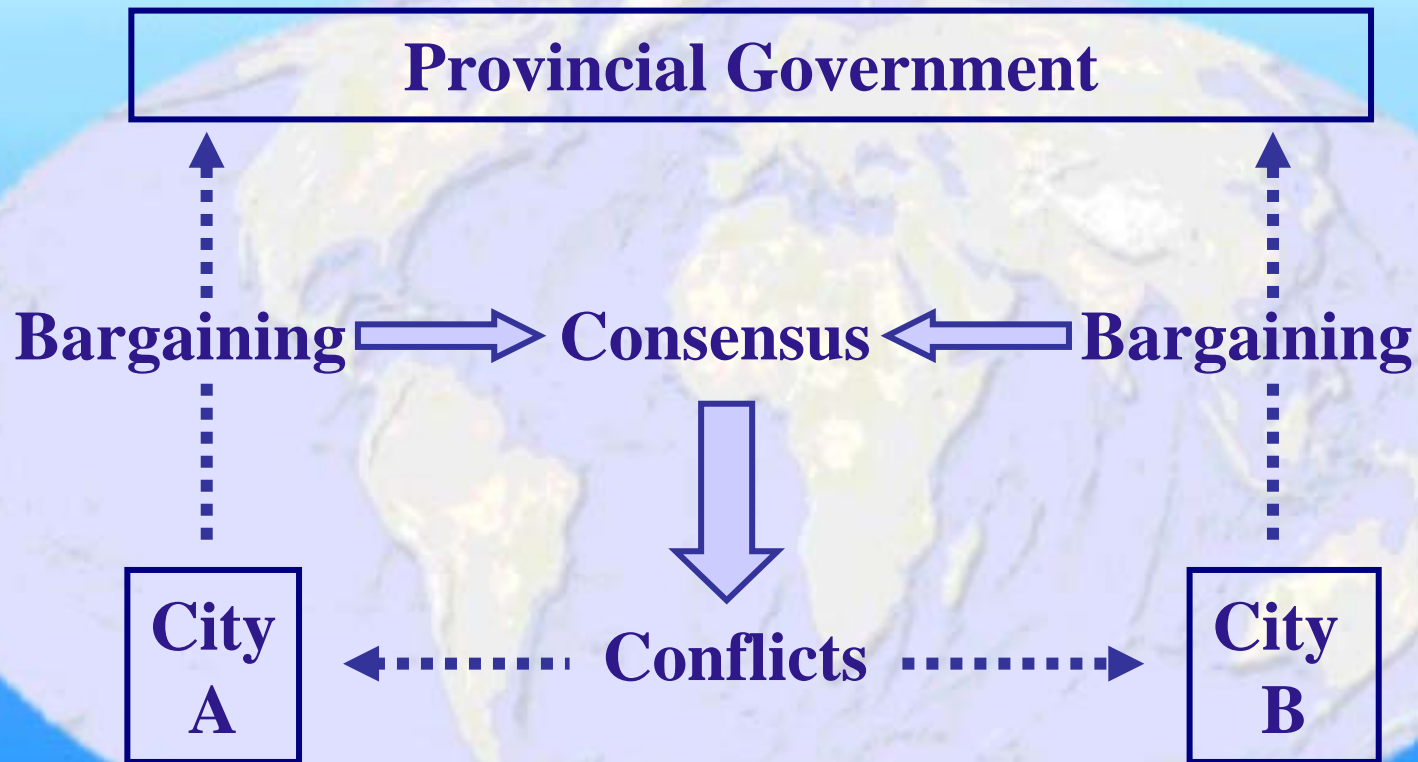


Water Resources Conservation & Bureaucratic Conflicts

“Fragmented authoritarianism” model



Water Resources Conservation & Bureaucratic Conflicts

Reform: complicates bargaining relations

- reform: decentralization of authority

⇒ **central: coercive means** ↓

⇒ **central: ideology** ↓

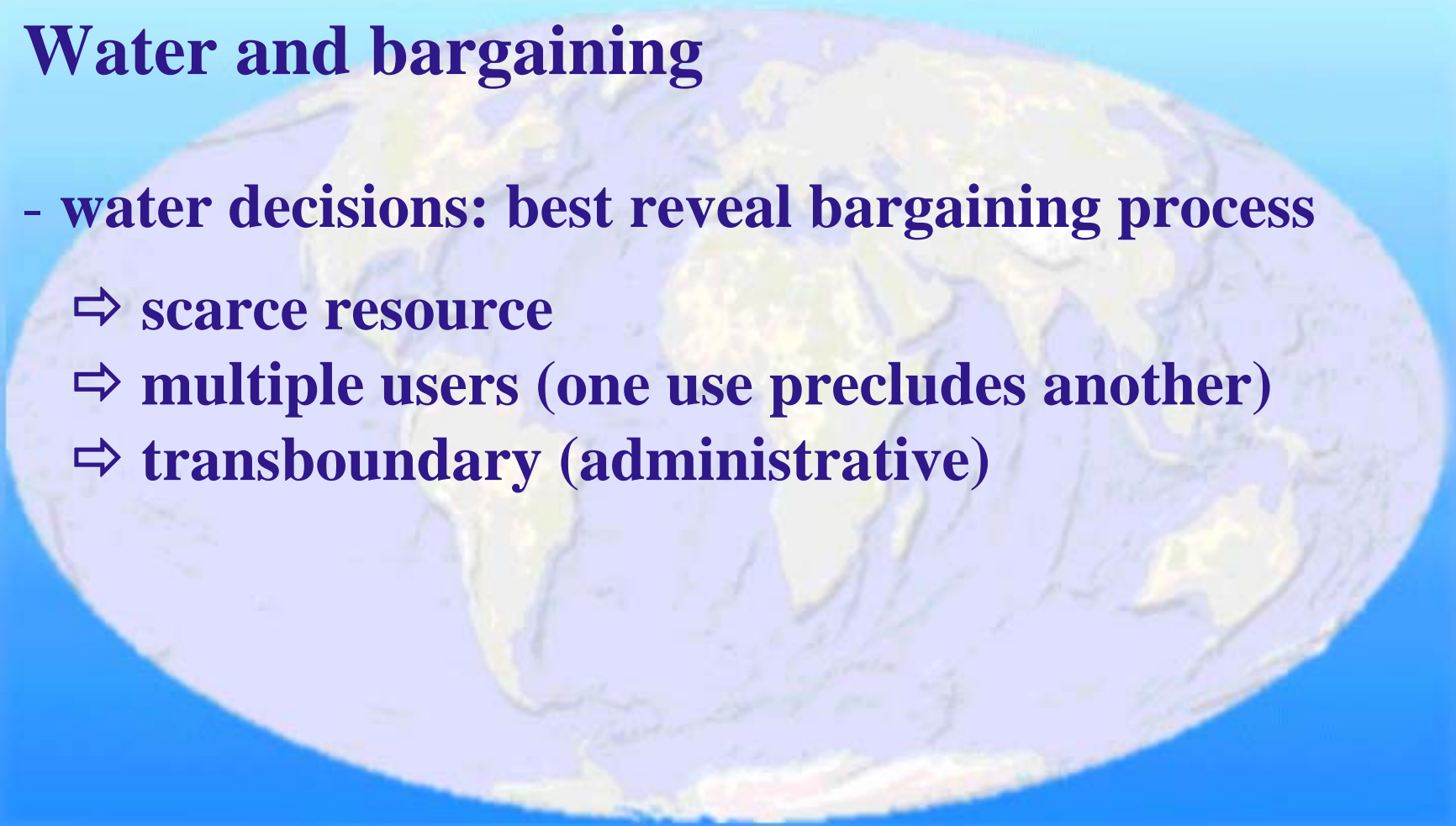
