

## A Brief Analysis on the Development Strategies for New-Type Urbanization Simulated by Demographic Factors: Based on Real Evidence in Chongqing

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## Abstract

Population urbanization is an important part of optimized distribution of factors during the process of new-type urbanization. This paper, from the perspective of the current situation of Chongqing's population, adopts qualitative and quantitative methods to analyze the number, structure, migration, and spatial distribution of population in this city. The study finds that there will be a rapid trend of people moving to the west and to the urban areas. Besides, aging will be a problem for a long period of time, and there might be a shortage of labor resources and immigrant labor force will increase, finally in the long run, the low educational level of local population will affect the transformation of development model in Chongqing. Therefore, during the process of urbanization, on one hand, the strategy of reasonable population flow into western and urban areas should receive enough priority, and on the other hand, household-registration system should be further reformed; demographic structure should be improved; quality of labor force should be enhanced; agricultural population should be transferred as planned; urban system and industrial distribution should be bettered according to demographic characteristics so as to promote synchronized development of agricultural modernization, industrialization, informatization, and urbanization.

**Key words:** New-type urbanization demographic factors; Population urbanization

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## INTRODUCTION

Urbanization is a necessary approach to modernization and an important historic task and long-term strategy for China's modernization drive. It is explicitly pointed out in the Report at the 18th Party Congress that China should stick to the path of new-type urbanization, informatization, urbanization and agricultural modernization with Chinese characteristics (Xinhua Express, 2012, Nov. 19). As it was emphasized at the Central Urbanization Work Conference, household registration urbanization level should be steadily enhanced with the focus on quality of urbanization; people-oriented urbanization should be promoted. New-type urbanization is the new target and fundamental requirement for China's urbanization (Lin, 2010, pp.48-56; Qiu, 2011, pp.36-41). We should face up to the contradictions and problems and transform the development model of our urbanization changing from the extensive growth model to the intensive growth model (Chu, 2011, pp.8-10; Xiang, 2011, pp.31-43). The former is focusing on scale and speed, while the latter is highlighting efficiency and balanced development between men and nature (Wang, 2009, p.154). The extensive urbanization dominated by the government prioritizes size growth, concentration of population, and spatial expansion to the connotative urbanization which is driven by industrial upgrading and follows the spirit of scientific development and balanced development (Li, & Yan, 2009, pp.158-160). It finally achieves coordinated development of the economy, society, resources, and environment (Chen, Li & Xu, 2008, pp.45-54).

Chongging, as one of the five major cities in China, is the only municipality in southwest China. It is the pilot area for balanced urban and rural development, thus playing a crucial role in the national strategic layout. Chongqing is representative in terms of demographic structure, speed, and characteristics of urbanization and spatial differences. Therefore, it is chosen for the case study of population issues during the process of urbanization, so that it will be valuable for other provinces, cities, and districts in other domestic cities, especially cities in the Central and Western area. This paper, referring to Chongqing Statistical Yearbook and Chinese demographic data, adopts methods such as quantitative analysis and comparative analysis to summarize the current situation of Chongqing's population, its problems, and the reasons and put forward corresponding strategies according to the development requirements and targets for new-type urbanization.

## 1. INTERNAL RELATIONS BETWEEN NEW-TYPE URBANIZATION AND DEMOGRAPHIC FACTORS

Compared with previous urbanization, new-type urbanization has some new characteristics in terms of the essential requirements, targets, and approaches of development. These new characteristics are mainly demonstrated in three aspects regarding demographic factors, namely, new-type urbanization should meet the essential requirement of human development, achieve the target of accelerating population urbanization and adopt the main path of transferring rural surplus labors.

# 1.1 Putting People First as the Essential Requirement for New-Type Urbanization

New-type urbanization should adopt a new path different from the previous extensive development model, and require putting people first. As Premier Li Keqiang pointed out at the press conference for NPC and CPPCC (Xinhua Express, 2014b, March 13), "the urbanization we are emphasizing should put people's interest at the core." This means that during the process of newtype urbanization, we should first consider issues about people. In order to give full play to people's major role in urbanization, we should fully respect people's choices and needs and make urbanization help human beings realize their values and play their dominating roles. Specifically, during the process of urbanization, adequate job opportunities and social guarantee should be provided to immigrant workers, and farmers' income should be increased through appropriate operation. We should help immigrant workers to become urban citizens, improve living environment in urban areas and effectively prevent *city disease*.

