

# Study on the Non-constructive Land in Town Development and its Governance

## ETUDE SUR LA TERRE NON-CONSTRUCTIVE DANS LE DÉVELOPPEMENT DU BOURG ET SA GOUVERNANCE

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**Abstract:** This article tried to do some research, on the foundation of the study with the governance of non-constructive land in China's county territory to promote the balance of the region. Specifically, this paper reviews the necessity of research on town's non-constructive land and designs the system of non-constructive land. Finally, by analyzing the correlation of the construction land and the non-construction land, the paper expounds the methods of the governance for non-constructive land in town development.

**Key words:** the developed area, county territory, non-constructive land, styling, governan

**Résumé:** Le présent article cherche à effectuer des recherches sur la gouvernance de la terre non-constructive dans le territoire national de Chine dans le but de promouvoir l'équilibre des régions. Concrètement, l'article examine la nécessité de recherches sur la terre non-constructive du bourg et établit le système de la terre non-constructive. Finalement, en analysant la relation entre la terre constructive et la terre non-constructive, l'article expose les méthodes de gouvernance pour la terre non-constructive dans le développement du bourg.

Mots-Clés: région développée, territoire national, terre non-constructive, style, gouvernance

### 1. INTRODUCTION

Non-constructive land has attracted much attention in both research and development in recent years. This reflects the conflict between urban expansion and environment have become more and more serious, especially in the developed area with high town-density of China.

China's town construction is undergoing changes at an unprecedented high speed, towns in all quarters have stepped into a brand new era for development as well. The scale of towns expands sharply, particularly in regions that are relatively developed in economy. However, most of towns, owing to the lack of effective conduct, began to either extend to periphery resembling "spreading out a large pancake" or spread to exterior in disorder with freeway as support. The increasingly acute

conflicts between towns expansion and ecological environment result in the stepwise erosion of open spaces among towns, the beginning of disorder in towns' structures, the gradual disappearance of towns' unique rurality and characteristic landscape. The deterioration of urban and rural living environment has turned into a real bottleneck in urban and rural sustainable development. It is inseparable to the attitude that people only emphasize the planning and construction of construction area while pay no attention to the non-constructive land which is related to the towns' sustainable development, ecological security and quality control on towns' human residential environment. Considering China's vast territory, only some of economically developed regions that are relatively representative are selected as this paper's research subjects.

This research tried to do some research, on the foundation of the study with the governance of

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non-constructive land in county territory to promote the balance of the region. While there has been relatively little research that directly addresses the methods of the planning of non-constructive land, several interesting studies have examined the connection between non-constructive land and constructive land. For example, England promulgated a law of "Green Belt Act" to prevent urban sprawling to country land in 1938, and the planner in England planned a green belt surrounding the city. R·Me (1980) also observed that the phenomena of "urban sprawl" had become more seriously, and he conclude that we should pay more attention to the green land. "Smart growth" theory of 1990's also found a new urban form of "compact urban forms" can make cities better. In the current study, some scholars have turned to find some measures in city's management.

However, these researches fail to address how the cities can be in good management of green land, and fail to structure the non-constructive land system. The management of cities is more important than planning.

The analysis of critical thinking in the present research focused on the management of non-constructive land. Hereafter, academic writing is merged with analytical writing and argumentative writing. And, it is suggested that further studies on the non-constructive land development need aim at the government's act.

## 2. THE NECESSITY OF RESEARCH ON TOWN'S NON-CONSTRUCTIVE LAND

Land is the carrier of all urban activities. In China's relatively developed regions, non-constructive land, which appears increasingly in a way of scarcity and irreversibility, is the sensitive area of towns development. But it is often neglected by local governments. As a matter of fact, it is the foundation of regional ecological economy and the key to determine on efficiency and cost of towns' ecological system, which exerts a direct impact on the regional economic growth as well as the speed, quality and level of development. While planning, what we should consider foremost is to define the structural and ecological land vital to town's development and the land where construction is not inadvisable or should be prohibited. In addition, we should come up with a planning and controlling program with regard to the non-constructive land. Therefore, on the new domestic and international background, it is an urgent task to explore the governance of non-constructive land with an attention given to the objective of efficiency and stability.

### 2.1 Town (city)--basic regional socio-economic unit

It is China's most ancient and stable administrative

system at grass roots level, as well as the most basic regional socio-economic unit that is relatively integrated and independent. Therefore, it is of great significance to promote comprehensive urban and rural development and integration. Its role can be principally summarized as following points:

#### 2.1.1 The role of "connecting link between higher and lower governance"

It is a sort of regional type between province, city and villages, which determine on that the study on it should not only meets the upper layer's need in a deepening, refining and pragmatic way, but also conduct effectively on lower layer's formation. It is the foundation on which all the planning and formation of towns should be established.