⇒ **local units: resource autonomy** ↑

⇒ **local units: bargaining position** ↑

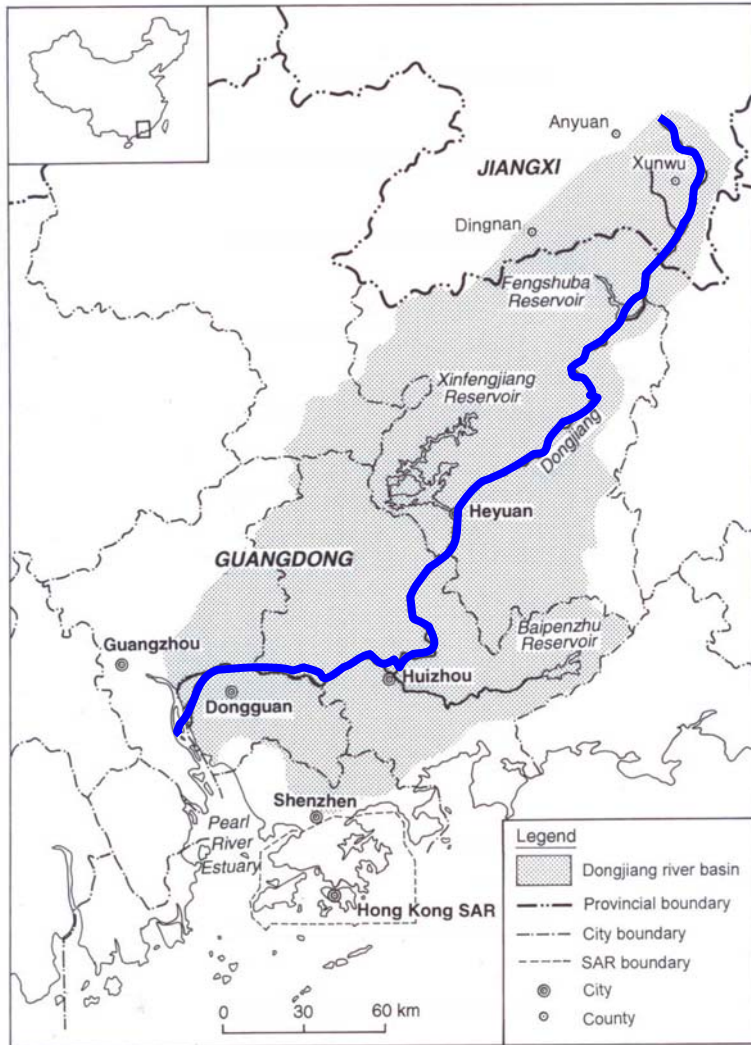
Water Resources Conservation & Bureaucratic Conflicts

Water and bargaining

- **water decisions: best reveal bargaining process**
 - ⇒ **scarce resource**
 - ⇒ **multiple users (one use precludes another)**
 - ⇒ **transboundary (administrative)**



