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Coordinated urban and rural development in China
A Comparative Study of Shanghai and Chengdu

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**Coordinated urban and rural development in China –
A Comparative Study between Models in Shanghai and Chengdu**

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Abstract

China is generally regarded as a country that has successfully achieved rapid economic development and rapid urbanization over the last three decades. But, in the course of this process, spatial inequalities in the country and the rural-urban divide within the city increase. That has led to the consolidation of the country's dual economic structure. In 2003, the Chinese government implemented the Coordinated Urban and Rural Development Programs in various cities dedicated to reducing urban-rural disparities and to break the dual economic structure. This thesis discusses two programs, one in Chengdu and one in Shanghai, and to analyze the extent to which they have met their goals.

Keyword

Urbanization, Unbalanced Development, Dual Economy, Urban Rural Integration

TABLE OF CONTENTS

Abstract	i
Table of Contents	ii
Table of Figures	iii
Chapter 1: Introduction	1
Background	1
Research Purpose	7
Structure	8
Chapter 2: Methodology	9
Chapter 3: Theoretical Framework	12
Chapter 4: The Historical Background	19
Chapter 5: Comparative study for Chengdu and Shanghai	27
5.1 General Introduction	27
5.2 Chengdu Model	34
5.3 Shanghai Model	49
5.4 Similarities and Differences	61
5.5 The Impact of the Program	65
5.6 Dual Structure in Urban Area	78
Chapter 6: Conclusion	85
Reference	89

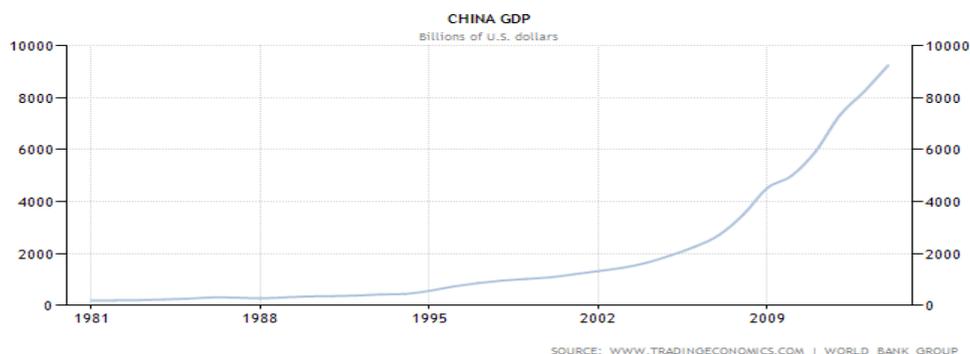
TABLE OF FIGURES AND TABLES

Figure 1. The GDP growth trend of China, 1981 - 2014	1
Figure 2. China GDP per Capital PPP, 1990-2013	2
Figure 3. China Disposal Income per Capital, 1978 - 2014.	2
Figure 4. Rural poverty ratio in China, 1978 - 2006	4
Figure 5. Location of districts, cities, and counties in Chengdu.	28
Figure 6. Demographics and GDP in Chengdu, 2000–2012	29
Figure 7. The central city, development zones, cities and corridors in Chengdu’s latest plan.	30
Figure 8. Location and administrative divisions of Shanghai, 2009	32
Figure 9. Urban expansion area and direction of the main city, 1947–2008	33
Figure 10. Number of Total and Agricultural Population in Chengdu (million), 2003 – 2013	66
Figure 11. The percentage of Labor engage in Primary Sector and Other Sectors in Chengdu. 2003 - 2013	67
Figure 12. Number of Total and Agricultural Population in Shanghai (10,000), 1999 – 2013	68
Figure 13. The percentage of Primary Sector Labor out of Total Labor in Shanghai, 1999-2013	68
Figure 14. Total GDP and Primary Sector GDP Growth Rate in Chengdu (%), 2004 – 2014	69
Figure 15. The percentage of GDP produced in Primary Sector and Other Sectors in Chengdu, 2003 - 2013	70
Figure 16. The GDP Annual Growth Rate of Shanghai, 1999-2013	70
Figure 17. City Residents’ Disposal Income and Farmer per Capital Net Income in Chengdu, 1999 - 2013	71
Figure 18. City Residents’ Disposal Income and Farmer per Capital Net Income in Shanghai, 1999 - 2013	72
Figure 19. The dualistic contrast coefficient in Chengdu and Shanghai, 2003-2013	73
Figure 20. Index of income gap between urban and rural residents in Chengdu and Shanghai, 1999-2013	74
Table 1. Percentage of Primary Industry and Tertiary Industry, 1980-2013.	3

Chapter 1. Introduction

China achieved remarkable socioeconomic development since the implementation of the Reform and opening-up policy in 1978 (Naughton 2007: 85). In the past three decades, the country went through a transforming from a planned economy to a rather the market-based economy. Although the market transition process is far from being complete, the reform becomes the driver of the development of the country (Naughton 2007: 85). The economic performance can be easily measured and visualized by the growth of GDP. As Figure 1 shows, China's GDP took off sharply immediately after the 1980s (Trading Economics and World Bank, 2014). According to the statistics, the average GDP growth in China in the period of 1952-1978 was 6 percent, and this number increased to 9.8 percent in the period between 1978 to 2005 (Naughton 2007: 140). Data from the National Bureau of Statistics shows that in 2003, China's GDP was 13.5822 trillion CNY. And the number reached 56.8845 trillion CNY in 2013 which is three times bigger than it was in 2003 (NBS, 2014).

Figure 1. The GDP growth trend of China, 1981 - 2014.

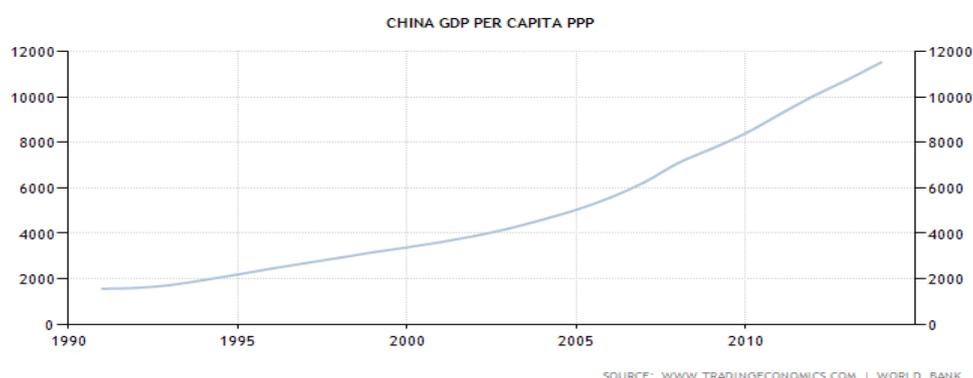


Source: Trading economics and World Bank, 2014

Rapid economic growth translates into a general living standard improvement in

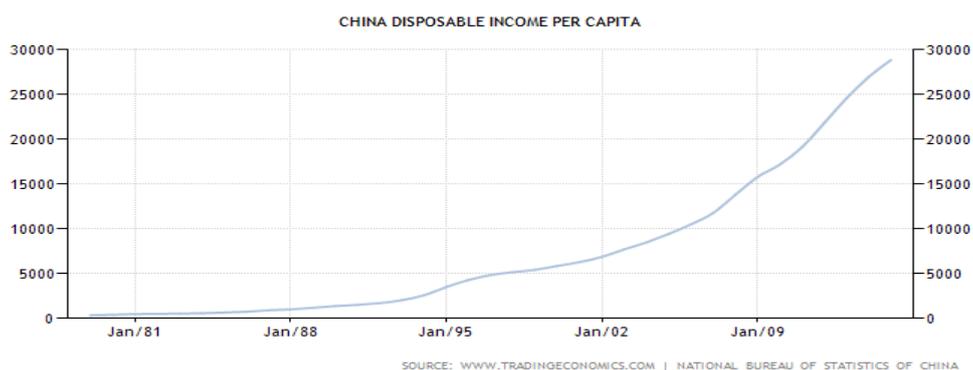
the country. Figure 2 shows that China's GDP per capita adjusted by Purchasing Power Parity (PPP) increased dramatically, from 1554 USD in 1990 and finally reached 11524 USD in 2013 (World Bank, 2014). Meanwhile, China's Disposal Income per Capita constantly increased from 343 CNY in 1978 to 28844 CNY in 2014 as Figure 3 shows (NBS, 2014).

Figure 2. China GDP per Capital PPP, 1990-2013



Source: Trading economics and World Bank 2014

Figure 3. China Disposal Income per Capital, 1978 - 2014.



