China National Report Prepared for the Third United Nations Conference on Housing and Sustainable Urban Development (Habitat III)

Ministry of Housing and Urban-Rural Development People's Republic of China February 2015

# Habitat III China National Report

#### Introduction

Among the declarations pervading the 21<sup>st</sup> century is that we have come to the "urban age" because, for the first time in human history, more than half of the world's population lives within cities. At the critical juncture of jointly addressing challenges and building a better future, the Third United Nations Conference on Housing and Sustainable Urban Development (Habitat III), to be held in October, 2016 at Quito, Ecuador, is aiming at a new historic blueprint – the New Urban Agenda. This conference, as another important global event following the Second United Nations Conference on Human Settlements (Habitat II), will become a new start for future-proof housing and sustainable urban development in all countries.

In order to promote and support Habitat III as well as enhance more significantly the quality of human settlements in China, the Chinese government has organized relevant departments to prepare the *Habitat III National Report*. This report summarizes the efforts and successes of human settlements in China over the past 20 years, analyzes the challenges and problems ahead, and specifies the objectives, strategies and actions for the next stage.

This report is jointly prepared by relevant government departments, NGOs, academic and research organizations in accordance with the requirements of UN-HABITAT Governing Council Resolution 24/14.

It is hoped that this report can contribute to the success of Habitat III.

# 1. Review of Urban and Rural Housing Development in China over the Past 20 Years

In the past 20 years, the world has witnessed the sustained and rapid economic growth in China, significant improvement of living standards of urban and rural residents and comprehensive progress of social undertakings. In order to constantly step up economic, social transformation and scientific development, the Chinese government has committed to "upholding the principle of 'putting people first' and fostering the outlook on comprehensive, balanced and sustainable development so as to simultaneously promote the economy and human society"; it has adhered to the requirements of "coordinating the development of urban and rural areas, of different regions, of economic and social sectors of man and nature, and of national development and opening-up to the outside world", and to the ideology of "implementing the overall plan for economic, political, cultural, social, and ecological progress"; it has also introduced a number of important policies and measures concerning further reform, environmental governance, energy conservation and emission reduction, improvement of social governance ability and transformation of economic development mode.

In the past 20 years, in accordance with the objectives and action plans specified

in the *Habitat II National Report*, Chinese government has formulated and implemented a series of policies, regulations, development strategies and programs to promote sustainable development of human settlements, constructed urban and rural housing on a large scale, optimized urban and rural infrastructures, improved ecological environment, preserved historical and cultural heritage, and strived to build distinctive, beautiful harmonious, culture-rich and people-friendly eco-towns in an intensive and efficient way.

#### 1.1 Urban and Rural Housing Development

# 1.1.1 Achievements of Urban and Rural Housing Development in China over the Past 20 Years

On the occasion of Habitat II in 1996, the Chinese government put forward the goal of urban and rural housing development: by 2000, each urban household would possess a residence; 70% of the households would live in self-contained residences; the per capita floor space for urban residents would reach 9 square meters(the per capita construction space being 12 square meters). As for rural residence, the using function would be improved; the construction quality and capability of disaster preparedness and prevention for both urban and rural residence would also be improved. By 2010, each urban household has had a residence with basically complete functions and better living conditions, with per capita construction space for urban residents being 18 square meters – basically one room for one person; as for rural residence, the function had been basically complete and living conditions better; what's more, renovation of former shanty areas had been basically finished, and the construction quality and capability of disaster preparedness and prevention of urban and rural residence had been greatly improved.

Over the 20 years, China's sustainable and rapid economic growth has laid a material foundation for housing construction. The reform measures have promoted the improvement of housing system and added strong power to housing development. Thus, the outstanding achievements in urban and rural housing development have been made.

(1) By the continued and large-scale housing construction in urban and rural areas, the completed housing space each year has reached an unprecedented level. The completed housing space in urban and rural areas increased from 1.22 billion square meters in 1996 to 1.93 billion square meters in 2013, up 2.7% on average each year. To be specific, the housing space in urban areas increased from 395 million square meters in 1996 to 1.07 billion square meters in 2013, up 6% on average each year.

(2) The overall housing level of urban and rural residents has been raised dramatically. On the one hand, the per capita floor space for urban residents increased from 8.5 square meters in 1996 to 32.9 square meters in 2012. The living conditions have been obviously improved with the improvement of construction quality of new housing and the constant increase in supporting facilities inside and outside. The ownership ratio of households reached above 80%, residential housing

being one of the most valuable assets of urban residents. On the other hand, the per capita floor space in rural areas increased from 21.7 square meters in 1996 to 37.1 square meters in 2012. The construction quality and safety performance of new housing in rural areas have been improved steadily, and the proportion of better-quality housing, such as, housing in brick-wood and brick-concrete structures, has been greatly increased.

(3) A large number of underprivileged people have benefited from the housing security system. From 2008 to 2013, the Chinese government had constructed a total of nearly 38 million units of various social housing and housing for shanty area renovation, solving effectively the urban housing problems of low- or medium-income households, newly-employed workers and rural migrant workers.

#### 1.1.2 Policies and Actions for Development of Urban and Rural Housing

(1) Deepening the urban housing system reform to meet the needs of economic system reform and housing development. Since the end of 1998, China's urban housing distribution system has been significantly changed. The distribution of public housing in kind - the State and institutions providing residential buildings for workers and charging little rent - has been replaced by distribution in currency. Housing accumulation fund system and housing subsidies system have been established and implemented.

The urban housing supply system has been gradually adjusted in accordance with the principle of commercialization and socialization. The system was dominated by affordable housing in 1998, by commodity apartments after 2003, and by commodity apartments combining with social housing after 2007.

Adapted to the above changes, the main housing suppliers have been changed from the State and institutions to real estate developers, the fund-raising for housing construction changed from relying mainly on the State to mainly by the market, and housing consuming changed from renting public housing to purchasing or renting housing through the market.

(2) Promoting the development of commodity housing market, strengthening market regulation and guidance, and increasing affordable housing supply. Urban housing system reform has laid a foundation for market distribution of resources. Over the past 20 years, in addition to adhering to the basic orientation of marketization, cultivating and developing real estate market, and increasing commodity housing supply, the Chinese government has strengthened regulation and guidance to keep the stable and sound development of the real estate market, striving to satisfy more people's multi-level housing demand by means of market.

China has fully mobilized the enthusiasm of enterprises and urban residents in housing construction, thus forming a diversified housing investment system. In 2013, the investment in urban residential housing was 6.75 trillion yuan, being 20.3 times of that in 1996. Meanwhile, the development of housing finance has supported the housing construction and consumption. By the end of 2013, the main financial

institutions' commercial real estate loan balance reached 14.61 trillion yuan, where the real estate development loan balance was 4.59 trillion yuan and the individual housing loan balance was 9.02 trillion yuan.

Commodity housing market has become the main channel for urban housing supply. In 2013, areas of newly-built urban commodity housing in China were 787 million square meters, being 5.6 times of those in 1998, and the ratio of the same to newly-built urban housing areas increased from 29.7% in 1998 to 70% above in 2013. The purchase and sale of second-hand housing and the housing rental market have also played an important role in satisfying the urban residents' housing demand. In recent years, the trading volume of second-hand housing in such cities as Beijing, Shanghai, Guangzhou, Shenzhen and Hangzhou has exceeded that of newly-built commodity housing.

China has attached great importance to the regulation of real estate market. Faced with the problems such as tense contradiction between supply and demand, the upward pressure on the price of housing and disordered market, the Chinese government has insisted on economic, legal and necessary administrative means to guide the stable and sound development of the market; carried out the responsibility system where provincial governments have general responsibility and municipal governments have direct responsibility for implementation; regulated the volume of housing supply, optimized the housing supply structure and increased the effective supply of small- and medium-sized commodity apartments as well as its land; given full play of the regulation role of fiscal, tax and financial policies to encourage self-occupied housing consumption and curb the speculative investment demand; steadily pushed forward the real estate tax system reform, increased the tax bearings of housing possession and reduced the tax bearings of housing construction and transaction; treated differently between the residential housing and non-residential housing, first-time housing purchase and non first-time housing purchase, and the length of purchase, etc., carrying out different tax rates, downpayment and interest on loans; intensified market regulation, investigated and punished violations according to law.

(3) Fully promoting social housing and optimizing housing security system. In 1998, the Chinese government proposed the principle of "lowest-income families rent low-rent housing provided by the government or institutions, and low- or medium-income families purchase affordable housing". In 2003, the government asked to establish and optimize the low-rent housing system to protect the basic housing demand of lowest-income families. Since 2007, China has fully launched the housing security work, accelerated the establishment and improvement of the policy system for solving the housing problems of urban low-income families through multi-channels with an emphasis on low-rent housing system. Since 2008, China has launched the social housing project on a large scale, speeding up the housing security work and launching a series of supporting policies. Since 2010, China has accelerated the construction of social housing project with an emphasis on public rental housing. Since 2013, China has comprehensively promoted the combination of low-rent housing and public rental housing system.

The Outline of the Twelfth Five-year Plan for National Economic and Social Development has proposed the framework of housing security system, which consists of low-rent housing for urban low-income households, public rental housing for medium- or low-income households and commodity housing rented to or purchased by medium- or high-income households. The objective of housing security is that, by end of 2015, the coverage rate of social housing in China shall reach around 20%.

The targets of housing security system include urban medium- and low-income households with housing problems, newly-employed workers without residential housing and urban migrant workers with stable employment but with housing problems. The methods of housing security include rental subsidies distribution and social housing supply. Social housing consists of low-rent housing, public rental housing, affordable housing, housing for shanty area renovation and price-limit commodity housing.

As for the working mechanisms, provincial governments have general responsibility and municipal and county governments have direct responsibility for implementation. The central government is mainly responsible for preparing fiscal, tax, credit and land policies and providing financial aid, while local governments are responsible for preparing construction plans and organizing implementation. The construction of social housing is operated according to market mechanism.

(4) Implementing shanty areas renovation on a large scale. China's shanty areas include shanty areas in cities, State-owned industry and mining (containing coal mines), forest districts and reclamation areas. The main characteristics of shanty areas are considerable safety hazards, large building density, poor construction quality, insufficient functions and supporting facilities. The majority residents of shanty areas are low-income households and migrant workers. In 2004, Liaoning province launched the renovation of shanty areas for the first time in China. After that, the renovation of various shanty areas has comprehensively launched throughout the country. Currently, the renovation of urban village and integrated management of old residential quarters has also brought into the scope of shanty areas renovation.

The renovation of shanty areas is led by the government, operated by the market and joined by the residents. The central government provides support in financial investment, construction land, tax and credit to help local governments implement such preferential policies as financial subsidies, tax reduction and exemption, and the allocation of certain amount of funds from the net income of land transfer. The shanty areas renovation project is allowed to construct a percentage of commercial service facilities and commodity housing so as to attract social forces to participate in shanty areas renovation. In terms of resettlement, two forms of arrangements, physical resettlement and monetary compensation could be selected by the residents according to their own wishes.

From 2008 to 2013, China started construction of 15.8 million units of housing for shanty area renovation, actually solving the housing problems of residents of former shanty areas.

(5) Optimizing the land supply system of housing construction and

**increasing the land for housing.** For commodity housing, the land is acquired by the development body through marketization methods, such as, bidding, auction and listing. For low-rent housing and affordable housing, the construction land is acquired through allocation.

China has optimized the structure of land supply. The government starts to increase the land supply for general commodity housing and social housing to solve the problems of tense contradiction between housing supply and demand and of fast rising housing prices in some hotspot cities. For example, in May 2006, China proposed to ensure the land supply for low- or medium-price and middle- or small-sized general commodity housing. It demanded that local governments at all levels should prepare the annual landuse planning, scientifically decide the land supply scale of real estate development, ensure the land supply for low- or medium-price and middle- or small-sized general commodity housing, whose annual supply shall not be lower than 70% of the total amount of residential land, continue to stop the land supply for villa development and strictly limit the land supply for low-density and large-sized housing.

