

# **Impact Analysis of the Town and Country Planning Act On the Smart Growth of Small-size City in China: Case Study of Lianjiang County Town's Master Planning**

## **1 Introduction**

China put the first official urban planning law into practice in 1990 and it played an important role in guiding the urban planning and construction. On January 1 this year, the new Town and Country Planning Act became effective, and the original one was abolished at the same time. In this act, the town and country planning is defined as consisting urban system planning, planning of city, town, country and village<sup>1</sup>. This is the first time for China to clearly integrate the village planning into national level's legislation, and it means that China is breaking the former planning administrative system based on the urban-rural dual structure and marching to the era of urban-rural integrated planning.

Because the urban-rural integration is a huge systems engineering which involves multiple layers, such as space, population, economy, market and Institution, there must be significant transformation in the legislative spirit and mentality in the new act. In fact, the regulative power of controlling the expansion of urban construction land is greatly strengthened. As a result, this will objectively promote many Chinese small-size cities which still adopt traditional development model – such as stimulating the economic development by constructing new district in a large scale converting to adopt smart growth strategy. This paper analyzes the implementation background of the new act at first, then makes theoretical analysis on the main change of the new act content and the possibility that the new act makes small-sized city adopt smart growth strategy, at last makes the case study of Lianjiang County Town's master planning on how the new act promotes small-size city to take the path of smart growth.

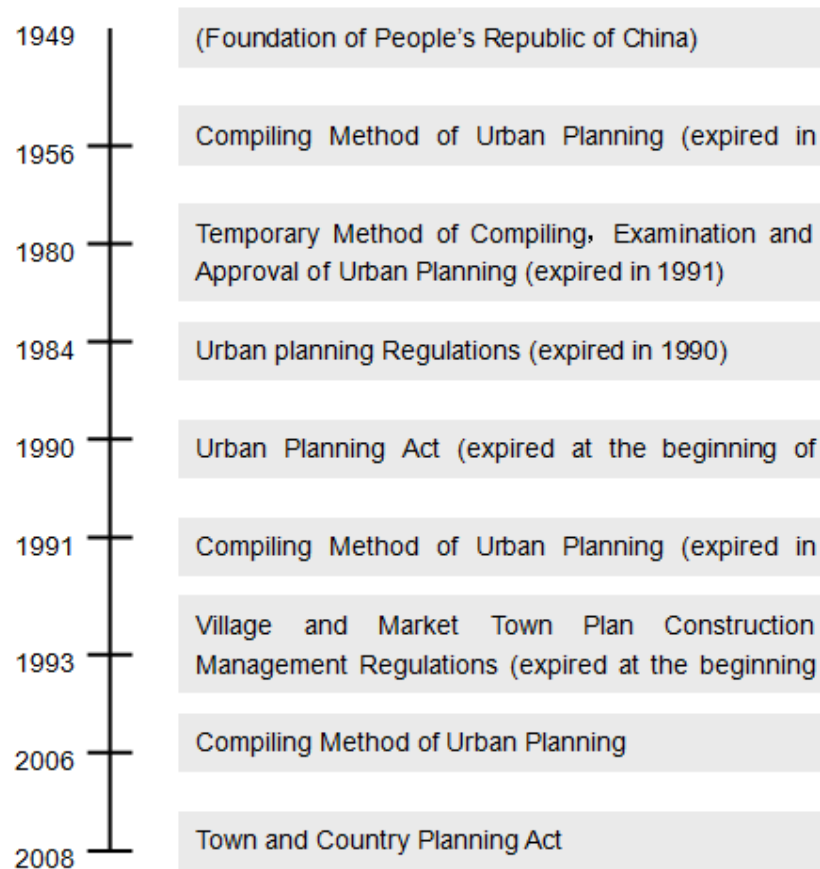
## **2 Background**

### ***2.1 The New Situation of Chinese Socio-economic Development Impels the Birth of Town and Country Planning Act***

Since the foundation of the People's Republic of China in 1949, several versions of laws or rules about urban planning had been issued and implemented (Figure 1). Before the Town and Country Planning Act became effective this year, Chinese legal institute of town and country can be described as “one law and one regulation”, namely the “Urban Planning Act” which was implemented in 1990 and the “Village and Market Town Plan Construction Management Regulations” which was issued by National Council in June 1993<sup>2</sup>.

