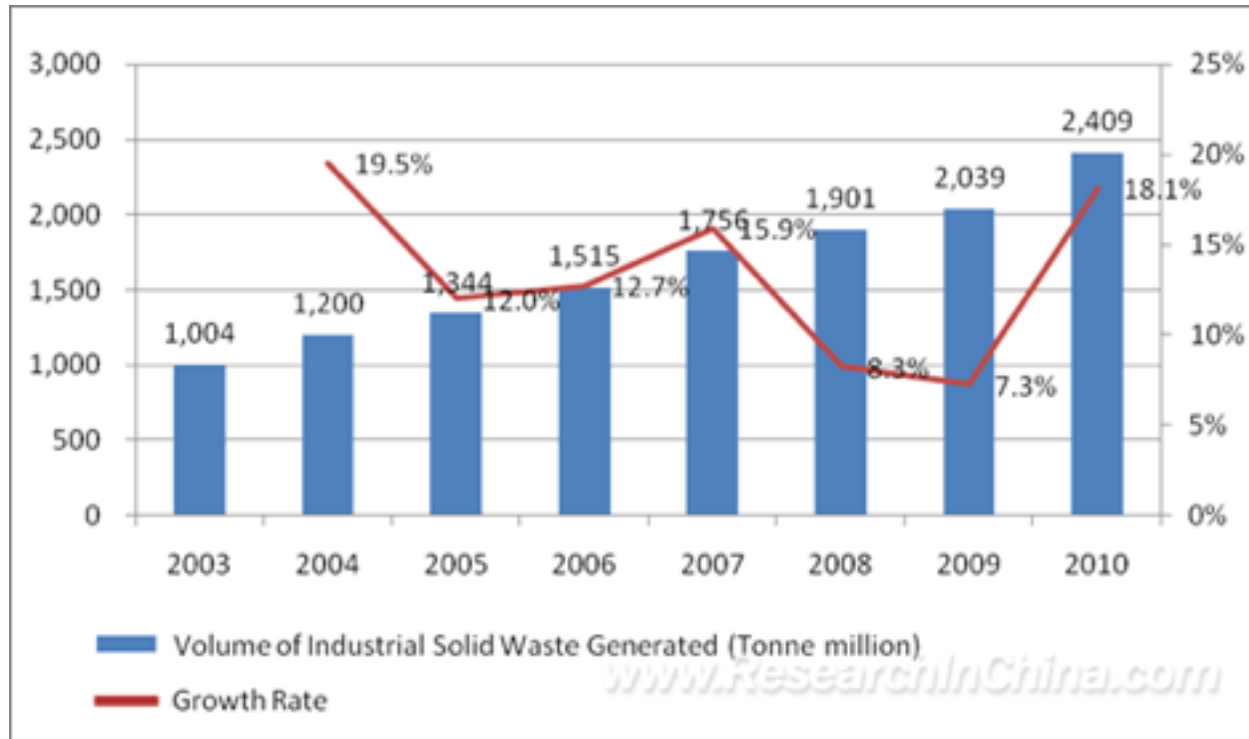


Note: According to Environmental Quality Standards for Surface Water (GB3838-2002) in China, the function of surface water is classified into five categories. The five grades of standard value match the surface water functional area. Grade I stands for the best quality, while Grade V represents the worst.

Sources: MEP Report on the State of the Environment in China, 1991–2010.