Some regions have started to explore new ways and new modes of housing construction land supply. Beijing, Shanghai and some other places have launched the pilot project of constructing social housing in collectively owned land in accordance with relevant regulations.

(6) Accelerating the establishment and development of housing financial system. In the past 20 years, the housing finance has developed comprehensively, basically forming the housing financial system dominated by financial institutions, such as, banks supported by housing accumulation funds and supplemented by capital market, government's extra-budgetary income (land transfer fees), and containing various institutions, such as, commercial banks, insurance companies, guarantee agencies, securities companies and housing accumulation funds management center. In order to raise housing construction funds and increase urban workers' accumulation for housing consumption, the Chinese government issued the Regulations on the Administration of Housing Accumulation Funds in 1999, which were revised in 2002 to further normalize and systematize the management of housing accumulation funds, playing an important role in solving the housing problems of urban workers. Some cities have started to set up housing savings banks and the country has started to explore national housing financial institutions. In 2014, China Development Bank set up a specialized self-accounting institution to issue special bonds for housing finance through the market, raising funds from financial institutions, such as, postal savings bank and other investors, encouraging commercial banks, social security funds and insurance institutions to proactively participate in the activity. The main purpose of the bonds is to support the renovation of shanty areas and construction of urban infrastructures and other relevant projects.

The development and improvement of housing financial system has broadened

the fund channel of housing construction. In terms of commodity housing development, such financing methods as bank loans, trust funds, capital market and securitization have flourished, providing an effective fund guarantee for real estate development enterprises. In terms of social housing construction, such methods as standardizing government financing platform and strengthening financial support have effectively promoted the large-scale construction of social housing projects.

(7) Enhancing the modernization level of housing industry and improving housing quality and functionality. In 1996, China issued the Outline on the Pilot of Housing Industry Modernization. In 1996, China issued the Circular on Several Opinions Concerning Promoting Modernization of Housing Industry and Improving Housing Quality, which marks a new development stage of the housing industry process. After that, supported documents, such as, the Management Measures on Performance Confirmation of Commodity Residential Housing (1999) and the Assessment Methods and Index System of Housing Performance (2005) were successively issued, thus leading to the trial implementation of housing performance throughout the country.

Since 2005, China has started to set up comprehensive pilot cities (districts) for housing industry modernization, proposed to construct national housing industrialization bases, and clarified the new mode of housing industrialization development which is promoted by pilot cities and industrialization bases. Meanwhile, local governments have issued guiding opinions and relevant policies on facilitating the development of housing industry to accelerate the industrialization of housing construction industry and the development of full decoration housing. A group of enterprises engaging in real estate development as well as the research, development, design and production of housing and its components, accessories and materials have come into being successively, thus formulating the foremost force of housing industrialization. With nearly 20 years' efforts, China has initially established the housing structure system, housing components system and technology security system meeting the requirements of housing industrialization.

(8) Strengthening the guidance and management of rural housing construction and conducting renovation of dilapidated buildings in rural areas. China has strengthened policy training for rural housing construction and management personnel; it has provided technical instructions for constructors; it has prepared architectural drawings of rural housing; and it has popularized related technology of rural housing construction. It has fully considered the seismic fortification, implementing the supportive structures, such as, ring beams and structural columns, and improving the seismic performance of rural housing. It has adopted various measures like supporting construction materials, applicable components, spreading new housing structural system to rural areas to promote the energy saving of rural housing.

The renovation of rural dilapidated buildings has been continuously promoted. In

2008, the central government supported Guizhou Province to launch the pilot renovation of rural dilapidated buildings. Since 2009, Ministry of Housing and Urban-Rural Development (MOHURD) has broadened the pilot renovation together with National Development and Reform Commission and Ministry of Finance. The pilot region gradually expanded from Guizhou Province to other regions and eventually realized full coverage of rural areas in 2012. The central government subsidies for renovation of dilapidated buildings per household have gradually increased from 5,000 yuan to 7,500 yuan. An extra subsidy of 2,500 yuan for the borderline household and building energy saving model household is subsidized and another 1,000 yuan for the household in poverty-stricken areas is added at the same time. From 2008 to 2014, the central government accumulatively arranged subsidies of 119.172 billion yuan to help 15.654 million poor households in rural areas renovate their dilapidated housing. Ministry of Housing and Urban-Rural Development successively issued policies and technical specifications, such as, the Technical Guidelines for Rural Dilapidated Buildings Identification (for Trial Implementation), the Building Energy-saving Technical Guidelines for Rural Buildings in Severe Cold and Cold Regions (for Trial Implementation) and the Basic Requirements of Seismic Safety for Rural Dilapidated Buildings Renovation (for Trial Implementation) to guide the local governments to strengthen the quality, safety, seismic performance and building energy saving of rural housing while renovating the rural dilapidated buildings, improving the quality, safety and comfort of rural housing.

# **1.2** Sustainable Development of Urban and Rural Settlements

# 1.2.1 Urban and Rural Population and Urbanization

In 1996, Chinese government set up the goal of urbanization development and proposed, "By 2000, the urban population of China will reach 450 million with a urbanization rate of 35%; by 2010, the urban population of China has reached 630 million with a urbanization rate of 45%."

In the past 20 years, China has quickened the pace of urbanization and obtained remarkable achievements. In 2000, there was 459 million of urban population and the urbanization rate was 36.2%. In 2010, there was 670 million of urban population and the urbanization rate was 49.9%. Both the urban population and urbanization rate surpassed the goal set in 1996. By the end of 2013, the urban population increased to 730 million, and the urbanization rate amounted to 53.7%. The number of cities with a municipal government increased to 658, and the number of designated towns increased to 20,113. The rapid development of urbanization has helped to attract a large number of rural labors, increase the allocation efficiency of urban and rural production factors, promote the sustained and rapid development of economy, result in the profound change of social structures, and comprehensively improve the living standard of urban and rural residents.

(1) Adjusting and making the strategy of urbanization development. Based on the factors such as stages of economic development, levels of social development and carrying capacity of resources and environment, the Chinese government has constantly adjusted the strategy of urbanization development, thus vigorously promoting the sound development of urbanization. In 2002, China explicitly proposed to "persist in the coordinated development of large, medium-sized and small cities and towns along the path to urbanization with Chinese characteristics." In 2007, China proposed that, "taking a path of urbanization with Chinese characteristics, we will promote balanced development of large, medium-sized and small cities and towns on the principle of balancing urban and rural development, ensuring rational distribution, saving land, providing a full range of functions and getting larger cities to help smaller ones." In 2014, China issued the *National New-type Urbanization Plan (2014–2020)* to further indicate the direction of the sound development of urbanization.

(2) Facilitating the development of city clusters and promoting the coordinated development of large-, medium-, and small-sized cities and towns. Guided by the policy, Chinese urbanization has been transformed from separated development to coordinated development, with city clusters being the main type of urbanization development, and the three city clusters of Beijing-Tianjin-Hebei Region, Yangtze River Delta and Pearl River Delta being the main platform of leading the rapid growth of economy and participating in the international cooperation and competition. At the same time, the government has strived to create a more comfortable environment for the development of small cities and towns, let the market play its leading role in the flow of goods, personnel and productions factors, and accelerate the intensive development of the small cities and towns with the emphasis on quality, functions and scientific planning.

(3) Promoting the conversion of rural migrant population into urban residents. The main feature of Chinese urbanization at the current stage is the large number of rural population entering into cities and towns. By 2013, there was more than 200 million of rural population counted as urban population. Chinese government has strived to accelerate the coordinated development of large-, medium-, and small-sized cities and towns and guide the rational flow and distribution of population on the one hand, and orderly promote the conversion of rural migrant population into urban residents on the other hand. It is envisaged that those rural workers who have stayed in cities for long, are good at finding jobs and can adapt to the industrial upgrading and market competition environment should be first considered to become urban residents in order to convert agricultural migrants and other permanent residents into urban residents gradually. It is also designed to accelerate the full coverage of urban basic public services for permanent residents and introducing a series of policies and measures, with the emphasis on employment, children's education and housing, to ensure that the rural population in urban areas can be employed, receive job training, sign labor contracts, be covered by social security system, get full salary, safeguard their legal rights, improve their housing conditions, let their children receive education, enjoy and participate in cultural activities and make their development goals clear. In addition, measures have been

adopted to care for the migrant population and improve the development capability of migrant families so as to facilitate the social integration of rural population in urban areas and to promote the sound and harmonious development of cities and towns.

# **1.2.2** Urban Construction and Development

In the past 20 years, Chinese urban construction has made great achievements. The urban infrastructures, such as, water supply, electricity, road, gas, and information network have got significant improvement, per capita floor space and areas of green land in parks increased greatly, and the level of such public services as education, medical care, culture and sport enhanced evidently. According to statistics, by the end of 2013, the capability of urban water supply reached 280 million cubic meters/ day and the coverage rate of tap water reached 97.6%; the capacity of natural gas supply reached about 90.1 billion cubic meters and the coverage rate of fuel gas reached 94.2%; the capacity of centralized sewage treatment was 120 million cubic meters/ day and the rate of sewage treatment was 89.3%; the capacity of domestic waste harmless treatment was 492,000 ton/ day and the rate of harmless treatment was 89.3%; the total length of urban road was 336,000 kilometers and urban road space per capita was 14.9 square meters; the green space in built-up areas reached 1.907 million hectares, the ratio of green space being 35.8%, and the per capita green land space in parks reaching 12.64 square meters.

(1) Scientifically allocating the construction land and enhancing the level of urban planning. The Chinese government attaches great importance to urban planning and land use planning, actively guiding the rational use of land. The government has established the legal status of master plans on landuse and urban plans and strengthened the authority and seriousness of plans. The urban planning has been gradually transformed from city expansion to city boundary limitation and space structure optimization. The government has also scientifically established the urban function and type, strengthened the regulation of urban space exploitation and utilization; reasonably set up the standard requirements such as the floor area ratio, green space ratio and ground permeability rate of land development and utilization in various function zones; set up the inspection systems for national landuse and urban and rural planning to ensure the effective enforcement of relevant laws and regulations; carried out the land use control system and the approval system for farmland transference and construction land to control the disordered expansion of city size and increase the intensive degree of urban construction land.

(2) Strengthening the construction of urban infrastructures and improving the level of urban governance. China has made great efforts and done a lot of work on urban construction and management. The government has guaranteed the fund supply of infrastructural construction through continuously increasing investment and reforming investment and financing system; guided the sound development of the construction of urban flood control and disaster reduction system and municipal public facilities construction through preparing various plans, including special plans such as plans for ensuring national urban tap water safety, plans for urban flood control, the renovation and construction plans for urban water supply facilities, construction and development plans for urban sewage and domestic waste treatment facilities, plans for urban gas development and plans for urban landscaping development; the government standardizes the development of municipal infrastructures through reinforcing the construction of regulatory system including regulations on urban drainage and sewage treatment, regulations on administration of urban roads, regulations of urban parks and technical guidelines on urban drinking water source safety assessment; the government also popularizes the digital city management technology, information network and digital technology and advanced scientific achievements to promote the scientific and technological progress and enhance the level of urban management.

(3) Protecting human settlements and constructing eco-friendly residential areas. China has continuously strengthened the environmental construction to promote the development of ecological, energy-saving and environmental friendly settlements. Local governments at all levels have strived to establish national ecological garden cities to promote the overall development and improvement of urban low-carbon traffic, municipal infrastructures, housing security, green transportation, green buildings, circular economy and building energy saving. They have implemented the bus priority development strategy and the traffic policy of giving priority to public transport to promote the sustained development of urban traffic. They have also launched actions on green building development, guided the urban and rural construction with green, circulation and low carbon principles, strictly implemented the mandatory standard of building energy saving, promoted the energy saving renovation of existing buildings and the renovation of urban heating system, and strengthened the energy saving of public buildings. Pilot cities have been selected to push forward the development of water ecology and explore an appropriate mode fitting into the conditions of Chinese water resources and water ecology. During the post-disaster reconstruction after Wenchuan Earthquake and Lushan Earthquake, the local governments have strived to build new towns that are more secure, more comfortable, more vigorous and more sustainable for development through utilizing natural environment, optimizing infrastructure and enhancing the disaster-resistance ability.