Source: Tradingeconomics and National Bureau of Statistics of China (NBS) 2014.

The country achieved not only rapid economic growth but also experienced massive structural change. At the beginning of the reform period in 1980s, 71

percent of the workforce was engaged in agricultural production (Naughton 2007: 152). However, the share of the labor force in agriculture decreased sharply after that and fell below 50 percent by the end of 2004 (Naughton 2007: 152). In 1978, the agricultural sector accounted for 42 percent of the GDP but the number decreased to 13 percent in 2004 (Naughton 2007: 155). According to the data from the National Bureau of Statistic (NBS), and as Table 1 shows, the agricultural sector constituted 30.2 percent of the economy in 1980. Since 1985, the proportion gradually started to decrease culminating in a share of 10 percent at the end of 2013. Meanwhile, the share of the service sector increased dramatically at the same time, from 21.6 percent in 1980 to 46.1 percent by the end of 2013 (NBS, 2014).

Table 1: Percentage of Primary Industry and Tertiary Industry, 1980-2013.

%	1980	1985	1990	1995	2000	2005	2010	2013
Primary	30.2	28.4	21.7	20.0	15.1	12.1	10.1	10.0
Tertiary	21.6	28.7	31.5	32.9	39.0	40.5	43.2	46.1

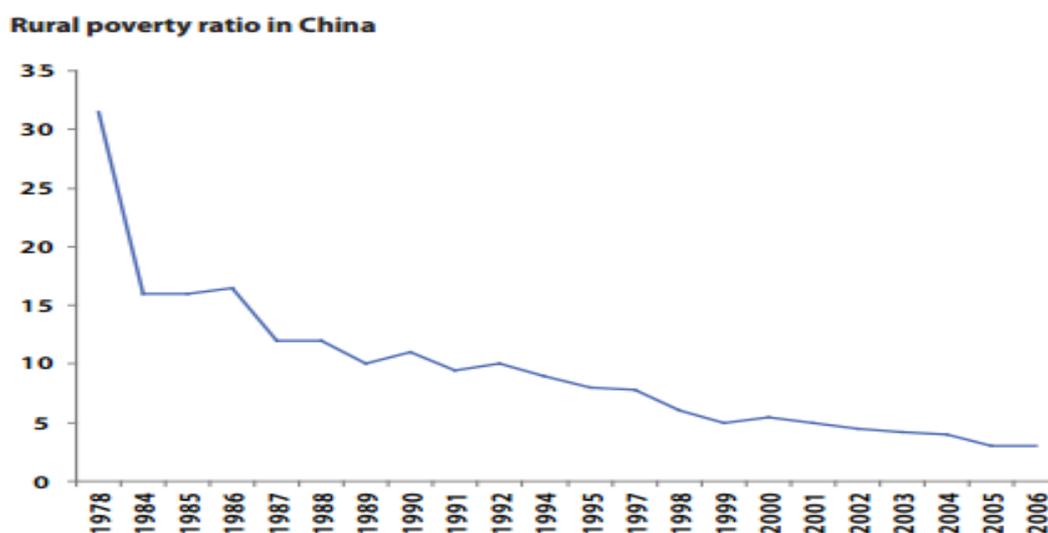
Source: National Bureau of Statistics of China (NBS). 2013

As the result of rapid economic growth and massive structural change, China has simultaneously experienced a rapid urbanization. During the 30 years of the reformation, the urbanization rate increased from 17.9 percent to 44.9 percent, with massive population flows from rural toward urban areas (Ye 2009:118). During the year between 1978 and 2013, the percentage of rural residents out of the total population in China dropped from 83% to 46% (NBS, 2014). However, the agricultural sector still plays a crucial role in national development with a high proportion of the population living in rural areas (NBS, 2014). Therefore, enhancing the well-being of rural residents will be the key for general-based

living standard improvements in China.

Under the impact of the Green Revolution and the implementation of policies effective, agricultural productivity in China increased dramatically (Naughton 2007: 140). As Figure 4 shows, relative poverty in rural areas dropped from 30.7 percent in 1978 to 1.6 percent in 2007, according to China's national poverty standard established in 1978. (NBS, 2014).

Figure 4. Rural poverty ratio in China, (1978 - 2006)



Source: National Bureau of Statistics of China (NBS), UNDP 2005, 2008

Meanwhile, a large amount of rural residents diverted from agricultural production and engaged themselves in the industrial and service sectors (NBS, 2014). In the urban areas, the middle class had been expanded with disposable income and life quality improvement. The Engel coefficient (i.e., food expenditure as a proportion of total household spending) of urban residents and rural residents decreased gradually, from 57.5% and 67.7% in 1978 to 35.0% and 37.7 percent in 2013 respectively (NBS, 2014). According to the Human Development Index

published by the UNDP, China achieved a significant progress and is currently ranked 91st in the list, meaning that it reached a middle human development level in recent times (UNDP, 2014).

However the awkward fact always exists behind the glory of the surface. In spite of the rapid development industrialization and modernization of China, the benefits of the growth are unevenly distributed across groups and regions. The social division and regional disparity issue gradually intensified, as people from bottom social classes failed to catch up with the process and were not able to enjoy the prosperity of development. According to the latest statistic, China's GINI coefficient has reached 42.1 in 2010 which was far beyond the international average (Word Bank, 2014). At the same time, spatial inequality between the East and the West of China, as well as the urban and rural divide increased. The urban-rural disparity is among the main features of China's economic inequality, and the statistics show that from 1999 to 2007, China's urban-rural income gap increased significantly (Jayati 2010: 6). The uneven and diversified development conditions within the country have become one of the most pressing challenges that need to be solved in contemporary times.

China is probably the country that has the world's largest rural and urban disparity not only in terms of income inequality (Yusuf & Tony 2008: 43). The urban-rural separated household registration (hukou) system also contributed to extending urban-rural disparity. The system provides a series of subsidies, such as free medical care and subsidized schooling to pensions, insurance, and some other living allowances to urban residents, and it significantly hampered rural population from accumulating welfare. So apparently the urban-rural disparity statistics are underestimated according to some scholars (Kanbur and Zhang 2003,

Khan and Riskin 2004). While a part of the rural population has moved to urban area, rural residents still live in a comparably more vulnerable position than most of urban residents (UNDP 2013: 35). Not only is the average income of urban residents several times higher than rural residents today (Yusuf & Tony 2008: 42). But the quantity and quality of social services and public administration government provides in the urban area are also much better in the countryside, especially health care and education (Yusuf & Tony 2008: 71). Along with the productivity improvement of modern sectors in the urban area, like many other developing countries in the world, China unconsciously created a dualistic economic structure and formulated a separated urban and rural development mechanism (Jayati, 2010).

The separated urban-rural development mechanism is a major cause for the huge urban-rural divide. The 1978 reform did not successfully reduce the gap, and in contrast, the reform had increased this diversity (Yusuf 2008: 42). From international experience, a vast social disparity can cause social unrest and further stagnant a country's comprehensive modernization (Knight, Li, and Song 2006; Eastwood and Lipton 2004). Since China's rural-urban gaps are much larger than in most of the other developing countries in the world, the Chinese government has realized the importance of reducing the development gap between urban and rural parts. For example, it launched its new-type urbanization and coordinated urban-rural development program to re-balance the development, to coordinate development in both urban and rural areas as a whole (Jiang, 2002). The Sixteenth National Congress of the Chinese Communist Party held in 2002, can be seen as a turning point in China's urbanization strategy. It was the first time that China declared that the countryside should be a key area that needs to be further developed. And to achieving the goal of moderate prosperity, the socioeconomic

development strategies must incorporate urban and rural areas together (Ye 2009: 119). Since then, the Chinese government has put more attention on the coordinated urban-rural development program and carried out series of policies intended to promote a balanced urban-rural development (Ye 2009: 119).

This thesis makes a comparative study of the coordinated urban-rural development programs conducted in both Chengdu and Shanghai, the biggest cities in the West and the East of China respectively. The thesis firstly investigates the government measures and policies in both cities that were carried out and established to reduce urban and rural disparities. A second of the purpose is to evaluate how the program influenced the regional development and to what extent the plan played a useful role in eliminating the dual economy structure. Besides, the thesis also discusses how the living conditions of vulnerable groups particular the migration workers had been influenced by the new-type modernization and coordinated urban and rural development program in China.

