Multi-scale Ecosystem Service Assessment for policy decisions in the Upper Yangtze River Basin

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July 12, 2009

Outline

- Chinese situation
- Project Area Background
- Methods
- Results and Analyses:
- Scale comparisons & Application to policy
- Conclusion

Chinese Situation

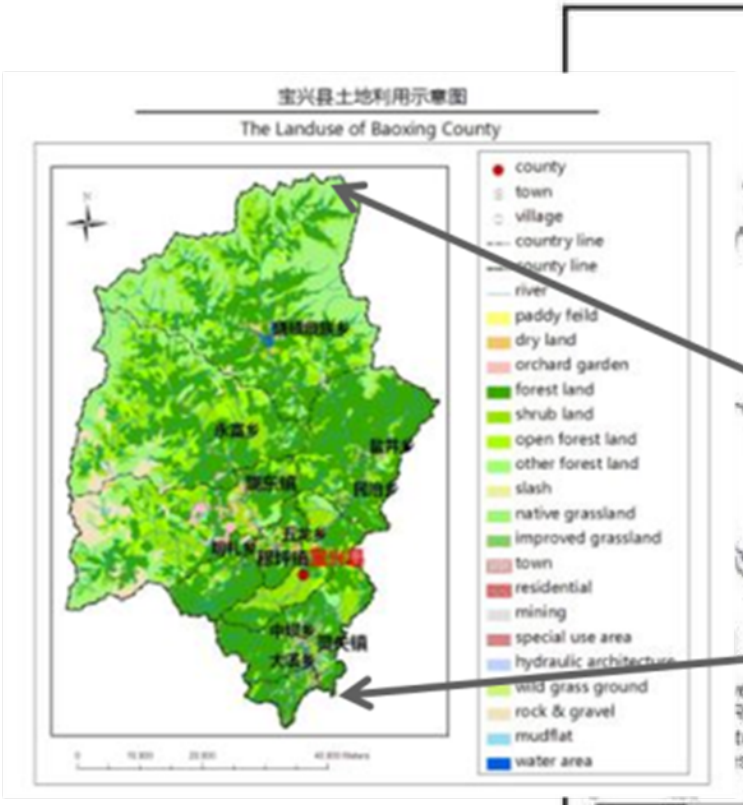
- Balancing conservation and development
- Many strategies deployed – EFCA