The interval between approval and implementation of the Town and Country Planning Act is only three months, which is very short and seldom occurs in China. To some extent, this situation implies the strong demand of changing the law relating to urban planning in Chinese

society.



**Figure 1: History of Chinese urban planning legislation**

Resource: drawn by author

As known, great changes have been made since China adopted “reform and open” policy 30 years ago. According to the data from the Ministry of Housing and Urban-Rural Development, Chinese urban population has risen from 1.7 billion at the beginning of reform to 5.77 billion at the end of 2006, and the urbanization level has risen from less than 18% to nearly 44%<sup>3</sup>.

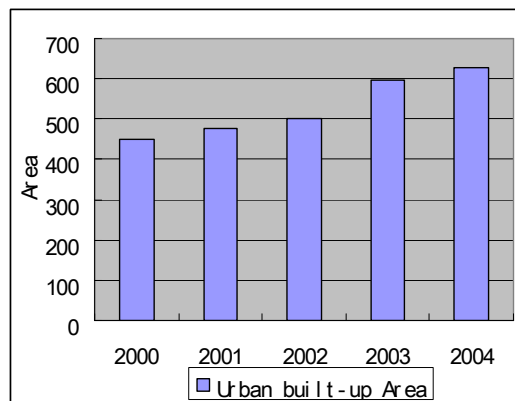
Comparing to the fast urbanization process, Chinese legislation on town and country planning has not changed accordingly in a long period to adapt to the reality. For example, there are many villages became designated towns-even county level cities, their planning management have to conform to two different laws in different periods, which bothers planning management a lot. Furthermore, because the “one law and one regulation” is so theoretical that various kinds of problems occur when dealing with actual work; and because of the lack of relative provisions about village planning, the unordered construction and the waste of land use became even serious. In addition, there are many unoccupied districts that the urban planning can not cover in most of Chinese cities at present, even in relatively developed zones along eastern seaboard. This situation indicates that a new law which integrates all the

urban construction into legal planning management should be put forward as quickly as possible. Thus , the original pattern that planning separation between towns and villages can not adapt to the new situation of Chinese social-economic development because it results in the lack of harmonization and linkage between town's planning and village's planning<sup>4</sup>.

## **2.2 The Fast Expansion of Chinese Town and Country's Constructive Land Needs More Restrict Supervision**

Chinese cities have kept fast development for almost 30 years, especially in the new century, and the wider expansion of constructive land in cities is unprecedented. Taking Fujian Province as the case whose socio-economic development level is in the moderate position in China, Urban built-up area in Fujjian kept fast growing during 2000-2004 (Figure 2), and the area of land expropriation per year is considerable. Moreover, according to the data from

Ministry of Land and Resources , the constructive land area of town and country was almost 240 thousand square kilometers in 2006, arriving at more than 130 square meters per capita, which is higher than not only the contemporaneous average level of developed countries ( 82.4square meters), but also that of developing countries (83.3square meters). From 1990 to 2004, the constructive land area of town had risen from 13 thousand square kilometers to nearly 34 thousand square kilometers. The Elastic Coefficient of Urban Land-use Scale ( Urban Land Growth Rate/ Urban Population Growth Rate )rose from 2.13 (during the period of 1986-1991) to 2.28, which is much higher than 1.12, the reasonable level <sup>5</sup>. This indicates that the urban space grows fast excessively and presents an increasingly serious trend.



**Figure 2: Urban Growth in Fujian Province (2000-2004)**

Data Resource: Annual Statistical Report of Chinese Urban Construction 2000-2004

Consistent with overall situation, the land-use of Chinese small-size cities also embodies the feature of quick expansion after the year 2000 (Table 1). The urban spatial growth of most small-size cities in China – in particular county towns is just similar to Lianjiang Town, the case town in this paper. Usually there is the same mode in small-size cities: the cities try their best

to attract industrial investment at first, after some projects- especially industrial projects come into the cities, large-scale infrastructure construction begins as the main hardware supporting to the investors. Thus the urban space expands quickly following the construction process.

