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# The goal, path, and policy responses of China's new urbanization

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#### **Abstract**

Urbanization has great significance for China's economic and social development, but the traditional model of urbanization is unsustainable. This paper details the basic model of new urbanization after analyzing briefly the requirements for implementing new urbanization. The basic model of new urbanization is, with the Scientific Outlook on Development as the guiding principle, to insist on comprehensive, coordinated, and sustainable development in building urban China. Urbanization of the population is the key content. Information, agricultural industrialization, and new industrialization are the driving forces. Productivity-induced economic growth is the development method. Government guidance and the market are guarantee mechanisms. The article lays out eight specific ways of integrating an integrated rural and urban China. It also proposes four basic responses to advance new urbanization: drawing up strategy and planning, providing infrastructure and public services, strengthening supervision and management, and improving institutions and policies.

Keywords: New urbanization; Development model; Development way

### Time characteristics of new urbanization

Urbanization, caused by scientific and technological progress as well as the development of productivity, is a historical process both of the agricultural population dispersing in agricultural functional areas and moving into the nonagricultural population in nonagricultural functional areas, as well as traditional rural society transforming into a modern urban society. The urbanized population is not only the traditional urban population of label significance, but is also a population that enjoys urban infrastructure and public service. The urban area is not only the area with administrative and geographic significance, but also the functional area of bearing non-agricultural population and industries. Chinese urbanization exhibits the increase of the number of cities, the expansion of urban areas, the increase of the urban population; as well as the change of jobs, the industrial structure, and spatial morphology. The great change of human society's organization methods, productive methods, and living method produces a new face of the economy, society, culture, environment, and human beings.

After 30 years of reform and opening, China has created a magnificent epic of urbanization to strongly support the miracle of economic growth. By 2011, the rate of Chinese urbanization had reached more than 50%, with an urban population of 670 million, 655 cities, and 20,000 small towns (Wang et al. 2012). The urban and town system is formed basically with different levels: large cities are centers, middle and



small cities are the backbones, and small towns are fundamental. Today, Chinese urbanization is in the middle stage. The traditional urbanization mode, that is, economic development, is central target; export-oriented industrialization is central power; local government plays a key role; land is the main content; scale expansion is the development method; and the great volume of investment of material capital is the driving element. This is not sustainable. The traditional urbanization model has many problems, such as the population not being fully urbanized. Although 50% of the population lives in urban areas, only 35% of residents enjoy public services as residents with urban household registrations. Land is over-developed. Over the past 30 years, the population has doubled, while construction area has increased four times. Most people move into center cities with high administrative ranking, while middle cities develop slowly and small cities do not function well. Small towns are scattered. The traditional urbanization model causes other problems: high resource consumption, spatial centralization, imbalanced economic structure, pollution, and intensified social contradictions. Some cities and rural areas have serious 'urban disease' and 'rural disease', respectively.

Today, over 50% of the global population lives in the urban areas where science and technology changes rapidly, city development is more and more clustered, economic globalization is soaring, and the ecological environment continues to deteriorate. Economic globalization means that China may utilize all global factors, resources, and markets to push forward Chinese development. Information technology helps China digest and absorb global advanced technologies, such as advanced transportation technology and communications and networking technologies. Since world development is imbalanced, excessive consumption in developed countries and the rapid expansion of demand in emerging countries are causing a serious shortage of non-renewable resources. Meanwhile, excessive pollution in developed countries and increasing pollution in emerging countries is causing global warming and the continuing deterioration of the environment. For this reason, Chinese urbanization cannot take the traditional road.

China is now a middle-income country. Reform and opening has created a miracle of economic growth, which has enabled China to have enough capital, talent, and technology to transform and upgrade industries, including urbanization. Due to increasing individual, the enhancement of personal quality, social openness, and the awaking of citizen consciousness, China must look for new urbanization models to avoid the intensification of social contradictions and protect its fragile ecology. China is a large country with a large population and vast land, but resources are in serious shortage and distribution is imbalanced. There are great differences in economic, societal, and cultural development. Thus, Chinese urbanization must utilize its large-scale economic advantage to avoid over centralization and long-distance movement (Qiu 2003).

