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## Research of government intervention model of new urbanization in China based on international experience

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### ABSTRACT

"Twelfth Five Year Plan" point out that "actively and steadily promote urbanization, and adhere to the road of urbanization with Chinese characteristics". Decades of urbanization have generated many problems, such as excessive dependence on land resources, ineffectively protect the interests of landless peasants, parts of the urban people can not have equitable access to social security, and the breeding of "urban disease". The paper describes the new urbanization concept and content, drawing on experience in the urbanization development of United States, Japan, Britain and other developed countries, combined with the actual situation of China's urbanization development, pointed out the importance and necessity of the government regulation in the development of new urbanization process. Domestic academia studies more about urbanization process, pattern, dynamic mechanism, international comparison, less involved from practical or quantitative aspects. This paper studies the functions of government behavior and orientation of new urbanization, using principal component analysis to construct a comprehensive index system of government intervention, the paper also gives suggestions of indemnificatory policy and optimization measures in the new urbanization process, makes a specific explanation from the perspectives of land, residence, administration and urban planning. In order to provide a good environment for China's urbanization healthy and sustainable development, government should change the traditional development model of urbanization, concentrate on policy guarantor, complete the mission of "urban public service providers".

### KEYWORDS

New urbanization; Government functions; Government intervention model; Protection policy.



### INTRODUCTION

Since New China was founded, the domestic development of urbanization has undergone six stages of smooth-going and speeding, retrogression and stagnation, rapid and stable (FANG Chuang Lin, et al, 2008), to achieve the rapid development of urbanization as a whole. Especially after the reform and opening-up, the development of urbanization made great progress, and constantly improved the level of urbanization. Sustained rapid urbanization left behind a number of social issues, such as: the neglect of the agricultural economy led to the "three rural" problem, farmers can not improve their quality of life; spatial planning and urban governance is not in place, leading to farmland has been continuous occupation of farmland, towns spread wantonly, waste and shortages coexist; over-reliance of traditional energy and materials led to the scarce resources exhaustion; weak awareness of energy conservation and environmental regulation led to poor long-term high pollution, high energy consumption and high emissions and so on. It should also be clearly seen that, comparing with developed countries, China's urbanization level is still low.

Along with China step into the ranks of middle-income countries, domestic demand pressures will be further enhanced. To this end, urbanization must quickly shift from one-sided pursuit of speed to promoting the quality of urbanization, (QIU Bao xing, 2012), must increase inputs of urban and rural construction in public service quality and ecological environmental protection, to avoid falling into the "middle income trap", promote social harmony and stability.

### NEW URBANIZATION CONCEPT

Recalling the history of urban development since the founding of New China, can be divided into four phases: 1949-1958 start-up phase of urbanization that limited intervention by government, intervention over 1959-1978 fluctuations phase of urbanization that over intervention, 1978-1992 rapid urbanization phase that moderately intervention, the accelerated urbanization phases after 1992 with a rational guide by government.(Figure 1 shows four stages of urbanization development in China, Source: "China Statistical Yearbook" 1949-2013).

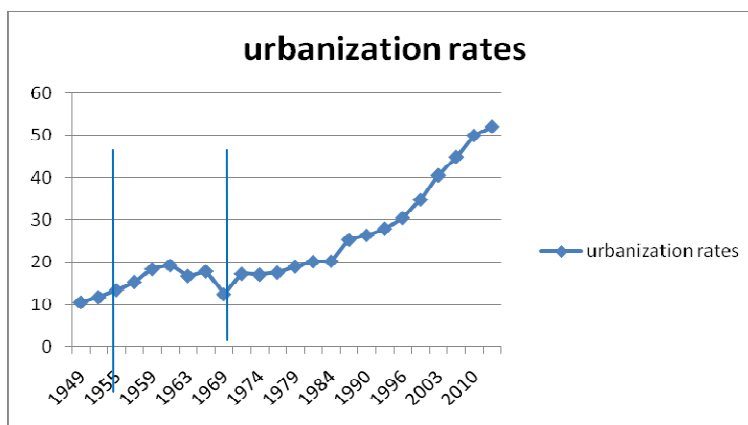


Figure 1 : Four stages of urbanization development in China

After the reform and opening up, China's urbanization process into a benign period of development, urbanization steadily developed (TABLE 1 shows the growth of China's urbanization rate from 1978 to 1995). Since 1998, Chinese government proposed "small town, big strategy" in the fifteenth Third Plenary Session of CPC (Communist Party of China) for the first time, and then "16th National Congress of CPC" proposed rural economy flourish plan and speeding up urbanization plan, until 2013, CEWC (Central Economic Work Conference) keep promoting urbanization as China's important development strategy, pay attention to the transformation and development of urbanization, and actively promote the new urbanization.