**Table 1: Basic Data of Town and Country Construction in China (2000-2003)**

|  | <b>Year</b> | <b>Urban Built-up Area</b><br>( square kilometer ) | <b>Area of Land Expropriation this Year</b><br>( square kilometer ) |
|--|-------------|--|---|
| <b>National Total</b>                  | 2000        | 22439.28   | 447.25  |
|  | 2002        | 25973  | 2879.86   |
|  | 2003        | 28308.02   | 1605.6  |
| <b>All Small-sized Cities of China</b> | 2000        | 6318.05  | 124.32  |
|  | 2002        | 6829.5   | 1758.64   |
|  | 2003        | 7266.38  | 522.55  |

Data Resource: Annual Statistical Report of Chinese Urban Construction 2000-2003

### **3 Theoretical Analysis : the new act's excitation effect on urban smart growth**

#### **3.1 Main Differences of the New Act**

Based on the experience of the original Urban Planning Act and the Management Regulations of Village and Town's Planning and Construction, the new act makes detailed provisions about the compilation, implementation, modification, supervision and examination of planning, as well as the legal liability of related parties<sup>6</sup>. There are some obvious changes on legislation thought and coping with detailed problems, and the regulation force is strengthened.

##### **3.1.1 Great changes in the legislation thought**

Comparing to the original one, the new act's legislation thought is remarkably different. This is reflected in the following points :

##### **( 1 ) Highlights the public policy attribute of town and country planning<sup>7</sup>**

The act describes distinctly that town and country planning is an important public policy for government to guide and control the urban-rural construction and development blueprint in legal position.

##### **( 2 ) Emphasizes the planning management as more important work<sup>8</sup>**

The act makes it clear that the core attribute of town and country planning work is planning management, the more important thing is to implement planning, and the government function in urban-rural planning is planning management.

##### **( 3 ) Establishes new system of town and country planning**

The act values the thought of urban-rural integration and adds the content about country and

village planning management. This makes country planning and town planning link mutually and constitutes a complete planning system.

**( 4 ) Embodies the public participation and respects public will**

**( 5 ) Strengthens the supervision of People's Congress**

The act stipulates that provincial urban system planning, master planning of city and county town must be deliberated by the Standing Committee of People's Congress at the corresponding level; ordinary towns' master planning must be deliberated by the People's Congress; regulatory detailed planning must be reported to the Standing Committee of People's Congress at the corresponding level to keep on record; regular assessment of provincial urban system planning and master planning of city and town must be reported to People's Congress<sup>9</sup>.

**3.1.2 The legal strength of urban planning management is more powerful**

The new act becomes more restricted and normative on many aspects, and sets more severe and compulsory requirements on each link of urban planning work. This embodies in the following aspects:

**( 1 ) Perfects the administrative management procedure**

Being different from the original one, the new act describes not only the planning compiling but also the announcement, deliberation and examination before approval and public summons after approval. Moreover, the act makes the process clear of all kinds of planning compilation and various construction applications, as well as the power of government and department in charge. This will perfect the administrative management procedure and avoid chaotic law enforcement.

The act also establishes and perfects the management system of constructive land planning which is adaptive for "the system of compensation for land use" and "the investment system reform", stipulates the administrative license of various planning.

**( 2 ) Regulates the planning modification**

The new act restricts the precondition of planning modification and makes detailed stipulations about the assessment and modification of different types of planning.

**( 3 ) Makes claim compiling unit's qualification**

The new act adds the compulsory demand about compiling unit's qualification and makes the related detailed express provision.

**( 4 ) Supervises and restricts the administrative power**

The new act makes the respective supervision right clear of administrative department at the higher level, People's Congress and public. At the same time, the new act strengthens the law enforcement power of government, such as compulsory demolition power.

**( 5 ) Establishes the system of law accountability in urban planning**

The new act makes the provisions clear about investigating the respective law liability of

government, administrative staff, urban planning compilation unit and illegal construction activity, as well as the detailed punishment.

### **3.2 Analysis of the Possibility that Small-size City Adopts Smart Growth Strategy Urged by the New Act**

Usually the strategy of city's spatial development is made at the master planning level; therefore the analysis in this paper is mainly based on the possibility of that some clauses relating to urban master planning stimulate towns to adopt smart growth strategy in the new act.

The author holds that there are some very important clauses on urban spatial growth, they are following:

**( 1 ) The compilation of urban master planning should take the national economic development planning as foundation and link up with the general land use planning.**

This implies theoretically urban master planning has to be limited by the land supply and use planning which is made by land management department, the urban spatial development scale which is defined by urban planning must base on the land allocation index that the city can get from nation. In the past, the phenomenon that the urban planning breaks through the land supply index is common because the relationship between urban master planning and general land use planning is parallel. Now it will not exist any longer.