In summary, in this new era, it is important to reflect deeply on China's urbanization model, and fully explore the model, path, and strategy of new urbanization in China (Wang 2010).

#### The basic model of new urbanization

On the basis of the problems of traditional urbanization, the time characteristics of future urbanization, and Chinese characteristics, this paper proposes a basic model of

new urbanization: with the Scientific Outlook on Development as the guiding principle, to insist on comprehensive, coordinated, and sustainable development in building urban China. Urbanization of the population is the key content. Information, agricultural industrialization, and new industrialization are the driving force. Productivity-induced economic growth is the development method. Government guidance and the market are guarantee mechanisms.

#### The new final target of urban China is the integration of urban and rural areas

The final target of new urbanization is to build an urban China that integrates urban and rural areas. The integration of infrastructure will cover urban and rural areas in China, public services will be equal for everyone, and farmers and urban citizens will have the same opportunity to obtain knowledge, skills, personal quality, and income. The details can be described as following:

#### New economy

In the context of new industrialization, the industrial system consists of high-technology content, yields good economic returns, has low resource consumption, produces less environmental pollution, and is less labor intensive. The demand structure system is composed of domestic demand and consumer support. Human capital and technological innovation play a key role in the element structure system. Large companies and a great number of middle and small companies form the enterprise structure system.

#### New society

Under the administration of new community, new social organization, and new society, the communication method is social, the social connection is international, living methods are modern, and residents' composition is diversified and mobile. Social class structure shows an olive shape and is harmonious.

#### New environment

Beautiful natural scenery, good ecological environment, resource conservation, effective environmental protection, and a good relationship between people and the environment should be achieved.

### New governance

For urban-rural development and urban life, provide a social environment with a good system and rule of law, an open, convenient, and free-market environment, a free and open cultural environment, and a democratic and free political environment.

# The new main content is equal public services, which is the core of urbanization Equal access to public services among all urban residents promotes people-first urbanization

There are three kinds of population urbanization: university education urbanization, local urbanization, and migrant urbanization. Each portion makes up about 30%, while other urbanization accounts for 10%. The new main content of population urbanization is to give the three kinds of population urbanization equal access to public services, just like those with urban household registration. This is

particularly necessary for farmer laborers. In the future, the main point of urbanization will be to provide equal public service for 0.16 billion farmer laborers and newly added farmer laborers.

# The key is to optimize the utilization of land to promote productivity-induced economic growth urbanization

Land urbanization has mainly three fields: old urban area, new urban area, and rural settlement. The new content of land urbanization is to increase the land use efficiency by rebuilding old urban areas and to increase urban capacity by reducing the expansion of new urban areas. By adjusting rural settlements, the scale of rural construction land decreases. Simultaneously, the distribution of urban and rural areas should be optimized.

# It is necessary to overcome 'urban and rural diseases' in order to keep urbanization healthy and sustainable

After the rate of urbanization is over 50%, urban disease will burst centrally and rural areas may continue to deteriorate. Therefore, the main contain of new urbanization is to avoid 'urban and rural diseases' and to make sure urban and rural both win.

# New basic drivers are information technology, new industrialization, and modern agriculture

China's new urbanization has three new drivers due to global information, key technological breakthroughs, and the third industrial revolution.

#### New pulling power

Information technology is based on new industrialization with high technology content, which yield good economic returns, has low resource consumption, produces less environmental pollution, and is less labor intensive. Information technology and the intelligent third industrial revolution will form new pulling power for new urbanization.

#### New pushing power

China should fully utilize modern information technology, agricultural production, and management based on information and modern service. Agricultural mechanization, agricultural science, agricultural industrialization, and labor quality enhancement will form a new pushing power for new urbanization.