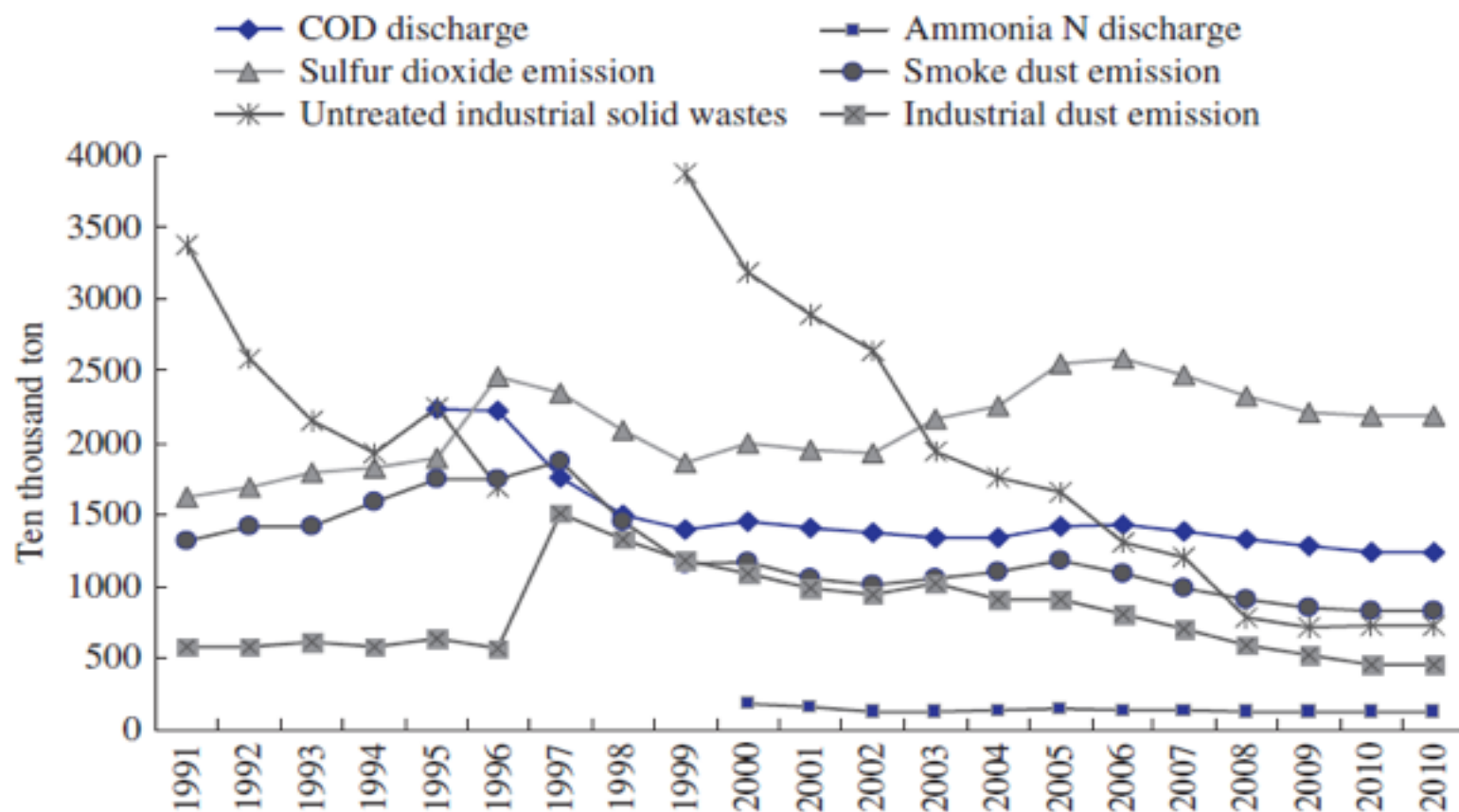
Guizhen He, Yonglong Lu, Arthur P.J. Mol, Theo Beckers. 2012. 'Changes and challenges: China's environmental management in transition', *Environmental Development* 3, pp25–38.

# Growth Rate and Volume of Industrial Solid Waste



Source: National Bureau of Statistics of China; Research In China

# Annual discharge of main pollutants in China, 1991–2010



Sources:

China Environmental Yearbook Committee, 1992–2011.

Guizhen He, Yonglong Lu, Arthur P.J.Mol, Theo Beckers. 2012. 'Changes and challenges: China's environmental management in transition', *Environmental Development* 3, pp25–38.

# The Downside of the Boom

China's environmental problems



500 km

# Interrogating “wealth” and “poverty”

- China’s development paradigm is for growth and marketization.
- “Wealth” is increasingly a monetary term, and the determining factor of poverty is “money”.
- Marketization which puts at its centre the measurement of relations in terms of money is the “god” that produces poverty.
- Markets determined by capitalistic relations can only thrive on the basis of polarization by various means of deprivations and marginalizations.

- Social polarizations and inequalities in China have been increasing, concurrent with the “growth” and “poverty reduction”.
- Marketization destroys the basis of community life, and the basis of people’s livelihood.
- As long as marketization constitutes the driving force of China’s modernization and developmentalism, any government actions to deal with “poverty” can only bring about temporary relief.