#### 2.1.2 The role of "enrichment of planning and practice system"

It is the basic regional unit that is relatively integrated in state administration. Thus, the town planning could be put well into place with township government as its executive main body. Therefore, the study on it could be an enrichment of planning and practice system and provide a kind of pragmatic possibility and foundation for the reorganization and integration of planning system.

#### 2.1.3 The role of "overall arrangement of town's resources"

Through the study on town, we can aim at actual situation incorporating upper layer's planning tenors. Objective of socio-economic development will be put into practice in towns' spatial distribution. The population, industry and land are further optimized among township level. We may realize the coordination and unification between planning of substantial space development and objective of socio-economic development.

In view of administrative borderline, each town in County (City) often does things in his own way. Established in study within County (City) domain, we can handle well with the horizontal development among towns in County (City), coordinate the relationship among the relevant planning in fields of land utilization program, environmental protection program, flood control and water conservancy program and etc. We can solve the current problem brought about by division of stripes and blocks and realize the objective of "all schemes in one map", presenting government the basis for the centralization of management among its departments. Meanwhile, we can address the major issues of sharing of regional infrastructure and construction transcending the border of administrative regions to avoid out-of-order competition, redundant construction and disorder in ecological environment.

## 2.2 Non-constructive land--the space of uncertainty in town construction

People often pay close attention to what to build , but in fact, town's sustainable development requires us to know what should not be constructed.

Photographs taken by the Shenzhou five in outer space show an extraordinarily vast yet withered and yellow China. We should be aware of that the shade and protection left by our ancestry is being diminished and destroyed by urban exploitation. In urban planning , because we haven't described areas besides land for construction in an explicit way with clear-cut requirement of control, this part of land ,which is most closely related to regional sustainable development, is occupied at random as "land for extra uses".

The writer of this paper comes to a conclusion that the protection of towns' non-constructive land has become a top priority, for it is the inevitable choice for urban and rural development.

### 2.2.1 The unpredictability of the economic growth and urban development

Currently, China has an awfully serious problem that economic growth and land use are out of control. China has been the among the countries that develop the fastest in economy in the world since 1980. In relatively developed regions, the scale of land for construction and population brought about by concentration is expanding rapidly.

The local governments are trying their best to advance urbanization and land development has appeared an unprecedented upsurge. From 1990 to now, land development throughout the country has been in full swing, the frenetic enclosure movement in development districts and real property development is rolling on with full force with an evidence of over 8,000 development districts at peak time.

However, the urban rapid economic growth speed results in the loss of control on land utilization, mainly in the form of mass irrational loss of agricultural land , which conflicts with our country's increasing demand for grain. Rapid urban expansion, planless land utilization and unplanned urban spread have become the main development mode in china's relatively developed regions. "A type of self-destructive economic model" is in use now.

Meanwhile, because city is a complicated, open and huge system, urban development is of unpredictability. Current investigation, analysis, evaluation and program of land in city planning all center around choice and decision of planned land for construction. The unpredictability of urban development results in some little malpractice in our present traditional planning. Traditional city planning always proceed in such sequences: predict the scale of urban population in near, middle and long term ; determine upon the scale of land according to state land on average per capita ; arrange

spatial distribution of the different functional areas ; compile planning of the land utilization program. The standard form of planning is to define precise usage and range of land for construction in the period of planned times. It is less described explicitly with clear-cut control requirement whether the area besides land for construction can be used for urban construction or not. In the process of readjustment in planning, we either don't grant a warrant to any program with rigid control or adjust at will to lay out construction project on the land that should not be used for urban construction. But, considering that city is a changeful, complicated and huge system , it is often difficult to predict the independent variable on which the scale and functional distribution of urban land rely(for instance, population) , resulting in that land for construction often break through the land scale and spatial limit. Consequently, on the one hand, the city planning can't be carried into execution effectively and the phenomena of known "loss of control on planning" often occur , influencing urban proper redistribution and sound development, on the other hand , the main body of construction and department of economic management will hold a view that the city planning is inadaptable to the need of urban development and economic construction, another embodiment of "planning delay", leading to the chaotic and out-of-order urban expansion and waste of land resources. By contrast, conservation program of urban green network and ecological environment is only a functional plan drawn after urban land has been defined with mark of red line. In fact, it has become a passive ornament just for show which is subsequent and secondary.