Water Resources Conservation & Bureaucratic Conflicts



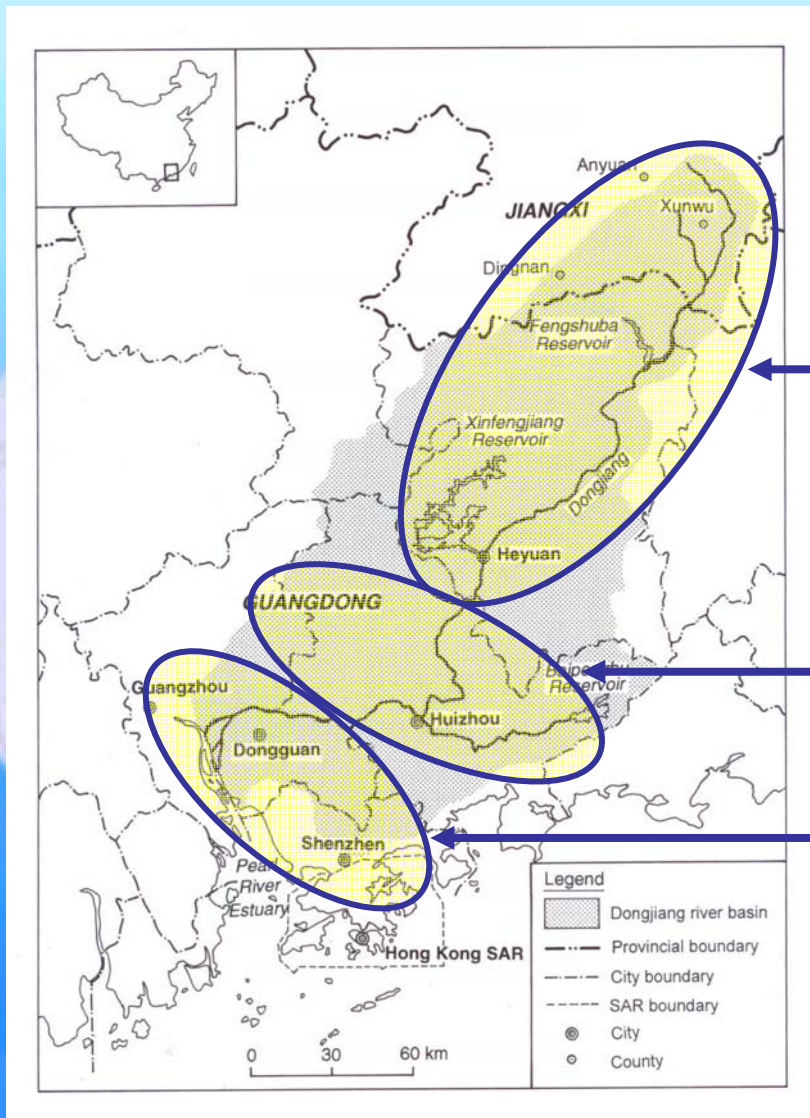
Drainage area:
35,340 km²

Mainstem:
562 km

Annual average discharge:
32.66 billion m³

Population served:
45 million

Water Resources Conservation & Bureaucratic Conflicts



Upstream zone

Midstream zone

Downstream zone

Water Resources Conservation & Bureaucratic Conflicts



Upstream zone

10% drainage area

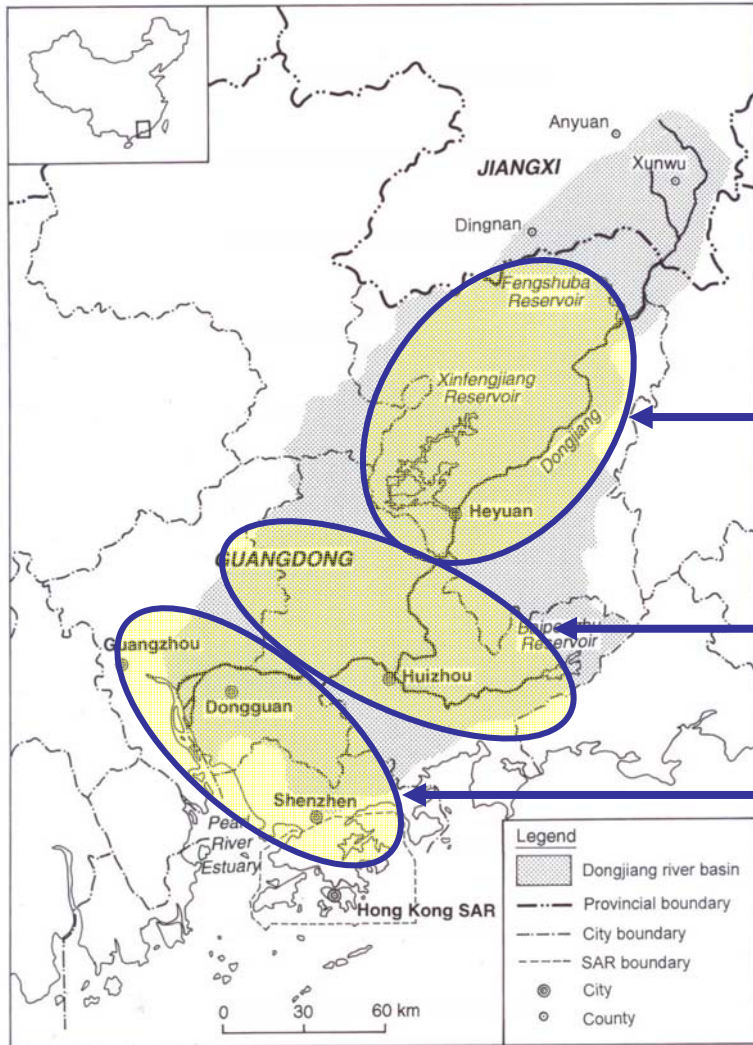
6% annual discharge

Downstream zone

90% drainage area

94% annual discharge

Water Resources Conservation & Bureaucratic Conflicts

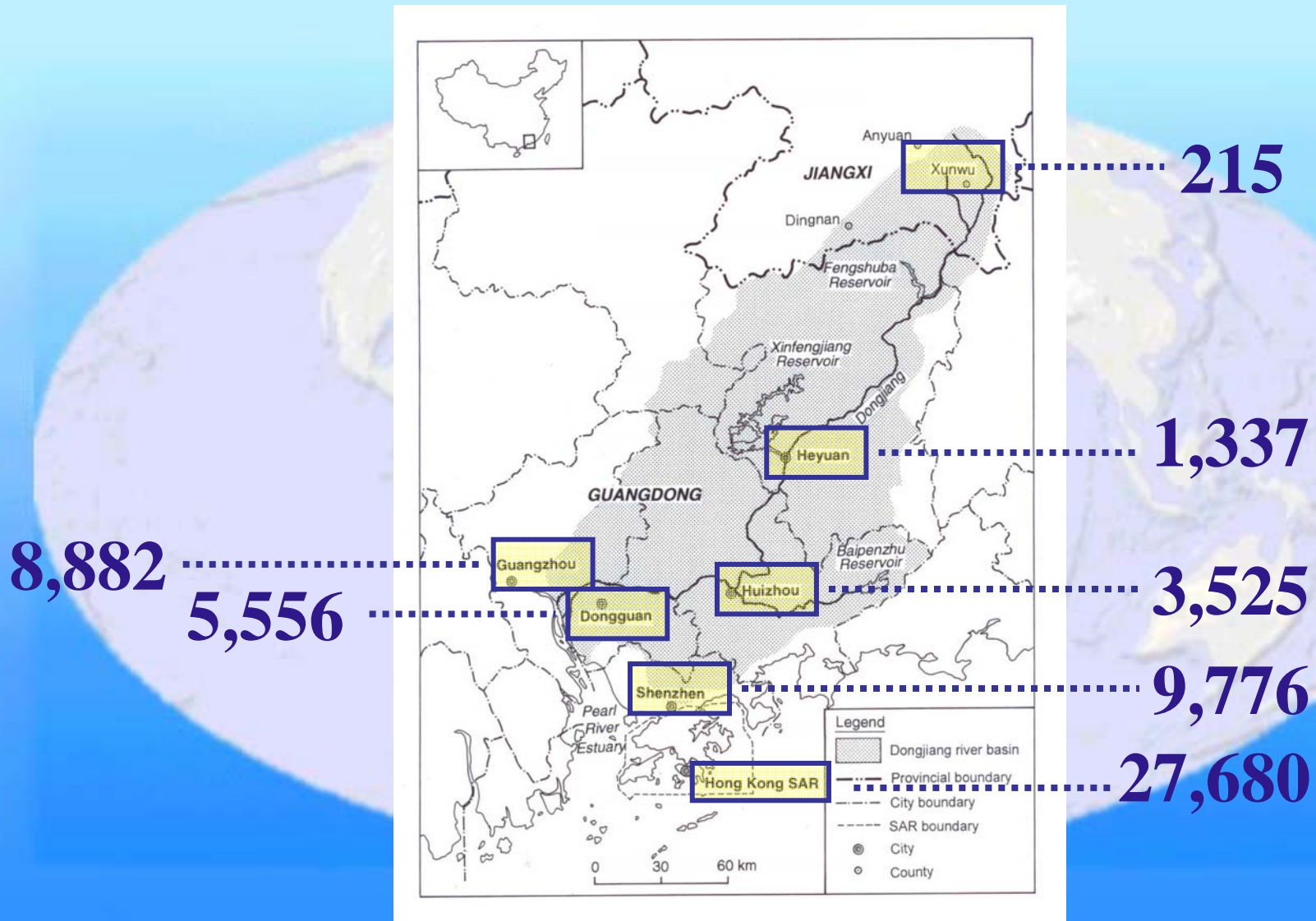


Upstream zone

Midstream zone

Downstream zone

Water Resources Conservation & Bureaucratic Conflicts



Water Resources Conservation & Bureaucratic Conflicts



