Spatial Analysis of city and peri-urban regions--- a Case Study of Wuxi City, China

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“Growing and globalizing” in the Yangtze Delta

- “T” shaped Juncture zone of the Yangtze River and coastal regions
- 1.1% Territory, 7% population
- 19% regional GDP, 50% FDI
- Shanghai is increasingly competing globally as an emerging global city
- Suzhou and Wuxi are the most serious competitors to Shanghai’s efforts to attract FDI and develop high-tech industry.

Topic Areas
- What happened in the city area with spatial expansion over the last 30 years?
- What kind of problems occurred affecting urban sustainability?
- What policies have and should be undertaken for urban spatial management?
What happened in Wuxi since 1980s

- Wuxi, close to Shanghai, along the Grand Canal and Shanghai-Nanjing railway.
- Wuxi has long enjoyed the prestige of ‘a land of milk and honey’.
- Origin of Wu culture and Chinese industry

In 1980s, introduction of Sunan model of TVEs, as a semi-state, yet market-oriented form of ownership
- TVEs’ output had reached about 2/3 in total output by the end of 1980s
- TVEs absorbed a large number of rural surplus laborers and enriched farmers from rural areas and initiated the rural industrialization and urbanization
- TVE problems of property rights, income distribution, and party-enterprise relationships resulted in corruption, mismanagement, the loss of collective assets (asset stripping), loss-making, and even bankruptcy

With the development and opening up of Pudong, the Yangtze River Delta became the focus of China opening-up policy in the early 1990s.
- Sunan had found the way out of the difficulties: Globalising regional development
- Wuxi established a number of leading national development zones as platforms to attract foreign capital and develop open economy. Local governments actively promoted the establishment of preferential policies, and a legal and market environment to attract foreign capital.
- More than 400 world’s top 500 enterprises have settled in Yangtze Delta and 74 in Wuxi by the end of 2008.

In the development process of open economy, original Sunan Model played a tremendous role.
- TVEs became the main force to set up joint ventures with foreign enterprises and gradually developed into a new market force and private economy, through restructure.
- At the end of 2007, the number of private industrial enterprises above the scale in Suzhou, accounting for half of industrial enterprises above the scale.
- The private economy of Wuxi in 2007 achieved added value accounting for 58.5% of total economic output,
The Pressure of resource and environment

- Over-expansion of construction land
  In 2008, Wuxi: 44.8%

- Lake eutrophication and water problem

Future spatial pattern of the city in Yangtze Delta

- Problem: what happens to the future land use pattern?
  - Where to expand for new urban and industrial areas?
  - What to do for ecological protection?

Urban Development Principles

- Follow the guidelines for zoning on ecological protection and economic potential
- Protect the high value ecological regions from impact
- Locate urban and industrial areas in regions with low ecological costs of development
- Identify restraints of land resource supply and locate new urban and industrial development in lower value ecological environments

and

- Ecological value restrains economic development demand
The pattern of development suitability

- Emphasized exploitation area
- Urban optimization areas
- Ecological conservation areas
- Prohibited exploitation area

Conclusions - 1

- In the rapid industrialization and urbanization process, the Yangtze River Delta area is in the process of rapid spatial succession.
- Population, economy and construction land are all in rapid expansion and require improved spatial planning.
- The introduction of foreign investment since 1990s promotes the economic globalization in this region.

Conclusions - 2

- However, resources and environment are increasingly under development pressure. Therefore, it is necessary to guide the region’s allocation of industry space according to the development suitability of different areas.
- Remaining problems when planning:
  - Considering and protecting ecological values
  - Identifying limits to availability and distribution of future construction land
  - What kind of urban policies are best suited for planning and implementing regionalization?

Thank for your attention!