TABLE 1 : The growth of Chinese urbanization rate from 1978 to 1995 (Source: "China Statistical Yearbook" 1978-1996)

Years	1978	1979	1980	1981	1982	1983	1984	1985	1986
Urbanization rate	17.92	18.96	19.39	20.16	21.13	21.62	23.01	23.71	24.52
Growth rate		1.04	0.43	0.77	0.97	0.49	0.39	0.70	0.81
Years	1987	1988	1989	1990	1991	1992	1993	1994	1995
Urbanization rate	25.32	25.81	26.21	26.41	26.94	27.46	27.99	28.51	29.04
Growth rate	0.80	0.49	0.40	0.20	0.53	0.52	0.53	0.52	0.53

"New urbanization", presents more than 10 years, was first recognized in the sixteenth CPC National Congress accompanied with "new industrialization" strategy, mainly relying on the industry integration to promote urban and rural integration (LI Cheng Zhou, 2012). However, the "new urbanization" is well known by Chinese people in the eighth CPC National Congress, report says that: "adhere to road of new industrialization, informatization, urbanization, and agricultural modernization with Chinese characteristics, promote deep integration of information technology and industrialization, positive interaction of industrialization and urbanization, coordination of urbanization and agricultural modernization, promote simultaneous development of industrialization, informatization, urbanization and agricultural modernization." 2012 CEWC for the first time officially that "the concept and principle of ecological civilization penetrate the whole process of urbanization, choose the new urbanization way of intensive, smart, green, low-carbon." was first officially proposed in 2012 CEWC, Which was established as a new growth engine and an important means of expanding domestic demand. Afterwards, "new urbanization" gets more and more attention of academic community.

Connotation of New urbanization is people's livelihood, sustainable development and quality. Core goal of New urbanization is to the pursuit of equality, transformation, green and intensive. The new urbanization is a process, aiming to achieve regional integration, coordination of overall industrial upgrading, low-carbon transformation, social civilization, efficiently intensive, institutional reform and innovation.

Interpretation related content of "the 12th five-year plan" and "the 13th five-year plan", core objectives of China's new urbanization can be summarized as six point below in TABLE 2: the equality, happiness, transformation, green, health, intensive urbanization goals.

**TABLE 2 : The core objectives system of new urbanization**

Urbanization target	Corresponding connotation	Key content	Main performance
Equal urbanization	Social connotation	Integration of co-ordination	Security of migrant workers, safeguard of public services, household and land systems, urban and rural overall development
Happiness urbanization		Housing and income distribution	Income distribution system innovation, narrowing the wealth gap, the public housing security
Transformation urbanization	Economic connotation	Upgrading and optimization of structure	Optimization of industrial structure, modernization of agriculture, scale service
Intensive urbanization		Efficiency and economy	Intensive use of land resources, and facilities, regional coordinated integration
Green urbanization	Environmental connotation	Low carbon and environmental	Decreased carbon emissions, ecological optimization, green concept
Healthy urbanization		Safe	improvement of food safety, public health, environmental quality, reduce energy consumption and pollution

### GOVERNMENT FUNCTIONS

Review academic research since 1990s, academic papers on urbanization presents a "blowout" situation. The follow viewpoint has important reference value: SHEN Zhen Dong believes that because of Chinese historical reasons and fundamental social system with Chinese characteristics, China urbanization has significant Chinese characteristics<sup>[1]</sup>. WANG Guang Tao expounded China's urbanization characteristics from six aspects of economic system, social system, the new road of industrialization, population mobility, and regional differences in cultural background<sup>[2]</sup>. GU ShengZu, JIAN Xin Hua think urbanization features of China are: China's urbanization is launched by the Government; Chinese urbanization, urbanization and rural urbanization simultaneously; low urbanization of non-labor absorptive capacity; city constitutes uncoordinated and rural surplus labor career transition area prior to conversion<sup>[3]</sup>. These studies are all referred to the important role of government in promoting and guiding the process of urbanization in play.