Water Resources Conservation & Bureaucratic Conflicts



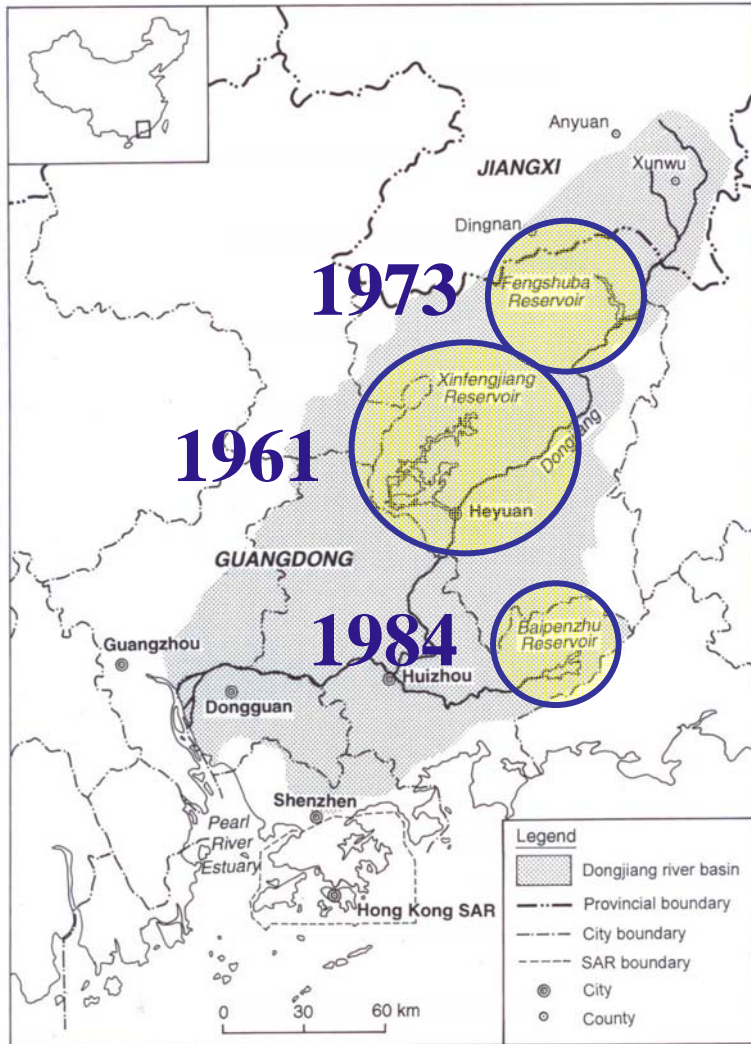
Water Resources Conservation & Bureaucratic Conflicts

Upstream zone:

- water resources conservation
 - ⇒ shut down polluting ind.
 - ⇒ refuse polluting investment



Water Resources Conservation & Bureaucratic Conflicts



Upstream zone:

- water resources conservation
 - ⇒ reservoir migrants
 - ⇒ conservation forest

Water Resources Conservation & Bureaucratic Conflicts



Water Resources Conservation & Bureaucratic Conflicts



Upstream zone:

- unfair distribution of burden
⇒ intra-basin disparity
- development restricted
⇒ underdevelopment
- priorities
⇒ “ecological compensation”
⇒ supportive policies

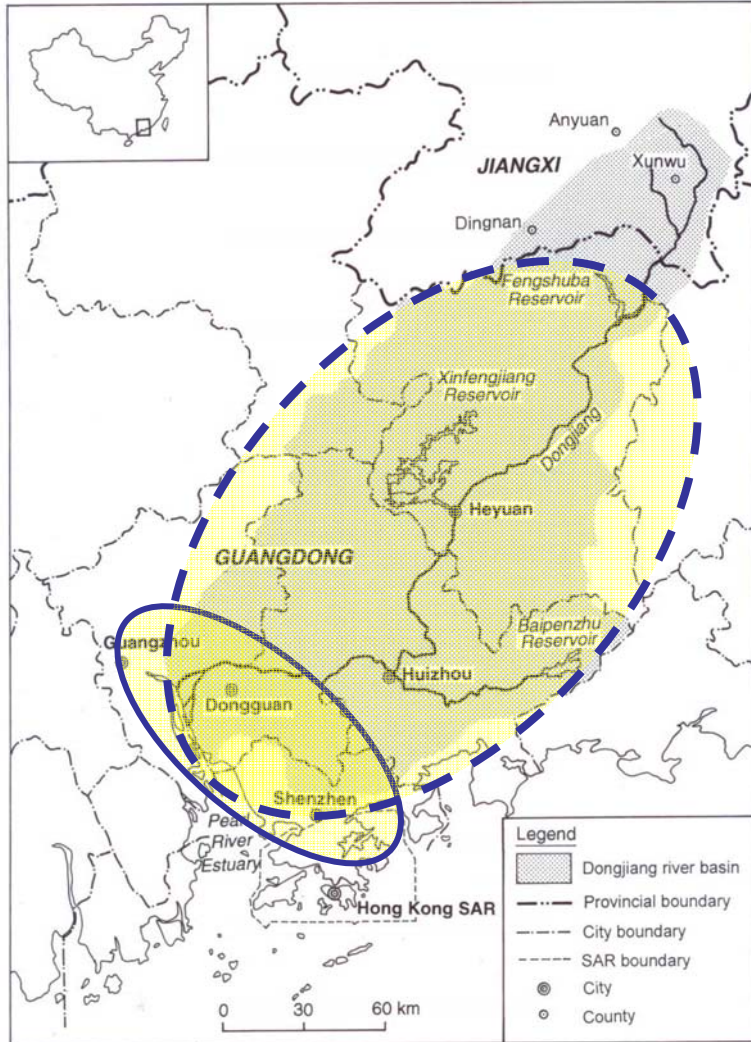
Water Resources Conservation & Bureaucratic Conflicts



Upstream zone:

- bargaining actions
 - ⇒ publicity
 - ⇒ propose legislation
 - ⇒ plead w/ higher-ups
 - ⇒ plead w/ downstream

Water Resources Conservation & Bureaucratic Conflicts



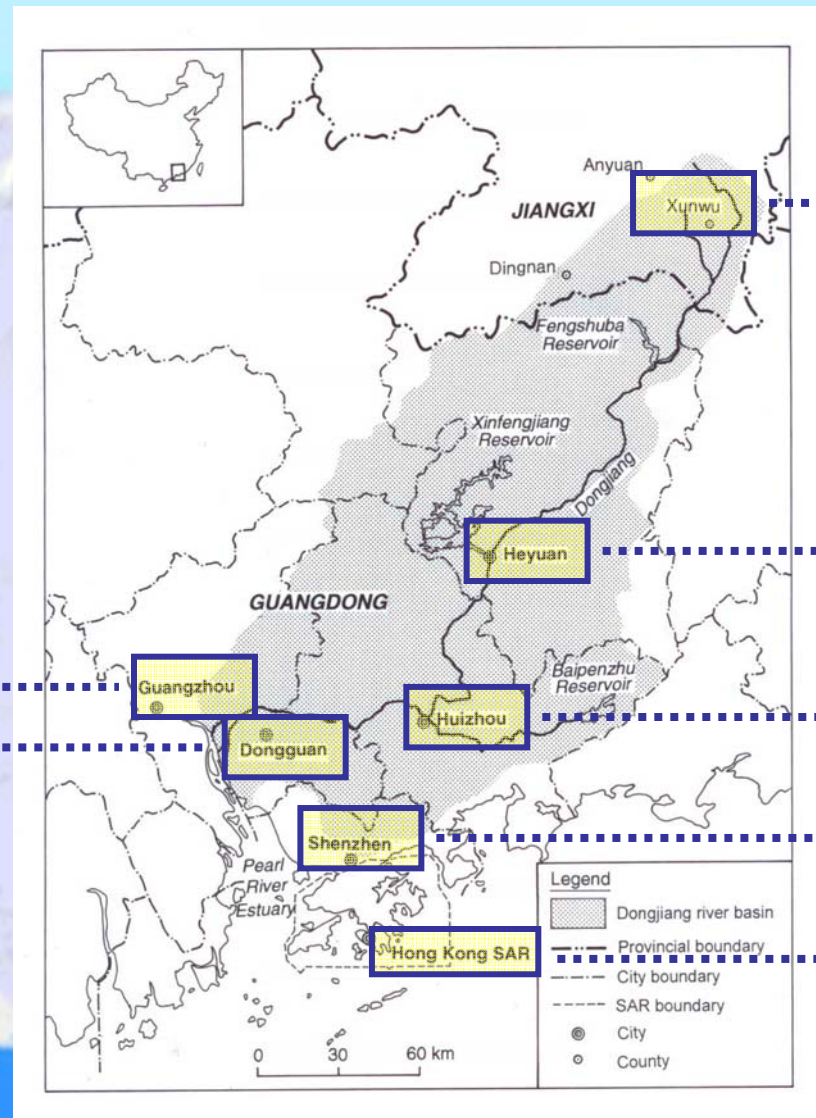
Downstream zone:

- resist direct compensation
⇒ higher authorities to handle
- priorities
⇒ clean & sufficient water
- bargaining actions
⇒ plead w/ higher-ups

Water Resources Conservation & Bureaucratic Conflicts

Guangdong
water allocation plan:
10.66 billion m³

0.548
2.095



?

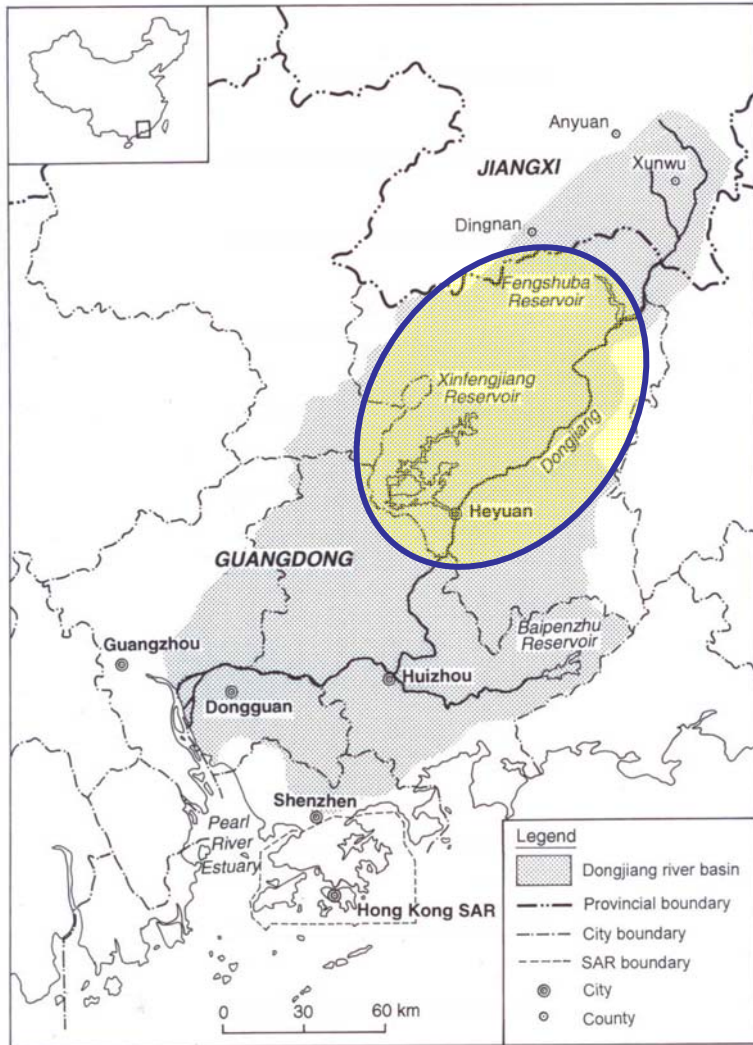
?

?