The reason to choose Chengdu and Shanghai as the research sites are because both cities had been selected as the National Comprehensive Reform and Experimental Districts of New-type modernization for pushing further comprehensive development. Both cities can be seen as the reform pilots, the primary task of Chengdu is to coordinate urban and rural development while Shanghai focuses more on the development and opening up. The coordinated urban and rural development in both cities may be described differently, as Shanghai prefers to use the term urban-rural integration. Traditionally, Shanghai has been the economic center of China and has lead the country's development for a long time. It now serves as the symbol of modern and urban China. The city can be seen as an experimental field for many kinds of reforms in the country. At the same time,

Chengdu is catching up rapidly. It can be seen as a very unusual city in Western China. Alike Beijing and Shanghai, Chengdu achieved rapid economic growth, and benefited hugely from the globalization process since China joined the WTO. Like many cities in the coastal area Chengdu also made a tremendous spatial transformation and improved its human development level. In fact, Chengdu even went beyond Shanghai in some reform domains related to public administration reform and social equalization.

This paper is divided into five further chapters. The second chapter introduces the methodology of the thesis. The third chapter is a literature review and describes the theoretical framework of dual economic structure and unbalanced development pattern. The chapter shows how ideology or theories have been improved over time. In chapter four, the thesis introduces China's economic history, and to further investigates how the dual economic structure and separated urban and rural development model have been established and consolidated. I will introduce the implementation of China's Coordinated Urban and Rural Development Program. Chapter Five will be the primary focus of this thesis. It presents the measurements and policies that governments have carried out in both cities. It discusses and analyzes the development outcome of the program. Besides, it also discusses the general living conditions of migrant workers in the urban area. Finally, the chapter comprehensively analyzes the extent to which the current coordinated urban and rural development program breaks with the traditional dual economic structure in both cities. In the last chapter, Chapter Six, I will conclude the paper by discussing how theories influenced China's urbanization process and if those theories can be modified on the basis of China's experience.

Chapter 2. Methodology

The methodology of the dissertation bases on a literature review and quantitative research. Research related to the dual economy and unbalanced development in China has a rich tradition. The existing literatures concerning the coordinated urban and rural development in the country also provides a basic foundation for my further research on the municipal level. It is crucial for me to read classical theories and also to conduct an exhaustive review of the related literatures, to find out the main arguments and other relevant evident indicate the phenomenon (Bryman 2008: 8). It is important for me to link the previous research with my own research questions, findings and analysis. Besides, the literatures could also make contribution to demonstrate the credibility of my dissertation (Bryman 2008: 8).

At first, I have read various classical articles based on both dual economic structure and unbalanced development theories, such as the Lewis-Ranis-Fei model and urban-bias policy. I have checked a large amount of books, articles concerning China's economic development process as well as the urbanization strategy in the last few decades. Trying to find out how the implementation of China's development policies being influenced by theories I mentioned as well as to critically analyze the already known research conclusion in the research domain. Secondly, certain government documents and other evaluation paper published by governmental organizations concerning the coordinated urban and rural development program in the country provides me a shortcut to find out the detailed measures and policies the government carried out.

With the help of the existing literatures, I further adapted quantitative research as

my research strategy, and try to use data to indicate the actual development outcome in both cities to increase the credibility of my research.

“Quantitative research was outlined as a distinctive research strategy. It was described as entailing the collection of numerical data, as exhibition a view of the relationship between theory and research as deductive and a predilection for a natural science approach and as having an objectivist conception of social reality.” (Bryman 2008: 160)

With the consideration of many reasons, I choose to conduct a secondary analysis by directly collecting secondary data instead of collecting the first-hand information by field study or other methods. The secondary analysis which “offers the prospect of having access to good-quality data for a tiny fraction of the resources involved in carrying out a data-collection” (Bryman 2008: 312) would provide me certain advantages to save my cost and time. Secondly, it gives me an opportunity to make longitudinal analysis, and it is possible to chart development trend and connections over time by measuring the indicators. (Bryman 2008: 312)

Most of data referred in the thesis are mainly from the World Bank, UNDP and Statistics Bureau of Chinese Governments at different levels. The Statistics Yearbooks published by Chinese government shows a comprehensive and complete picture of the general development condition in a specific area of the country. The Statistics Yearbooks can be regarded as the most authoritative data resource in China, and data published on the yearbook are frequently being referred by a large amount of social research in the country.

However, I fully aware that the use and analysis based on official statistics have

been a very controversial in recent years. (Bryman 2008: 320) Since the government tends to put positive indicators in order to running record of their economic and political agenda. Meanwhile, the official statistics in China are sometimes being criticized being falsified. (Rueters News, 2014) Based on my experience from literature review, I gradually realized that certain amount of articles published by China's state-owned think tanks or government organizations tends to only speak highly of development achievements and greatly neglected development issues that still remained. So, except indicators directly collected from Statistics Yearbooks to indicate the relationship between urban and rural areas of my research sites. I also adapted two more indicators by my own calculation. The first one is the dualistic contrast coefficient, and the second is the index of income gap between urban and rural residents, to further evaluate the real situation of urban-rural divide in Chengdu and Shanghai. The detailed calculation methods of two indicators will be presented in the Chapter Five.

Chapter 3. Theoretical Framework/Literature Review

Dual Economic Theory and Unbalanced Development Theory

The urbanization process is defined as “an increase in the proportion of a given population that is to be found living in urban spaces” (Potter 2008: 382). And normally urbanization, industrialization and development occur together as a joint process (Potter 2008: 382). Many countries in the world have gone through a transformation from a traditional, rural, agrarian-based society into modern, urban-industrial societies. And today, many developing countries are experiencing faster urbanization rates than those of industrialized countries in the world. But the general urbanization rate in the developing world is still far away from developed countries (Potter 2008: 382). Despite that China has achieved a rapid and massive urbanization process, ‘the continuing widening income gap between urban and rural areas and prominent dual economic structure, are increasingly becoming a constraint for China’s sustained economic growth’ (Xu et al., 2014: 14). Therefore, a more evenly spread of the development benefits among different regions as well as to break the dual urban-rural economic structure becomes the urgent task for the Chinese government, to ensure its sustainable economic development and to build a harmonious society.

The concept of coordinated urban and rural development or urban-rural integration was firstly raised by Utopian socialists such as Saint-Simon, Fourier, and Owen in the nineteenth century. They mentioned the idea of elimination of antagonisms between urban and rural areas (Hsing, 1973). Based on the initial theories, both Karl Marx and Friedrich Engels made a systematic elaboration regarding urban and rural relations. They deeply analyzed the conditions of urban

and rural binary opposition as well as developed a vision for class equality and regional integration (Engels, 1902; Marx, 1906). Marx argued how the relationship between urban and rural part could fundamentally change the social structure. He also suggested that the industry should be evenly distributed in the country and to link both agriculture and industry together to reduce the distance between urban and rural areas (Engels, 1902; Marx, 1906).

After the Second World War, “underdeveloped economies were characterized by a ‘dichotomous’ or ‘dualistic’ nature, where advanced and modern sectors coexisted alongside traditional and backward sectors” (Desai & Robert 2008:82). In 1950s, Lewis developed a dual sector model that explains the process of overall economic development in the developing world. Especially overpopulated Asian countries, which are typically characterized by a large subsistence sector with relatively low productivity and low income coupled with a small capitalist sector with relatively high productivity and high income (Lewis, 1954). Lewis’ model suggests a structural transformation from a primary subsistence to more-capitalist based sector. And explained how rapid capital accumulation achieves economic growth and continuously releasing surplus labor from the rural area (Lewis, 1954). It further illustrated how this transformation leads to a continuous released of surplus labor from rural areas. To stimulate economic growth with unlimited supplies of labor, the country needs to move labor force out of subsistence sector into the modern capitalist sector so that the output of the worker can be improved by capital (Douglas, 2014). As a result of higher wages provided and massive labor force demanded by an expanding industrial sector, surplus labor is released from the agricultural sector and migrates into urban areas where the industrial sector is typically located. The constant inflow of surplus labor into modern sectors keeps wages at a low level which ensures higher profits for factories and

further stimulates investments and economic development. Meanwhile, agricultural productivity and food production will not be reduced since labors are surplus and marginal productivity is low (Lewis, 1954).