The World Bank's World Development Report "Governments in Changing World" (1997) said that, the government functions under market economy conditions defined around three areas: "First, the government should maintain the balance of aggregate demand and aggregate supply, ensure macroeconomic stability; second, establish a sound market regulations, maintain the economic order; Third, organize the supply of public goods, regulate social distribution, realize social security. China is now in the urbanization transition period from the mid-to late, so meet the public needs of residents should be their top priority. "12th five-year plan" proposed to make basic public service system providing to people as public goods, which means that our government functions need to shift from economic growth-oriented government to public economic governance-oriented government. Paper below summarizes the urbanization experience of some typical country, to guide our government's governance..

## FOREIGN GOVERNMENT EXPERIENCE IN URBANIZATION PROCESS

The urbanization process of developed countries is diverse from each other. The time, various countries experience, that urbanization rate developed from 20 percent to 40 percent urbanization rate has a wide difference: UK 120 years, France 100 years, Germany 80 years, the United States 40 years (1860-1900), Japan 30 years (1925-1955), China 22 years (1981-2001). Urbanization is the only way to achieve modernization, urbanization current practice abroad provides useful experience for China's urbanization development. However, China's urbanization process are different from the process of urbanization in Western countries. Explore the overseas development of urbanization process, aims to summarize the experiences, derive lessons, in accordance with the requirements of China's conditions, actively guide the healthy development of China's urbanization.

Take the urbanization way of United States, Japan, and Britain for example(Figure 1 shows the urbanization trends in modern Japan, British, the United States, the blue line represents the United States, red line represents the British, green line represents Japan, Source: United Nations, World Urbanization Prospects, the 2011 Revision), the paper analysis of various urbanization types of initiatives and influence in various countries' urbanization process.

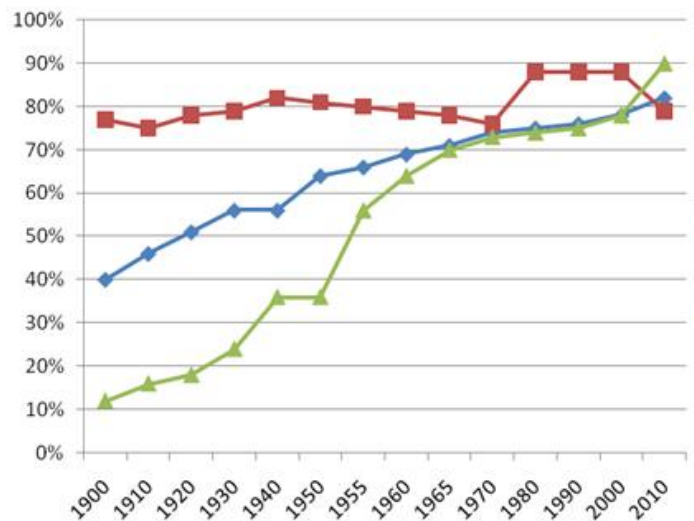


Figure 2 : The urbanization trends in modern Japan, British, the united states

### American experience

The United States is the world's most economically developed capitalist countries, which started the process of urbanization began in the mid-19th century, and urbanization basically completed in 1960s. there are totally 51 U.S. states, 3,043 counties (county), 35,153 city(town) in United States. There is high degree of aggregation of small towns, a large number of small towns distributes around the surrounding cities, and gradually form a dense urban agglomeration.

With the formation of the urban belt and the rise of a large number of satellite towns, not only effectively solve the urban scale expansion defects that caused by traditional unlimited expansion of the city scope, inhibit bloated size of the large cities, but also conducive to the medium and small cities interdependence in urban space and industrial layout, forming a functional complementation of the urban system.

American economic freedom prevails, the process of urbanization is endogenous demand-led, Government has only played a supporting role. However, there are many management practices worth considering for, the following four points summarized the American government management of urban development.

Firstly, strengthen urban planning and management; secondly, put the industry as a basis for urban development; thirdly, coordinated development of medium and small cities and towns. United States government requires that each city should have its own detailed development plan. Planning must be demonstrated by considering the experts and the public, once the plan confirmed, the plan have the force of law, that shall not be altered at will. If you want to change, you must re-examined and approved by the public.

### Japanese experience

First of all, develop rational urban planning.

Japan enacted five "national comprehensive development plan," according to the changing situation, in order to solve problems arising in urbanization. In 1962, Japan began to implement the first "national comprehensive development plan"; in 1987, government developed the fourth "national comprehensive development plan" ;In 1998, government introduced the fifth comprehensive development plan in order to solve the affect that old aging work on urbanization.

Besides, active management of urban environment.