# **1.2 Population Urbanization as the Target for New-Type Urbanization**

Population, as an important factor for economic and social development, plays a supporting role of quality of urbanization, industrial upgrading and transformation, and building of urban system. Urbanization rate is the proportion of urban population in the total population, and population urbanization is one of the main criteria to measure the level of urbanization. New-type urbanization also gives priority to the problem how the population moves to urban areas. The Research team of China Population and Development Research Center (2012) puts forward that accelerating population urbanization is an important approach to urban-rural integration, a sound driving force for economic growth, a crucial measure to stimulate domestic growth, the fundamental solution to the problem of "agriculture, rural areas and farmers", and the prerequisite for modernization (2012, pp.3-13). Therefore, the core issue of developing new-type urbanization tis to settle down the problem of population urbanization.

# **1.3 Transferring Rural Surplus Population as the** Approach to New-Type Urbanization

The process of urbanization is a process of adjusting industrial structures. New-type urbanization and balanced rural and urban development can be achieved through improvement of agricultural productive efficiency and transfer of rural surplus population (Dong, 2009, pp.55-56). At the deliberation of Shandong Delegation during NPC and CPPCC, Premier Li Keqiang proposed that:

Supplementing each other, urbanization and industrialization are the necessary requirement for new-type four modernizations. We should follow the trend of rural surplus labors moving to the cities, strengthen the accommodating capacity of the urban areas, improve rural productive efficiency, enable immigrant workers to have a peaceful life in the cities, achieve further development in modern agriculture and realize virtuous interaction. (Xinhua Express, 2014a, March 6)

The completion of new-type urbanization will not happen without agricultural development and the transformation of agricultural production models, and the transfer of rural surplus population will be carried out on this basis. Therefore, while considering the synchronized development of new-type urbanization, industrialization, and agricultural modernization, we should make transferring rural surplus population the main approach to new-type urbanization.

# 2. CURRENT SITUATION OF INFLUENCE OF CHONGQING'S DEMOGRAPHIC FACTORS

### 2.1 Current Situation of Chongqing's Demographic Factors

As a municipality with the largest population, Chongqing's permanent population and urbanization rate are rapidly increasing. So the spatial distribution is not balanced between regions and between urban and rural areas, and the population structure is not rational. These are mainly represented as below:

a) Permanent population and urbanization rate is rapidly increasing. By the end of 2012, Chongqing's permanent population reached 2.945million, with urban population 1.67811 million and an urban rate of 57%, an increase of 2 percentage points compared with last year (Chongqing Statistics Bureau, 2013). Over the last 10 years, the annual increase of urbanization rate has been over 1.6%; the permanent urbanization rose by more than 970,000; urban population grew by nearly 6.64 million, and its urbanization rate has been improved nearly 21.4 percentage points.

**b)** There are more people in the west than in the east and more people in urban areas than in rural areas. Generally, the population is mainly concentrated in the west, and the structure is quite fragmented. In 2012, the average population density in the nine districts in the major city was 640.9 people per km<sup>2</sup> (the number was as high as 1,453.3 people per km<sup>2</sup> in the nine districts in the major city); the population density in the suburban area was 449.2 people per km<sup>2</sup>, on the north wing of East Chongqing was 244.3 people per km<sup>2</sup>, and on the south wing of East Chongqing was 141.2 people per km<sup>2</sup>.

c) The population structure tilts to the city. Urban population in Chongqing increased by nearly 6.6 million from 2000 to 2012, and rural population reduced by over 5.68 million during this period of time. In 2000 the urban-rural population ratio was 0.55. It rose to 1.0 in 2008 and 1.32 in 2012--an increase of 0.77, namely, an annual average increase of 0.06.

**d)** There has been an obvious aging problem. According to the 6<sup>th</sup> National Population Census (2010), population aged over 65 was 3.334 million, and its aging rate was 11.6 %--highest in the country. It is expected that in the upcoming 10 years, aged population and its proportion will decrease slowly, and young and middle-aged population will increase at a low rate.