Later, based on the dualistic economy development model Lewis suggested, Ranis and Fei raised their critiques and further advanced the model. They noticed that Lewis did not appreciate the key role of the small-scale agricultural sector on economic growth. Besides, Lewis failed to observe that the increased in the levels of agricultural productivity are a precondition for the release of labor out of agriculture (Ranis & Fei, 1961). Besides that, Ranis and Fei combined with Rostow's economic growth theory, further divided Lewis model into three phases (Ranis & Fei, 1961). The first stage of Lewis theory can be naturally divided into two phases with all phases being determined by the marginal productivity of agricultural labor (Ranis & Fei, 1961). The first phase symbolizes the redundant agricultural labors are created (Marco & Zheng, 2010). As long as the modern industrial sector provides higher wages than the agricultural sector, the surplus labor tend to migrate to urban areas (Ranis & Fei, 1961). The second indicate that while large amount of agricultural labor flow into the urban area, the improvement of marginal productivity of some laborers would decrease the agricultural production (Marco & Zheng, 2010). The increase of the price of agricultural commodities as well as the decrease of the real wage of surplus labor has a negative impact on further industrial expansion and culminates in a stagnation of economic development. Therefore, it is important to enhance the agricultural productivity to bridge the gap of labor shortage in the countryside (Ranis & Fei, 1961). The third phase, often referred to as the commercialization point, is characterized by a self-sustaining economic growth coupled with the commercialization of the agricultural sector (Marco & Zheng, 2010). When there

is no surplus labor existing in the rural area, the development enters the third phase. Labors would be distributed according to the wage level both sectors provide. The agricultural sector will continue to provide more created surplus labor while the modern industrial sector will further support agricultural development simultaneously (Ranis & Fei, 1961).

The American economist Dale W. Jorgenson argued that if only the agricultural sector were further developed, it can provide more surplus labors to the industrial sector. The development of the industrial sector is driven by agriculture surplus rather than the scale of capital (Jorgenson, 1967). Although the industrial sector plays a strategic role in economic development, agricultural development is the pre-requisite for industrial expanding and may also push the dual economy from the lower phase to upper phase. Conversely, the absence of a labor surplus in agriculture may result in no improvement in the levels of living of people engaged in industrial production (Jorgenson, 1967). Jorgenson's considerations and thinking contributed to the creation of awareness among development practitioners of the importance to concentrate on both agricultural and industrial development in developing countries.

In 1970s, John R. Harris and Michael Todaro developed the Todaro model. Based on the development experience from Western Europe and the United States, they suggested that rural-urban migration can be regarded as an important feature of economic development. Surplus labor is released from the traditional agricultural sector and is redistributed to the industrial sector in the urban areas, while stimulating industrialization and urbanization processes in the country (Harris & Todaro, 1970). However, empirical evidence has indicated that, the development conditions in many developing countries were contrary to the underlying

assumptions in Lewis model. In fact, the industries in the urban areas cannot fully absorb surplus labor released from the rural areas (Harris & Todaro, 1970). The Todaro model suggested that rural-urban migration is an economic phenomenon. No matter how severe unemployment rates increased in urban areas, plenty of people still move to cities with the hope to achieve a better living. Thus, the decision whether or not to move to urban areas is often based on income differences between rural and urban areas. (Harris & Todaro, 1970). Following this logic, the majorities of migrants compare their current income in the rural setting with expected incomes in the urban areas and make a rational decision. (Harris & Todaro, 1970). Most of the migrants would easily compare their current income in the rural area with expected income in the urban area and to make a rational decision. As long as the expected income in the metropolitan area is higher than the general revenue in the rural area, the migration process will continue (Harris & Todaro, 1970). As Todaro summarized, in many developing countries, the high unemployment rate in urban settings is the result of uneven economic development between rural and urban areas. In comparison to the Lewis-Ranis-Fei model, Todaro's model tends to depart from assumptions that are closer to the reality in developing countries. It also highlights the need for policymakers to put more emphasize on coordinated urban-rural development and investments in the agricultural sector instead of a sole focus on industrial development in urban areas (Harris & Todaro, 1970).

Influenced by the work of Francois Perroux who pointed out that the growth will not happen everywhere simultaneously, but is rather located in a 'growth center of pole' (Desai & Robert 2008: 83), both Gunnar Myrdal and Albert Hirschman offered growth pole theories. Myrdal suggested that some regions develop faster than others due to initial advantages that can comprise various aspects. Labor,

capital, and commodities may move to the faster-growing areas and lead to 'backwash effects' in others. However, the less developed regions may benefit from centrifugal 'spread effects', and spill-over of growth dynamics from neighboring regions. (Desai & Robert 2008: 83). Hirschman introduced the concept of 'unbalanced development'. He promoted the idea to stimulate development in selected regional centers, while growth in the remaining areas will be consolidated by virtue of trickle down effects. (Desai & Robert 2008: 83). The growth pole theory advocates developing countries to expand investment in the capital-intensive industry in the metropolitan areas or regional center, to further stimulate economic growth in the region and expect the growth will spread to remaining areas and rural regions in a long-term. The strategies and approaches in the 1980s and 1990s were based on the notion of a strong belief trickle down dynamics. This notion is underlined by a statement from Deng Xiaoping who stated that, part of the region and some people can become rich first, and then to drive and help other areas and people to achieve universal prosperity (Deng, 1994). The theory later became one of the major principles of China's reform; based on this unbalanced development notion, policies the Chinese government carried out brought a profound effect on the unbalanced urban-rural relationship in the country.

In the 1970s, Lipton raised his critique of urban-rural relations blaming the urban preference development model to entail an 'urban bias'. Lipton (1977) noticed that both rural and agricultural development tends to be neglected during rapid urbanization and industrialization process; to a diverging development between rural and urban region (Lipton, 1977). He further argued that the urban class no matter rich or poor using their political resources to formulate a powerful political alliance, to maintain the urban bias as well as to distribute more social resources

to the urban area that caused the reinforcing of regional and class disparity (Potter 2008: 393). Based on the urban bias thesis Lipton raised. Corbridge believed that the root cause of urban bias was the cheap food price and series of pricing policies against with rural livelihood improvement. Also, the preferences to invest in industrial urban settings also led to scarcity in terms of health care and education infrastructure in the rural areas (Jones & Corbridge, 2007).

Turning back to China's experience, various theories influenced the urbanization strategy in the country in different periods. The substantial readjustment of development policies made by the Chinese government is also one of the key factors to correct China's growth failure in the past.

Chapter 4. The Historical Background

The dual economic structure in China had been formulated for a long time, and the causes and implications of the uneven development conditions can be complicated. The socialist planned economic model established in the 1950s laid an essential foundation for the dual economic structure in China. A series of political campaigns like the Great Leap Forward and People's Commune hindered the stable and constant agricultural development. Meanwhile, as a reaction to the great famine happened in the 1960s, the strict household registration 'hukou' system was established at first to restrict the free movement of people. The 'hukou' system further consolidated the separate rural and urban development. (Zhong 2004: 518) Under the planned economy era, the benefit of agricultural production in the rural area had been squeezed and heavily exploited to support China's heavy industrial development. Besides, farmers were regarded as necessary tools to stimulate China's radical industrialization (Zhong 2004: 518). During the first and second national five-year plan, a large shift from rural labor into urban areas contributed to China's large-scale and heavy industrialization in urban areas. The urban bias in national policies assisted to the stagnation of rural development, had adverse implications for agricultural productivity, and thus constituted an impediment to the achievement of improved living conditions in rural setting during the era of planned economy. (Naughton 2007: 72).

After the opening up of the country, a series of policies unfettered population flows, and the migration process accelerated. Low-wage migrant laborers rushed into cities, contributed to the urbanization process, and increased disparities between urban and rural areas (Ye et al. 2013: 127). Meanwhile, the gap between urban and rural resident's incomes increased. This was associated with a widening

of the gap of social welfare in both qualitative and quantitative terms including public services such as primary education, health care, infrastructure, and social security aspects (Hsing, 2012). Although the Chinese government increased its investments in public services in the country, the investments were primarily directed to urban settings. The budget invested in rural development was much slower than the money spent in urban areas. When China opened up in 1980s, the infrastructural conditions in the rural areas were relatively poor compared with urban regions that all contributed to the dual urban and rural structure in the country. In 1978, China implemented the household contract responsibility system, which further improved agricultural productivity. Meanwhile, more surplus labor were released from the rural areas, and also the living condition of rural residents been enhanced considerably (Naughton 2007: 252). However after 1985, Chinese government perceived the agricultural production as being sufficient and turned again towards urban development again which expanded the disparities between urban and rural areas. Accordingly, many scholars argued that, “China has a long history of the dualistic economic model; the 1978 Economic Reform has not brought this dualistic structure to an end” (Marco & Zhang, 2010). The industry and urban preference development pattern restricted rural modernization which consolidated the original dual economic structure and posed huge obstacle for surplus labors migrating to the urban area.