(4) Protecting the historical culture and traditional feature. The Chinese government has proposed to explore the urban culture resources, intensify cultural inheritance and innovation, and build the city into a charming humanistic place with profound historical heritage and obvious time features. Since 1982, the Chinese government has published the list of many famous historical and cultural cities, towns and villages successively, increased the protection fund input for historical and cultural cities, towns and villages as well as historical and cultural blocks, carried out the pilot work of historical buildings protection and reuse, strengthened the preparation, implementation and record management of protection planning, established the dynamic supervision information system, utilized the remote sensing and information technology, played the role of planning inspectors, strengthened the supervision and inspection, so as to inherit and develop the excellent traditional culture, promote the development of local culture and preserve the memory of urban culture.

# **1.2.3** Rural Construction and Development

From 1996 to 2003, the number of designated towns (not including county-level cities) increased from 15,800 to 20,100; the number of townships reduced from 31,500 to 12,300; the number of administrative villages reduced from 74,700 to 58,900; and the number of natural villages reduced from 3.676 million to 2.65 million. Meanwhile, the capability of population agglomeration improved continuously. The average population size of designated towns increased from over 6,000 in 1996 to about 10,000 in 2013, with the annual increase rate of 2%. In 2013, there was 152 million registered population in all the built-up areas of designated towns and 31 million in the built-up areas of townships. The total population in built-up areas of designated towns and townships exceeded the population in built-up areas of county-level cities.

(1) Gradually perfecting infrastructures. In 2013, the coverage rate of tap water in designated towns reached 81.7%, the coverage rate of fuel gas being 46.4%, green space ratio being 15.4%, and road space per capita being 12.3 square meters. The transportation has been more convenient. According to the Statistical Bulletin on the Development of Transportation Industry (2013), the rate of administrative villages connecting to highways reached 99.7%, and the rate of administrative villages connecting to highways with hardened surface was 89%. The drinking water safety problem of rural areas has been basically solved. According to the Statistical Bulletin on the Development of National Water Conservancy (2012), by the end of 2012, a total of 750 million people benefited from the rural drinking water safety project, and the rate of population benefited from rural centralized water supply was 67.9%. The problem of rural electricity consumption has been basically solved. Only few people living in some western regions do not connect to the power supply system because of bad traffic conditions. Public services have basically covered the rural areas. The villages and towns have generally realized the comprehensive coverage of health centers, culture stations, primary and secondary schools, supermarkets and public transport, which is able to meet people's primary needs of daily life.

(2) Improving the residential and ecological environment. The project of rural dilapidated buildings renovation from 2008 to 2013 has accumulatively supported 12.994 million of poor rural households to renovate their dilapidated housing. The quality of rural housing has been enhanced and the living conditions of rural areas been obviously improved. Through such projects as village renovation and comprehensive renovation of rural environment, the environment of 214,000 villages has been improved. According to the data published by National Health and Family Planning Commission, the popularization rate of rural sanitary latrines was 74.1% by the end of 2013. The figure was only 7.5% on the occasion of the first national

environment and sanitation investigation in 1993.

(3) Protecting and developing traditional villages. Since 2012, the Ministry of Housing and Urban-Rural Development, in cooperation with the Ministry of Culture, the State Administration of Cultural Heritage and the Ministry of Finance, has launched the project of traditional village protection and issued relevant policies and technical specifications to direct local governments to strengthen the protection of traditional villages. Through investigation, the whole nation has identified 11,490 traditional villages, with 80% formed before Qing Dynasty, which possess 25,000 traditional buildings and 3,174 representative intangible cultural heritage projects above provincial level, containing the typical settlement forms for 51 ethnic groups. By 2013, Ministry of Housing and Urban-Rural Development and other departments have inscribed 2555 traditional villages with important protection value on the list of Chinese traditional villages. In 2014, the Ministry of Housing and Urban-Rural Development, in cooperation with the Ministry of Culture, the State Administration of Cultural Heritage and the Ministry of Finance, formulated the Guiding Opinions on Practically Strengthening the Protection of Chinese Traditional Villages. The support from the central government to the restoration of the historical environment factors of traditional villages, public environmental and hygienic facilities improvement, construction of disaster prevention and reduction facilities has ensured the appropriate protection, inheirtance and development of traditional villages in an era of rapid development of modern civilization. By 2014, the central government has provided fiscal support for 600 villages.

# **1.3** Legal Development and International Cooperation in the Area of Urban and Rural Settlements

# **1.3.1 Legal Development of Urban and Rural Settlements**

Chinese government pays special attention to legal construction to promote the sustained development of urban and rural settlements and protect the participating right of urban and rural residents in this process.

(1) Promulgating Urban and Rural Planning Law. In 2007, China promulgated the Urban and Rural Planning Law of the People's Republic of China on the basis of the City Planning Law of the People's Republic of China. It is an important law of regulating and standardizing the urban and rural planning and construction, stipulating the principles of urban-rural integration, reasonable layout, land saving, concentrated growth and planning before constructing; It reflects the requirements of improving ecological environment, enhancing the conservation and comprehensive utilization of resources and energy, protecting natural resource and cultural heritage, maintaining local features, ethnic features and traditions; constructing a national urban-rural planning and village planning; setting up the system of "one written proposal and two permits" - a written proposal of location for construction project; establishing the mechanism of public participation in

planning preparation and implementation.

(2) Amending the Land Administration Law. In order to adapt to new conditions and requirements, the existing Land Administration Law of the People's Republic of China has been amended three times. The managing system focused on the protection of cultivated land has been ensured. The basic State policy of "cherish and rationally use land resources, acctually protect cultivated land" has been written into the law, Through the strengthening of regulation by the landuse masterplan, measures to balance land occupation and subsidies as well as reinforce the land management for urban-rural construction have been taken. Besides, a series of measures have been publicized to improve land requisition, strengthen urban-rural development, protect the legal benefits of land owners and users, and promote the rational use of urban-rural land as well as social-economic development.

(3) Amending the Urban Real Estate Administration Law. The Urban Real Estate Administration Law of the People's Republic of China (revised in 2007) further stipulates that only "for public interests", can the state expropriate any entity or individual's house built on state-owned land. It also stipulates that "the state shall give relocation compensations according to law and safeguard the legitimate rights and interests of the entity or individual. If an individual's residential house is to be expropriated, the State shall guarantee the housing conditions of the individual."

Moreover, the *Property Law of the People's Republic of China* was officially issued and implemented in 2007. The basic law explicitly stipulates that the real rights of the State, collectives, individuals or any other right holder shall be protected by law and shall not be infringed by any entities or individuals. The legal system for urban and rural development has consistently been improved.

# **1.3.2** International Cooperation in the Field of Urban and Rural Settlements

Since Habitat II, Chinese government has paid more attention to and effectively strengthened the international cooperation and communication in the field of urban and rural human settlements.

(1) Promoting advocacy to establish World Cities Day. Shanghai Expo 2010 took the theme of urban life for the first time, making a comprehensive and in-depth interpretation of the concept of "Better City, Better Life". At the closing ceremony, the Bureau of International Exhibitions and the Organizing Committee of the Expo jointly published the *Shanghai Declaration*, proposing to set October 31<sup>st</sup> of each year as the World Cities Day. On December 28<sup>th</sup>, 2013, the 68<sup>th</sup> UN General Assembly adopted the revolution and decided to designate October 31<sup>st</sup> of each year as the World Cities Day. The establishment of World Cities Day has accelerated the cooperation of different countries to meet the opportunities and challenges of the urbanization process and promoted the cause of urban sustainable development and global sustainable development.

(2) Winning Habitat Scroll of Honor Award and Dubai International Award for Best Practices for many times. The Chinese government has attached great importance to Habitat Scroll of Honor Award and Dubai International Award for Best Practices to Improve the Living Environment established by UN Commission On Human Settlements. In April 2000, Ministry of Construction of the People's Republic of China established China Habitat Award, then choosing the best of the winning projects each year to recommend to United Nations Centre for Human Settlements (currently United Nations Human Settlements Program, UN-Habitat) and apply for Habitat Scroll of Honor Award and Dubai International Award for Best Practices to Improve the Living Environment. From 1990 to 2014, China won 22 times of Habitat Scroll of Honor Award and Habitat Scroll of Honor Special Citation. From 1996 to 2012, 124 projects won Dubai International Award for Best Practices to Improve the Living Environment, Good Practices Award and Promising Practices Award separately, among which, 7 projects won the top ten awards. China's significant achievements in human settlements have won widespread praise and affirmation from the international community.

(3) Hosting World Urban Forum 4. In November 2008, the 4th session of the World Urban Forum co-hosted by Chinese Ministry of Housing and Urban-Rural Development and UN-Habitat and undertaken by Jiangsu province and Nanjing municipal government opened in Nanjing, China. The forum, with the theme of "harmonious urbanization", attracted 7800 government officials, scholars and relevant people from the United Nations and 175 countries and regions. On this forum, Nanjing city was awarded Habitat Scroll of Honor Special Citation because of its successful control and development of Qinhuai River which flows through the downtown. The forum was highly evaluated by the then Executive Director of UN-Habitat.

(4) Carrying out regional communication and technical cooperation. On June 6<sup>th</sup>, 1996, Chinese Vice Premier Zou Jiahua made a speech at the high level meeting of Habitat II, expressing the willingness of strengthening communication and cooperation with various countries in the field of human settlements. MOHURD and UN-Habitat have jointly published the Human Settlements Magazine for a long time. MOHURD has also translated and published a series of publications of UN-Habitat, increasing Chinese people's understanding of UN-Habitat and the world human settlements campaign. Since 2010, the China Science Center of International Eurasian Academy of Sciences, China Association of Mayors, Urban Planning Society of China and UN-Habitat have cooperated to compile the States of China's Cities and have published three volumes already. In 2002, the China-Europe Exchange Platform for Water Resources was established, which put "ensure water resources in the process of urbanization" as the main field of key research and collaboration. Many high-level dialogues have been held, where responsible departments for water resources in both China and Europe had policy talks and exchange of ideas. Recent years have seen increasingly broader and deeper-going interaction and cooperation between China and UN-Habitat, for example, in 2010, UN-Habitat Regional Office for Asia and the Pacific and Jiangvin city of China signed the memorandum of "Low-carbon Economy and Sustainable Urban Development Project - Jiangyin Development Zone Practice" to respond to climate change under the framework of sustainable urban development through building energy saving, water resources and natural ecological protection and new energy utilization, etc; from 2012 to 2013, UN-Habitat, Kunshan city of China and some African cities cooperated for the first time to make professional training on urban and rural planning, construction and management for more than 30 officials from six cities of Benin, Cote Ivory Coast, Mali and Senegal in three batches.

# 2. Basic Propositions of Chinese Government on the Development of Human Settlements

The sustainable development of human settlements is an eternal theme, which is related to having a better life. In today's world, urbanization has developed significantly and the world is facing various challenges such as urban poverty, insufficient facilities, expanding slum areas, rising unemployment rate, unsustainable consumption and production modes, etc.. It is shown by statistics that 30% of the world population is living in slum areas and informal housing, and the figure is as high as 65% in some developing countries. Solving the problem of human settlements development requires joint efforts of countries throughout the world. China has made great progress in urbanization and human settlements improvement, so its experiences can provide beneficial reference for the development of human settlements. The Chinese government believes that the sustainable development of human settlements is the coordinated development of economy, society, culture, environment, science and technology, governance, security and planning. The specific propositions include:

2.1 Economic development is the foundation of sustainable human settlements development. Many issues related to the development of human settlements, such as poverty, disaster, sanitation, security and green settlement, need to be addressed with the backing of economic strength. For most of developing countries, economic growth remains the first priority. Only a strong economy can provide material conditions for the development of human settlements. Economic development should pursue inclusive growth, encourage the co-existence of multiple economic forms and create diversified job opportunities. Efforts should also be made to emphasize coordinated development, encourage rich people help the poor, gradually eliminate poverty, and comprehensively improve the level of human settlements.