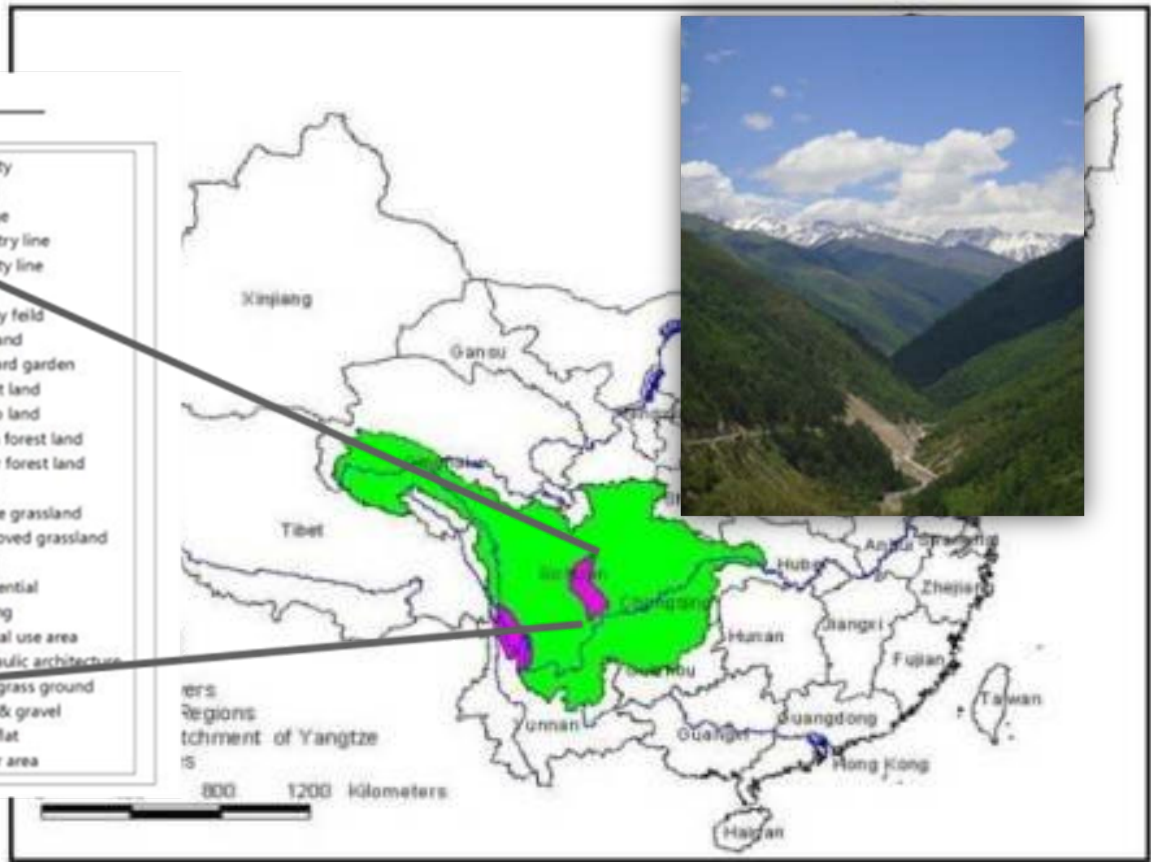
Ecological Function Conservation Areas

Background:

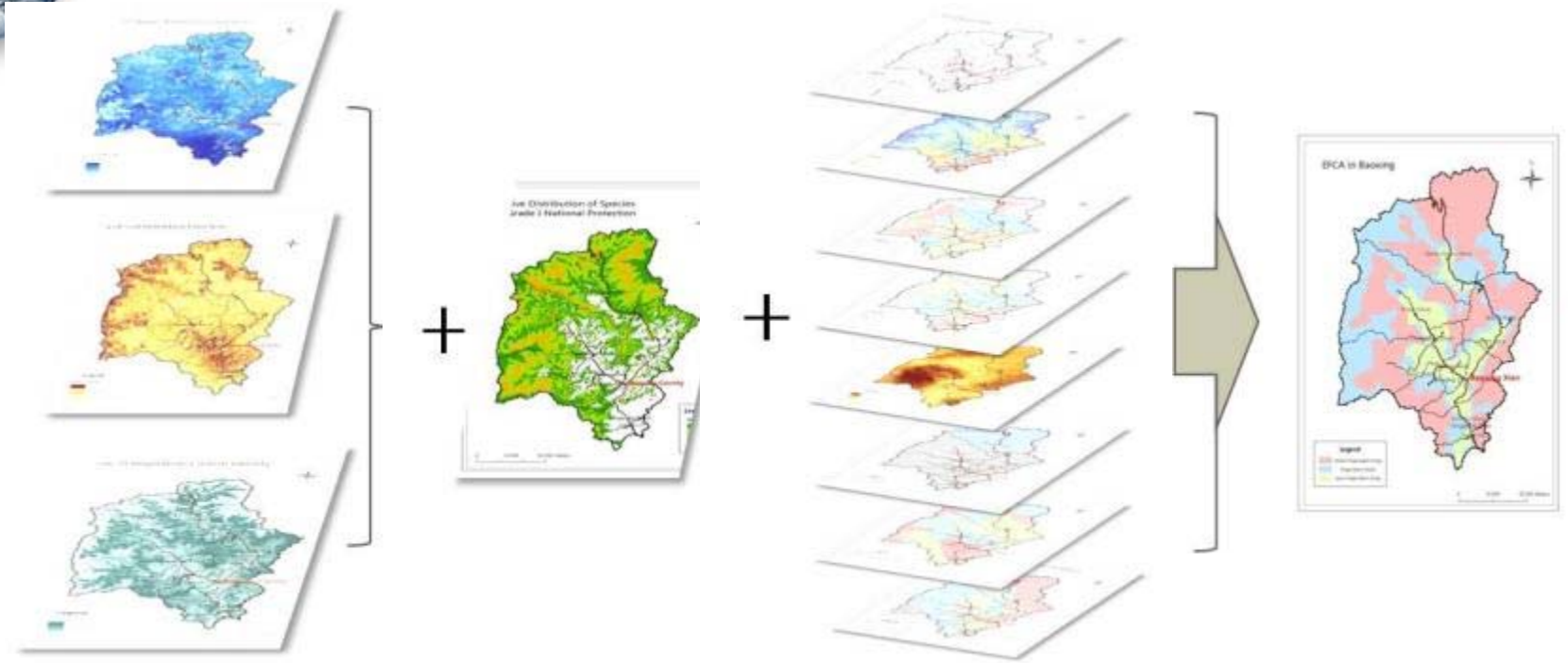
Upper Yangtze River Basin and Baoxing County

- UYRB - Area = 1 mi sq km, population > 100 million, 32% of china's agricultural production
- Baoxing – Area = 3,114 sq km, population 56,000





Methods



Ecological Function Maps

-Water Retention

- Soil Retention

- Carbon Storage

InVEST

Biodiversity

Species database maps (CAS, 2007)