### New source of power

Information technology is a main representative of modern science and technology that indirectly affects urbanization supply and demand and directly decides urbanization scale, speed and quality. Information technology, new industrialization, and modern agriculture provide more powerful sources of power than before and ensure that urbanization is people-first, driven by innovation and sustainable development.

# The new development method is productivity-induced, intensive economic growth It is a good idea to improve the construction density of urban and rural areas and to use underground space fully

It is necessary to increase industry and population density in limited urban space and to promote industrial clustering development and intensive land development.

### To optimize the layout of urban and rural areas

Reasonable layout of urban and rural areas and convenient connecting channels can improve the efficiency of resources, factors of production, and the industrial arrangement.

#### To improve the function of urban and rural areas

Improving and building comprehensive urban and rural infrastructure and a public service system can improve service quality and attract investment.

#### Breeding and utilizing high-end factors of production

It is necessary to decrease material capital investment and resource consumption and to use human capital and innovation to promote urbanization.

### Basic path of Chinese new urbanization

The accomplishment of new-content urbanization depends on new driving forces and methods to carry out target urbanization. It is crucial to keep a general way of sustainable development and new urbanization. Sustainable urbanization is development balanced between the short-term and long-term and development coordinated among the economy, society, and the environment that will allow future generations to develop sustainably and live and work in peace and contentment.

# Walk the road of people-first urbanization, pushing people to move to urban areas from rural areas

To build city needs people and people will live in new urban areas; thus, all tasks of urbanization should focus on people. The core of people-first urbanization is to allow farmers to move to urban areas, while at the same time allowing farmers to change their jobs from farmers to urban residents. These farmers have the same rights as citizens in urban areas: housing, education, pensions, income, entertainment, and health care. They also have the right to enjoy modern urban infrastructure and public service, to enjoy a good residential space environment, beautiful ecological environment, and a clean and highly efficient production environment. The purpose of people-first urbanization is to promote comprehensive social development, to raise personal quality and incomes, to improve factor supply, to enlarge consumption, and to maintain sustainable development between urban and rural areas.

#### Walk a smooth road of urbanization where equality and efficiency are equally important

Population concentration and free movement can ensure the best distribution of resources and shared-scale economy and external economy, so as to raise economic efficiency. However, population concentration will cause high costs, urban disease, and

enlarging regional disparities. It is necessary to push forward new urbanization. First, the general layout of urbanization should be designed to form a unified national market to reduce obstacles among separated markets in different cities to take advantage of the scale economy of a large country. On the other hand, reasonable measures must be taken to optimize the concentration of urbanization and maximize the benefit of the scale economy and external economy. Second, regarding the relation of urban scale and urban development, the road of urban clustering development emphasizes the coordination of large, middle, and small cities. The road of central city driving small cities should be changed. According to the principle of marginal cost being equal to marginal revenue, cities of different sizes are built in the different regions based on position, transportation, resources, environment, factors, and market conditions. Infrastructure networks will connect all cities to form an urban ribbon and to complement each other, so that all cities will benefit from the external economy. Third, walk the road of integration between urban and rural areas, that is, the integration of industry and agriculture, urban and rural, and urban citizens and rural residents. The dual structure of urban and rural economies should be broken to promote urban and rural areas complementing each other and lasting prosperity. Industry feeds back into agriculture by transfer payments to support rural vulnerable groups.

# Walk the road of urbanization where industry and the city interact to ensure lasting prosperity

First, the advantage of secondary industry should be maintained or expanded. Raising the international competitiveness of secondary industry is crucial to providing jobs and increased incomes. Second, it is necessary to develop various businesses, including production, consumption, distribution, and social service, in order to promote economic growth and speed up urbanization. Third, agricultural industrialization should be accelerated to raise agricultural efficiency and farmer incomes. Fourth, the implementation of a resident income plan ensures rising incomes and more job opportunities to promote urbanization and economic growth.