Supported by the establishment of the export-oriented economic policies, urbanization processed in China got further accelerated. This was not confined to the coastal zones, but equally took place in the inland parts of the country (Yusuf & Tony 2008: 16). In 1978, the urbanization rate in China was 17.9 percent, much less than in its neighboring countries like India, Indonesia or Pakistan (NBS, 2014; Yusuf & Tony 2008: 16). By the end of 2005, China’s urbanization rate reached

42.9 percent which was close to the average in the East Asian region (Yusuf & Tony 2008: 16). In 2011, the country had more urban than rural residents for the first time (UNDP 2013: 3), and in 2013, the urbanization rate reached a level of 53.7 percent (NBS, 2014). By the end of 2020, it is estimated that 60 percent of China's population will reside in urban settings, with more than 200 million rural residents migrating to urban areas. (Yusuf & Tony 2008: 16). In the past three decades, nearly half a billion people moved into cities, which is unprecedented in human history (UNDP 2013: 15).

The ongoing reforms and rapid industrialization are two main driving forces of this massive migration process; capital accumulation and labor demand are major pull factors for the transfer of surplus labor released from agricultural production into cities (UNDP 2013: 19). Migrating to the city, however, does not guarantee improved living standards or the people who migrated themselves can enjoy the same living standard as the urban residents do. Typically the surplus labor that moved from the rural area toward urban area engage in industrial sectors or part of service industries can be described as 'migrant worker'. Migrant workers in China are often characterized by young ages, low incomes, engaged in labor-intensive work, and a lack of social welfare (UNDP 2013: 21). Although this group is physically working in an urban area, they are registered as the 'floating population' (Chan, Liu, & Yang, 1999; Fan, 2008; Goodkind & West, 2002). The term describes people who are temporarily living and working in cities (Yusuf & Tony 2008: 7). Their personal identities shown on the household registration or 'hukou' system remains in the rural area. The system makes the group are not able to be fully regarded as urban residents and, of course, cannot share the same welfare resources as urban populations do. The strict household registration system brings an enormous gap of living standard even inside cities (UNDP 2013:

39). Migrant workers made a great contribution to China's rapid economic growth and to the modernization process in urban areas. However, without the approval to register local 'hukou', migrants are deprived of many social and economic benefits. They are restricted access to certain types of housing, social welfare and so on (Huang, 2004; Logan, Bian, & Bian, 1999). There have also been substantial benefits from rural areas:

"The remittances migrants send to their villages have significantly bolstered rural household consumption, in some cases contributing as much as 40 percent of annual household incomes (the average is closer to 20 percent), also to enhance living standard in some extremely poor villages closer to the urban level." (Yusuf & Tony 2008: 7)

However, at the same time, the group also brings pressure for public services and administrations in urban areas, as many of them are struggling for their livelihood and belong the most vulnerable groups, for example:

"The migrant worker with low incomes, live in poverty and suffer from occupational diseases due to bad working conditions. Families are separated; children do not have adequate educations." (UNDP 2013: 39)

The migrant workers can be interpreted as a link between urban and rural areas and play an important role for urban-rural relations and bridging the gap between the two. This is the reason why the group should receive more attention in public discussions and need to be considered as the core actor group in prospective coordinated urban and rural development programs.

So basically China's economic structure is characterized by the coexistence of a planned economy and a market economy, associated with a traditional agricultural sector in rural areas, and modern industries in urban settings. The long-term urban and industrial oriented development policy created two distinct identity systems, educational systems, employment systems, and financial systems between urban and rural areas. Two separate systems are a cause for the huge development disparity that leads to the consistent imbalanced socioeconomic development in the country. In conclusion, scholars agree that China exhibits tendencies of the Lewis-Ranis-Fei model:

“From empirical study, that China's economic growth can be mainly contributed by Lewis-Ranis-Fei model which was driven by rapid rural-urban migration, industrialization and capital accumulation in urban areas. The evidence shows that currently Chinese economy has fully absorbed the redundant agricultural labor, but has not yet completely reallocated the disguised unemployment; which means China has already entered phase two of economic development, but did not enter the third phase defined by Ranis and Fei.” (Marco & Zhang, 2010: 32)

The main objective of implementing coordinated urban and rural development programs in China is to change the original urban-rural separated development conditions and to break the current dual economic structure. The program was guided by Deng Xiaoping's 'feeling the stone when crossing the river' to Hu Jintao's 'develop scientifically' and 'building a harmonious society' ideology and political campaigns (Chen & Gao, 2011), to ensure socioeconomic development issues in both urban and rural areas as a whole part to be overall planned, coordinated considered and unified solved. The program Chinese governments

launched is intended to establish a mutually reinforcing and balanced development mechanism that readjusts the relationship and redistribute development benefit between urban and rural areas.

Based on the development potentials, different cities in China adapted different development strategies to achieve a coordinated, balanced, and harmonious urban-rural relationship. Since 1978, China experienced one of the fastest urbanization processes in the world which not only provides chances in the city but also brought huge problems and in the countryside. To achieve the harmonious development and to balance the development outcome, the Chinese government formally launched the strategy of Coordinated Urban-Rural Development in 2003. Later in 2007, carried out the Urban and Rural Planning Law, marks a new era for promoting new patterns of urbanization (Jiao, 2011). Under the guidance of coordinated urban-rural development program, many cities started to readjust their development ideology, and integrated rural development into the framework of regional development. Chines governments attach more attention on stimulating urban-rural integration and equalizing public service between urban and rural areas (Jiao, 2011).

The traditional model of China's urban - rural framework can be simply explained by a flow from agricultural products and labor from rural to urban areas. Moreover, the urban areas provide industrial products and other related services to the rural part. However, this pattern cannot be regarded as a success (Bao 2008: 34). Since China opened up for a market economy in cities, urban and rural disparities extended and deteriorated. During the year from 2004 to 2007, Chinese government re-emphasized the importance of development issues concerning the agricultural sectors, the rural areas, and farmers. The Chinese government

constantly grasp ‘san nong wen ti’ in the state document which means ‘three agricultural issues’ as the key area that needs to be addressed (Bao 2008: 34). A new type of urban-rural development framework is urgently needed to solve the problem and to stimulate further rural and agricultural development.

China’s coordinated urban and rural development program was firstly advanced by the Third Plenary Session of the 16th Central Committee of the C.P.C in 2003 (Yu 2013: 9). It is dedicated to solve problems related to the dual economic structure and to set put a focus on the ‘three agricultural issues’ mentioned above as the major task. The program readjusted China’s original urban preference development pattern, and established new pattern which encourage industrial sectors to re-feeding agricultural sector. Also, the urban development needs to support rural development and finally to achieve a coordinated development pattern (Yu 2013: 9). The program was gradually carried out in various regions in the country to update and to innovate the original urbanization framework. It is also expected to channel more investments to rural areas and to generate employment and income opportunities in rural settings. The program highly ensured cities would benefit from a sustainable supply of rural product and labor without suffering environmental deterioration at same time (Bao 2008: 34). At the end of 2005, China has eliminated agricultural taxes which has reduced the gap between urban and rural development, also established a starting point for a narrowing trend in relation to the dualistic structure. It also brought hope to rural farmers catching up with urban residents in terms of their living standards (Yu 2013: 10). In 2007, the third plenary session of the 17th assembly of the CCP was held in Beijing. It pointed out that the new pattern of urban-rural socioeconomic integration is the fundamental requirement for pushing China’s reform and development forward (Yu 2013:10). In 2010, the State Council of China released

its No.1 document. The document re-emphasized the importance to solve 'three agricultural issues' in terms of agricultural sector, rural area and farmer, and also expressed concerns about the transformation of agriculture and the elimination of the dualistic structure (Yu 2013:10). The Eighteenth National Congress of the CPC was held in 2012. It claims that China entered the new period for pushing urban-rural socioeconomic development integration. The report emphasized the new strategy for reinforcing urban-rural coordination, to enhance the vitality of rural development and finally achieve joint urban and rural prosperity (Yu 2013:10).

In general, the current coordinated development programs that are carried out by the Chinese government covers three main dimensions including planning layout, financial arrangement and public resources allocation. It suggests that both urban and rural areas should be overall planned as connected parts, development issues in both areas are recommended to be researched and solved with regard to their interrelations. The main target of the scheme is to build a symbiotic system for both urban and rural areas to enjoy the equalized development rights and to formulate a new model of urbanization in the country. The government should play a positive role to reasonably allocate financial capital applied for urban and rural construction, and to realize further coordinated development between urbanization and agricultural modernization. In essence, the core objective of the program is to eliminate current China's dualistic economic structure and to promote urban-rural integration.