**2.2 Putting people first, we should ensure all the people share the fruits of development.** The overarching goal of efforts related to human settlement development is to improve the working and living environment of all people, especially poor people in urban and rural areas. This kind of improvement is an equal right, which requires equal access to public and infrastructure services. It will

contribute to gradual realization of residents' right of free migration and free choice of where to live, and the safeguarding of residents' right of participation. The government shall formulate appropriate policies and offer help and support to solve the settlement-related problems for the vulnerable groups such as the poor, the aged and the disabled.

**2.3 We should work to inherit and develop cultures, respect differences and promote diversity.** People in different regions have created diversified cultures, offering spiritual foundation for the development of their settlements. Based on the protection of natural, historic and cultural heritage, sustainable development of settlements shall strengthen culture inheritance and innovation and encourage development with local features to enrich settlement cultures.

2.4 We should uphold the concept of ecological development to facilitate harmonious development between human beings and environment. Sustainable ecology is the guarantee of sustainable development. Ecological development is the long-term strategy concerning the soundness of human settlements and the well-being of mankind. In the course of promoting human settlements development, we should pursue green, circular and low-carbon development, implement the strategy of energy conservation and emission reduction, and facilitate ecological protection and restoration to build a resource-conserving and environmentally friendly society.

**2.5** Construction and development of human settlements should be supported and boosted by scientific and technological progress. Science and technology have been playing more and more important role in the development of human settlements. Scientific and technological progress has influenced the layout of urban space, changed the mode of urban governance and offered easier and more convenient conditions for the construction and management of human settlements. We should promote the intelligent development of settlements and build smart cities to facilitate the development of human settlement sciences.

2.6 We should endeavor to innovate social governance and facilitate cooperation among relevant parties. The innovation of social governance structure is the new requirement of human settlements development, among which, government leading is the key point, social collaboration is the supporting force and public participation is the foundation. Government should play a central role because the government has always had important responsibilities in the process of social governance. Meanwhile, social organizations shall be fostered and developed, various relevant parties of the society be encouraged and supported to participate in the settlement building, and the self-governance and service function of urban and rural communities be strengthened.

2.7 The security of urban and rural settlements should be enhanced continuously. Security is the basic demand of settlement development. Faced with frequent meteorological, geological and other disasters, the government shall strengthen the capacity-building in disaster prevention and reduction, optimize emergency management system and disaster monitoring and early warning system,

and raise the disaster-proof standards for urban building. At the same time, the government should strengthen the mechanism of comprehensive management of public security, and improve the preparedness for unexpected incidents and emergency response system.

2.8 The sustainable human settlements development should be guided by urban and rural planning. The development of human settlements will not be possible without the efforts made by government departments and legislative bodies to formulate and implement plans and action programs aiming at boosting the sustainable development of human settlements. The future development of settlements shall integrate the concept of putting-people first, respecting nature, inheriting historical features and green and low-carbon development into the whole process of urban and rural planning. The government shall enhance the regulatory role of planning to forestall runaway development of settlements, and make integrated plans for the coordinated development of downtown areas, suburbs and surrounding countryside.

# 3. Action Plans for the Development of Urban and Rural Settlements in China

#### 3.1 Urbanization and Urban and Rural Planning

China's urbanization is still within the range of rapid development and will enter into the stage of transformation emphasizing quality enhancement. Yet it is faced with risks and challenges which cannot be ignored. From the domestic aspect, there are outstanding problems such as unbalanced development of industrialization, IT application, urbanization and agricultural modernization, unstable agricultural foundation, excessive regional disparity between urban and rural areas, unreasonable industrial mix, reduced surplus rural labors, growing aging population, unsolved issues related to left-behind children, women and old people in rural areas, serious bottleneck constraint of environment and resources, and the increasingly obvious contradiction of the internal dual structure in the city. The pattern relying on cheap labor force supply, inefficient consumption of resources such as land and unequal basic public services which lower the cost of rapid growth of urbanization can hardly continue. From the international aspect, the global supply and demand structure has undergone profound changes. The contradiction between enormous production capability and limited market space has been more prominent and the competition in international market has been more intense. China is faced with great challenges of industry transformation and upgrading and absorbing the serious excess capacity. As the contradiction between global resources supply and demand and the contest for carbon emission rights become more and more tense and China's energy resources and ecological environment is faced with unprecedented international pressure, the traditional development mode of industrialization-driven urbanization featuring high input, high consumption and high emission can no longer be sustainable.

#### 3.1.1 Urbanization

#### •Objectives

The level and quality of urbanization will be steadily improved. By 2020, the urbanization rate of permanent population will reach about 60%, and the urbanization rate of registered population will reach about 45%. The urbanization strategy pattern of "two horizontal axes and three vertical axes" will be basically formed. The urban size and structure will be improved, and the central cities will have greater influence and larger development-driving role to play. The number of medium- and small-sized cities will increase and the service functions of small cities and towns will improve. The intensive and compact development mode with higher density, mixed functions and public traffic-orientation will become the dominant mode. The urban construction land per capita will be strictly restricted within 100 square meters. Green production and green consumption will become the mainstream of urban economic life. The basic urban public services will steadily cover all the permanent population. The natural landscape and cultural features will be effective protected. The urban development will highlight local style, and urban management will be shaped by considerations about people's needs and the full use of information technologies. The reform on such fields as household registration management, land management, social security, fiscal, taxation and financial systems, administration, and ecological environment will make significant progress, and the institutional barriers that hinder the sound development of urbanization will be fundamentally removed.

#### ·Policies and Actions

(1) Convert the rural population who have migrated to the cities into urban residents in an orderly manner. There is much to be done to promote the reform of household registration system and equal access to basic public services as a whole with an emphasis on rural migrant population, further promote the reform of household registration system, implement differentiated registration system, facilitate the process of entitling rural migrant population to have access to basic urban public services, strengthen the responsibility of local governments at all levels, and establish a cost-sharing mechanism among governments, enterprises and individuals for converting rural migrant population into urban residents.

(2) Optimize the layout and pattern of urbanization. The urbanization strategy arrangement of "two horizontal axes and three vertical axes" aiming at coordinated development among large-, medium- and small-sized cities will be conducted, with the land bridge corridors and Yangtze River as two horizontal axes, the coastal area, Beijing-Guangzhou and Beijing-Harbin Railways and Baotou-Kunming transportation corridors as three vertical axes, urban agglomerations on the axes and node cities as foundation and other urbanization areas as important components.

(3) Improve the sustainable urban development capacities. The measures include: optimizing the urban industrial structure, improving urban innovation ability, upgrading and improving the functions of central areas of cities, strictly regulating the construction of new cities and new districts, developing urban green traffic,

strengthening the construction of municipal infrastructures, improving the basic public service system, promoting the urban green development, boosting the application level of information technologies, enhancing the historical and cultural attractiveness, facilitating the new-type urban construction, improving the urban governance structure, strengthening self-governance and service functions of communities, making innovations on comprehensive management of public security, and improving the disaster prevention, reduction and relief systems.

(4) Promote the integrated development of urban and rural areas. The measures include: stepping up efforts to coordinate urban and rural development, increasing the vitality of rural development, gradually narrowing the gap between urban and rural areas, promoting urbanization and construction of the new countryside in a coordinated manner, speeding up the removal of institutional barriers of urban-rural dual structure, accelerating the transformation of agricultural development pattern, making scientific planning for countywide town-village systems, and balancing the construction of rural infrastructures and the development of rural social undertakings.

(5) Reform and improve the institutions of urbanization development. The measures include: balancing the institutional reforms on such important fields and key links as population management, land management, fiscal, taxation and financial systems, urban housing, administration and ecological environment, fostering innovation on land management system, accelerating the reforms on fiscal and taxation systems and investment and financing systems, establishing the housing system which combines market allocation with government-subsidized delivery, and improving the institutions for urbanization highlighting green, circular and low-carbon development.

# **3.1.2 Urban and Rural Planning**

# **·Objectives**

China will improve the scientific soundness, authority, seriousness and continuity of urban and rural planning, optimize the management systems and mechanisms, intensify the supervision, and enable it to play a full role in regulating and guiding urban construction and development to fit the requirement of new-type urbanization.

# ·Policies and Actions

(1) Innovate planning concept. During the whole process of planning, China will adhere to the concept of putting-people first, respecting nature, carrying forward historical traditions and green and low-carbon development, scientifically define urban functions and forms, intensify the control of urban space development and utilization, develop integrated plan for urban spacial function layout, and encourage appropriate blend of the functions of urban land.

(2) Optimize the space structures and enhance land use efficiency. The measures include: strictly carrying out the national standard for urban planned construction land and per capita construction land use index, increasing the population

density of built-up areas, forming reasonable urban space structures to promote the synchronous development of economic, urban and rural and environmental development according to the general requirement of promoting intensive and efficient production space, adequate and livable living space and picturesque ecological space.

(3) Improve planning procedure. The working procedures of preliminary research, planning formulation, communication and coordination, expert deliberation, public participation, examination and approval, implementation management and assessment and revision will be optimized to explore the establishment of urban chief planner system and improve the soundness and democratic level of planning work. The publicity efforts on urban planning will be promoted and intensified. The integration of different plans such as economic and social development plans, urban and rural plans and land use plans in areas where necessary conditions are satisfied will be promoted.

(4) Intensify planning control. The measures include: adhering to and consistently implementing the principle of "one planning with one blueprint"; implementing and strengthening overall process control and regulation of the planning to ensure that the development and construction are based on plans, improving the national urban and rural planning inspector system, strictly implementing planning implementation accountability system to intensify the responsibility investigation and punishment on the illegal behavior of government departments, development bodies and individuals, formulating the examination index system of urban planning and construction, and employing information technologies to strengthen the technical support to urban planning control.

# 3.2 Development of Urban and Rural Housing

China is in the stage of rapid urbanization. In the near future, the newly increased housing demand triggered by the urban population increase, the housing improvement demand created by the upgrading of resident consumption structure and the passive housing demand brought by the urban renewal will remain significantly large. Meanwhile, such problems as unbalanced development between different regions, irregular market order and inadequate security system still exist in the housing field. The construction mode and consumption idea also need to be changed. Great efforts shall be made to improve the housing security and supply system and increase effective housing supply.

## **3.2.1 Urban Housing System**

### •Objectives

The Chinese government will continue to improve the housing system which combines market allocation and government security and promote the development of housing supply and demand pattern with overall balance in total stock, reasonable mix and a suitable matching between housing price and consumption ability to effectively meet the rational housing demand of urban permanent residents.

·Policies and Actions

(1) Improve the housing supply system. China will accelerate the establishment of housing supply system with the government providing basic security and the market satisfying the diversified demand. The government will provide social housing for the urban low- and moderate-income households to address their housing difficulties. The government-subsidized housing can either be rented or purchased with renting being given the priority. China will also stably increase the supply of commodity housing, vigorously develop resale and rental housing markets and introduce different types of housing providers into the sector to satisfy diversified housing demands of the market.

(2) Improve the housing security system. China will establish a consistent investment system for social housing guaranteed by financial departments at all levels, broaden the effective supply of social housing, optimize the rental subsidies system, promote the integration of low-rent housing and public rental housing, formulate fair, reasonable, open and transparent allocation policies and supervision process, tighten access and exit regulations, and improve the property management and service level and operation efficiency of social housing.