Demand Information

-Hydropower/irrigation/flood mitigation/etc

- Land production/sediment reduction

- Carbon sequestration

Estimate relative demand. Circle high contributing

Overlay

Draft EFCA map

EFCA Development

Upper Yangtze River Basin

Water Retention

Soil Retention

Carbon Storage

Biodiversity

EFCA Development

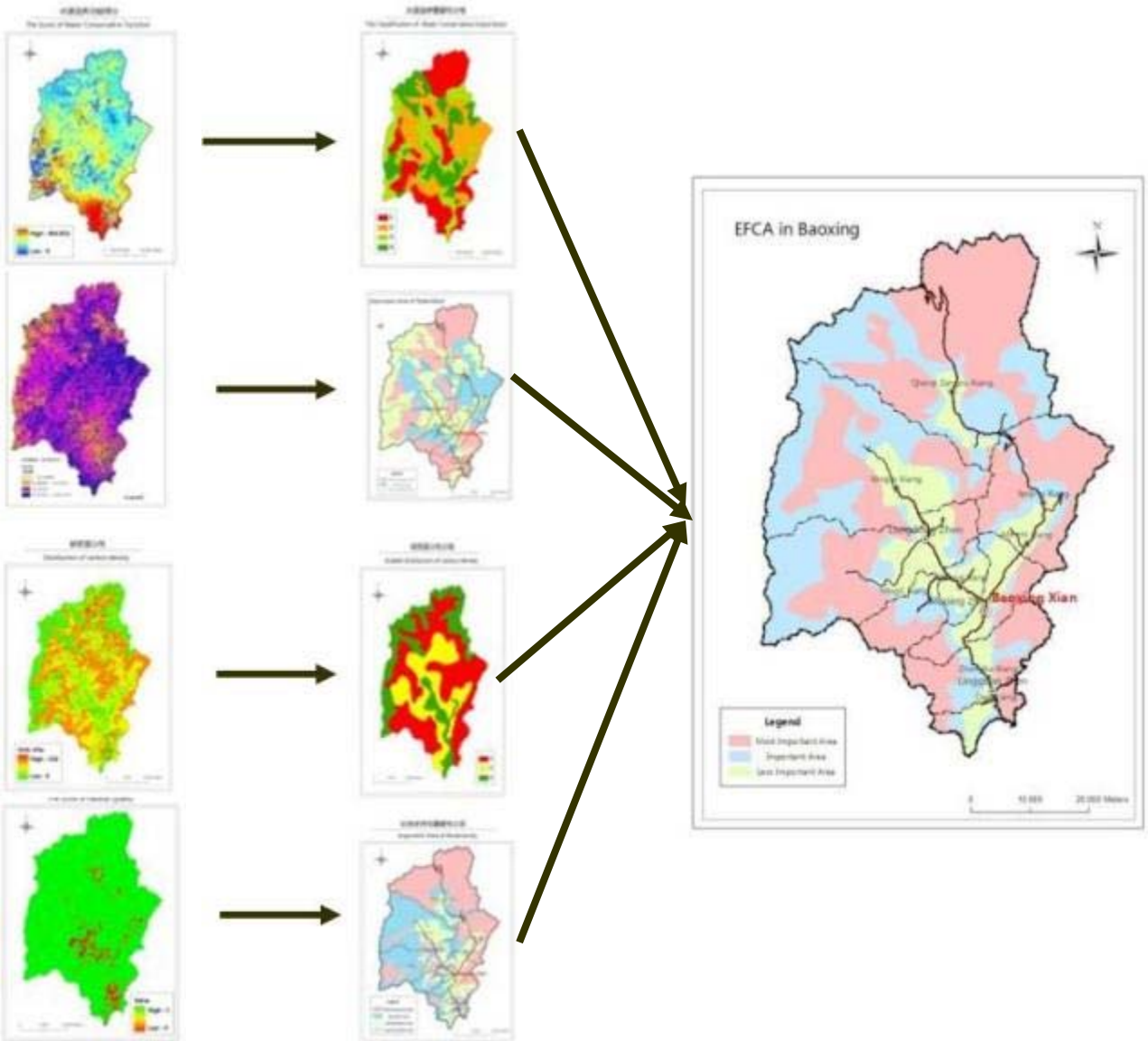
Baoxing County

Water Retention

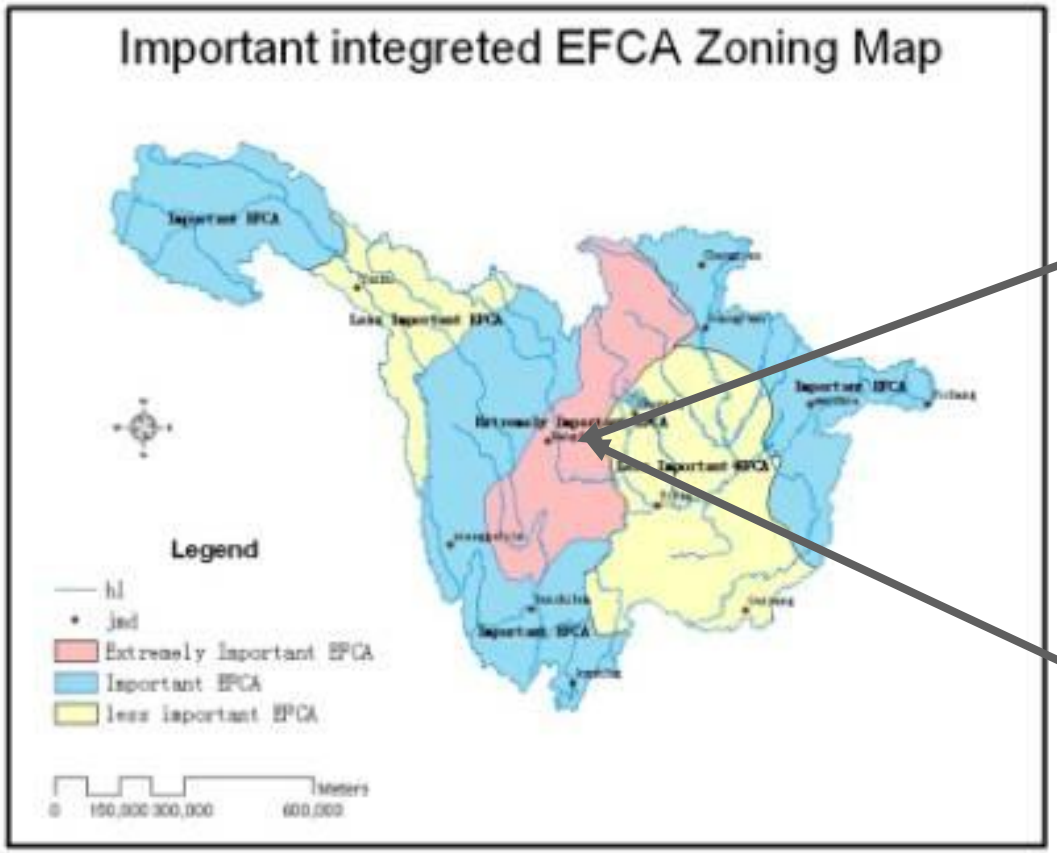