Chapter 5. Comparative Study for Chengdu and Shanghai

This chapter offers an introduction to both Chengdu and Shanghai. Chengdu is the capital of Sichuan Province located in the Southwest of China. The city has for more than two millenniums been regarded as one of the most productive agricultural regions in China (Ye et al. 2013: 126). Chengdu officially became a sub-provincial administration by the Chinese central government long times ago. Today, it governs nineteen separate administrative units, contains nine districts, four county-level cities, and six counties. The nine districts locate in the core urban area with surrounding counties located in peri-urban and rural area as Figure 5 shows (Bo 2014: 18). Chengdu is the key center in China's West Development Campaign which was launched in 2000 and later became the development pilot city in China (Deng and Bai, 2014). In 2013, the population of Chengdu reached 11.87 million, there were 5.5 million population holds urban household registration and 7.1 million engage in non-agricultural production (CSB, 2013). In the middle of the 20th century the city attracted large-scale domestic investment and became China's key industrial center during the First Five-Year Plan (1953-1957) and the Third Front Movement since 1964 (Duan et al., 2011). Since the 1990s, the city has increasingly been integrated into the world economy, it has attracted huge amounts of foreign direct investment (FDI), consolidated its position as a western industrial center. In 2012, there were more than 220 Fortune 500 Multinational Corporations established in Chengdu, concentrated in four pillar industries including, electronic information, mechanical engineering, medicine and food (Naisbitt & Nasbitt, 2012). Today, Chengdu is one of the most developed cities in West of China; it is the center of industry, finance, communication, logistics and technology in Western China (Goodman, 2004).

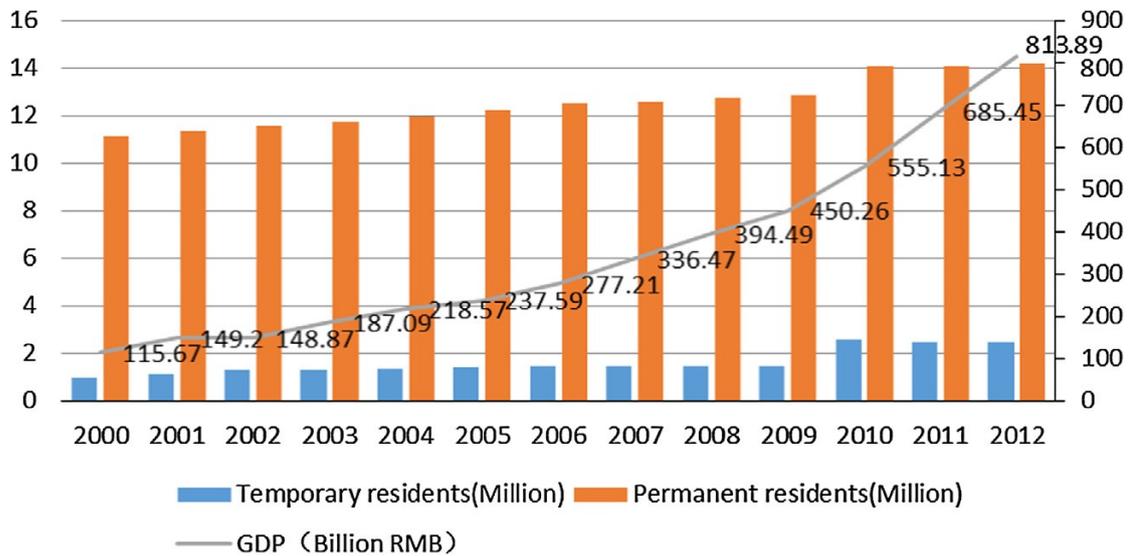
Figure 5. Location of districts, cities, and counties in Chengdu.



Source: Bo Qin (2014). City Profile: Chengdu. Cities 43 (2015).

The rapid industrial process in recent decades resulted in a massive urbanization of the city. With its rational industrial structure and open economic system Chengdu achieved fast GDP growth since 1990s. The annual rate of GDP growth from 2000 to 2012 is over 15 percent as Figure 6 shows (CSB, 2013). Meanwhile the industrialization process created a large amount of employment in the urban area it resulted in a move of labor force from the rural agricultural areas to the urban industrial areas. As the figure 7 shows, the permanent residents increased from 11.11 million to 14.18 million in the same period (CSB, 2013).

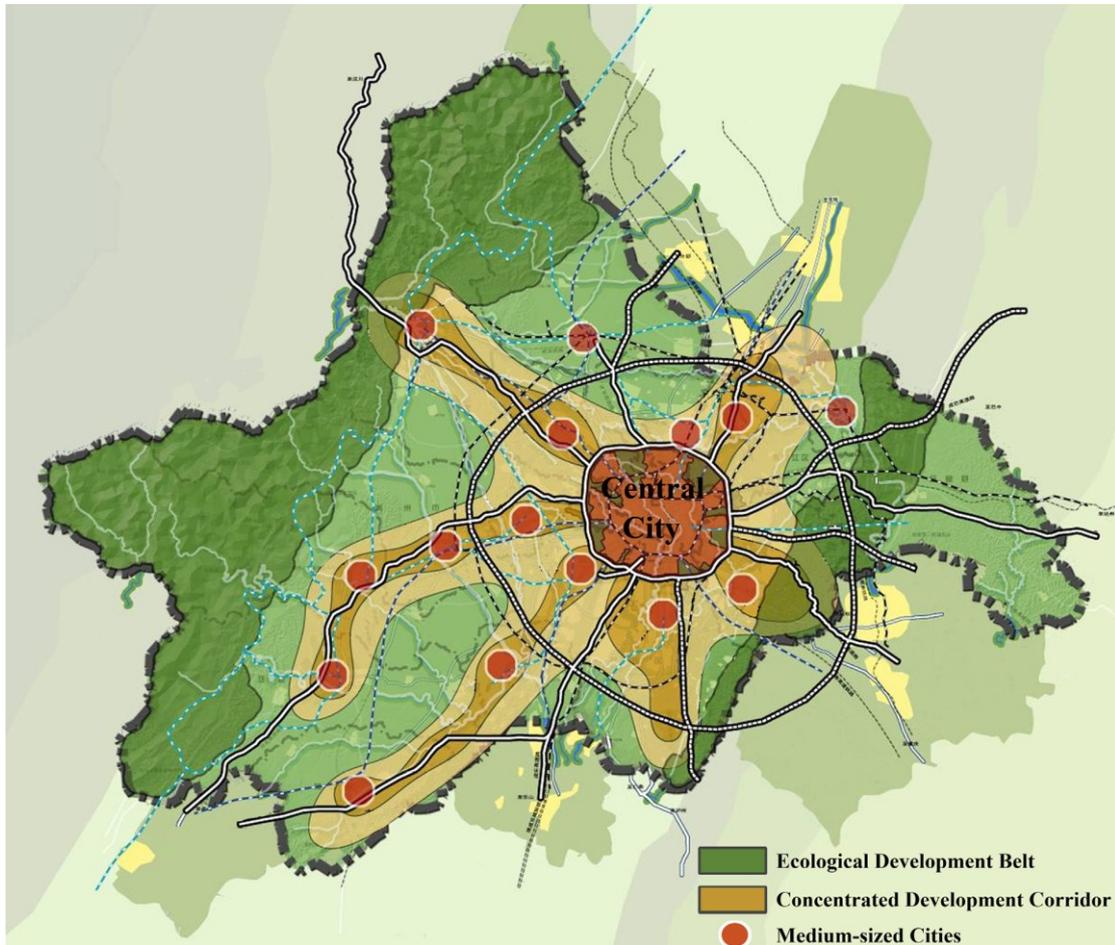
Figure 6. Demographics and GDP in Chengdu (2000–2012).



Source: Chengdu Statistic Year Book 2013.

In 1996, Municipal Government of Chengdu started to restructure its urban spatial layout (See Figure 7). In 2002, the 16th Chinese Communist Party Plenary Conference proposed a new policy of coordinated urban and rural development. The aim was to evolve traditional urban - rural structures and narrow the gap between the cities and areas of agriculture across the country (Bo 2014: 25). The city began practicing Coordinated Development urbanization in October 2003, it was focused on the ‘three concentrations’ project (Chen & Gao, 2011). In 2007, the reform pace accelerated, when the city formally launched its Coordinated Urban and Rural Development Program. Under the guidance of “Total Chengdu Planning”, the municipal government began to construct one central city, two belts, five wedge-shaped green spaces and six township development corridors as figure 8 shows (Bo 2014: 23). In the same year, Chengdu was designated to experiment a comprehensive implementation of the Coordinated Development (Zheng, 2010).