(3) Improve the real estate market regulation system. China will adjust and improve housing, land, fiscal and financial policies, set up the real estate market regulation system, develop urban housing development planning and determine the total amount, structure and layout of housing construction. China will also intensify market supervision, regulate market order according to law, improve the laws and regulations system, establish the unified registration system of real estate on the basis of land and realize the networking of nationwide housing information to promote the information sharing.

(4) Improve the housing provident fund system. China will improve the depositing, withdrawal, using and profit distribution policy, improve supervision and management system, intensify social supervision, improve the transparency of the management and operation, promote the security, efficiency and fairness of the housing provident fund system and establish an open and well-regulated system to safeguard the rights and interests of depositors, support the depositors to solve basic housing problems and improve the management institution of the system.

# **3.2.2 Development of Urban Housing**

# **·Objectives**

Chinese government will maintain appropriate urban housing investment and construction scale, increase the amount of urban housing and the floor space per capita, optimize functions of urban housing and improve living environment according to the changes of housing demand. By 2020, the floor space per capita for urban residents will reach 35 square meters. Urban shanty areas and urban villages accommodating about 100 million people will be upgraded. The newly-built urban housing will meet the requirement of appropriate layout, sufficient facilities, uniqueness, excellent performance of thermal insulation, energy efficiency and sound-, earthquake- and fire-proof effect.

#### ·Policies and Actions

(1) Develop commodity housing. China will maintain appropriate scale of commodity housing supply to satisfy people's housing ownership or improvement demand. China will improve land supply policies, secure the rational supply of residential land, give full play of the regulatory role of fiscal, taxation and financial policies to encourage owner-occupied housing consumption and curb speculative investment demand, steadily push forward the real estate tax system reform to increase the tax bearings of housing possession and reduce those of housing construction and transaction, develop a housing construction and consumption mode consistent with our national conditions, guide the residents to improve their living conditions step by step - from renting to purchasing, from buying small units to large ones - according to their own capabilities, comprehensively implement the water, land, energy and material saving and environmental protection requirement to improve the level of housing industrialization, and encourage the delivery of housing with interior finishing to enhance the quality of housing.

(2) Increase the supply of social housing. China will strengthen the responsibility of governments at all levels and promote the construction of security housing projects to solve the basic housing problems of the underprivileged people, increase the supply of public rental housing, integrate the low-rent housing with public rental housing, explore the development of co-ownership housing to solve the housing problems of the leftover, establish a consistent investment system to guide social forces to participate in the construction and operation of social housing, strengthen the management of social housing, formulate fair, reasonable, open and transparent allocation policies and supervision process of social housing, tighten access and exit management and regulate rent charge. The ways of delivery of security housing will gradually shift from in-kind distribution as a major means to in-cash subsidies supplemented by in-kind distribution.

(3) Intensify the upgrading of shanty areas. China will optimize the location and distribution of resettlement housing, improve the planning and arrangement of supportive facilities, do a good job in requisition compensation, set up fast tracks for administrative examination and approval, accelerate the preliminary work of the projects, strengthen the quality and safety supervision of projects under construction, accelerate the construction of supportive facilities, improve public services of the community, guarantee the supply of construction land, implement the supportive fiscal and taxation policies, and increase financial support.

# 3.2.3 Development of Rural Housing •Objectives

China will improve the design and construction level of rural housing, specify the requirement for quality, design and construction of rural housing, guide the residents to build sufficient facilities or reserve rooms for future expansion, develop housing with good performance in ventilation, lighting and insulation, encourage the use of green building materials and products, adopt energy saving measures and employ low-cost construction technologies, explore the excellence in local ways of construction and cultural meaning of local buildings, carry forward local and ethnic architectural cultures, and basically complete the upgrading of existing stock of dilapidated rural buildings by 2020.

#### **·**Policies and Actions

(1) Strengthen the guidance and management of rural housing construction. China will promote the establishment of construction management teams in towns and villages, establish and improve the quality and safety management system of rural housing, carry out the examination, guidance and supervision of the design and construction of rural housing, strive to make the newly-built rural housing meet the seismic fortification criterion, specification and requirement, and enhance the awareness of the quality and safety and strengthen technical guidance for rural housing construction.

(2) Continue the upgrading of dilapidated rural buildings. China will investigate the overall situations of dilapidated rural buildings throughout the country, based on which the Thirteenth Five-year Plan and annual plan for upgrading those buildings will be made, formulate the upgrading plan for poverty-stricken areas, continue to increase the support to poverty-stricken areas and impoverished people, improve the existing information system on work related to dilapidated buildings upgrading and gradually open it to the public, and strengthen the management, supervision and inspection on the upgrading work.

(3) Research, develop and promote green and energy efficient construction methods. China will continue to carry out the research and demonstration projects on green residential houses built with modern rammed earth, promote the construction of safe, practical, energy-saving and waste-reducing, affordable, good-looking, healthy and comfortable green rural housing, enhance the availability of energy-saving, emission-cutting, convenient and recyclable green building materials in the countryside, and organize the recommendation and recognition of typical rural buildings, including rural residential buildings, public buildings and agricultural production buildings, to provide reference for rural house building.

(4) Promote the local rural features in rural housing construction. China will promote the local rural styles and features in rural housing construction while ensure safety and economy, strengthen the technical guidance and management on the development of local styles and features, pay attention to the traditional style of local dwellings in such aspects as architecture forms and details and interior and exterior finishing to promote the construction of modern rural housing with local characteristics, strengthen the comprehensive development of styles and features of rural housing, conduct improvement, utilization and beautification of courtyards, and strive to make the renovated rural housing and courtyard be harmonious with the surrounding environment.

# 3.3 Infrastructures in the Urban and Rural Settlements

The infrastructure of a country is the foundation of normal operation and sound

development of urban and rural areas, playing an important role in improving the environment of human settlements, increasing the comprehensive carrying capacity, improving the urban and rural operation efficiency and steadily promoting new-type urbanization. China's urban and rural infrastructure has such problems as insufficient total amount, low standard and extensive management. Serious traffic jams, frequent occurrence of public security accidents and low efficiency of urban management and operation appear in some cities because they pay attention to construction while ignore management, so that these cities should intensify construction, improve the level of operation and management and improve the supporting capacity for population agglomeration and services.

#### •Objectives

China will continue to strengthen the construction of infrastructures such as road transportation, vigorously develop green transport such as public traffic, walking and cycling and establish the urban comprehensive transportation system with emphasis on green transport, satisfy the water demand of urbanization development, strive to establish the safety security system for urban water supply, promote the coordinated regional water supply between urban and rural areas, strengthen the construction of urban drainage, flood prevention and sewage treatment facilities to build a more comprehensive urban drainage and flood prevention engineering system in about 10 years, and promote landscaping and greening efforts to strive to promote the overall infrastructure level.

By 2020, public transport proportion of motorized travel in cities with more than one million population will reach 60%, wastewater treatment rate in cities, counties and key towns will reach 95%, 85% and 70% respectively, urban non-hazardous treatment rate for domestic garbage will reach 95%, all counties will build their capacities for non-hazardous waste treatment, key towns will realize the overall coverage of garbage collection and transfer, and green space coverage rate of urban built-up areas will reach 38.9%.

#### **·Policies and Actions**

(1) Improve laws and regulations. Accelerating legislation is the foundation of urban and rural infrastructure development. Clear legal provisions on the relationship between city and infrastructure development and relevant factors, conditions, guarantees for the development of infrastructure will be defined from the aspect of guiding economic and social sustainable development. Institutional design for urban and rural infrastructure development will be further optimized, including promoting the process of urban public transportation legislation, accelerating the legislation on the management and protection of drinking water sources, improving the laws and regulations on securing the safety of urban water supply, promulgating laws and regulations for urban water drainage and sewage treatment, and accelerating urban park legislation.

(2) Strengthen planning guidance. China will scientifically arrange the distribution of public transport facilities, combine the coordination of distribution of

public transport facilities with urban development, explore the new development mode of public transport to promote the transformation of urban development, accelerate the development of urban flood control plans and comprehensive plans for urban water drainage (rainwater) and water-logging prevention to specify the goals, tasks and measures for urban flooding control and disaster reduction, further regulate urban sewage treatment planning, construction, management and supervision, and strengthen the planning and construction of parks and green space such as community parks, street gardens, suburban parks and green corridors in combination with urban and rural environment improvement, urban villages upgrading and ecological restoration of abandoned land.

(3) Improve investment and financial system. The central government will give subsidies through national budgetary investment and central finance will give support through such approaches as transfer payment. The government will proactively guide private capital to enter into the municipal public utilities industry, promote and regulate the partnership between the government and market, and introduce competition mechanism through concession practice to improve the service quality and efficiency of the municipal public utilities industry.

(4) Boost management level. China will strengthen the digitalized urban management, encourage cities at or above prefecture level to establish digitalized urban management platform to boost the management levels in terms of standardization, information technologies application and sophistication, improve the management system of city-wide roads and bridges, identify the maintenance and safety management responsibility, enhance the capacity in securing the safe operation of urban roads and bridges, strengthen the transport demand management, encourage the development of green transport modes such as walking and cycling and their coordination with public transportation so as to meet the diversified transport demands, implement the strictest management system for water resources to enable the carrying capacity of water resources to be compatible with the urbanization level, boost the capacity in urban disaster prevention and reduction and emergency response and improve the preparedness in urban flooding control to enhance the awareness of disaster prevention and risk aversion as well as the ability in self-help during emergency, strengthen the whole-process control and management of urban landscaping and greening activities to realize the expansion of urban and rural green areas, improvement of green space quality and enhancement of management and maintenance level, intensify efforts to protect and manage parks and green space, and actively explore and study the grading and classification of parks.

(5) Strengthen technical support. China will actively promote the development of management information system for the construction of urban roads and bridges, further intensify the construction of public transport information service system, expand the application of public transport intelligent scheduling, public bus priority system and electronic ticketing system, accelerate the establishment of comprehensive information management system with the function of disaster monitoring, forecasting and warning and risk assessment, strengthen the support of digital information technology for water drainage and water-logging prevention, develop access to realtime information on the construction and operation of urban sewage treatment facilities, and establish the urban sewage treatment assessment system which integrates quality and quantity.

# 3.4 Green Development of Urban and Rural Settlements

China is in the stage of rapid urbanization. Due to the continuous increase of urban and rural new buildings and the demand of urban and rural population for energy and resources, the continuation of the traditional extensive development mode will result in many risks such as deterioration of resources and environment and increase of social conflict. It is urgent for China to transform the development mode, improve the energy efficiency, reduce building energy consumption, develop eco-cities and promote the formation of green and low-carbon production method, life style and urban construction and operation mode.

# 3.4.1 The Development of Low-carbon Eco-Cities

# ·Objectives

China will gain eco-city experience by promoting the development of "demonstration cities for low-carbon and eco-oriented growth", "green urban eco-districts", and "key green small cities and towns" to guide urban transformation, improve urban human settlement environment and boost the quality of urbanization.

# ·Policies and Actions

(1) Develop nationwide low-carbon eco-city plans and assessment standards to identify the goal and direction of development. The assessment index system of eco-cities will be established and improved to make scientific and macro evaluation of the current urban ecological level. Eco city planning & construction standards will be developed and both basic and special indicators reflecting nationwide circumstances and local conditions will be improved to promote the implementation of ecological development strategy in cities and towns located in various climate zones and of different sizes in light of their respective local conditions.

(2) Make development guidelines for low-carbon eco-cities and identify the guidance principles for various regions. According to factors such as geological conditions, climate conditions, resources and economic levels in different geographic regions, different incentives, guidance policies and support systems will be developed and key measures aiming to scientifically and reasonably guide local low-carbon eco-city practice will be adopted to promote the achievement of the low-carbon eco-city goals in various regions.