1.593

1.100

Water Resources Conservation & Bureaucratic Conflicts



Dongjiang River Basin compensation:

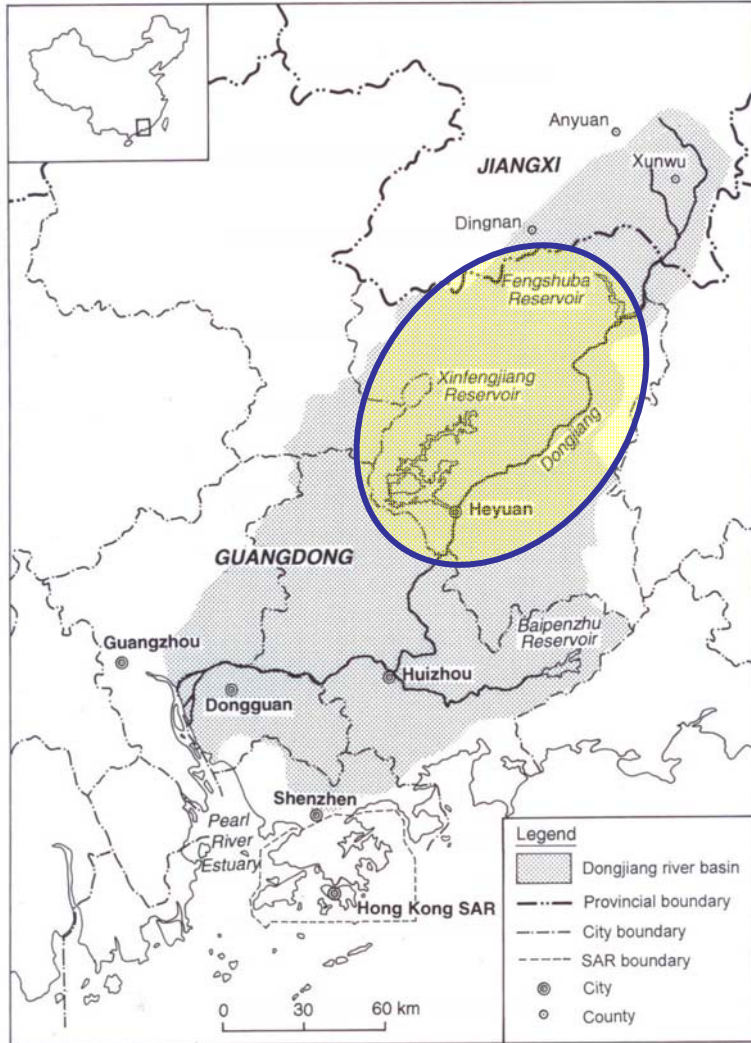
- targets

⇒ reservoir migrants

⇒ conservation forest farmers

⇒ Heyuan City Government

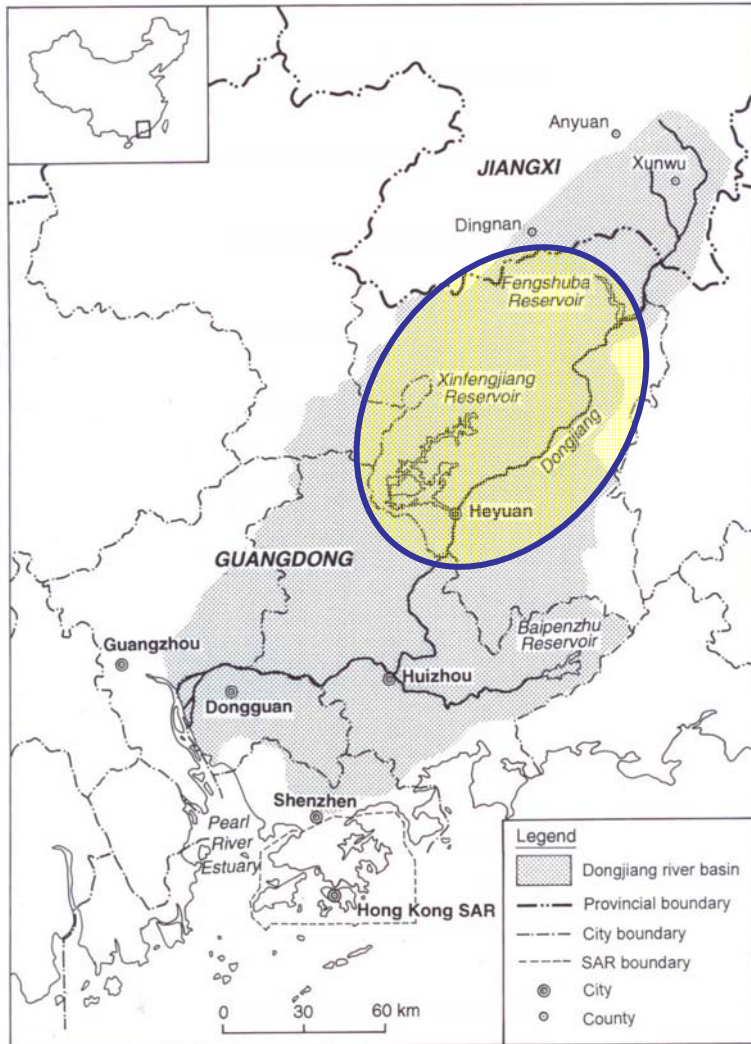
Water Resources Conservation & Bureaucratic Conflicts



DJ Basin compensation:

- reservoir migrants
 - ⇒ 2006: Y600/per/yr
 - ⇒ 1958-2002: Y100/per/yr
- funding sources (2003)
 - ⇒ power plants: 0.5¢/kW
 - ⇒ electricity rate increase
 - ⇒ GD government
 - ⇒ Central government

Water Resources Conservation & Bureaucratic Conflicts



DJ Basin compensation:

- conservation forest

⇒ state: 1.58 million mu

⇒ GD: 6.17 million mu

- funding sources

⇒ 1999 (GD): Y2.5/mu

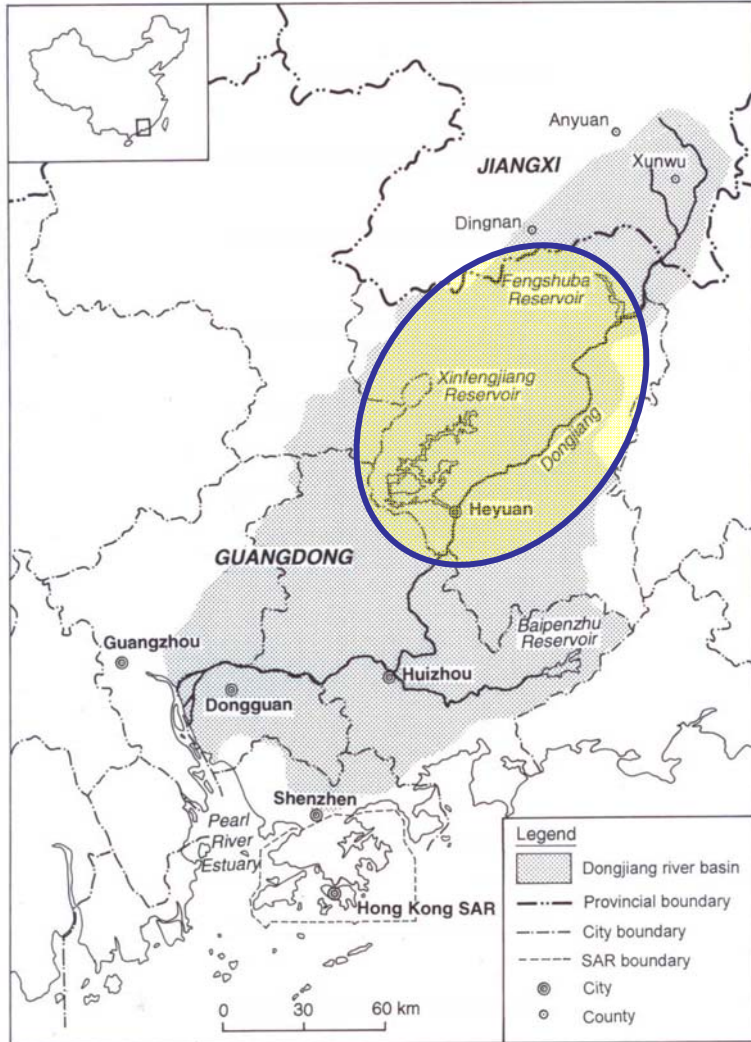
⇒ 2000 (GD): Y4.0/mu

⇒ 2003 (GD): Y8.0/mu

⇒ 2004 (CG): Y5.0/mu

- income loss: Y37.4/mu

Water Resources Conservation & Bureaucratic Conflicts



DJ Basin compensation:

- Heyuan City Government

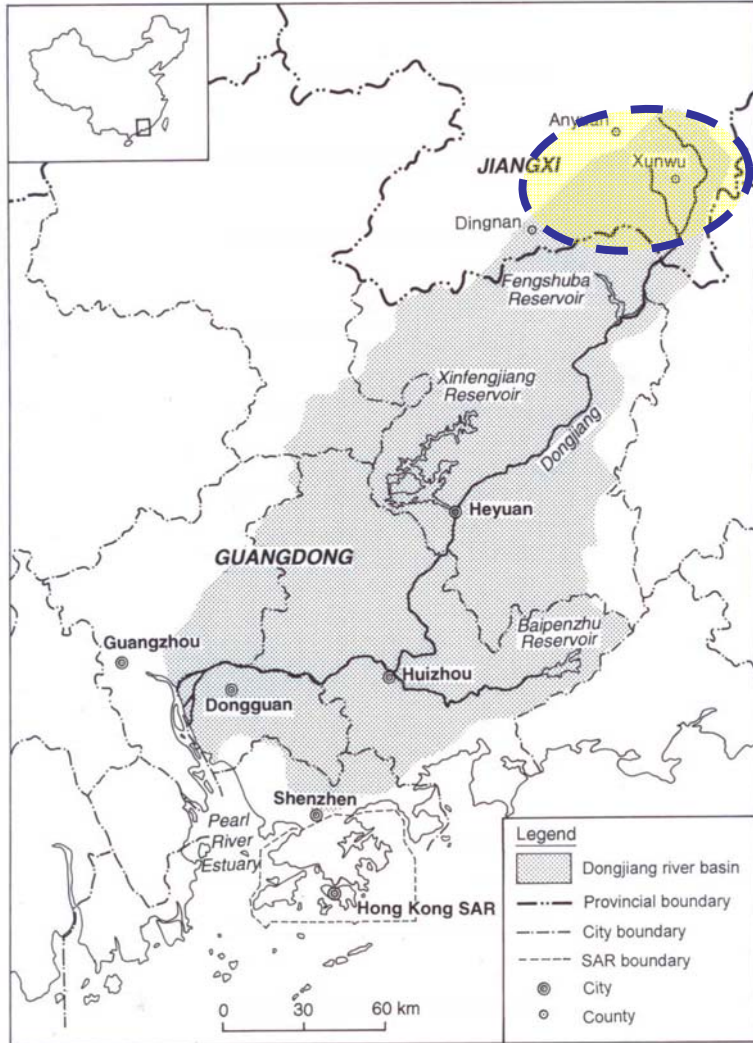
⇒ fiscal transfer

(not compensation)

⇒ industry transfer park

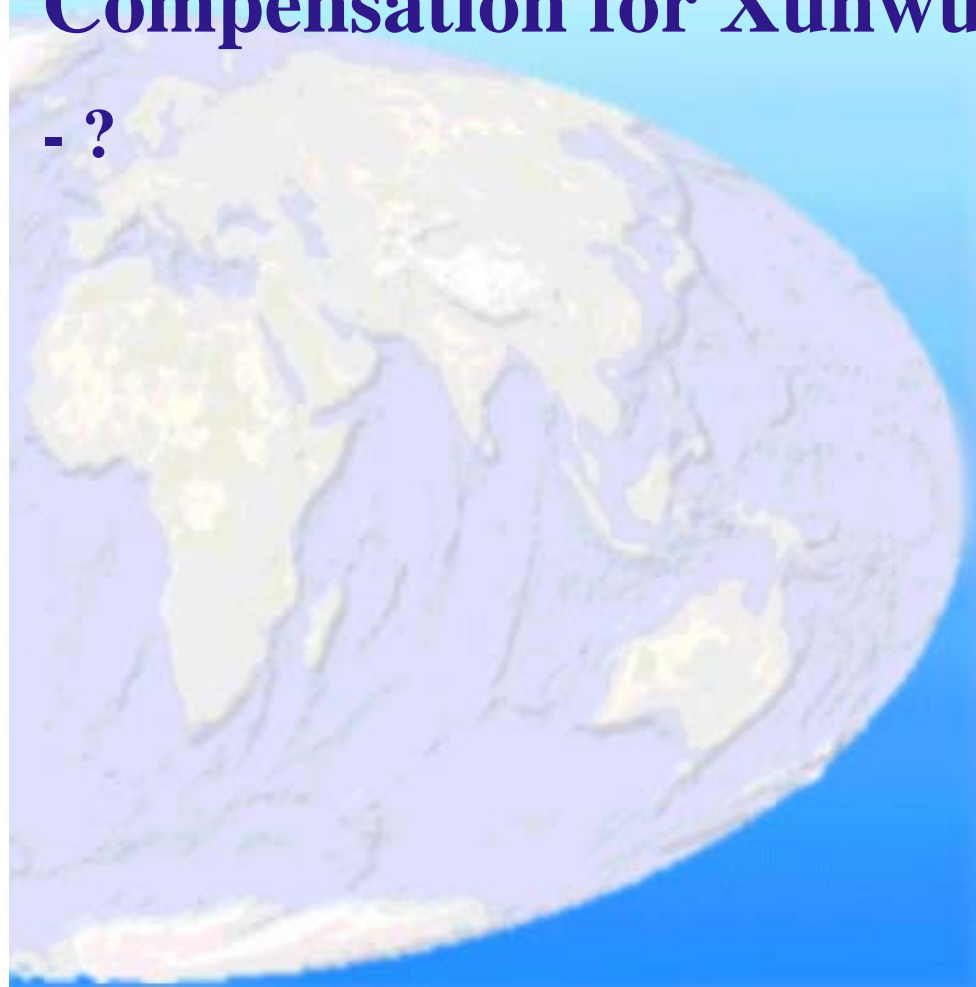
⇒ cellphone production ctr

Water Resources Conservation & Bureaucratic Conflicts



Compensation for Xunwu?

