Exploration of Future Prospects and Path of Sustainable Urbanization of China

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Note: views presented in this report are those of the author rather than those of the organization where the author works.
Outline

- Introduction
- Achievements of Urbanization in China
- Challenges
- Targets and Policies of China’s Urbanization in the Future

Good Cities, Better Lives

The Five Basic Challenges that call for new approach, new power and new investment mechanism

- Rebalancing our urban economies so as to create the potential for good jobs and new sources of work for everyone.
- Building new homes in enough quantity, to meet demand, in the right places and to good standards.
- Linking people and places through integrated land-use and transport planning.
- Living with finite resources and the impacts of climate change.
- Fixing the broken machinery so as to bring public and private agencies together in the process of development and redevelopment.
New Type Urbanization

- **Population** (人) — free mobility of the population
- **Land** (地) — more intensive and agglomerating utilization of land of cities
- **Financing** (钱) — more multiplex forms and financing actors of cities
- **Industry** (业) — agglomeration of industry and economy of scale will become the major driving force of sustainable development of urbanization
- **Transportation** (通) — public transport will play a larger role within and inter-cities
- **Resources and Environment** — pattern of recycling utilization of resources and style of greening living will be fully established

Achievements urbanization in China
China’s Urbanization Achievements

- Between 1978 and 2013, the population in cities increased from 170 million to 730 million, the urbanization rate grew from 17.9% to 53.7%, the number of cities rose from 193 to 658, newly established township from 2173 to 20113.

China’s rapid urbanization from an international perspective—China’s change in urbanization rate has been lower than that of countries such as Japan and the Republic of Korea at comparable stages of development, but higher than that of the United States and the United Kingdom in the past.
China’s Urbanization Achievements

- Growth of China’s cites (1978-2010)

<table>
<thead>
<tr>
<th>City Type</th>
<th>1978</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 10 million person</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>4 million ~10 million person</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>2 million ~4 million person</td>
<td>8</td>
<td>30</td>
</tr>
<tr>
<td>1 million ~2 million person</td>
<td>19</td>
<td>81</td>
</tr>
<tr>
<td>0.50 million ~1 million person</td>
<td>35</td>
<td>116</td>
</tr>
<tr>
<td>0.20 million ~0.50 million person</td>
<td>80</td>
<td>150</td>
</tr>
<tr>
<td>&lt;0.20 million person</td>
<td>49</td>
<td>266</td>
</tr>
<tr>
<td>Little towns</td>
<td>2173</td>
<td>19410</td>
</tr>
</tbody>
</table>

China has avoided some of the common ills of urbanization, notably urban poverty, unemployment, and squalor

- Many countries have urbanized in the course of development, but some have seen their cities expand without much growth and in such cases, urbanization has been accompanied by rising unemployment, slums, congestion, and squalor.
- China has avoided this, in part by regulating the flow of people to its cities, but more so by creating the conditions for rapid growth in income and employment. Mobile migrant labor either moved back to the rural areas or on to the next job, thus containing open urban unemployment, cheap land, and good infrastructure.
China’s Urbanization Achievements

- Rapid urbanization has facilitated an unprecedented economic transformation in the past 30 years
  - Growth was triggered by reforms and opening up, which caused a rapid transformation of the economy that allowed people to move out of agriculture to more productive activities.
  - Rapid economic development was facilitated by urbanization that created a supportive environment for growth with abundant labor, cheap land, and good infrastructure.

Challenges
Population

- **Incomplete migration**
  - In 2012, the urbanization ratio of permanent population is 52.6 %, while the ratio of people who have Hukou is merely 35.3 %.
  - Only 20 % of rural migrant moved to urban city accompany with their whole family, but more than half of them expect to settle in the cities.