# Walk a green-development road of urbanization and ensure the natural beauty of the ecological system

Future urbanization does not walk the road of both protecting the environment after pollution and protecting the environment first with economic development second. Regarding the Chinese development condition, both economic prosperity and protection of the environment are important to ensure coordinated and sustainable development between ecology and the economy. First, the energy-saving environmental protection industry should be encouraged, so as to reduce the consumption of energy, water, and air. Second, the circular economy should be emphasized to produce more and consume less. Third, industrial zones should be built so all enterprises may share external economy and wastes will be treated centrally. Fourth, the government should encourage urban residents to carry out energy-saving environmental protection in daily life and promote energy-saving environmental protection. Fifth, green areas should be increased to raise the self-purification ability of the environment. Sixth, green consumption should be encouraged to reduce consumption pollution. Seventh, occupation and allocation of resources should be managed reasonably to promote the positive interaction of urbanization and environmental protection.

#### Walk the road of inclusive-growth urbanization and ensure fairness and justice

The relationship of urbanization and social development should be focused on to ensure harmonious urbanization. First, in the field of politics, people of all social classes should have more opportunities to discuss and decide their issues of concern. Government should provide a platform for all people to create their own careers and share urban progress results. Second, in the field of society, the government should treat the relationship of government, businesses, and residents reasonably, protect the legal rights of farmers and urban residents, and respects residents' willingness and choice. Government treats reasonably the relationship of local residents and migrants, protects legal rights of migrants and enable migrant have a good relation with local residents. Government should reasonably handle the relationship between different income groups, encourage people to innovate, create jobs and make money, and should simultaneously take care of and protect weak groups. Social insurance policies should cover weak groups and narrow the gap between rich and poor.

#### Walk the innovation-and-drive road of urbanization and ensure that cities lead the future

As a latecomer to urbanization, China should not hesitate to carry out a strategy of innovation and drive. First, the implementation of a strategy of innovation and drive may push economic growth, and the latecomer may become the leader. Therefore, the priority development of education is a key step by continuing to increase education investment, to lengthen compulsory education, and to extend occupational education and adult education. A multi-level education system matching the future Chinese economy should be established. Increasing science and technology investment ensures breeding the innovation main body, creating the innovation network, setting up the innovation platform, and forming a science and technology innovation system that will match urbanization development and the industrial system. Second, the implementation of institution and management innovation will ensure a sustainable new urbanization. Third, innovation is not only in technology, but also in management, particularly in development methods. China should strive for latecomers to become leaders.

### Walk the road of government-guided urbanization and develop the basic role of the market

Urbanization is the exhibition of main market entities sharing a preference for the external economy in space accumulation. It is also the accumulation and transformation of rural population to urban areas. Improving market system is conducive to the process of free selection of market entities. Because of the existence of market failures, it is difficult to achieve optimal equilibrium only by market selection. The government has to create suitable soft and hard conditions to promote healthy sustainable urbanization and development. On one hand, the flow of market entities helps to show their space preference. On the other hand, more attention should be paid to fairness or efficiency of land utilization. Therefore, the main functions of the government are to make forward-looking scientific planning, to build infrastructures in administrative areas, to provide equal public service for all residents, and to create fairness, justice, equality, and standard institutional conditions.

### Walk the road of open urbanization and ensure the individual character of cities

The advancement of new urbanization should face the whole world and have a global view to construct a fully international country and urban–rural areas. The strategy is to open

to the whole world; to use global elements, resources, and markets; to learn from global development experiences; to insist on global standards; and to follow global development trends. Then, the advancement of new urbanization should stand on the local land and have individual character. Each city has its own individual character due to its different fundamentals, background, and environmental and development conditions. Large and central cities should perform the gathering function to develop technology-intensive and capital-intensive industries, so as to enhance radiating driving capacity to their regions. Productive service industries should also be developed to enhance technological innovation and institutional innovation. Large and central cities should become main powers to participate global competitiveness. Medium and small cities should keep industrial characteristics and accept industrial transfer and strong support from large cities. Since investment cost is low and industrial development conditions are better in medium and small cities, manufacturing industry is the main content to raise effective power to surrounding areas. Finally, the integration of foreign culture and native culture is also important. The absorption of foreign culture is the same as all rivers run into the sea. All urban residents should carry out protection and inheritance of their cultural heritage, respect native cultures and lifestyle characteristics, and reflect the fusion of ancient and modern cultural charm. The coexistence and integration of the development of diverse cultures is a remarkable characteristic in new urbanization.