**( 2 ) Clearly define the district scope where is forbidden, limited or suitable for urban spatial construction**

This demands detailed research of the urban land-use condition, and makes deep consideration of planning area scope and the constructive land scale in urban planning.

**( 3 ) Shall not set any development zone and new urban district outside the urban constructive land scope defined by master planning.**

This provision will basically eliminate a new large-scale urban development outside the construction scope defined by master planning. In the past, wide variety of development zones has been major difficult problem for related department in charge to control. Once the spatial development range is strictly limited by the act, city will have to pay more attention to optimizing the land use to tap the potential comprehensive benefits in the existing built-up area. Thus greatly enhance the possibility of the city to implement smart growth strategy.

**( 4 ) Only after getting the License for Construction Planning, construction units can go to the land management department of local government above the county level to apply for land. The department will allocate the land after the approval of government above the county level.**

Together with other provisions relating to the land use right transfer, this clause makes more restrictive conditions for construction doers to get land use right, as well as land use way, and the related procedure is more perfect. Furthermore, the planning condition aiming to limit the land development way must be integrate into the land use right transfer, and can not be changed or removed; department in charge of planning management is responsible for this

work.

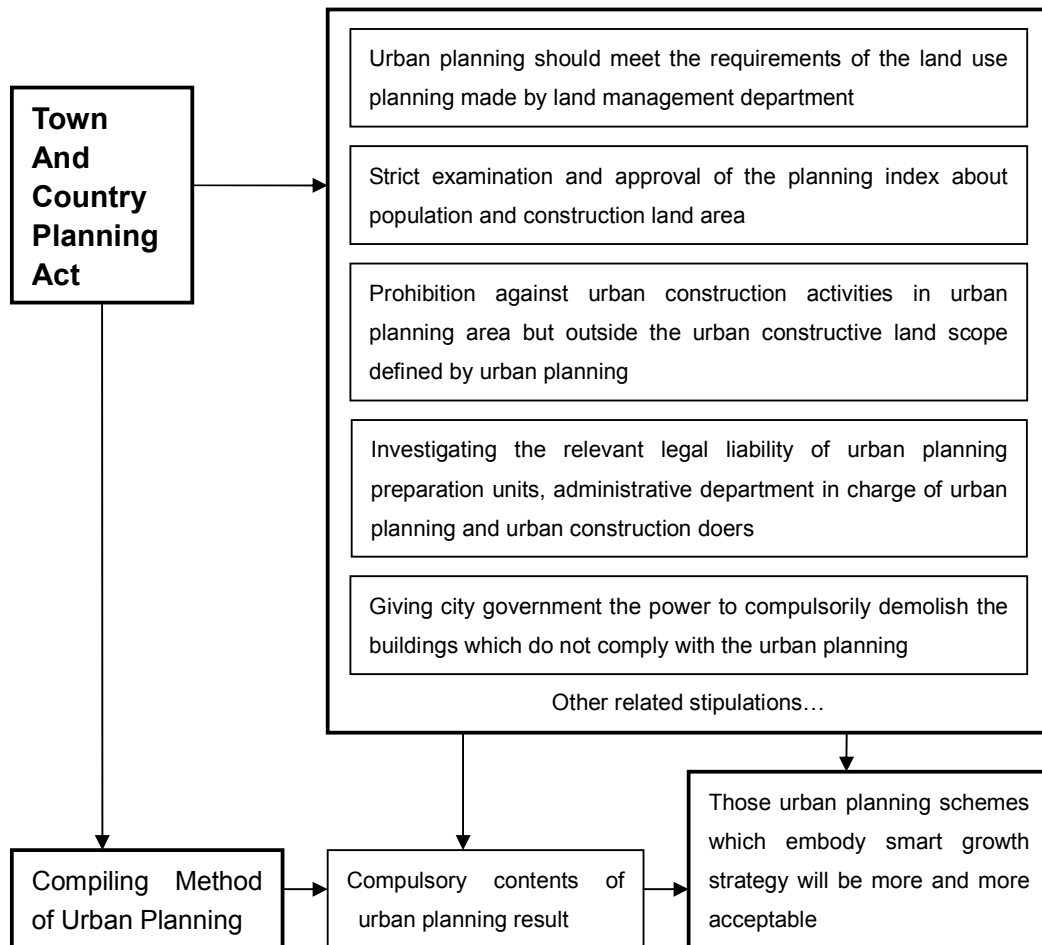
These clauses will supervise strongly the planning implementation; they are very helpful to turn the legal urban spatial growth into reality smoothly.