(3) Identify the planning content of low-carbon eco-cities and carry out implementation with different approaches. Aiming to promote the harmony between human settlements and the nature, China will summarize and improve traditional spacial planning and design methods and technical systems to define the goals, principles, content and methods for planning low-carbon eco-cities of different size. (4) Promote the development of demonstration projects and boost the application of appropriate technologies. China will carry out pilot or demonstration projects in different regions around the country on new technologies relevant to low-carbon eco-city construction, including those concerning green buildings, new energy, green transport, circular industry, ecological environment, waste utilization and green infrastructures and boost the application of appropriate technologies in regions where conditions permit to develop demonstration bases.

(5) Transform the production methods and life styles to promote social harmony. The methods include: integrating the concept of "low-carbon", "ecology", "livability" into various construction work and daily life of residents to gradually adjust the production and consumption structure of the city and fundamentally change the traditional extensive urban development mode, promoting the concept of green ecology through various methods such as series of lecturing, selection and demonstration of best practices and media report, encouraging residents to choose green consumption, helping them to develop the habit of green consumption and demonstrating the green life concept from various aspects of life including clothing, food, shelter, travel and consumption.

# **3.4.2 Building Energy Efficiency** •Objectives

By the end of 2015, 20% of urban new buildings in China will try to reach green building standards. By the end of 2020, the proportion of urban green buildings to new buildings will reach 50%, and by the end of 2030, and the energy efficiency retrofitting of residential buildings with retrofitting potentials in areas of northern China with heating supply will be basically completed.

# ·Policies and Actions

(1) Launch green building actions. The measures include: carrying out pilot schemes on promoting compulsory green building standards, making green buildings compulsory in all the new construction in appropriate regions, promoting the construction of green eco-urban areas and the regional and large-scale development of green buildings, preparing guide on applicable technologies for green buildings suitable for different climate zones, accelerating the promotion of application of green building technical systems and products consistent with national conditions, and fostering and supporting the development of green building industry and technical service industry.

(2) Intensify efforts in energy efficiency supervision of new buildings. The measures include: further improving the energy efficiency supervision system of new buildings in the process of planning, design, construction and completion acceptance, accelerating the development of energy efficiency management system of new buildings to improve the implementation of energy efficiency standards, encouraging appropriate regions to carry out higher building energy efficiency standards, and actively conducting the pilot construction of energy efficient buildings with ultra-low energy consumption or zero energy consumption.

(3) Carry out energy efficiency retrofitting of existing residential buildings. The measures include: continuously intensifying efforts in the heat metering and energy efficiency retrofitting of the existing residential buildings in northern China areas with heating supply, strengthening the quality control of the energy efficiency retrofitting projects in the process of design, construction, material selection and acceptance, further promoting the consumption-based heat billing, intensifying efforts in promoting energy efficiency retrofitting of existing residential buildings in areas with hot summer and cold winter, and involving the promotion of energy efficiency retrofitting in the process of upgrading dilapidated rural housing.

(4) Promote the energy efficiency supervision of public buildings. The measures include: further expanding the construction scale of provincial dynamic monitoring platform for energy consumption of public buildings, striving to construct and complete the nationwide dynamic monitoring system for energy consumption of public buildings, promoting the energy saving management of public welfare buildings, fostering the development of conservation-oriented campuses and hospitals, and stepping up efforts in developing key cities for energy efficiency retrofitting of public buildings.

(5) Accelerate the scale application of renewable energy in buildings. The measures include: intensifying efforts in promoting wider application of clean energy such as solar energy in public welfare industry and urban and rural infrastructure, encouraging the expansion of technical fields for the application of renewable energy in buildings, and promoting the gradient application of deep geothermal energy and the wider application of photothermal and photovoltaic technology.

# **3.4.3 Waste Treatment**

# **·Objectives**

By 2017, the domestic garbage of Chinese cities will be treated effectively to ensure regulated operation of waste treatment facilities, prevent secondary pollution and get rid of the predicament of being besieged by waste. By 2019, domestic garbage in 90% of villages across the country should receive effective treatment, and for this purpose, sufficient facilities and equipment, developed treatment technologies, stable team of cleaning staff, improved supervision institution and sustained and secure funding support should be in place. By 2030, the facilities and services of urban domestic garbage treatment will spread to small cities, towns and villages, and urban and rural domestic garbage treatment will approach the average level of developed countries.

# ·Policies and Actions

(1) Select appropriate technologies according to local conditions. The measures include: coordinating the selection of classified garbage transportation and treatment technologies to improve the level of resource utilization, promoting the application of waste incineration technologies, continuously improving the level of waste landfill, and steadily promoting biological treatment.

(2) Enhance the construction and operation level of facilities. The measures

include: increasing the investment in the construction of domestic garbage treatment facilities, accelerating the process of facilities planning, pre-construction preparation and construction, continuously promoting the pilot work of kitchen waste and construction waste recycling and reuse, improving the national urban domestic garbage management information system, and enhancing the supervision on treatment facilities.

(3) Promote garbage classification properly. The measures include: linking domestic garbage classification with waste materials recycling system and poisonous and harmful waste treatment system, fostering the construction of classified collection, transportation and treatment system, studying and formulating incentives on garbage classification, and guiding local governments to develop demonstration cities on garbage classification.

(4) Promote the management of rural domestic garbage. The measures include: improving laws, regulations and policies related to rural domestic garbage treatment, establishing synergetic mechanism engaging both central government departments and local governments, coordinating urban and rural domestic garbage management with emphasis on that in counties, and encouraging the specialization and outsourcing of cleaning, collecting and transporting services.

# 3.4.4 Environment Improvement

# ·Objectives

In the near future, China will continuously improve urban appearance, maintain urban environment and order, strengthen and make innovations in social management, and raise the level of the standardization, IT application and sophistication of urban management to improve the efficiency of urban management. China will also promote rural human settlements improvement according to local conditions and carry out various village improvement work in different forms to strive to achieve significant improvement in the basic living conditions of rural areas including residential housing, water supply and transportation, develop clean, tidy and convenient human settlements, and build a number of beautiful livable villages with distinct features by 2020.

# ·Policies and Actions

(1) Improve laws and regulations and strengthen the management of appearance of cities, towns and villages. China will accelerate the process of legislation on urban and rural management, revise relevant laws and regulations concerning city safety and orderly management of urban public spaces, and develop comprehensive and systematic system of laws and regulations governing urban and rural management.

(2) Strengthen planning regulation and control to accelerate the construction of public toilets. The measures include: incorporating urban public toilets as an important element into the special plan on environment and sanitation and other relevant urban plans in line with the actual conditions with the focus on distribution, land use and size, accelerating the planning and construction of new

public toilets, upgrading of old and rundown public toilets and construction of supportive public toilets, and making use of social public toilets properly.

(3) Accelerate the construction of digital urban management platform to achieve sophistication in urban management. China will increase investment to promote the construction of digital urban management platform, establish a "five-in-one" urban management platform combining identification, analysis, service, commanding and supervision, and enable digital urban management platform to play its full role in transforming the way of law enforcement to pool efforts in urban management and enhance the sophistication of urban management.

(4) Strengthen the protection of urban rivers and lakes as well as the water ecology and environment to improve the urban water ecological environment. China will intensify efforts in urban and industrial wastewater treatment. In light of the goal of intensifying emission reduction by combining actions in both upstream and downstream areas, efforts in collecting and treating wastewater should be promoted and the amount of water pollutants discharged into rivers should be continuously reduced to improve the quality of water environment. The source of urban drinking water should meet the standards, and the supervision system for water quality should be set up and improved. The comprehensive improvement of urban water environment should be conducted and the connection among rivers and lakes and the orderly flow of water bodies should be facilitated to improve the urban human settlements environment.

(5) Strengthen media publicity to guide public participation. The measures include: enhancing the awareness of the whole society that cities should be built, managed and enjoyed by all, enabling the public to play their role in urban management, mobilizing the initiatives of social organizations and volunteers in urban management, giving commendation to excellent urban managers, and reward individuals, enterprises and other social organizations for making contribution to urban management to guide the whole society to pool efforts to build harmonious cities.

(6) Further the improvement of rural human settlements. The measures include: accelerating the preparation of village plans, guiding the management of rural human settlements according to different conditions, ensuring that rural plans are operational, properly determining the priorities of improvement, highlighting the key points, and carrying out the rural environment improvement in a step-by-step manner to steadily promote the development of livable villages.

# 4. The Work that the Chinese Government Has Done to Support "Habitat III" and Expectations to the Conference

Habitat III is the most important conference on the development of human settlements in the United Nations system. China supports "Habitat III" and is looking forward to its contribution to future global sustainable development.

The Chinese government has always attached great importance to the

development of human settlements. It is proactively promoting new-type urbanization strategy and has participated actively in international cooperation on urbanization development. Especially in 2013, advocated by the Chinese government, the UN made the decision to establish the World Cities Day, which is an important contribution of Chinese government to global human settlements cause and global urban sustainable development. Chinese government believes that the improvement of human settlements needs three pillars: taking the sustainable development path, pursuing new-type urbanization to promote the integrated development of urban and rural areas, and reinforcing international cooperation.

(1) Taking the sustainable development path is the prerequisite for solving the problems of human settlements. The relationship between population growth, environment protection and improvement of human settlements shall be correctly handled. While being consistent with economic development, the development of human settlements shall also be coordinated with population growth, development of production force, resource development and utilization and environment protection, and follow the path of sustainable development.

(2) Equal emphasis should be put on both urban and rural development. The development of urban and rural human settlements is related with and complemented to each other. With the rapid development of urbanization, more and more attention has been directed to the problems of urban human settlements. However, in a considerable long time to come, large number of people in developing countries will still live in rural areas, and thus, issues related to rural human settlements will constitute the weak links and may trigger serious problems in the efforts to address global settlements issues. In this sense, the comprehensive and balanced development of human settlements can only be guaranteed by putting equal emphasis on both urban and rural areas.

(3) Strengthening international cooperation is an important way to solve the problems of human settlements. In order to solve the problems of human settlements, on the one hand, countries should rely on their own efforts, and on the other hand, need to maintain favorable external environment and effective international cooperation. The key point and priority area of the universal improvement of global human settlements is to solve the human settlements problems in developing countries.

The Development Agenda beyond 2015 will be another important agenda following the UN Millennium Development Goals. The international development will enter into a critical stage which connects past and future in 2015. Considering the significant role of Habitat III in the design of a new urban agenda, the Chinese government hopes that the conference can develop a universal and workable new urban agenda which takes full account of the important role of urbanization in the process of sustainable development. The new urban agenda needs to consider the different concerns of countries in different urbanization stages, including challenges confronting developing countries in an advanced stage, and fully consider the vulnerability of the least developed countries. Currently, in the process of urban development, the developing countries are still faced with severe challenges such as growing population living in poverty, urban sprawl, employment problems, transportation problems, social conflicts and widening gap between the rich and poor.

Bearing in mind the common interests of the mankind, the international community, especially developed countries, shall show political resolution and sincerity to create favorable external conditions for the economic and social development of developing countries to narrow the gap between the rich and poor, and in particular, fulfill their commitments on capital, technology, talents, market opening and debt reduction and relief to enhance the developing countries' ability to tackle the human settlements problems.

Although China has made great progress in the development of human settlements environment, the unbalanced, uncoordinated and unsustainable issues in the development process remain acute. China will learn from the advanced experience of countries all over the world in light of national conditions. The Chinese government is willing to strengthen the cooperation and exchange with UN-HABITAT, relevant international organizations, national governments and partners to jointly promote the sustainable development of human settlements environment in the whole world.