- **Rural migrant is difficult to integrate into urban life**
  - The hukou system and its link to entitlement of public services in the city and right to land in rural areas; lack of portability of social security; and insufficient low-income housing
  - Unequal access to public services between citizens with urban household registration and those without, although diminishing, remains, and is a barrier to mobility.
  - The Education and training of migrants can not match their job positions, and the innovation capability of employment is insufficient
Land use

- "Land urbanization" faster than the population urbanization
  - From 2000 to 2011, the area of the urban built up area increased by 76.4%, far higher than urban population growth speed which is 50.5%
  - The rural population fell by 133 million, and the rural residential land has increased by 20300 km².
  - According to some estimates, average population density in China’s cities has dropped by more than 25 percent in the last decade

Land use

- Land use is not compact enough-Urban land use in China always based on the superblock, rather than small building plot.

The size of blocks and impacts on connectivity of a series of cities in Europe, Japan, and China

<table>
<thead>
<tr>
<th></th>
<th>Turin</th>
<th>Barcelona</th>
<th>Paris</th>
<th>Ginza Tokyo</th>
<th>Pudong Shanghai</th>
<th>North Beijing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intersections per km²</td>
<td>152</td>
<td>103</td>
<td>133</td>
<td>211</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>Distance between intersections (m)</td>
<td>80</td>
<td>130</td>
<td>150</td>
<td>43</td>
<td>280</td>
<td>400</td>
</tr>
</tbody>
</table>
**Land use**

- Guangzhou could accommodate 4.2 million more people if it has Seoul’s density profile

![Graph showing land use comparison between Guangzhou and Seoul](image)

**Financing**

- **The local government debt**
  - Although the “budget law” has a strict limit on local government financing, the local government still can use the urban development and infrastructure (UDICs) and the government financing platform companies (LGFVs) tools to financing for infrastructure construction. According to the audit report of national audit office, until June 2013, local government direct liability has reach 10.89 trillion yuan.

- **The investors are relatively unitary, the private agency participation is not enough**
  - The investment from government budget in the infrastructure construction of urbanization in China still accounts for a larger share. The enthusiasm of Social capital is not high because urbanization infrastructure construction project has long construction period, takes up large forehead capital, need a long cost recovery time and mostly public welfare project, which does not produce cash flow itself.
Industry

- The economic agglomeration rate is low
  - China’s economic concentration is still substantially lower than the United States, where top 10 metropolitan areas account for about 38% of GDP, comparing with only half as much in China. Moreover, China’s large cities will shift from their current concentration of industry toward a higher concentration of services. But these tradable services are still much less concentrated than global norms would suggest.

- Industrial development foundations in urban city are unstable, over-reliance on the investment, especially real estate investment

- Services industry development is relatively lagging
  - The added value of China’s service accounted for the GDP just reached 46% in 2013, much lower than global average (64%). Second, the rate of progress in modern services is slow. Catering, transportation and other traditional services occupied 40%, and only 30 percent are contributed from modern service not produce cash flow itself.

Transportation

- Motorization and urbanization have stepped into a rapid development stage
  - The urbanization rate had been beyond 50% after 2011, a sign of urbanization process stepped into a new stage. Private motor vehicle ownership surged from 0.82 million in 1990 to 105 million in 2013, that is, the utility of motorized transport in big cities is over 30%.

- Transport congestion in megacities and big cities continued intensifying and high pollution issue.

- Development of transportation in urban clusters has gained preliminary achievement, but the structure of passenger transport is not reasonable, lacking in rational division and coordination.
Resources and Environment

- **Rising Cost of pollution in China’s cities**
  - Because much of China’s pollution is concentrated in its cities and as its urban population grows, a greater number of China’s citizens are exposed to pollution that threatens their health and well-being.
  - Despite progress in environmental standards and policies, the cost of pollution to the nation’s health is rising as China’s population is increasingly concentrated in cities.
  - Energy production is a key source of air pollution in China’s cities owing to China’s dependence on coal. Water pollution, increasingly from livestock and poultry operations and other upstream nonpoint sources, domestic sewage, and industrial point sources, contributes to China’s rising digestive cancer rates.
Resources and Environment