**( 5 ) Planning management department shall not make any planning license if the construction is outside in the constructive land scope which is defined by the urban planning.**

This clause will put an end to the administrative behavior which does not conform to the planning; it is very necessary for the imperfect legal environment at present in China, and strongly supports the planning management department to carry on administration according to law.

In addition to the above, under the guidance of the new act, the present Compiling Method of Urban Planning makes claim many compulsory contents of urban master planning results, including urban planning district scope, controlled construction zone, urban constructive land scale, as well as the use intensity control etc. All these mentioned are related closely to the urban spatial growth.

From the above description, it is known that the new act especially emphasizes on the limited conditions and controlled content of new district construction and development on the urban master planning layer; it indirectly encourages city to make full use of existing infrastructures and carry on compact, efficient planning and construction. The new act urges people to give careful consideration to “leap-forward development” which used to be advocated by many cities, protects the effective implementation of master planning through the restrict examination and approval procedure of planning and construction. So we have reasons to believe that the new act will fundamentally avoid the phenomenon that many small-size towns construct large-scale “image projects” which surpasses their own economic capacity under the excuse of “improve city’s image to attract investment”, prevent individual local government leaders to intervene and change urban planning arbitrarily<sup>10</sup>, eliminate the situation of “one term of leadership, one planning” and “one term of government, one newly developed area” which used to exist widely in small-size towns in China. Objectively, all these will promote Chinese small-size towns discard traditional ideas of “stimulates the economic development by large-scale construction of new urban district” and transfer to consider efficient, centralized and compact spatial development model. In a word, the new act really creates good conditions for small-size towns to carry out the smart growth strategy continually and steadily (Figure 3).



**Figure 3: the New Act Makes Smart Growth Strategy Welcomed**

Resource: drawn by author

#### 4 Case Analysis: the Master Planning of Lianjiang Town

##### 4.1 Brief introduction of Lianjiang Town's master planning compilation process

Lianjiang County is under the administration of Fuzhou City, the capital of Fujian province. The county town is located in the northeast of Fuzhou from where is 50 kilometers. Figure 4, Figure 5 respectively indicates Lianjiang County Town's location at different levels and the existing land use situation.





**Figure 4: Location of Lianjiang County and Lianjiang Town**

Resource: drawn by author

Table 2 lists the basic data of Lianjiang Town's population and built-up land area in the period 2000-2005, it shows the town's urban space did not grow drastically before 2002. After that, the area of new constructive land per year was at least 0.5 square kilometer, and the per capita built-up area kept quickly and stably increasing from 2002 to 2005. The Elastic Coefficient of Urban Land-use Scale is 1.84, it is a much higher than the reasonable level. This situation indicates the urban growth fastened obviously and corresponds with the local economic development-some large industrial projects began invest in the county town since 2002. Therefore, the Lianjiang Town shows the trend of spatial sprawl at present.

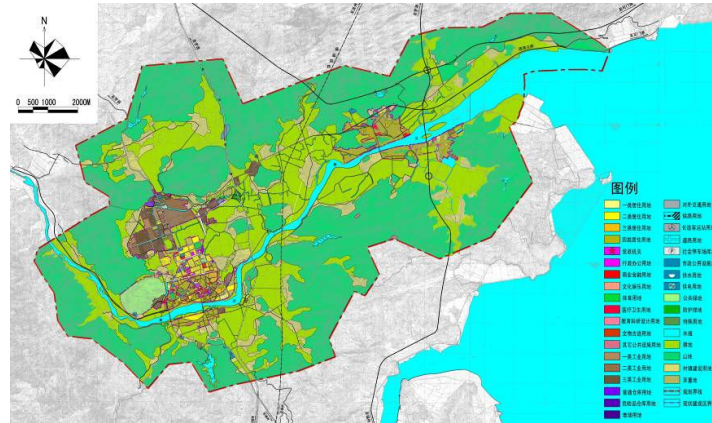
**Table 2: Basic Data of Lianjiang Town's urban growth (2000-2005)**

| Year | Population | Built-up Area<br>(square kilometer) | Per Capita Built-up Area<br>(square meter) |
|------|------------|-------------------------------------|--|
| 2000 | 60952      | 5.8                                 | 95.16                                      |
| 2001 | 68069      | 6.28                                | 92.26                                      |
| 2002 | 68985      | 6.8                                 | 98.57                                      |
| 2003 | 70525      | 7.8                                 | 110.60                                     |
| 2004 | 72452      | 8.32                                | 114.83                                     |
| 2005 | 77973      | 9.05                                | 116.07                                     |