In 1993, Japan government enacted the "Basic Environmental Law", established environmental policy guidelines. Put urban pollution that appears in the process of urbanization and environmental degradation into the legal system. Meanwhile, in the 1990s government began to explore the environmental protection measures to conserve resources, promote resource recycling, proposed the idea of "recycling society". In June 2000, government enacted a "Basic Law of Recycling Society".

### British experience

Britain is the world's first industrialized country, the British government first formulated the "Law on Urban Planning", first establish a "garden city", first implement "urban social security system" means a welfare system named "from the cradle to the grave", first establish a "satellite", first achieve a "suburban urbanization" and so on.

In 1834, the British Parliament passed the "Poor Law" amendment practiced since 1601, established relief system to provide housing for the poor and helpless worker. In 1848 and 1875, the "Health Law" was implemented. In 1866, government adopted the "environmental health Act." In 1909, Britain passed first urban planning "Housing town planning etc, Act, 1909", marking the city planning as a government function. In 1947, Britain enacted the "Town and Country Planning Act". At the same time, the "industrial distribution method" "Metro Law", "National parks and countryside pathway Law", "town development Act" and other 40films about urban development was promulgated. The social security system of the welfare state is responsibility the central government and local authorities to undertake together.

## CONSTRUCTION OF COMPREHENSIVE INTERVENTION MODEL

Academic study of urbanization domestic and overseas focus on the aspects of the measure of urbanization level, the negative impact of hysteric urbanization, relationship between urbanization and industrial structure, excessive urbanization, international comparative study of urbanization, urbanization power mechanisms. Less study concerned on the real evidence and quantitative aspects. Therefore, to study the government policies and market behavior in the China's urbanization process by empirical analysis is worth of study.

Government Intervention indicators of urbanization is a comprehensive concept. in order to accurately measure the extent of government intervention, we should select government intervention indicators from different aspects, to build a comprehensive government intervention indicator system. First, indicators chosen should be able to accurate reflect certain features of government intervention in a given period. Secondly, the indicators selected must be measurable, data should be obtained from the authority.

According to comprehensive index selection principle, the paper identified eight important indicator of urbanization in the degree of government intervention:

- X1- ratio of employees of state-owned units to total employees;
- X2- ratio of state-owned units in wages to total wages;
- X3- ratio of government expenditure to GDP;
- X4- ratio of the total state-owned unit's consumer goods to the total social consumer goods;
- Y1- ratio of the number of state-owned industrial units to the number of industrial enterprises;
- Y2- ratio of urban residential land to a gross area of urban;
- Z1- total number of city buses;
- Z2- total urban hospitals.

**TABLE 3 : Correspondence table of new urbanization target and measurement Indicator System of government intervention**

Urbanization target	corresponding connotation	Index name	Government intervention index content
Equal urbanization	Economic connotation	X1	The ratio of employees of state-owned units to total employees
		X2	The ratio of state-owned units wages to total wages
		X3	The ratio of government expenditure to GDP
		X4	The ratio of the total state-owned unit's consumer goods to the total social consumer goods
happiness urbanization	Social connotation	Y1	The ratio of number of state-owned industrial units to the total number of industrial enterprises
		Y2	The ratio of urban residential land to gross area of the city
transformation urbanization	Environmental connotation	Z1	The total number of city buses
Intensive urbanization		Z2	The total number of city hospitals

Among these indexes, X1, X2, X3, X4, Y1, Y2 is specific value. The greater the index value, the greater the degree of government intervention in Urbanization. The comprehensive evaluation index system of government intervention was established showed in TABLE 3, the eight indicators were selected from different aspects reflecting the information that government intervention in the economy. But the amount of information contained in these variables is uneven, the correlation between the variables and the variables is existed, the information contained in the measured data may be duplicated in part. Therefore, put the above-mentioned eight indicators simple weighted as the degree of government intervention are unscientific. In order to effectively evaluate the government intervention status each year, the paper uses PCA(principal component analysis) to study, which reasonable eliminate the influence of multicollinearity between indicators.