- Urbanization strains China’s resources
  - Water scarcity and quality are major problems for sustainable urban development in China
  - Water pollution has exacerbated water scarcity, intensifying competition for water resources
  - China’s urbanization has consumed significant land resources as urban boundaries are continuously shifted outward and territorial jurisdictions of cities are expanded, primarily through the expropriation of surrounding rural land and its integration into urban areas.
The Targets and Policies of China’s Urbanization in the Future

Population

- Target:
  - Improve the capacity of agglomeration
  - Free mobility of Population
  - Basic public services equalized and inclusive urbanization development
Population

- Improving the spatial layout, which requires the coordinated development of cities and small towns, based on major city clusters

- According to the carrying capacity of land, water, atmospheric circulation characteristics and ecological environment, optimize the spatial layout of urbanization and urban scale structure to build urbanization strategy pattern via “two horizontal and three longitudinal”, including Land-bridge channel and the Yangtze river as horizontal axis, and coastal, Beijing-Harbin & Beijing-Guangzhou highway, Baotou-Kunming highway as longitudinal axis. In addition, urban clusters were along the axis and node cities were located on intersection and other urbanization city areas, and other towns coordinated development in phase.
Population

- Implement differentiation Hukou policy
  - Remove restriction to locate in township and small city comprehensively
  - Orderly open the limitation in cities where the population is 0.5-1.0 million,
  - Reasonable unconstraint urban cities with population of 1 million - 3 million,
  - Reasonably determine size of the cities with population of 3 million - 5 million,
  - Strictly control the urban population of more than 5 million urban population size.

Population

- Promote rural migrant entitlement of basic public services in cities
  - Steadily move toward basic public services in urban city which aim to shift the target population from local people who have hukou to permanent people, gradually solve the issues that employed migrant who live in urban city without hukou entitle to basic public services.
  - A variety of ways to improve rural migrant living and housing conditions; expand their social security coverage; ensure their children entitlement of education; improve access to public health programs and basic medical care, and assort migrant and their family to the basic community medical services system according to the basic medical service sources configuration of permanent population in urban
Population

- Enhance the level of human capital and broaden the employment channels
  - Build the migrant skill training, improve the employment capability and professional quality. Integrate vocational education and training resources, comprehensive government subsidy to vocational skills and training services. Construction information network of employment across country, provides free employment information and policy consulting.
  - The training can be divided into five categories
    - Developing training for migrant workers to get them employed
    - Develop training for employed migrant workers to improve their work skills
    - Develop training for high-tech workers and workers who want to start their own businesses
    - Develop charitable training in communities
    - Develop preparatory training in labor skills for rural middle and high school students who have not entered the next level of their education

Land use

- Target:
  - Compact urban land spatial structure
  - Improve output rate of land
Land use

- Optimizing internal land layout and establishing compact urban space structure
  - Strengthen the construction of urban complex and integrating the multiple functions such as industry, commerce, housing, transportation within a block. Through the development of underground space and the corridors between high-rise buildings, various functions of city can be compound on the stereoscopic space and the land can be full used.
- Optimizing urban industry structure and developing industries with higher land output rate

Land use

- Reforming land management system and promoting the free transfer of rural construction land
  - The protection of arable land will be a foundation and precondition for urbanization.
  - Prudently advance the reform of the rural land system while deepening the reform in the urban land system.
  - For the land with collective ownership in rural area, the Ministry of Land and Resources will adhere to such ownership and the protection red lines of the arable land and stick up to the rights and interests of farmers. Under the precondition of legitimacy in city planning and land use regulations, they will allow commercial land with collective ownership to enter the land market. Apart from that, we will release reform measures for land requisition and the use of land for homesteads.
Financing

- **Target:**
  - The fiscal and taxation system reform and the investment and financing mechanism innovation should be accelerated and gradually establish a diversified and sustainable urbanization funds safeguard mechanism

- **Improving the system of financing mechanism and guiding social capital to participate in urban construction**
  - By constantly improve the investment and financing mechanism, make the investment subject more diversified. Government, policy Banks, enterprises, individuals, foundations and other social organizations may become the subject of investment