**e)** The educational level is low. From the statistics of the 5<sup>th</sup> and 6<sup>th</sup> National Population Census in Chongqing, population with college degree or above accounted only less than 10% of the permanent population, and the illiterate population was equal to that in Beijing, Tianjin, and Shanghai together.

**f)** The net outflow of population is high. In 2012, population moving out of Chongqing was 5.2857 million,

and population moving into Chongqing was 1.21 million, reflecting a net population outflow of 4.0757 million.

#### 2.2 Influence of Demographic Factors on New-Type Urbanization

Chongqing is rapidly urbanized. The total urban population is increasing fast, with a large number of people immigrating into the city, and Chongqing's socio-economic development is significantly promoted. However, the base of Chongqing's rural working population is still very large, with rural population mainly distributed in the east and west and urban population mainly in the center and major urban areas of the city, indicating a big regional difference. The problem of aged population is relatively serious, the educational level is still low, and the population quality is yet to be improved. These characteristics will exert a long-term influence if Chongqing plans to optimize its urban system, adjust its industrial structure, and modernize its agriculture.

#### 2.2.1 Imbalanced Population Distribution Will Hinder the Optimization of the Urban System and Limit the Aggregation and Diffusion Effect

Chongqing's population is rapidly aggregating to the center and major area of the city. As indicated by its urbanization rate and current spatial distribution, the population is mainly concentrated in the one-hour economic circle in the west and the major area of the city. Therefore, Chongqing expects to form super metropolis in its nine districts in the major city. The main population area is in the one-hour economic circle. so as to enable the city to give full play to the aggregation effect of a big city, to accelerate the optimization of industrial structures and to let the advantage of its labor force and its radiation paly their role. However, the population concentrated in the metropolitan area leads to Chongqing's primacy to reach 7.4. Apart from the nine districts with population of over 10 million, there are no big urban areas with population between 1 and 2 million in Chongging, so it is difficult to optimize its urban system and give full play to its aggregation and diffusion effect as a big city. Due to the lack of mature submetropolis and big cities, the healthy development of Chongqing's urban system will be affected; sublayout and effective allocation of its industries will be hindered; the degree of coordination between cities will be lowered, and the population gathering towards subcities will be influenced in terms of structure for a long period of time.

# **2.2.2** Irrational Population Structure Will Restrict Supply of Labor Force and Upgrading of Industrial Structures

According to statistics and analysis (Chongqing Statistics Bureau, 2013; Hu, 2003, pp.20-24; Xu, 2009, pp.148-150), Chongqing's population will remain aged for a long time, meaning that there is a higher risk of inadequate supply of labor force, higher burden of increased spending on public service and structural adjustment, and optimization in Chongqing's industrial development will be affected in an indirect way. The development of secondary and tertiary industries requires robust young people and trained and skilled labors, but the educational level in Chongqing is relatively low, and the local vocational education cannot meet the industrial needs. Thus long-term negative effects will be caused on Chongqing's industrial transfers and the development of its service industry, high-tech industry, and emerging strategic industry. Lack of skilled labors will raise the cost of labor force, which is a disadvantage during the process of industrial transfer. Lack of top talents and think tank will cause inadequate personnel support to industries needing high technologies and innovations. It will lead to the situation that Chongqing cannot grasp the opportunities to fast upgrade traditional industries and arrange hightech and emerging strategic industries. On the other hand, Chongqing has to postpone its plan to occupy the top of the industrial chain. Thus, the hidden troubles will be caused for Chongging's industrial competition in the future.

2.2.3 Large Population Outflow Will Delay the Process of **Agricultural Modernization and Urban-Rural Integration** Net outflow of rural population accounts for a big part of the large net population outflow of Chongqing every year. Besides, population transfer in Chongqing is mainly reflected in rural people moving into town. Local agriculture is limited by mountains and hills where it is difficult to develop mechanical agriculture, so the agriculture is highly dependent on labor force. Restricted by the terrain and transport, most parts in Chongqing has been dominated by agriculture for a long time; so the large rural population, the cities' weak capacity to nurture the rural area, the low modernization level of agriculture, and backward development of rural township enterprises lead to the slow process of urbanization in Chongqing's rural areas. Therefore, if the rural population are not provided with opportunities to local employment and modern agriculture for their income, it will be difficult to curb the trend of population outflow, and the strategy of urban-rural integration will not be able to implemented. Lack of rural population gathering towards small cities and towns will definitely weaken the effects of production factors, the input of urban capitals, technologies, and market into rural areas. The agriculture will be delayed, with characteristic industries and modern agricultures not formed. The rural residents' income will increase very slowly, and the land revenue will be considerably low. These will profoundly influence the process of agricultural modernization and balanced urban-rural development.