Soil Retention

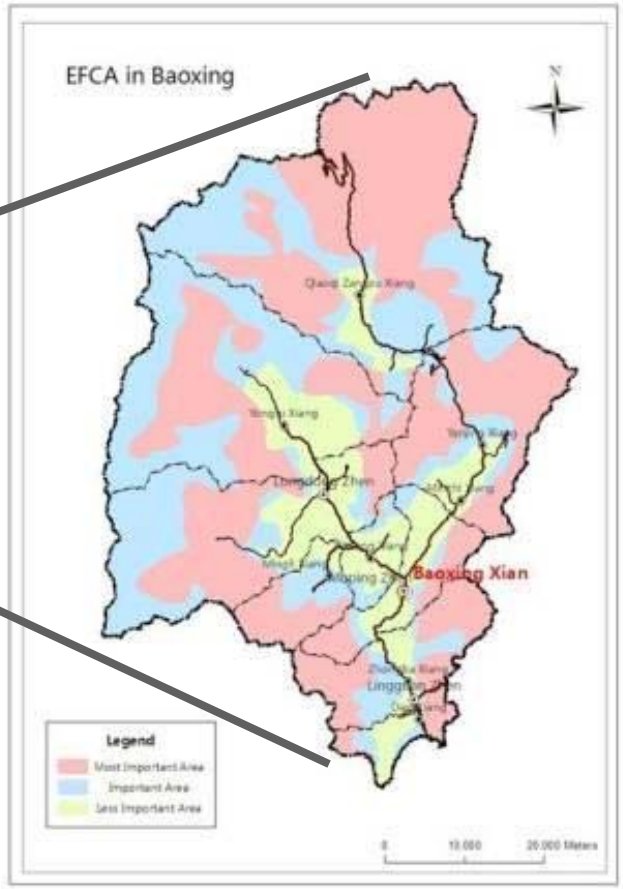
Carbon Storage

Biodiversity



Multi-Scale EFCA Design





- More funding for conservation
- Greater protection zone allocation

Conclusions

- Multi-scale mapping enables practical implementation of national-level EFCA

- Local Scale ecosystem service mapping is critical now for development planning in China


Thanks!
Ganyang valley
In Baoxing