- **Promoting the innovation of the multi-channel financing mode**
  - Promote the cooperative model of government and social capital, or the PPP model, in which the government, by means of franchise rights, fair pricing, fiscal subsidies and other open and transparent measures, clarifies the benefit-cost mechanism in advance and attracts social capital to participate in the construction of urbanization infrastructure
Financing

- Improving the local tax system. Foster local main tax category, and the real estate tax legislation and reform should be timely boost
  - Reinforce the power of local government bonds in promoting urbanization, give more rights to local governments to issue bonds in accordance with the law, improve the current system of local government bonds, and explore a means of local government bond issuing that combines general and special bonds
- Establish a standardized and transparent urban construction investment and financing mechanism
  - Further strengthen the management of local government financing companies, regulate the local government borrowing, sort out the relationship between enterprises and governments, correctly guide market expectations, and prevent and diffuse financial risks

Industry

- Target:
  - Exploit industry agglomeration and scale effect on incentive urbanization sustainably develop
  - Adjust and optimize the network and structure of industry in cities, promote transformation and upgrading of the economy, and improve the business environment, enhance the vitality of the economy, and expand the employment capacity to build the city as an entrepreneurial paradise and innovation cradle
Industry

- Optimize the structure of industry and promote the transformation and upgrading of the economy
  - Head for the development of specialization and socialization in productive services. Displayed at the guideline of productive services agglomerate in core city or the regions
  - According to the environment carrying capacity, endowment and comparative advantage to hatch and develop the industrial system with different characteristics
- Improve the city capacity of innovation, and construct a harmonized environment of employment and entrepreneurship
- Promote reasonable networks of the industry, construct platforms of industry to transfer and undertake

Sectoral GINI coefficient between cities in China (2000—2011)

注：GDP和第二产业的区位基尼系数是主坐标轴，服务业的区位基尼系数是次坐标轴。
Transportation

- **Target:**
  - Low emission and environmental friendly way of transportation
  - City-city transportation lead urban clusters assimilation

- **Construct urban comprehensive transportation hub and establish integrated management system, mechanism and supporting policy**
  - Based on the integrated transportation hub, strengthen the concatenation among railways, highways and civil aviation, water transport and urban rail transit.

- **Improve the comprehensive transportation network within urban clusters**
Transportation

- Promote green transport to impulse green transportation development
  - Put the public transport as the first place of the urban traffic development, to speed up built it as the main body of urban motorized travel system, and develop the large capacity ground public transportation system
  - Rigorous and detailed regulation put forth on motor vehicle emission standards. Update standards of car emission every four years especially control the motor vehicle exhaust pollutant.
  - To establish safe continuous current space for walking and bicycles, the walking and bicycle traffic system serves as a cardinal part of urban comprehensive transportation planning and construction

Resources and Environment

- Target:
  - Ecological civilization concept should be integrated into the urbanization process, promoting green, recycling and low-carbon development, saving and intensive utilization of land, water, energy and other resources, strengthening the environmental protection and ecological restoration, and reducing the interference and damage to the natural, promoting green low carbon production and life style and healthy urban construction and operation mode
Resources and Environment

- Promoting economical and intensive utilization of the land, strictly control the incremental land and efficient use the inventory of land.
- Building water-saving society, improve the utilization efficiency of water resources.
- Promoting comprehensive utilization of resources, building recycling system.
- Promoting the development of clean energy.

Toward a More Efficient, Inclusive, and Sustainable Urbanization

- To improve the quality of urbanization to accelerate the transformation of urbanization development that will see people-oriented urbanization as an essential value.
- To 2020, the urbanization ratio of permanent population would reach about 60 %, and the ratio of people who have hukou would be about 45 %.
- As China implements the new model of urbanization, a new urban landscape will emerge. China will continue to urbanize rapidly, reaching almost 70 % by 2030.
Thank you very much!