We can use SPSS software to process data by PCA, to empirical research of government intervention urbanization in specific period. First, the raw data were normalized to calculate the correlation matrix R and the eigenvalues and eigenvectors, to determine standardized coefficients calculated for each component of the vector, then refer to the variance contribution rate to determine the criterion of principal components number. This process can be greatly simplified using SPSS software, related options and commands are "Save standardized value as variables" "correlation Matrix" "Total Variance Explained" "Component Matrix". Interception of part of urbanization data from 1961 to 2005, we can get the main component expressions:

$$F1=0.372Z'X1-0.812Z'X2+0.889Z'X3+1.910Z'X4-3.010Z'Y1+2.406Z'Y2+3.609Z'Z1+32.628Z'Z2$$

$$F2=0.071Z'X2+0.123Z'X22-0.699Z'X23+0.350Z'X24+0.318Z'Y2+3.505Z'Y22-1.088Z'Z2+1.699Z'Z2$$

Then take the contribution rate of each principal component as weight, confirm the total evaluation coefficient Z'. After that, put each year index into the comprehensive evaluation function, to obtain comprehensive evaluation coefficient of each year.

To further study the relationship between government intervention in urbanization process and China's urbanization level, we introduce statistical regression analysis. Regression analysis is statistical methods, which study the changing relationship between variables, it generalized the correlativity between the variables as a function, It is a analytical method to describe and deduce the changing relationship using function and model. The paper established regression model using SPSS software, and take data into analysis, then get the expression below:

$$Y=0.2676-0.1179X$$

$$R^2=0.9288$$

The equation shows that, every one percentage point increase in urbanization, government intervention is necessary to decrease the degree of 0.1179 percentage points. This also proves that with the urbanization process in China, the theoretical results that government intervention weakened gradually is right.

## SUGGESTION FOR CHINESE GOVERNMENT

By order the urbanization-related data, and analyzed using SPSS software, shows that urbanization developed slowly, the process mainly depend on government policy supporting rather than the spontaneous market economic forces. Because urbanization power system could not continuous output power, China's urbanization process is slow in recently 30 years. Therefore, to improve the level of urbanization, to carry out new urbanization remains strong government support. The paper propose the following suggestions to serve as a useful reference for latecomers.

### Optimization of the household registration system

For a long time, Chinese government divide country's population into agricultural population and non-agricultural population according to the household registration. And implement unfair national treatment in aspects of economic, political, cultural, educational, health and so on, based on the household registration system<sup>[7]</sup>. Which build a urban-rural split, become an obstacle to the urbanization. After the reform and opening up, farmers can more freely go into town and go into business, but in attending school, employ, housing, welfare benefits and other aspects, farmers have great differences to urban residents. As Zhou Linlang said: "reform of household registration system is still not in place, delay the time that part of the rural population go into the cities, increasing the cost of rural to urban migration, leading to slows the rapid development of urbanization<sup>[8]</sup>". According to China's population situation, if population flow laissez-faire freely, that would cause excessive urbanization. Therefore, how to optimize our household registration system is the key problems.

After the government conducted detailed research and careful argument, July 30, 2014, the State Council issued "opinion on the reform of the household registration system"(specific measures in TABLE 4). Whether this policy is effective in promoting the healthy and rapid development of urbanization, whether the policy can resolve the impact and malpractice of the traditional household registration system or not is still takes time to tests. There is no further plan for urban agglomeration and urban consolidation on the household registration problem in the "Opinions", there are also no distinction between policies for the country's eastern cities and Middle west City. while the opinion do not mention preferential policy to specific job and groups. Therefore, there is no doubt that within a certain time, the household registration system in promoting population movement, controlling of the city population size, optimizing the process of urbanization are still play an important role. The government should continually optimize household registration policy, actively cooperate with the developing process of new urbanization.

**TABLE 4 : The differentiated city settled policy**

City size		Policies and measures
towns and small cities		Full liberalization of the household registration system, no threshold, anyone who want to settle down, have a legal and stable residence can be settled
Small cities		liberalization of the household registration system in part, settled threshold is low, anyone who has a legal and stable residence, employment, and willing to settle, can be settled in general.
medium-sized cities	1 million-3million	anyone who have legitimate and stable employment for a certain years, have a legitimate and stable residence, participate in social insurance up to a certain years can be settled
Big cities	3 million-5 million	moderately controlled size of settle, to prevent excessive growth of population
megacities	5 million or more	Strict control the population size,, establish an open and transparent settled channel through establishing a points system

### Improving the social security system

Some people is certainly to lose their own resources in the urbanization process, and become vulnerable groups. In order to make these vulnerable people to enjoy the benefits brought by urbanization, the government should protect their basic rights of life. Accelerate the social security system is the city's foundation of maintaining social stability and harmonious development.