### Policy responses to advance China's new urbanization

The basic model of new urbanization is, with the Scientific Outlook on Development as the guiding principle, to insist on comprehensive, coordinated, and sustainable development in building urban China. Urbanization of the population is the key content. Information, agricultural industrialization and new industrialization are the driving forces. Productivity-induced economic growth is the development method. Government guidance and the market are guarantee mechanisms. The article lays out eight specific ways of integrating an integrated rural and urban China. According to the functional principle of being perfect to make up for market failures, the government may implement four basic countermeasures to advance new urbanization actively and steadily: drawing up strategy and planning, providing infrastructure and public service, improving institutions and policy, and strengthening supervision and management.

# Formulate strategy and plans and lead the sustainable development of new urbanization The development goal is integrating urban and rural areas to form an urban China

The government should formulate an urban and rural development plan in 2030 and in 2050. Under the guidance of the Scientific Outlook on Development, top-level design should be made on the development goals and steps of Chinese urbanization and given full consideration.

The pace of urbanization should be kept in a reasonable range based on the ultimate loading condition of economic social development and the resource environment. In view of the global competition pattern and the future situation of industry transferring and upgrading, the annual growth of urbanization speed cannot and should not maintain the 1% annual growth of the past. Future Chinese urbanization should combine connotation urbanization and extension urbanization and focus on quality. It is necessary to solve the

problem of the partial urbanization of 160 million people and to continue to fight to resolve the urbanization of 360 million new people.

The total scale and level of the urban population The total population from 2030 to 2050 is estimated to stay at around 1.4 billion. The population space distribution will be 25% living in rural areas, 25% in small towns, 25% in medium cities, and 25% in metropolises (Jian and Huang 2010). The urbanization level will be 75% on average (80% in the east, 70% in central regions, and 60% in the west). The total urban population will reach 860 million in 2030 and 1.06 billion in 2050.

Construction land and level of urbanization The construction land for urbanization is 65% of non-farming construction land. Total non-farming construction land is 160,000 km<sup>2</sup>; non-farming construction land in urban areas is 100,000 km<sup>2</sup>, with large cities at 15%, medium and small cities at 20%, small towns at 30%, and rural areas at 35%. The standard of population density is 10,000/km<sup>2</sup>.

Urban scale system Cities are concentration points for national resources and fountainheads of economic development, as well as centers for national innovation and enrichment. The number of cities is around 1,000 and small towns 20,000 in 2030 and 2050. The urban space layout, which includes super cities, large cities, middle cities, small cities, small towns, and resident settlements, is rational and coordinated. First, the advanced techniques and methods of transportation and communication are used to develop a number of large and super large cities by rational planning. Both expanding large city scale and raising city quality are important to be growth poles and power sources. Second, a number of small cities, which are regional centers, are extended to medium cities to enhance driving power. The central government should support the development of medium cities. Third, the functions and management level of small cities should be improved. Fourth, small towns have special functions to connect urban areas with rural area. It is urgent to adjust the distribution of small towns.

**Urban function system** In the view of urban functions, urban functions will tend toward multiple levels. Chinese cities will bean open system in the future: one global top city, 3 to 5 global cities, about 15 international cities, 30 to 50 national cities, and about 1,000 regional cities. Hong Kong, Shanghai, etc., will have concentrated high-end service industries and high-tech manufacturing. Research and design centers of industrial process and brand marketing will be developed dramatically to form a top city and a center of global economic control and management. Some cities being international cities will play professional functions to provide international services. Others being national cities or regional cities will play a comprehensive function to provide services and management for national or regional areas.

**Urban space layout** In the future, a lot of Chinese cities and towns will be distributed regularly to form urban clusters or urban ribbons, showing three structures: spot, line, and centralized area. The layout of the three structures will be connected with a modern transportation network. Cities will be the heart and vast rural areas the body.