Data Resource: Lianjiang Town's master planning 2006-2020

The Lianjiang Town's master planning (2006-2020) compilation began in September 2006 and completed in May 2008. During this period, the planning experienced 5 rounds of report and discussion. The first round was aim to exchange and discuss options; some matter of principle, such as main direction of urban development and urban function structure etc were initially defined in the second round, and the planning also made clear the basic framework of

urban spatial construction at that time. Then in the third and fourth rounds, the main work was to adjust and perfect the planning combining the advices of professional experts, local government and related departments. At last, the planning results was examined and approved in the fifth round. After approved smoothly, the final results were completed basing on experts' opinions.



**Figure 5: Existing Land-use Map of Lianjiang Town (2006)**

Resource: Lianjiang Town's master planning team

#### **4.2 Reflection of the new act's effect in the master planning**

Basing on the above introduction, the planning schemes of the second round, the fourth round, as well as final scheme were taken to do comparison in this paper aiming to analyze the planning evolution under the effect of the new act. Here the paper focuses on two aspects: urban spatial development direction and urban spatial growth scale.

After the second round of report, the main development directions were defined to eastern and to southern, this train of thought was unanimously approved because it corresponds with the town's actual situation very much. So the remaining core problem was urban growth scale, especially the spatial scale.

Table 3 shows the adjustment process of the planning urban constructive land scale, the planning indexes related to urban spatial growth kept declining. But in fact, the local leader had made claim about much more constructive land for developing industry for several times and the compilation unit had agreed to moderately expand the planning spatial scale under the premise that did not surpass the national standard about per capita index in the third rounds. Exactly in this time, the new act was promulgated. Under the pressure of the respective legal liability, compilation unit and local government determined to give up this agreement after quick communication. From then, compilation unit, local government and professional experts finished argue on spatial development model. They unanimously agreed that based on deep research of socio-economic development demand, Lianjiang Town's urban development should borrow ideas from smart growth, fully tap the land-use potentials of existing built-up area, moderately strengthen development intensity to enhance the land-use benefit to reasonable level which used to be very low. As the direct result, the spatial scale at end of the planning period in the schemes became smaller and smaller (Figure 6).

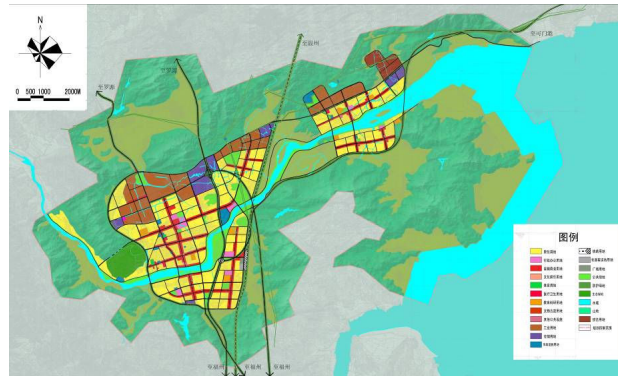
**Table 3: Change of the planning index about urban construction land area in different rounds**

|   | Year | Planning Index (Unit: 10 thousand, square kilometer) |                              |   |
|---|------|--|------------------------------|---|
|   |      | Population of Planning                               | Urban Construction Land Area | Per Capita Urban Construction Land Area |
| <b>The second-round planning scheme</b> | 2010 | 20.5   | 19.5                         | 95                                      |
|   | 2015 | 25   | 26.2                         | 105                                     |
|   | 2020 | 30   | 33.2                         | 110                                     |
| <b>The fourth-round planning scheme</b> | 2010 | 20   | 19                           | 95                                      |
|   | 2015 | 25   | 25.3                         | 100                                     |
|   | 2020 | 30   | 31.7                         | 105                                     |
| <b>The fifth-round planning scheme</b>  | 2010 | 20   | 20                           | 100                                     |
|   | 2015 | 24   | 25.2                         | 105                                     |
|   | 2020 | 30   | 30                           | 100                                     |
| <b>The Final planning scheme</b>        | 2010 | 19   | 17.1                         | 90                                      |
|   | 2015 | 23   | 20.6                         | 90                                      |
|   | 2020 | 28   | 23.8                         | 85                                      |