Figure 7. The central city, development zones, cities and corridors in Chengdu's latest plan.



Source: Chengdu Master Plan (2009).

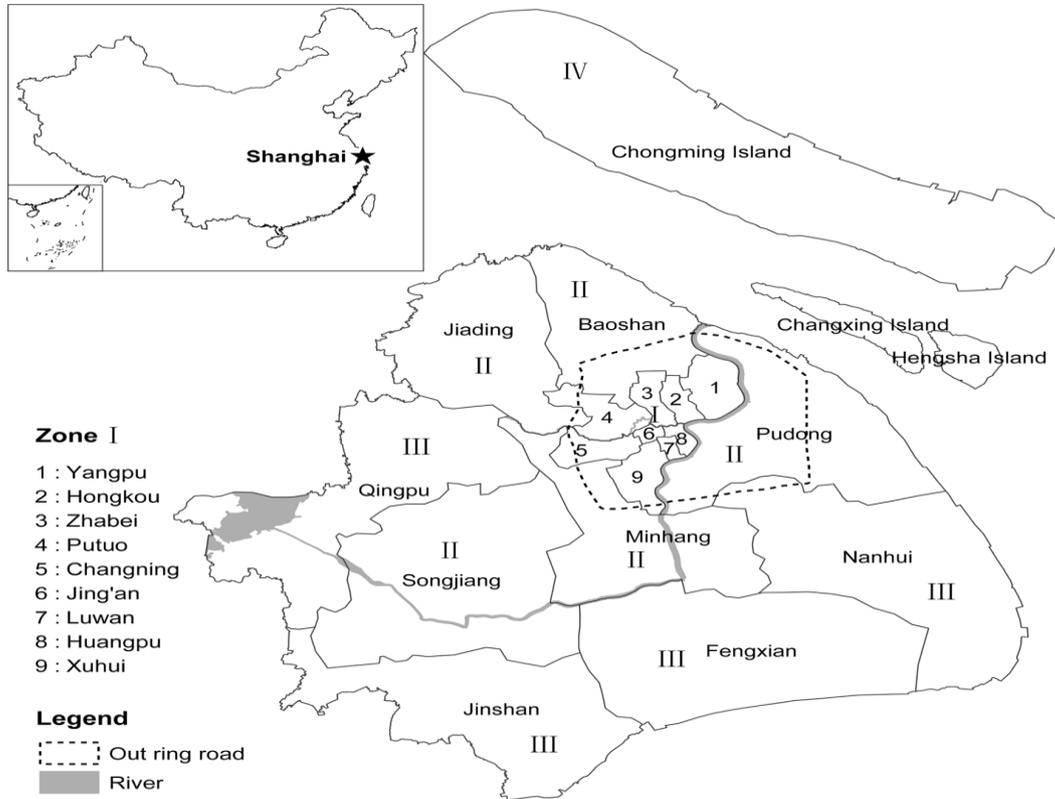
In 2009, China's former premier Wen Jiabao spoke highly of the progress and instructed Chengdu as an example for the nation with its coordinated development experiment (Chen & Gao, 2011). In the future that aim is that Chengdu will be

“Surrounded by 14 medium-sized cities connected with the six corridors and within this huge spatial framework there will be 34 small cities, over 150 towns, more than 2000 new rural communities, and spacious open spaces consisting of arable land and natural parks, together forming a multi-dimension spatial structure for Chengdu.” (Bo 2014: 23)

We now turn to Shanghai. Shanghai is one of the four municipalities directly leaded by the Central Government of China. The city is located in the east of the country by the west coast of the Pacific Ocean close to the Yangtze River Delta front (Wang et al. 2013). The development of the city benefited hugely from the pre-established structures, such as: convenient transportation, vast hinterland, and superior geographical conditions. Now it is the engine of Chinese economic growth and it plays a leading role in the Delta's economic development. Since the 1980s, the city experienced rapid economic and social development, achieved a massive urbanization process and urban expansion. Shanghai today is the symbol of Chinese modernity. It is not only the economic center of the country but also the driving force for leading the manufacturing, commerce and international trade in China (Yue et al. 2014: 786). Under the planned economic era, most of the human activities happened in the Puxi New District which is the west side of Huangpu River. However, since the reform launched after the 1980s, the Pudong area, the east of the river, gradually became the development core of Shanghai and achieved massive urbanization construction during these three decades. Today the Pudong area has transformed itself from a piece wasteland into an extremely developed area full of skyscrapers (Yue et al. 2014: 786).

In 2013, the total population of Shanghai was 24.15 million off which 14.32 million registered by Shanghai household registration (hukou). There was 90 percent of the total population engaged in non-agricultural production. The population today is two times the population of 1986 (SBS, 2014). The city has experienced several administrative division changes. Today Shanghai governs 16 districts and one county as shown in Figure 8. The nine districts in Zone 1 and parts of Zone 2 is regarded as the urban core region. (Yue et al. 2014: 786).

Figure 8. Location and administrative divisions of Shanghai (2009)

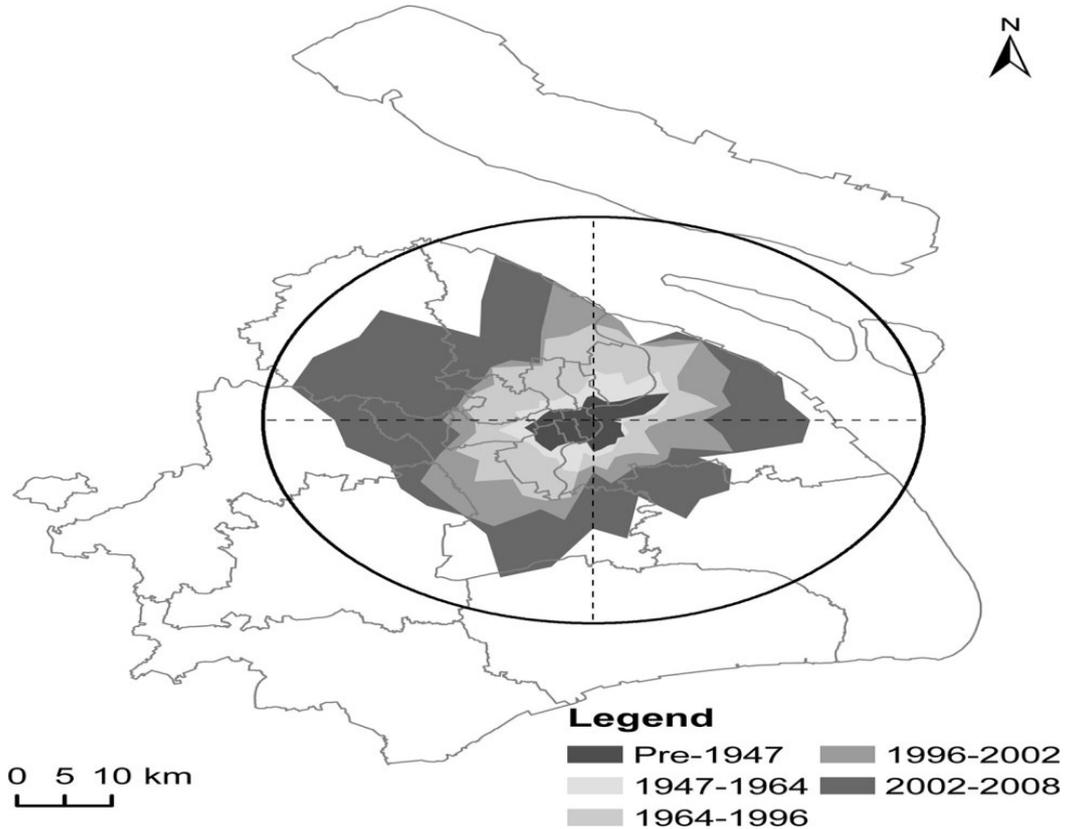


Source: Economic development, urban expansion, and sustainable development in Shanghai. 2014

Shanghai's economic development took off immediately after the Pudong New District formally was established in 1992. From 1991 to 2013, the average annual GDP growth reached 11.4 percent and the total GDP of Shanghai in 2013 was ten times bigger than in 1990 (SBS, 2014). Since 1990s, the occupation of primary and secondary sectors was sliding down while the tertiary sector occupation increased dramatically. In 2013, the tertiary sector occupied 62.2 percent of the total GDP in Shanghai whereas the primary sector only occupied 0.6 percent (SBS, 2014). The rapid economic development simultaneous brings massive social development and urbanization progress. Like Figure 9 shows, the city expanded dramatically because of development along paths that connected both urban center

with satellite towns in the peri-urban region (Yue et al. 2014: 787).