# 3. ANALYSIS ON THE CAUSE OF CHONGQING'S DEMOGRAPHIC FACTORS AFFECTING NEW-TYPE URBANIZATION

The restrictive function of Chongqing's demographic factors is closely related to, on one hand, Chongqing's unique geographical features, and on the other hand its large population base, imbalanced economic development, and low educational level.

# 3.1 Unique Geographical Features Form the Regional Characteristics and Urban System of Demographic Distribution

Chongqing is dominated by mountainous areas, and in particular, its northeast and southeast wings are in the intertwining area of Daba Mountain and Wuling Mountain. The Yangtze River, Jialing River, Wu River, and their countless branches run across the limited plain in the city. There are hardly any flat plains or basin in Chongqing. There are only some relatively spacious places for development in the western area. The unique terrain of Chongqing leads to the population concentration in the western metropolis and its surrounding cities, and also results in the expanding development of metropolitan areas and sluggish development of sub-cities, and no rational urban system is formed. Terrains cannot be changed by humans, which indicates that, in the long run, Chongqing has to focus on the development of the western areas and the metropolis without ignoring small-and-medium-sized cities and towns, trying to eliminate restrictions brought by terrains.

#### 3.2 Imbalanced Regional Development Causes Imbalanced Urban-Rural Distribution and Population Outflow

The metropolitan area and one-hour economic circle of Chongqing have a solid industrial foundation and a long history of development. It is dominated by secondary and tertiary industries with intensive labor forces, and this area will possess a strong aggregation capacity in the long run. Some small-and-medium sized cities and towns in the northeast and southwest area of Chongqing are dominated by agriculture and have a weak economic foundation. There are not many companies and they are not well equipped, so the development of these small cities and towns are sluggish and the population aggregation capacity is not strong. Imbalanced regional development is one of the important factors leading to imbalanced urban and rural population distribution and large population outflow.

# 3.3 Large Population Base and Backward Education Restrict Structural Optimization of Population

Chongqing has a population of nearly 30 million, the largest among all municipalities. Rural population accounts for almost half, and there is a lot of potential for rural population immigrating to urban areas. However, there is only a small size of local urbanization in rural areas. Because the small-and-medium-sized cities and towns lack the driving force for development, their capacity to attract rural surplus population is weak. The distribution of educational resources in rural areas and small-and-medium-sized cities is far from being adequate, leading to a low educational level of most people and huge difficulties to optimization of demographic structure and educational structure in particular. Moreover, low population quality restricts the supply of high-quality labors required by industrial upgrading and the input intellectual resources necessary for transformation of development models.

During the process of building knowledge city and intellectual city, Chongqing will also face the awkward situation of inadequate labors and overall supplies.

#### 3.4 Population Concentration in the Metropolitan Area Delays Urbanization of Small-And-Medium-Sized Cities and Towns and Industrial Transfer

Currently, the main destination for Chongging's population transfer is the metropolitan area in the major city. Big cities are developing fast, but small-and-medium-sized ones lack the motivation and find it hard to attract rural population to move in. This is not favorable to industrial transfer to big cities, and it poses difficulties to build a reasonable urban system. In terms of the direction and target of population urbanization, there are mainly two choices, namely, moving into town and settling down locally. The former refers to moving into large cities, and the latter refers to smalland-medium-sized cities and towns. For a long time, the population of Chongqing has been concentrated in the metropolitan area. Thus the demographic distribution is not rational, leading to the lack of motivation for urbanization and support from demographic factors, and hindering industrial transfer to small-and-medium-sized cities and the process of developing these cities. The urban structure of Chongqing is yet to be rationalized, and the direction and target for urbanization is to be adjusted.