For the construction of the social security system, it can refer to the advanced practices of Latin American countries, such as pension insurance and unemployment insurance system in Chile and Brazil. We can introduce personal credit accounts, while expanding insurance coverage. According to German modal, the government should use fiscal transfer payments to poverty reduction, and establish social organizations to poverty alleviation regularly. Learn from Japan's experience, government should continuously increase the investment for public health and national education, enhance the overall quality of the labor force. While studying the mature laws and regulations of Britain which is called "urbanization templates City", such as "Town and Country Planning Act", "Metro Law", "Town Planning Act", etc., we should extract beneficial ingredients to build a social security system which adapt to the construction of new urbanization.

### Appropriate urban planning

In 2003, on the Central Economic Work Conference, General Secretary Hu Jintao said: to strengthen the scientific planning of urban development, to maintain seriousness and authority of urban planning, to promote rational distribution, resource conservation and environmental protection. Meanwhile, to create conditions actively which conducive to the employment of rural surplus labor in cities, continuously guide the rational and orderly flow of rural labor.

Some cities blind expand the city size through the revision of urbanization plan. some of the planning and design units focus on their own economic interests, making inappropriate content of urban planning, so that some urban plans contrary to local conditions, beyond the resources, environment, the economy capacity and the people's actual needs, that may make irreparable historic error<sup>[9]</sup>.

Combined with the distribution of resources and industry, local government should purposefully plan the urban construction step by step, introduce the appropriate laws and regulations. For example, conduct preferential policy in the new development zone, try out "industrial distribution plan"; try out "Road Traffic Ordinance" in the blocked old city; introduction of "Urban Planning Ordinance", "Building Ordinance (applicable to certain zones) "; design " Country Parks Ordinance " in target," urban green land ordinance "," monuments and protected buildings ordinance ", " city health Regulations" and " environmental Impact Assessment Ordinance ".

## CONCLUSION

In March 2005, on NPC meeting Premier Wen Jiabao said: China is a big country with 1.3 billion population, the incoming labor force is 10 million annually, the number of laid-off, unemployed people is 14 million, the number of migrant workers is 120 million each year, and more than 90 million poverty people existed. Therefore, to improve China's urbanization level, to achieve coordinated development of urban and rural areas, there must be a fairly long historical process. Social transformation, economic transformation, changing the way of thinking is a prerequisite for new urbanization, the connotation of new urbanization is to pursue sustainable development of people's livelihood, the core goal of new urbanization is equality, happiness, green, healthy and intensive, the emphasis of new urbanization is regional co-ordination and coordination, industrial upgrading and transformation, ecological civilization, intensive and efficient., institutional reform and institutional innovation.

New urbanization is a key strategy to guide the future urban development and construction in a longer period. Therefore, definite the role of government, analyze key issues needed to solve in urbanization process, positive reference advanced urbanization policy and philosophy, and combined with reality of economic and social development, we know that rational planning is our government's priority. The paper positions the government in the provider of public economic and service, the director of urban planning and policy. The paper also in-depth analysis of the United States and the United

Kingdom endogenous urbanization, Japan's government-led process of urbanization, the development of Latin America excessive urbanization, accordingly, government proposed four-points security measures and proposals in order to carry out a comprehensive new urbanization as a good reference.

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#### REFERENCES

- [1] Shen Zhendong, Zhou Qihua; Urbanization dialysis [M] Beijing: China Economic Publishing House, (P1-2), (2004).
- [2] Wang Guangtao; problems on the road of urbanization with Chinese characteristics [A], Wang mengkui, Building a moderately prosperous society in China, China development forum, [C] Beijing: People's Publishing House, (P63-67), (2003).
- [3] Gu Shengzu, Jane Xinhua; Contemporary Chinese migration and urbanization [M] Wuhan: Wuhan University Press, (P271-276), (1994).
- [4] Wang Guangtao; Celebrated speech on the 50th annual general meeting of the urban planning[R], Guangzhou,9, 21 (2006)
- [5] Zhu Tiezhen; Urban modernization study [M], Beijing: Red Flag Publishing House, (P55), (2002).
- [6] Li Ruilin, Li Zhengsheng; Analysis urbanization patterns in Brazil[J], Urban Issues, (1), (2006).
- [7] Zhang Aiyong; Rid of urban and rural social structure and build a socialist harmonious society [J], CPC Shanxi Provincial Party Journal, (3), (2005).
- [8] Zhou Linlang; Balance urban and rural development: Theory and practice [M] Beijing: China Economic Publishing House, (P197), (2005).
- [9] Lu Bin, Chen Rui; Achieve a healthy way of urbanization spatial planning [J], Urban Planning, (Supplement), (2006).