- ?



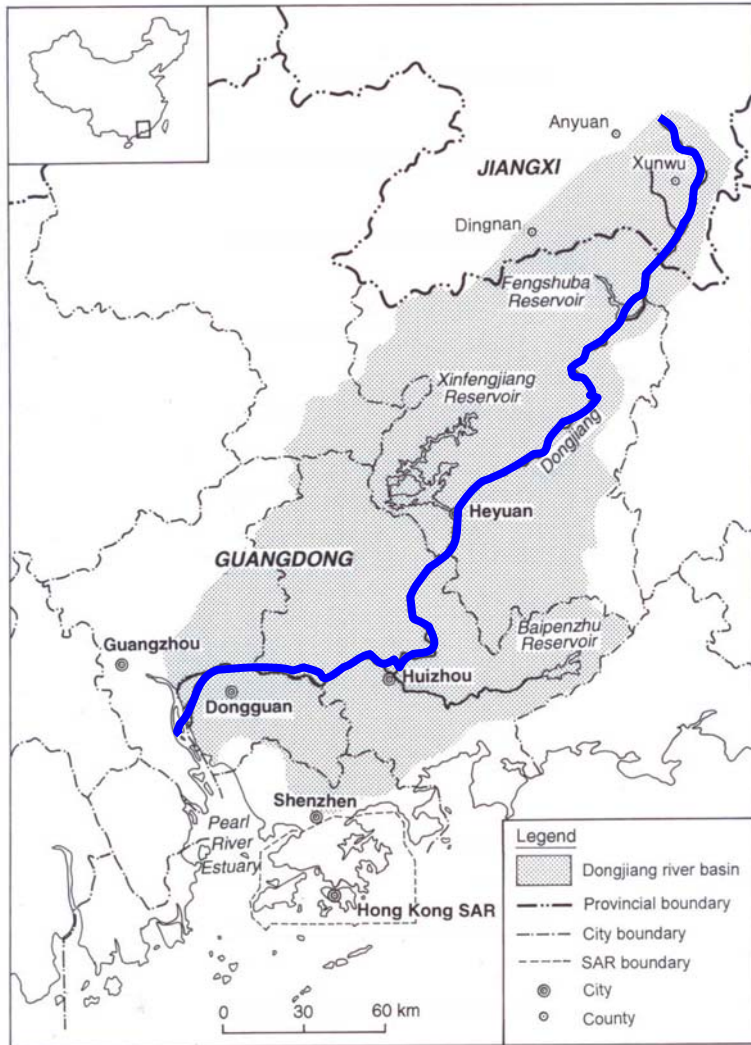
Water Resources Conservation & Bureaucratic Conflicts



Conclusion

- new bargaining strategies
 - ⇒ direct, bottom-up
 - ⇒ extra-bureaucratic channels
- grievances: unresolved
 - ⇒ undermine long-term conservation efforts

Water Resources Conservation & Bureaucratic Conflicts



Further research:

- water resource fee

⇒ rate?

⇒ collection?

⇒ purposes?

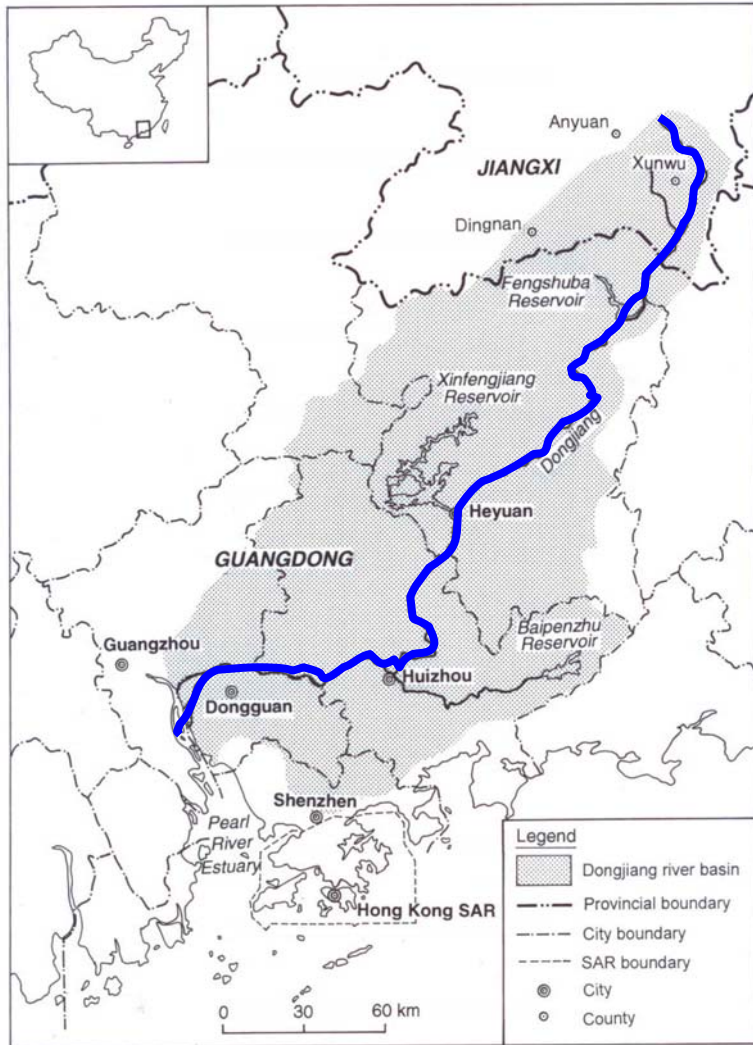
- water fee

⇒ rate?

⇒ collection?

⇒ purposes?

Water Resources Conservation & Bureaucratic Conflicts



Further research:

- “ecological compensation”?

or

- “payment for environmental services”?