# A Sustainable Paradigm is the only way for humanity and nature

- social justice and equality
- ecology and environment
- Relations between humans and relations with nature must be de-monetized
- This requires active participation of the people and the communities

# Visit to Fukushima 12 Oct 2012



# Mr Hasagawa, a dairy farmer's life wrecked by the Nuclear Plant disaster







His residence in Iitate Village can no longer be inhabited. Our detector indicated  $3.35\mu\text{sv/h}$





Government-set safety standard is  $0.23 \mu\text{sv/h}$



Iitate Village is still banned from overnight stay by the government.



His family now stays in temporary housing, his community members scattered in different places



# Sending the cows to the slaughter house after the radiation contamination



His dairy enterprise has ended





Fukushima Daily, 12 Oct 2012

Indicator list of vegetable and fruit contamination

予定していないという。  
県内市町村では、17自治  
体で自動起動機が設置され  
県内8自治体で設置され

9月に消防庁が行ったJ  
アラートの一斉訓練では、  
は1万3600

セシウム検査結果 (単位: ㍻/㍻)

■ 野菜・果実

市町村	種類	Cs134	Cs137
福島市	コマツナ	—(4.0)	—(3.1)
会津若松市	ナガイモ	—(3.3)	—(3.0)
"	ゴボウ	—(2.8)	—(2.6)
"	"	—(4.3)	—(3.3)
"	ニラ(施設)	—(4.3)	—(4.3)
"	ニラ	—(6.6)	—(6.0)
"	シュンギク	—(5.8)	—(4.4)
郡山市	ハクサイ	—(4.9)	—(4.5)
須賀川市	サツマイモ	—(4.5)	—(3.4)
喜多方市	カブ	—(4.2)	—(3.5)
"	キャベツ	—(5.3)	—(4.9)
"	茎アロココリー	—(4.9)	—(4.8)
"	コマツナ	—(7.2)	—(6.7)
"	サトイモ	—(3.4)	—(2.9)
"	シュンギク	—(5.4)	—(4.4)
"	"	—(3.5)	—(3.5)
"	食用キク	—(4.8)	—(3.5)
"	セルリー	—(5.1)	—(3.9)
"	チンゲンサイ	—(3.6)	—(3.2)
"	ナガイモ	—(4.4)	—(3.6)
"	"	—(4.6)	—(3.1)
"	ハウレンソウ	—(5.5)	—(4.5)
"	ミズナ	—(3.9)	—(3.5)
"	"	—(3.7)	—(3.7)
相馬市	ネギ	—(4.6)	—(2.7)
二本松市	サツマイモ	—(3.1)	—(2.3)
"	"	—(2.0)	—(2.2)
南相馬市	シュンギク	—(4.7)	8.03
"	ササゲマメ	—(4.1)	5.70
北塩原村	食用キク	—(4.9)	—(3.8)
西会津町	ショウガ	—(3.3)	—(2.6)
"	ハクサイ	—(5.2)	—(5.2)

ノコを出荷しないよう県で注意

福島市	イチジク	—(5.1)	—(4.5)
"	"	—(4.1)	—(4.1)
"	"	—(3.6)	—(2.8)
"	"	—(3.0)	—(3.0)
"	"	—(3.8)	4.52
"	リンゴ	—(6.5)	4.86
郡山市	カキ	—(4.3)	—(3.6)
いわき市	クリ	51.7	92.1
須賀川市	日本ナシ	—(3.7)	—(2.5)
"	西洋ナシ	—(3.8)	3.59
喜多方市	カキ	—(3.9)	—(2.9)
二本松市	リンゴ	—(6.8)	—(3.6)
本宮市	カキ	—(2.3)	5.31
鏡石町	日本ナシ	—(3.6)	—(3.1)
"	西洋ナシ	—(4.4)	—(4.9)
"	イチジク	—(4.0)	—(3.6)
西会津町	カキ	—(4.3)	—(3.7)
猪苗代町	ナツハゼ	—(8.3)	—(7.2)
会津坂下町	西洋ナシ	—(3.7)	—(3.8)
"	リンゴ	—(3.5)	—(1.9)
"	"	—(5.4)	—(3.7)
会津美里町	"	—(4.9)	—(3.7)
"	"	—(4.5)	—(5.1)
"	"	—(3.4)	—(3.5)
石川町	日本ナシ	—(3.2)	—(2.9)
"	イチジク	—(3.5)	—(3.5)
"	ナツハゼ	—(6.8)	—(8.2)
平田村	イチジク	—(3.5)	—(3.0)
古殿町	"	—(3.2)	—(2.5)
"	ボボ	—(7.4)	—(6.8)
三春町	ギンナン	—(7.7)	—(8.9)

◆事前確認