# 4. SUGGESTIONS ON STRATEGIES OF DEMOGRAPHIC FACTORS PROMOTING NEW-TYPE URBANIZATION

#### 4.1 To Innovate Household-Registration System and Gradually Cancel the Dual Household Management System

The current population management system is the urbanrural dual household-registration system. It restricts population flow and divides the life quality of urban and rural population according to social welfare, and the dual social service policies are formed, so is a dual life structure. To innovate the household-registration system, the restriction on household transfer should be lifted. The household transformation should be carried out, meanwhile, affiliated social welfare should be cancelled. Therefore, the urban residents who transform into nonagricultural residents can enjoy fair social services, avoid excessive social management stress, and accelerate the process of urbanization of rural population.

# 4.2 To Adopt Flexible Labor Resources Policies to Eliminate Negative Effects of Aging Population on Urbanization

All areas, especially the western areas should make use of the industrial opportunities to fully develop and utilize local agricultural labor force. The government can formulate policies to encourage migrant workers to return to Chongqing for employment. For absorbing labor force in surrounding areas, Chongqing maybe need explore an ideal model of caring for the old age combining different old-age ways. That includes public old-age care, social old-age care, community old-age care, and family oldage care. The government must develop the undertaking of old-age care, promote economy for the aged population and improve the investment environment under the leadership and with the participation of the entire society. We should issue supporting preferential policies to develop the undertaking of old-age care, and adopt flexible labor resources policies to eliminate negative effects of aging population on urbanization.

#### **4.3 To Gradually Improve the Quality of Labor** Force and Promote Industrial Upgrading and Scientific Urbanization

We should issue policies to attract talents to study, work, establish their own business, and settle down in Chongqing. The government and the enterprises must step up investment into R&D, and achieve the goal of investing more than 2% of the GDP by encouraging and supporting local colleges, vocational schools, and training schools to expand and improving the social service capacity and training level of all schools and research institutions. The society could further popularize compulsory education and reduce the number of illiterate and semi-illiterate population. With encouraging innovation and creation, setting up foundations, scholarships, and awards in this respect and offering financial support to self-innovation, Chongqing will accelerate industryuniversity-research transfer, develop financing platforms, promote the concentration and development of knowledgeintensive industry and embark on the path of new-type urbanization driven by science and technology.

# 4.4 To Transfer Agricultural Population and Develop Small-And-Medium-Sized Cities and Towns in Different Regions

It is efficient that the local government plans the layout of urban areas in a scientific way according to the urban system, accurately positions the function of the city, reasonably allocates the industries, and realizes the rational flows during population transfer. So as to maintain the population size at all levels that conforms to each level's actual accommodating capacity, Chongqing probably could improve the capacity of industrial concentration for small-and-medium-sized cities, expand industrial scale, and increase these cities' transferring and accommodating capacity on the basis of promoting agricultural modernization. We suggest that small cities should construct rapidly; township enterprises should develop to attract urban capital; and modern agriculture should form gradually which managed by companies. The local government may issue supporting taxation, loan, and financing policies to develop agricultural economy, and achieve local transfer of rural population.

In summary, the biggest disadvantage of the current population management system-- urban-rural dual household-registration system--is that it restricts population flow and produces dual social service policies, and will further form a dual life structure. Reform of the household-registration system can ease this contradiction, but this is not the sole solution. If Chongqing gradually loose the restrictions on household transfer and realize household transformation, residents transforming into nonagricultural ones can enjoy fair social services and avoid excessive stress from social management. After implementing flexible household and population management methods and turning householdregistration management into territorial management, abnormal population flow and household-registration changes can be effectively controlled by implementing taxation and individual credit system. In the future, Chongging can make use of the industrial opportunities to fully develop and utilize local agricultural labor force. To formulate policies to encourage migrant workers to return for employment, Chongqing can absorb labor force in surrounding areas, explore an ideal model of caring for the old age combining different old-age ways, and develop the undertaking of old-age care. To plan the urban and rural layout in a scientific way according to the urban system, the managers will realize the rational population flows and build small-and-medium-sized cities and towns. Chongqing must embark on the path of new-type urbanization that complies with her actual situation finally.

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