First, in the national space layout: in eastern China, the construction of centralized areas is principle and combination of spots and lines is secondary. There are superior locations, a suitable environment, and dense population. It is easy to develop first, with transfer and upgrading, facing the world and participating in competition. In central and northeast China, the construction of lines is principle and combination of spots and centralized areas is secondary. The area is resource-rich and population is dense. The development of incentive policies will attract talent and industry to transfer here. The rise of central China and the revitalization of the northeast will be carried out. It is important to enhance conservation of resources and environment protection. In west China, there is with much land and few people. The construction of spots will be principle and combination of lines and centralized areas will be secondary. The implementation of the western development policy is ongoing. It is important to enhance environmental protection and ecological restoration.

Second, in the regional space layout: it will be crucial to take advantage of the scale economy and the external economy to push forward the integration of urban and rural areas and avoid malignant competition. Urban clusters will be formed with rational industrial distribution, favorable cooperation, a closely connected economy, as well as inside gathering and outside expanding functions. The aid of border areas is necessary.

Third, in the urban and rural space layout: clusters and networks of cities and towns will be built to benefit the integration of urban and rural areas, favorable cooperation, mutual benefit, win-win, and external economy. Compact cities will be built to reduce the spread and expansion of construction land. By building new rural areas and canceling and merging settlements, the new face of rural areas will appear and land will be used centrally to ensure farmland.

### Development pace: two steps to achieve the ideal goal of urbanization

First step. in 2020, the urbanization rate will be over 60% and the three-dimensional structure will change to a two-dimensional structure. The comparatively perfect urban/rural infrastructure will be basically constructed. In urban areas, basic equal public services will be provided to everyone and income will also be the same for everyone. In rural areas, infrastructure, public services, and income will be improved gradually.

Second step: in 2040, the urbanization rate will be over 75% and urban and rural twodimensional structure will change to a one-dimensional structure. Perfect urban/rural infrastructure will have been built. Incomes and equal public services in rural areas will be the same as in urban areas.

# Provide infrastructure and public services to support the healthy development of new urbanization

Infrastructure: gradually realize the integration urban and rural infrastructure and the national integration of infrastructure

**Build a nationally integrated infrastructure network** According to the layout of national urban and rural areas and the distribution of cities, national transportation, communications, and information infrastructure network systems, which are fast, high efficient, convenient, and low cost, are constructed and improved by the help of

advanced science and technology, so that resources, people, and information can move freely among regions, cities, and urban and rural areas.

Improve regional integration of the infrastructure network Further accelerate the construction of urban physical infrastructure and intangible service networks so as to improve regional integration of infrastructure networks composed of highway, high-speed railways, channels, transportation pipelines, power transmission, networks, drainage pipe networks, and communication backbones, to decrease commuting distance among cities, and enable resource and information flow to realize the co-construction and co-sharing inside urban clusters and among large urban clusters.

Improve urban and rural integration of infrastructure networks. According to the plan for urban and rural integration, urban infrastructure networks will be extended to rural settlements and edge areas, and rural residents will have the same infrastructure network services as urban residents do.

# Public services: gradually advance equal public services in both urban and rural areas and the nation

On the basis of children education, social insurance, housing, and pension, in that order, farmer labors will gradually receive public services equal to those of urban residents. The employment and job creation system will be improved to raise resident incomes. The urban healthcare system will be improved to expand the coverage of healthcare insurance. The support capacity of affordable housing will be increased and public housing supply is enhanced. Simultaneously, it will be necessary to realize the integration and equality of employment, social insurance, education, healthcare, and other public services among regions and urban/rural areas.

Positive and efficient fiscal and tax, finance, industry will be formulated to aid rural areas, non-urban clusters, and edge areas. Large investment will be focused on infrastructure and public services to avoid the Matthew effect and to reduce the degree of regional tilt.