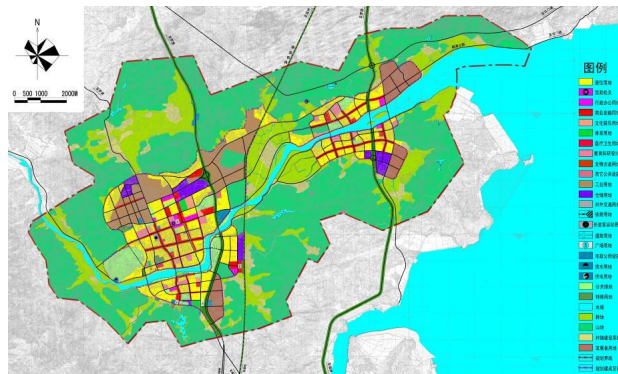
Data Resource: Lianjiang Town's master planning 2006-2020

Note: the urban planning scope contains the original county town and two close townships at the lowest level.

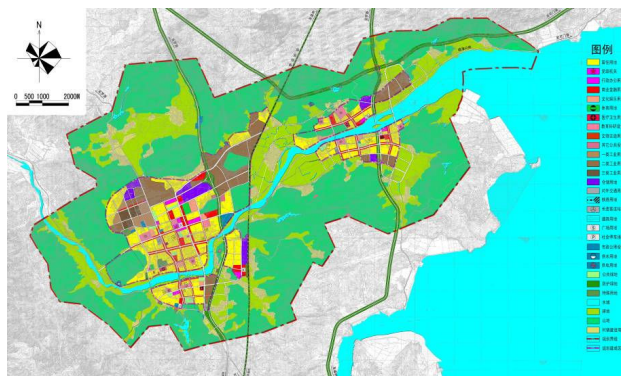
From the description above, the paper has some findings which base on the compilation process of the Lianjiang Town's master planning and the spatial growth scale which was determined at last: on one hand, under the guidance and regulation of the new act the planning compilation unit and the experts in charge of planning examination can break through the original model that give more consideration to the eager local demand of economic development than other factors, integrate smart growth idea into the planning scheme and convince the local government to change the development way, discard outdated idea of "promotes the economic development singly by urban spatial expansion and large-scale construction of infrastructure"; on the other hand, the law power had forced many city governments to rethink and review about how to realize scientific and reasonable spatial growth of the city, and this makes the smart growth strategy more widely accepted.



a: Master Planning of Lianjiang Town: The Second-Round Scheme



b: Master Planning of Lianjiang Town: The Fourth-Round Scheme



c: Master Planning of Lianjiang Town: The Final Scheme

**Figure 6: Change of Master Planning of Lianjiang Town**

Resource: all the maps are from Lianjiang Town's master planning team

**5 Conclusion**

The implementation of the Town and Country Planning Act will strongly promote the foundation of town-country integrated system, so it is of great significance in the history of Chinese urban planning.

As for the impact on urban spatial growth, the new act will be a very strong regulation of the urban space scale because it makes many clear, restrict and detailed stipulations aiming to the urban disorderly expansion from almost all the aspects including planning compilation, planning management, planning implementation etc.

The effect of the new act will be more obvious in small-size towns where the legalization and law enforcement are relatively weak. In particular, urban space grows fast in most of Chinese small-size towns at present, but the planning compilation, management, examination, supervision and implementation are much more non-standard than those of bigger cities. As the most direct effect on urban spatial growth, the new act can put a stop to illegal construction outside the planning area scope and unserious scale forecasting of urban spatial development. Namely in the planning period, urban growth will happen within a defined boundary and the constructive land area can not be arbitrarily expand. Therefore, the paper holds that the Town and Country Act will prompt Chinese small-size towns to pay more attention to using and optimizing existing urban space resource and consider smart growth strategy.

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