### 2.2.2 Ecological deficiency of non-constructive land among towns

Quite a few non-constructive lands display considerable ecological and environmental efficiency, conditioning and stabilizing climatic and meteorological condition, disaster alleviation, purifying water and air.

In company with the city's rapid regional socio-economic development , the correlation between urban and environment decline sharply in harmony with the gradual reduction of green land, wet land, water body and farm field as evidence. It has become the hotspot and focus in the planning of China's relatively developed regions that how to realize the mutual support between human and nature, reduce the antagonism between urban development and natural environment and prevent the calamity aggravation, environmental deterioration and decline of quality of life. In short , the non-constructive land is the main carrier of regional ecology, supporter of town's spatial expansion, supplier of town's productive and life material. The tide of globalization leads regional integration to be in the ascendant. In our country's relatively developed regions , as prevalent development of urbanization and continuous expansion of town's spatial space, town shows itself a tendency to spread. On

the one hand, the land for construction is expanding in an extensive way with a low ratio of land utilization and serious problem of waste and idle, on the other hand, it is often seen that land for construction occupy ecological greenbelt and farm field. Therefore, the original natures of ecology and scarcity in non-constructive land are increasingly laid stress on. "The main point of planning not only lies in scheme, but also protection of blank non-constructive land by all manners". (Wu Liangyong, 2002)

### **3. CLASSIFIED GOVERNING STRATEGIES FOR TOWN'S NON-CONSTRUCTIVE LAND**

Our country's governance mode regards governmental strength as absolute leading role. It mainly finds expression in a relatively integrate system of program compilation, a strict logical relation and intensive constraint relation among various levels, which cry up spatial configuration program. As a matter of fact, the research on our country's governance should stress more on legible division of powers. That is to say, we should adopt different standards of intensity upon planning of different spatial areas. Only in that way can the features of current governance concept be embodied. In the light of our national condition, our research on the governance, still with conspicuous political tint, is closely related to power, especially aiming at the distinctiveness of non-constructive land. With this end in view, this paper will primarily center around governmental functions.

#### **3.1 The governing strategy of non-constructive land that takes technological efforts**

This type of land is characterized by special physical geographic feature, unsuitability for construction, expensive development cost, and latent disasters, including the location of underground mineral resources.

With regard to this kind of area, urban planning department must guard the pass rigidly. We should not only make an examination of the design scheme of construction project, but also judge that whether the project's location is in violation of urban planning or not. Any kind of construction should be strictly banned on this type of land.

#### **3.2 The governing strategy of non-constructive land that should give play to ecological effect**

This type of land, one of broad categories of non-constructive land system, is inclinable to give rise to

"disputes". In practice of program, it is often turned into the land for emergency use because of improper control. We shall govern the use of this type of land with powerful measures when we formulate the town's planning in relatively developed regions.

#### **3.2.1 Land with ecological role to play yet unsuitability for construction**

We must stress on the protection of this type of land, for instance, town's natural mountain body and water substance and etc. That is to say, we should reduce unnecessary damage with maintenance of its natural ecological nature as the most important precondition.

#### **3.2.2 Ecological preserve**

This type of land, with a good condition for construction, plays an important role in improving urban environment, upgrading town's ecological quality and optimizing structure of ecological security. For this type of land that has been already built on, we should control and restore its ecological functions. As for original land that has not been used, we must reserve it with an all-out effort. This type of land mainly includes ecological patch in wetland, area for water conservation, ecological zone with hypersensitivity and ecological corridor.

### **3.3 The governing strategy of non-constructive land for landscape**

When we talk about non-constructive land, we don't mean that it can't be used for any urban development and construction. If we can carry out an appropriate development on non-constructive land for landscape, it will not only give play to natural value of landscape but also directly increase territorial economic value, moreover, it will be beneficial to the overall implementation of town's ecological policy. Therefore, control does not equal to an across-the-board ban on construction, instead, on the basis of fundamental precondition that destroy of ecological balance, negative effect of ecological function and degradation of landscape quality should be avoided, we can, guided by policy of rigid control, partly carry out development in control area for non-constructive land with consideration of ecology. We must formulate governing requirement in three aspects: approval of construction project, confirming administrative main body and hierarchy control on landscape. With a priority given to maintenance, protection and repair of territorial value in ecology and landscape.

#### **3.3.1 The approval of construction project**

Once the construction project in area of non-constructive land for landscape is established, following conditions must be fulfilled:

1<sup>st</sup>. With the aim of giving full play to the ecological function of non-constructive land, it must be the assistant development, which takes service as its major function,

under a certain circumscription. It must give priority to the ecological effect with direct economic benefit as a subsidiary role. A "win-win" solution should be advocated and development in violation of rules under cover of ecology should be strictly prohibited.