# Improve supervision and management and promote the smooth development of new urbanization

To realize efficient supervision and management for market entities, it will be necessary first to establish an administrative supervision and management system.

#### Build an administrative management framework suited to an urban China

Administrative level will be simplified and the city establishment model will be reformed. To adapt to administrative requirements, by learning from the experiences of advanced countries, the adjustment of administrative divisions and reduction of administrative level should be done quickly. There are 30 provinces, autonomous regions and municipalities as well as 14 cities specifically designated in the national plan. In east or central China, some developed regions with dense populations may set up new municipalities based on regional politics, economy, culture, and history. It is also possible to reduce provincial scale and allow provinces to manage counties directly.

#### Build longitudinal intergovernmental relationship of property power and financial power

To define property power and financial power of central and local governments is crucial for making clear the public responsibility and the public authority and making clear the property power and the public expenditure responsibility of all level governments. Since property power is consistent with financial power, the local government is very conscientious in the performance of its duties to promote urban development smoothly. At the same time, departments of the central government invest directly in some cities in poor regions by national projects or by fiscal transfers. The development of project grants from the central government is necessary and may guarantee the development of poor regions.

### To build up the transverse intergovernmental regional coordination mechanism

The regional coordination mechanism will be improved further by setting up regional organization of urban development particularly inside urban clusters. Innovation in the model of public management is created by co-building market and infrastructure, co-coordinating regional industrial planning, and co-constructing transportation networks and information networks.

#### Build up the integration of urban and rural management systems

First, the integration of urban and rural management systems led by cities is built to adapt to a complex economy, society, environment, and foreign connections. The urban management function is improved. Second, the idea of a public management is reformed to push forward the government management of humanization, efficiency, institutions, rewards and punishments, and competition, to raise public service efficiency and quality and to enhance urban competitiveness. Third, non-governmental organizations (NGOs) have developed widely, and a lot can be done by the NGO. Fourth, to enhance urban community construction, the city encourages organizational innovation and management innovation of community management to perform urban community function of politics, self-management, study, and service, to raise the level of selfeducation, and to encourage public participation. Residents can participate in managing the community and express their interest demands. Fifth, to enhance the urban emergency mechanism, cities should set up and improve urban emergency mechanisms, enhance crisis response capacity by institutionalized prevention and management system, and maximize the elimination of all kinds of unexpected events and hidden dangers or reduce the harm to a minimum.

#### Improve performance evaluations and accountability

Urban governments should establish a scientific performance appraisal system, formulate a performance evaluation index system, which is guided by the principle of the Scientific Outlook on Development, to show comprehensive, coordinated, and sustainable development. The evaluation index system should exhibit the standard of new urbanization, which includes urban economic development, social development, cultural prosperity, environmental protection, and so on. Evaluation results will reflect government performance and act as the key indicator in the job changes of main urban leaders.

#### Redefine the standards of city establishment and related functions

First, revise the Urban-rural Planning Law. Re-clarify the scale and rank of cities on the basis of China's larger population. The standards of city establishment and scale by population size are super large cities, super cities, large cities, medium cities, small cities, and small towns. According to the urban scale, urban functions are decided. It is possible to merge and reduce some cities in western China to reduce management costs. In eastern China, some towns will be changed to cities to improve their functions. Second, formulate and revise relevant laws. By formulating a system of constraining, quantitative, clearly regulate urban resource utilization, environment protection, and the standards of infrastructure and public service based on urban scale.

## Reform of institutions and policy to ensure the healthy development of new urbanization Establish sustainable institutions and policy to guarantee urbanization

Deepen reform of the fiscal and taxation system The central government should establish a longitudinal intergovernmental relationship of property power and financial power, carry out firstly compulsory education funds of national coordination and gradually implement national coordination of social insurance completely or in part. The central government should build up the central and local government fiscal transfer system to support farmers changing to urban residents. It is necessary to set up a cost-sharing system among governments, businesses, and individuals to help migrant workers change to urban residents and further to form a local fiscal and taxation system.