# Appendix

# Statistics and Charts on China's Human Settlements Development

# 1. Urban Development

# 1.1 Overview

By the end of 2013, there were 658 cities in China, decreasing by 8 compared with that in 1996. There were 4 municipalities directly under the central government, 268 prefecture-level cities and 368 county-level cities, respectively increasing by 1 and 68 and decreasing by 77 compared with those in 1996. By the end of 2013, the urban built-up area throughout the country was 47,900 square kilometers, 2.37 times of that in 1996 with an average annual growth rate of 5.2%.

Year	Amount of cities				
	Total	Municipaliti es directly under the central government	Prefecture- level cities	County- level cities	Built-up area (10,000 square kilometers)
1996	666	3	218	445	2.02
2000	663	4	259	400	2.24
2006	656	4	283	369	3.37
2010	657	4	283	370	4.01
2011	657	4	284	369	4.36
2012	657	4	285	368	4.56
2013	658	4	286	368	4.79

# **1.2 Amount and Size of Cities**






#### 1.4 Fixed Assets Investment in Urban Municipal Public Facilities

In 2013, the fixed assets investment in urban municipal public facilities reached 1634.98 billion yuan, 17.24 times of that in 1996 with an average annual growth rate of 18.2%, and its proportion to GDP at the same period increased from 1.33% in 1996 to 2.87% in 2013. The three industries with the largest proportion of the total investment changed from road and bridge, water supply and water drainage to road and bridge, rail transit and landscaping. The proportion of road and bridge was constantly increasing, from 37.3% in 1996 to 51.1%.



1.4.1 The Proportion of Fixed Assets Investment in Urban Municipal Public Facilities to GDP



1.4.2 Urban Population Growth and Economic Development

#### 1.5 Urban Water Supply and Water Saving

By the end of 2013, the comprehensive production capacity of urban water supply reached 284 million cubic meters/ day, 1.4 times of that in 1996 with an average annual growth rate of 2.1%. The length of water supply pipelines was 646,000 kilometers, 3.2 times of that in 1996 with an average annual growth rate of 7.1%. In 2013, the gross annual water supply volume was 53.73 billion cubic meters and water consumption population reached 423 million. The coverage rate of tap water reached 97.6%, up by 36.9 percentage points than that in 1996.

	Gross water supply	Length of water	Coverage rate of tap
Year	volume (100 million	supply pipelines	water
	cubic meters)	(10,000 kilometers)	(%)
1996	466.1	20.3	60.7
2000	469.0	25.5	63.9
2006	540.5	43.0	86.7
2010	507.9	54.0	96.7
2011	513.4	57.4	97.0
2012	523.0	59.2	97.2
2013	537.3	64.6	97.6

#### 1.5.1 Urban Water Supply

#### 1.5.2 Urban Water Consumption Population (10,000 persons)



#### 1.6 Urban Gas

The sources of urban gas mainly consists of manufactured gas, natural gas and liquefied petroleum gas (LPG), among which, natural gas increased most rapidly. In 2013, the total natural gas supply volume reached 90.10 billion cubic meters, the length of natural gas pipelines reached 388,000 kilometers, and natural gas consumption population reached 238 million, being 14 times, 21 times and 16 times of those in 1996 respectively. Manufactured gas supply dropped significantly to only

6.28 billion cubic meters, decreasing by 53.4% compared with that in 1996, and manufactured gas consumption population slipped to 19 million from 35 million. The total LPG supply volume was 11.097 million tons, up by 92.7% compared with that in 1996, but it has been slowly going down in the past five years. The gas consumption population totaled 408 million, and the coverage rate of gas reached 94.3%, up by 56.1% than that in 1996.

#### 1.6.1 Urban Gas

Year	Gross supply volume of manufactured gas (100 million cubic meters)	Gross supply volume of natural gas (100 million cubic meters)	Gross supply volume of LPG (10,000 tons)	Length of gas supply pipelines (10,000 kilometers)	Coverage rate of gas (%)
1996	134.8	63.8	575.8	6.0	38.2
2000	152.4	82.1	1053.7	8.9	45.4
2006	296.5	244.8	1263.7	18.9	79.1
2010	279.9	487.6	1268.0	30.9	92.0
2011	84.7	678.8	1165.8	34.9	92.4
2012	77.0	795.0	1114.8	38.9	93.2
2013	62.8	901.0	1109.7	43.2	94.3





#### 1.7 Urban Central Heating Supply

By the end of 2013, the heating capacity of hot water was 404,000 MW, 3.9 times of that in 1996, and urban steam heating capacity was 84,000 ton /hour, being 1.4 times of that in 1996 and keeping declining in the past 10 years. The length of

heating pipelines was 178,000 kilometers, 5.3 times of that in 1996, and the areas covered by central heating totaled 5.72 billion square meters, up by 679% compared with that in 1996 and with an average annual growth rate of 12.8%.

	Heating capacity		ity Length of pipelines (10,000 kilometers)		Areas by	covered central
Year	Steam (10,000 tons /hour)	Hot water (10,000 MW)	Steam	Hot water	heating million meters)	(100 square
1996	6.2	10.4	1.0	2.4	7.3	
2000	7.4	8.1	0.8	3.6	11.1	
2006	9.5	21.8	1.4	8.0	26.6	
2010	10.5	31.6	1.5	12.4	43.6	
2011	8.5	33.9	1.3	13.4	47.4	
2012	8.6	36.5	1.3	14.7	51.8	
2013	8.4	40.4	1.2	16.6	57.2	

1.7.1 Urban Central Heating Supply





# 1.8 Urban Rail Transit

By the end of 2013, there were 2213 kilometers of completed rail transit lines in 16 cities nationwide with 1447 stations including 270 transfer stations and 12346 vehicles. In 1996, there were only 63 kilometers of rail transit lines in Beijing, Tianjin and Shanghai. In 2013, there were 2760 kilometers of rail transit lines under

construction in 35 cities across the country with 1898 stations, including 443 transfer stations.

Year	Number of cities with completed rail transit system	Length of completed rail transit lines (kilometers)	Number of cities with rail transit system under construction	Length of rail transit lines under construction (kilometers)
1996	3	63		
2000	4	117		
2006	10	621		
2010	12	1429	28	1741
2011	12	1672	28	1891
2012	16	2006	29	2060
2013	16	2213	35	2760

# **1.8.1 Urban Rail Transit**

#### 1.8.2 Length of Urban Rail Transit Lines (kilometers)



# 1.9 Urban Roads and Bridges

By the end of 2013, the length of urban roads was 336,000 kilometers and the roads covered an area of 6.44 billion square meters, 2.5 times and 3.6 times of those in 1996 respectively with average annual growth rate being 5.6% and 7.8% respectively. The per capita urban road area was 14.87 square meters, increasing by

9.91 square meters compared with that in 1996.

Year	Length of urban roads (10,000 kilometers)	Urban road area (100 million square meters)	Per capita urban road area (square meters)
1996	13.3	18.0	4.96
2000	16.0	23.8	6.13
2006	24.1	41.1	11.04
2010	29.4	52.1	13.21
2011	30.9	56.2	13.75
2012	32.7	60.7	14.39
2013	33.6	64.4	14.87

#### 1.9.1 Urban Roads

#### 1.9.2 Urban Road Length and Road Area



#### 1.10 Urban Drainage and Sewage Treatment

By the end of 2013, there were 1736 sewage treatment plants in the country, increasing by 1427 compared with that in 1996. The daily sewage treatment capacity was 124.54 million cubic meters, 10.8 times of that in 1996 with an average annual growth rate of 15%. The length of sewage pipelines was 465,000 kilometers, 4.1 times of that in 1996 with an average annual growth rate of 8.7%. The total annual sewage treatment volume was 38.19 billion cubic meters, and the urban sewage

treatment rate was 89.34%, up by 65.72 percentage points than that in 1996.

Year	Number of urban sewage treatment plants	Treatmentcapacityofurbansewagetreatmentplants(10,000cubicmeters/day)	Urban sewage treatment rate (%)
1996	309	1153	23.62
2000	427	2158	34.25
2006	815	6366	55.67
2010	1444	10436	82.31
2011	1588	11303	83.63
2012	1670	11733	87.30
2013	1736	12454	89.34

**1.10.1 Urban Sewage Treatment** 

#### 1.10.2 Urban Sewage Treatment



#### 1.11 Urban Landscaping and Greening

By the end of 2013, the areas of space covered by greens in urban built-up districts totaled 1.907 million hectares, 3.9 times of that in 1996 with an average annual growth of 8.3%. The green coverage rate in built-up areas was 39.70%, up by 15.27 percentage points compared with that in 1996. The green land areas in built-up

districts totaled 1.719 million hectares, 4.5 times of that in 1996 with an average annual growth of 9.2%. The green land rate in built-up areas was 35.78%, up by 16.73 percentage points compared with that in 1996. The green land areas in parks amounted to 547,000 hectares, 5.5 times of that in 1996 with an average annual growth of 9.2%. The per capita green land areas in parks was 12.64 square meters, increasing by 9.88 square meters compared with that in 1996.

Year	Areas of space covered by greens in built-up districts	Green land areas in built-up districts	Areas of parks
1996	49.4	38.5	6.8
2000	63.2	53.1	8.2
2006	118.2	104.1	20.8
2010	161.2	144.4	25.8
2011	171.9	154.6	28.6
2012	181.2	163.5	30.6
2013	190.7	171.9	33.0

1.11.1 Urban Landscaping and Greening (10,000 hectares)

#### 1.11.2 Urban Landscaping and Greening (hectares)



#### **1.12 Urban Sanitation**

By the end of 2013, the areas of urban roads swept and cleaned across the country were 6.46 billion square meters, among which the areas covered by mechanical sweeping reached 2.87 billion square meters with mechanical sweeping rate of 44.4%. 189 million tons of domestic garbage and feces were cleaned and transferred during the whole year. There were 765 harmless treatment plants for domestic garbage throughout the country with daily treatment capacity being 492,000 tons and treatment volume totaling 154 million tons. The harmless treatment rate of urban domestic garbage reached 89.30%, up by 4.47 percentage points compared with that last year.



#### 1.12.1 Urban Domestic Garbage Treatment

# 2. Development of County-level Cities

#### 2.1 Overview

By the end of 2013, there were 1613 counties in China, 61 less than that in 2000. The built-up areas of county-level cities were 19,500 square kilometers, 1.5 times of

that in 2000 with an average annual growth of 3.1%.

Year	Amount of Counties	Built-up areas of county-level cities (10,000 square kilometers)
2000	1674	1.31
2005	1636	1.24
2010	1633	1.66
2011	1627	1.74
2012	1624	1.87
2013	1613	1.95

2.2 Amount and Size of County-level Cities

#### 2.2.1 Amount and Size Changes of County-level Cities



#### 2.3 Fixed Assets Investment in Municipal Public Facilities in County-level Cities

In 2013, the fixed assets investment in municipal public facilities in county-level cities was 383.37 billion yuan, increasing by 4.33 times compared with that in 2005 and accounting for 0.67% of GDP at the same period. Road and bridge, landscaping and drainage respectively accounted for 50.2%, 15.3% and 7.2% of the fixed assets investment in municipal public facilities in county-level cities. From 2005 to 2013,

the growth rate of municipal public facilities is faster than that of population in county-level cities.