2<sup>nd</sup>. The approval of projects must go through process of ecological evaluation strictly.

3<sup>rd</sup>. The nature of land utilization must be compatible with the natural feature of land. That is to say, we can't be at the loss of natural and ecological function of land, meanwhile, we can satisfy functions of use of corresponding construction project.

4<sup>th</sup>. Construction must satisfy the needs of a series of ecological index and construction guidance formulated by controlling planning.

5<sup>th</sup>. Specific green city and village landscape can be formed.

### **3.3.2 Confirm the administrative main body**

Administrative institution must be established according to relevant regulations to manage the non-constructive land. According to regulation of ministry of construction, this type of land can't be put under the management of enterprises. To be more specific, we can't practice in modes of management on commission, management of leased firm and transfer of management right to hand the responsibility of program management and supervision of resource protection in scenic area to enterprises.

### **3.3.3 Hierarchy control on landscape**

Once this type of land is developed, we must establish a grading evaluation system that depends upon the value and urgency of protection, according to which the range of scenic area and its core part can be defined. Under this system, the capacity of visitors and form of sight-seeing activity must be restricted. We must restrict the development and construction in core part of scenic area

and clean up buildings that should be demolished. Particularly, the protection of historical and cultural blocks, historical buildings and historical environment should be emphasized. We should define the range of absolute protection area, controlling zone for construction and coordination area for environment with a combination of protection and development, which may reserve the historical styles and features of scenic area in modern city.

### **3.4 The governing strategy of non-constructive land for policy**

It is the land, according to requirement of town's development, which must be controlled compulsively in a given period. In our country's relatively developed regions, overheating of urban development and "craze of enclosure movement" bring about uttermost territorial loss, even "life-saving land" and reserve land is used for construction in advance. In order to boost the intensive development of land for town's construction, we need to manage the use of basic farmland protective zone and land for strategic control on urban development, which fall into the category of land for policy.

### **3.5 The governing strategy of land for infrastructure passage**

In our country's relatively developed regions, infrastructure is stepping into regionalization. It is the fundamental conditions and warrant for town's development that we can share the road traffic, water and electricity, telecommunication and etc. Infrastructure passage can not only effectively drive economic rapid growth, but also improve environment in all directions to maintain ecological security. Therefore, in accordance with internal law of town's development, we need to construct town's infrastructure passage and ensure the effectiveness of land utilization.

## **REFERENCES**

- Adams, P. (1997). Cyberspace and virtual Space. *The Geographical Review*, 87: 155-177.
- Alexander, C. (1997). *A Pattern Language*. Oxford: Oxford University Press.
- Archibugi, F. (1997). *The Ecological City and the City and the City Effect: Essays on the Urban Planning Requirements for the Sustainable City*. England: Aldershot.
- Bacon, J. (1974). *Design of Cities*. Thomas and Hudson, 68-76.
- Barnett, J. (1974). Urban design as public policy. *Architectural Record Book*, 27-38.
- Mitchell, W. J. (1995). *City of Bits: Space Place and the Infobahn*. Cambridge, Mass: MIT Press.
- Burchell, R. W., Downs, A., Seskin, S., Moore, T., Shad, N., Listokin, D., Davis, J. S., Helton, D., Gall, M., & Phillips, H. (1998). *The Costs of Sprawl Revisited*. Washington, DC: National Academy Press.
- Hitters, E. Culture and capital in the 1990s. *Built Environment*, 20(2): 73-76.
- Jones, V. (1942). *Metropolitan Government*. Chicago: University of Chicago Press.

- Kichin, R. M. (1998). Towards geographies of cyberspace. *Progress in Human Geography*, 22(3): 385-406.
- Lopes, R., & Hynes, H. P. (2003). Sprawl in the 1990s: Measurement, distribution, and trends. *Urban Affairs Review*, 38(3): 325-355.
- Lynch, K. (1960). *The Image of the City*. Cambridge, MA: MIT Press.
- Punter, J. Design control in England. *Built Environment* , 8(2): 59-64.
- Rapoport, A. (1969). *House Form and Culture*. NJ: Prentice-Hall Press.
- Rubenslein, H. (1987). *A Guide to Site And Environmetal Plannins*. United States of America: A Wiley\_Interscience Publication,
- Smart Growth network. (2003). *Getting to Smart Growth II :100 more policies for implemengtation*. ppl-2

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