Deepen reform of the land system Establish an integrated urban—rural land system. Rural land ownership belongs to the nation, and farmers have land-use rights. By giving farmers transaction-use rights, there are improved rural land property rights to activate farmers' land assets by promoting land assets stock, farmer shareholders of land stock, and farmer democratic rights. The physical market of rural land property right transfer is justice, openness, and fairness. Land mortgage or sale is possible and land property rights protection system is established. Generally, land use, transaction, and income apportionment system are urban and rural integration, with the same right, same price, and free competition.

**Deepen reform of the household registration system** Some migrants should become citizens based on conditions of employment, investment, and residency and for migrants who have not yet become registered urban residents, to establish a residential permit system for shared right and responsibilities.

**Deepen reform of the employment system** Further liberalize the labor market and open all industries to laborers. At the same time, cancel all local policies and regulations that limit rural laborers from moving to cities to ensure that rural labors have an equal right to employment. Cancel the discriminating employment system of the urban labor market to build up a unified employment training system.

Improve the social insurance system First, improve the system to reform social insurance system positively, integrate the urban and rural social insurance systems to change the division of urban and rural areas. Second, the width and breadth of social insurance system should be extended further, including national endowment insurance, unemployment insurance, healthcare insurance, injury insurance, and maternity insurance. Third, form a new social assistance system, in which minimum living security is fundamental, special assistance is supportive, and charity aid is supplemental. Fourth, local social insurance systems should have their own character.

**Deepen reform of the financing system** Under the guidance of the government fiscal, deepen the reform of the system by actively and innovatively develop direct financing tools mainly in the form of mid- and long-term credit support. Improve the finance system by enhancing institutions and market construction. Diversified financing models include infrastructure securities, infrastructure investment funds, municipal bonds, and private finance.

#### Establish a long-term mechanism to ensure to the continual development of urbanization

Price adjustment mechanism First, by advanced techniques and methods, make sure infrastructure and public services have excludability as much as possible. User-pay service employs gradient-type markup pricing, and use more and pay more, to reduce the burden on the poor population. Second, the market will determine the price of transfer of management right of rural land, the price of collective land transfer into state-owned land in designed construction areas and the price of urban removing and resettlement houses. The role of price adjustment in land use will be fully employed to realize land benefits allocated fairly and reasonably among farmers, urban residents, the government, and businesses in order to promote social harmony and improve land use efficiency.

**Ecology compensation system** The price leverage effect is crucial in resource conservation and environment protection. It must clarify property rights and make users and polluters pay and ensure internalization of the external cost of economic production and daily life.

Land occupation mechanism Establish an index number of non-agricultural land area occupied per capita in different areas on the basis of the current population and land distribution. At the same time, make vouchers for population and land-use indicators. Each city has the right to decide on accepting a number of farmer laborers and a land-use index number in the light of its capacity. Cities where farmer laborers will move must provide houses, healthcare, and social insurance for farmer laborers and pay land-use index money. Rural areas, in line with population movement, will obtain land-use index money and part of the money will be used to transfer housing land into farmland.

**Fundraising mechanism** Urban infrastructure construction needs large investment and the return cycle is long. There is a mismatch in the supply and demand of fund maturities. Therefore, develop long-term finance tools, such as long-term credit, fund

investment, long-term funds, and asset securitization to match supply-and-demand cash flows for infrastructure construction.

**Fiscal subsidy mechanism** Central and local financial administrations should set up transfer payment subsidies for migrant laborers changing to urban residents in light of migrant worker residence size. Fiscal subsidies are mainly used to increase social insurance guarantees for migrant workers and their families, including medical facilities, compulsory education, and occupation education facilities, low-rent housing, and expansion of municipal facilities.

**Tax-adjustment mechanism** Reform and improve the taxation system quickly. It is urgent to levy real estate taxes, land taxes, resource taxes, and environment taxes. The problem of 'land finance' must be resolved and the tax leverage effect will be fully employed in resource conservation and environment protection.

#### Competing interests

The author declares that he has no competing interests.

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