2.4 Comparison between the Growth Rates of the Population and Municipal Public Facilities in the County-level Cities (2005-2013)

# 2.5 Water Supply in County-level Cities

By the end of 2013, the comprehensive production capacity of water supply in county-level cities reached 52 million cubic meters /day, 1.4 time of that in 2000 with an average annual growth rate of 2.8%. The length of water supply pipelines was 194,000 kilometers, 2.8 times of that in 2000 with an average annual growth rate of 8.2%. In 2013, the gross annual water supply volume was 10.39 billion cubic meters, and water consumption population was 135 million. The coverage rate of tap water was 88.1%, up by 3.3 percentage points compared with that in 2000.

a.s.i water Supply in County-level Citles					
Year	Gross water supply	Length of water	Coverage rate of tap		
	volume	supply pipelines	water (%)		
	(100 million cubic	(10,000 kilometers)			
	meters)				
2000	59.4	7.0	84.8		
2005	67.7	9.9	83.2		
2010	92.6	16.0	85.1		

2.5.1 Water Supply in County-level Cities

2011	97.7	17.3	86.2
2012	102.0	18.6	86.9
2013	103.9	19.4	88.1

2.5.2 Water Consumption Population in County-level Cities (10,000 persons)



### 2.6 Gas Supply in County-level Cities

In 2013, the gross supply volume of manufactured gas was 770 million cubic meters, natural gas 8.16 billion cubic meters and LPG 2.411 million tons, being 4.4 times, 24.6 times and 2.2 times of that in 2000 respectively. The length of gas supply pipelines was 80,700 kilometers, being 13.5 times of that in 2000. Gas consumption population was 108 million, and gas coverage rate was 70.91%, up by 16.5 percentage points compared with that in 2000.

Year	Gross supply volume of manufactured gas (100 million cubic meters)	Gross supply volume of natural gas (100 million cubic meters)	Gross supply volume of LPG (10,000 tons)	Length of gas supply pipelines (10,000 kilometers)	Gas coverage rate (%)
2000	1.7	3.3	110.8	0.60	54.4
2005	3.0	18.1	185.9	1.46	57.8
2010	4.1	40.0	218.5	4.67	64.9
2011	9.5	53.9	242.2	5.65	66.5

2.6.1 Gas Supply in County-level Cities

2012	8.6	70.1	256.9	7.07	68.5
2013	7.7	81.6	241.1	8.07	70.9

# 2.6.2 Comparison between the Coverage Rates of Tap Water and Gas in County-level Cities (%)



# 2.7 Central Heating Supply in County-level Cities

By the end of 2013, the heating supply capacity of steam was 13,000 tons /hour, being 3 times of that in 2000 and keeping declining in the past 5 years. The heating supply capacity of hot water was 107,000 MW, 9.3 times of that in 2000 with an average annual growth rate of 18.7%. The length of heating supply pipelines was 40,000 kilometers, being 7.5 times of that in 2000. The areas covered by central heating were 1.03 billion square meters, being 15.4 times of that in 2000 with an average annual growth of 23.4%.

	Heating sup	ply capacity		of heating pipelines	Areas covered
Year			(10,000 kilometers)		by central heating (100
	Steam (10,000 tons /hour)	Hot water (10,000 MW)	Steam	Hot water	million square meters)
2000	0.44	1.15	0.11	0.42	0.67
2005	0.88	2.08	0.12	0.80	2.06
2010	1.51	6.89	0.18	2.37	6.09

2.7.1 Central Heating Supply in County-level Cities

2011	1.47	8.13	0.17	2.86	7.81
2012	1.39	9.73	0.20	3.19	9.05
2013	1.33	10.75	0.29	3.72	10.33

# 2.7.2 Areas Covered by Heating Supply in County-level Cities (100 million square meters)



# 2.8 Roads and Bridges in County-level Cities

By the end of 2013, the road length in county-level cities was 125,000 kilometers and road area was 2.27 billion square meters, respectively being 2.5 and 3.6 times of that in 2000 with respective average annual growth rate of 7.3% and 10.4%. The per capita urban road area was 14.86 square meters, increasing by 3.66 square meters compared with that in 2000.

.o.i Roads in County-rever Chies						
Year	Road length in county-level cities (10,000 kilometers)	Roadareaincounty-level cities(100millionsquare meters)	Per capita road area (square meters)			
2000	5.04	6.24	11.20			
2005	6.68	10.83	10.80			
2010	10.59	17.60	12.68			

2.8.1	Roads	in	County-	level	Cities
	Itouus	***	County		CITICS

2011	10.86	19.24	13.42
2012	11.80	21.02	14.09
2013	12.52	22.69	14.86

2.8.2 Road Length and Road Area in County-level Cities



# 2.9 Drainage and Sewage Treatment in County-level Cities

By the end of 2013, there were 1504 sewage treatment plants in county-level cities across the country, while this figure was 54 in 2000. The daily treatment capacity of sewage treatment plants was 26.91 million cubic meters, being 48.9 times of that in 2000 with an average annual growth rate of 34.9%. The length of drainage pipelines was 149,000 kilometers, being 3.72 times of that in 2000. The total sewage treatment volume in county-level cities during the whole year was 6.91 billion cubic meters, and the sewage treatment rate was 78.47%, up by 70.92 percentage points compared with that in 2000.

8	caement in county it is		
	Amount of covers	Treatment capacity of sewage treatment	Sewage treatment
Year	Amount of sewage treatment plants in county-level cities	plantsincounty-levelcities(10000cubicmeters/ day)	

2.9.1 Sewage Treatment in County-level C
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2000	54	55	7.55
2005	158	357	14.23
2010	1052	2040	60.12
2011	1303	2409	70.41
2012	1416	2623	75.24
2013	1504	2691	78.47

2.9.2 Sewage Treatment in County-level Cities



# 2.10 Landscaping and Greening in County-level Cities

By the end of 2013, the areas of space covered by greens in built-up areas in county-level cities totaled 567,000 hectares, being 4 times of that in 2000 with an average annual growth rate of 11.2%. The green coverage rate in built-up areas was 29.06%, up by 18.2 percentage points compared with that in 2000. The green land areas in built-up districts totaled 483,000 hectares, being 5.7 times of that in 2000 with an average annual average growth rate of 14.3%. The green land rate in built-up areas was 24.76%, up by 18.25 percentage points compared with that in 2000. The green land areas in parks amounted to 145,000 hectares, being 4.5 times of that in 2000 with an average annual growth rate of 12.3%. The per capita green land areas in parks were 9.47 square meters, increasing by 3.76 square meters compared with that in 2000.

Year	Areas of space covered by greens in built-up districts	Green land areas in built-up districts	Green land areas in parks
2000	14.3	8.5	3.2
2005	21.0	15.2	5.7
2010	41.3	33.0	10.7
2011	46.6	38.6	12.1
2012	52.0	43.7	13.4
2013	56.7	48.3	14.5

2.10.1 Landscaping and Greening in County-level Cities (10,000 hectares)

2.10.2 Landscaping and Greening in County-level Cities (10,000 hectares)



### 2.11 Sanitation in County-level Cities

By the end of 2013, the areas of roads swept and cleaned in county-level cities across the country were 1.98 billion square meters, among which the areas covered by mechanical sweeping reached 630 million square meters with mechanical sweeping rate of 31.7%. 71 million tons of domestic garbage and feces were cleaned and transferred during the whole year. There were 992 harmless treatment sites/plants for domestic garbage in county-level cities throughout the country with daily treatment capacity being 152,000 tons and treatment volume totaling 43 million tons. The harmless treatment rate of domestic garbage in county-level cities reached 66.07%.



#### 2.11.1 Domestic Garbage Treatment in County-level Cities

#### 3. Rural Development

#### 3.1 Overview

By the end of 2013, there were 20,117 designated towns, 12,812 townships and 589,000 administrative villages, increasing by 1946 and decreasing by 14244 and 339,000 respectively compared with that in 1996.

By the end of 2013, the built-up area of national designated towns was 3.69 million hectares with the average built-up area of each designated town being 211 hectares, up by 135% compared with that in 1996. The built-up area of townships was 737,000 hectares with the average built-up area of each township being 60 hectares, up by 98% compared with that in 1996. Villages' present-status land area was 13.943 million hectares with the average present-status land area of each village being 5 hectares, up by 45% compared with that in 2000.

,		
Built-up area of	Built-up area of	Villages'
designated towns	townships	present-status land
143.7	95.2	1336.1
182.0	90.7	1355.3
312.0	92.8	-
317.9	75.1	1399.2
338.6	74.2	1373.8
371.4	79.5	1409.0
369.0	73.7	1394.3
	designated towns   143.7   182.0   312.0   317.9   338.6   371.4	designated townstownships143.795.2182.090.7312.092.8317.975.1338.674.2371.479.5

#### 3.1.1 Built-up Area of Rural Towns and Present-status Land Area of Villages

# **3.1.2 Development of Individual Rural Built-up Area (hectare)**



# **3.2 Planning Management**

(10,000 hectares)

By the end of 2013, 15810 designated towns had developed master plans, accounting for 90.6% of all designated towns included in statistics, 9055 townships had developed master plans, accounting for 73.7% of all townships included in statistics, 320,000 administrative villages had developed village plans, accounting for 59.6% of all administrative villages included in statistics, and 738,000 natural villages

had developed village plans, accounting for 27.9% of all natural villages included in statistics.



# 3.2.1 Development of Rural Planning

#### **3.3 Construction Investment**

In 2013, the total investment in the construction of towns and villages across the country was 1623.5 billion yuan, among which the investment in village construction was 818.3 billion yuan. In terms of purpose, the investment in housing construction was 1257.9 billion yuan and the investment in municipal public facilities construction was 365.6 yuan, respectively accounting for 77.5% and 22.5% of the total investment.



# 3.3.1 Structure of Investment in Rural Construction (2013)

Year	Investment in rural construction	Among which in residential housing	Among which in municipal public facilities
1996	2726	1699	248
2000	2995	1908	359
2006	6091	2808	1147
2010	10807	5612	2311
2011	11982	6269	2551
2012	14060	7204	3231
2013	16235	8934	3656

3.3.2 Investment in Rural Construction (100 million yuan)



3.3.3 Investment in Rural Construction (100 million yuan)

### **3.4 Building Construction**

In 2013, the floor space of rural buildings completed nationwide was 1.184 billion square meters, including 857 million square meters of residential housings, 112 million square meters of public buildings and 214 million square meters of productive buildings. By the end of 2013, the floor space of nationwide rural building stock was 37.369 billion square meters, including 31.331 billion square meters of residential housing, 2.428 billion square meters of public buildings and 3.610 billion square meters of productive buildings, respectively constituting 83.8%, 6.5% and 9.7% of the total stock.

Year	Floor space of building stock by the end of the year	-	Floor space of buildings completed by the end of the year	Among which floor space of residential housing completed
1996	252.97	215.08	8.39	6.66
2000	277.66	234.82	8.21	6.49
2006	301.28	251.06	10.92	7.18
2010	355.52	298.48	9.74	6.71
2011	360.29	302.89	10.07	7.03

3.4.1 Floor Space of Buildings (100 million square meters)

2012	367.39	308.00	11.23	7.67
2013	373.69	313.31	11.84	8.57





#### **3.5 Municipal Public Facilities**

By the end of the year, there were 522,200 kilometers of water supply pipelines, 159,900 kilometers of drainage pipelines, 120,800 kilometers of discharge culverts, 386,500 kilometers of paved roads, 2.698 billion square meters of paved roads and 184,500 public toilets in the built-up areas of designated towns, townships and township-level special regions.



#### 3.5.1 The Growth of Main Municipal Public Facilities in Designated Towns

By the end of 2013, the coverage rate of tap water reached 81.73%, the coverage rate of gas reached 46.4%, the per capita road area was 12.3 square meters and the per capita green land area in parks was 2.37 square meters in built-up areas of designated towns. In the built-up areas of townships, the coverage rate of tap water reached 68.24%, the coverage rate of gas reached 19.5%, the per capita road area was 12.1 square meters and the per capita green land area in parks was 2.37 square meters.

By the end of 2013, the length of roads within villages was 2.28 million kilometers including 710,000 kilometers of paved roads, and the road area was 64.1 billion square meters including 19.7 billion square meters of paved roads. The length of drainage pipelines and ditches within villages was 507,000 kilometers. Nationwide, central water supply was provided in 61.3% of the administrative villages with domestic sewage being treated in 9.1% of these villages, and domestic garbage collection points were set up in 54.8% of the administrative villages with domestic garbage being treated in 36.3% of these villages.



3.5.2 The Ratio of Administrative Villages with Main Municipal Facilities