Figure 9. Urban expansion area and direction of the main city 1947–2008.



Source: Economic development, urban expansion, and sustainable development in Shanghai. 2014

Shanghai is the first city in China that launched the Coordinated Urban and Rural Development Program or and the Urban Rural integration plan. Pudong District is also the core region for Shanghai Municipality to eliminate dual economy structure in the city. The region was in 2005 selected as one of the national integrated development synthetic reformation experiment areas (Bao 2008: 34). The eleventh five-year plan and twelfth five-year plan of Shanghai guided the clear development guidance for coordinated urban and rural construction in this decade.

Like the rest of the country, both Chengdu and Shanghai experienced a rapid economic growth and urbanization process. Development conditions between urban and rural parts extended along with fast development. The dualistic economic structure and urban-rural separation were gradually formulated. The income gap between urban and rural residents increased dramatically during the same period (Bao 2008: 34). The unbalanced urban and rural development conditions stagnated further rural and agricultural development. It limited sustainable income increase for rural residents and also caused amounts of social unrest events related to urban and rural disparity in the city.

In general the phenomena of unbalanced urban-rural development condition can be easily found in both Chengdu and Shanghai. The urban-rural planning system, the administrative system were established separately. Besides, the social protection system and household registration system were also designed separately in the urban and rural areas (Bao 2008: 34). Coordinated urban and rural development symbolizes the future of China's national economy and the re-balancing development process in both cities play a significant role for China's urbanization process (IESM, 2011).

5.2 Chengdu Model: Town driving County, Urban-Rural Interaction

Municipal government of Chengdu was dedicated to make a long-term reform plan and institution to coordinating both urban and rural development, to fundamentally change the traditional dual structure and to solve the deep-seated urban-rural contradictions (Ye et al., 2013). The reform program is characterized as industry re-feeding agriculture policy, and to guide urban and township development in the countryside. Originally, the old urban-rural framework can be

regarded as the model that rural part sent agricultural products and labors to the city in exchange city's industrial products and other related services. Under the traditional dual urban-rural framework, the rural residents were gradually marginalized while rural environment had been destroying all the time. (Bao, 2008). The core value of the reform in Chengdu is to respect individual's right. Based on the individual's right, in recent years Chengdu has established its three reform pillars to create an institutional innovation triangle that covers property right reform, public equalization, and grass-roots democratization. All these institutional reforms are based on the respect for farmers and migrant farmers' rights (Naisbitt, 2012).

Chengdu Municipal Government started its pace in 2003. It established a specific institution dealing with coordinating the planning and development efforts among different levels of government agencies, to tackle reforms related with urban planning, land management, infrastructure construction, agricultural development and environmental protection. The institution is called Chengdu Coordinated Urban-Rural Development Commission (CCURDC) (Ye et al. 2013: 125)

The coordinated urban and rural development program not only contains physical planning to coordinate urban-rural land use, transportation, infrastructure, industrial location, housing, public facilities, and open space management. The program was also set to enhance the governance and to push series of institutional reform (Ye et al. 2013: 128). The main target of the program is to break the original dualistic structure, to reduce the gap between urban-rural income and public service. Also, to achieve social equalization, economic marketization, political democracy, and a new pattern urban-rural framework (Ye et al. 2013: 128). The program was expected as a major initiative to solve 'three agricultural

issues' and to realize sustainable development in the city (CCURDC, 2010). In China, the government is frequently been criticized as low administrative efficiency and conflict of function (Abramson, 2006). Therefore, to improve the implementation efficiency of the program, Chengdu firstly launched series of governance reform, and also to ensure coordination among jurisdictions at every level (Ye et al. 2013: 128). We now turn to the detailed measurements.

I. Property Right and Land Management

The transformation of the land property right system and the innovation of land management in the city are core tasks and also the bright spots for coordinating urban-rural development in Chengdu. To push further capitalization and to increase land using efficiency, Chengdu carried out series of policies, established related institutions for land management. The reform package contains several programs, such as the land rights certification program; innovative cultivated land protection mechanism; property exchange institution; connecting an increase in urban construction with a decrease in rural residential land policy; three concentration campaign and new type agricultural collective system. (Ye et al., 2013)

China has never stopped reforming its land policy since 1950s, after the reform and opening-up policy implemented in 1978, the land property rights have been gradually decentralized from the central government. Under the planned economy era, all land in the rural areas as publicly owned under the People's Commune System and was managed by the brigade or 'production team'. In the late 1970s, the government accelerated the land reform pace, gradually contracted farmland out from brigade to household through the implementation of Household

Responsibility System. Normally the rental period was set as 15 years for the first round and 30 years for the second round (Li 2012: 51). In the early period of 1980s, the household responsibility system established which contracted land use right to farmers stimulated their working enthusiasm (Zhou, 2010). In the year from 1994 to 1998, the Chinese government allowed employees from state-owned companies to purchase the public house at a subsidized price. The initiative built the basic foundation for today's modern real estate market (Wang, 2012). However, the rural land and house cannot be freely transferred due to China's strict urban-rural separated land management system (Li & Yang, 2011). Lacking the transfer rights, in general, symbolizes that rural residents are not fully protected by the comprehensive property rights including the rights of occupation, gains, and transfer (Barzel, 1989). The lack of transfer rights heavily restrained economic activities of farmers (Besley and Ghatak 2009) and strengthened the income gap between urban and rural residents (Li and Ding 2005).

In 2008, Chengdu Government launched its "No.1" document regarding strengthening the protection of cultivated land. To further reform and perfect rural land and house property rights which formally started rural property right system reform in the city (NDS 2010: 80). The main task of the document suggested is to confirm, certificate and circulate rural land, to define clearly rights of land use and land management. It also established ownership and title of the rural house through registering, confirmation and certificating rural land ownership project to increase property and income of farmers (IESM, 2011). The process be divided into three steps, right confirmation, certificate granting and land operation (Li & Yang, 2011). According to the propaganda, the process is called 'returning rights and empowering' gave the property rights back to farmers and established the foundation for the land exchange market (Li, 2012). In the past, due to the

historical reason, rural property rights were defined unclear. Although farmers possess the certain amount of resource for agricultural production, the resource could not be transformed into capital (Chen & Gao, 2011). The unclear, imperfect and non-transferable property right made farmers not been fully protected by the equal public service and political rights. Along with the accelerating modernization process in the country, the enormous urbanization cost stagnated sustainable human development. The process encouraged the government to define fully and confirm the property right for rural residents (Li & Yang, 2011). Based on the confirmation of rural land and house ownership, the government could successfully build a micro-foundation of the rural market economy, also to create the authority of grassroots democracy (NDS, 2010). The initiative can reduce the cost of urbanization while farmers were migrating to the urban area. It can return rights and freedom back to farmers and stimulate the free movement of the land factor, enabled them to enjoy equal opportunity and improve the general living standard (NDS, 2010). It is estimated that by the end of 2010, there were more than 33,800 brigades been assigned land ownership. More than 1.8 million households got their new titles of the agricultural land contract. The land titling has covered most of rural area of Chengdu (Li, 2012). At the end of 2016, there will be 90 percent of the land be issued and confirmed. (Xinhua, 2015) The reform successfully eliminated the systematic risk for further land system reform and created safety nets for rural residents. This initiative delegated the property right from collective economic organization toward rural individuals. It also provided legal protection for the use, revenue, and assignment of the property, enabled the possibility of the land use right transaction. The reform broke the traditional dualistic property regime that was created in the planned economy era, further stimulated the movement of production factors and promoted development right equalization between urban and rural area (NDS, 2010).

The arable land in rural area shrinks dramatically due to many reasons like the city expanding or environment deterioration in such a long-term urbanization process. How to protect current limited arable land and to establish a land protection mechanism was a heavy task for the government to solve. During the period of re-balancing urban-rural development process, Chengdu government established an innovative cultivated land protection mechanism and formulated a cultivated land protection foundation system (NDS 2010: 91). The government spent 2.6 billion RMB to establish cultivated land protection fund to subsidies to farmer's livelihood (NDS 2010: 91). The implementation of the mechanism effectively encouraged farmers to protect the cultivated land. In recent years, Chengdu Government carried out 'golden land project' and 'fertile soil project', invested hugely to expand the effective arable land. The mechanism protected cultivated land and achieved land dynamic balance. It also improved comprehensive agricultural productivity and further stimulated socioeconomic development in Chengdu (IESM, 2011).

In 2009, Chengdu established the first rural property exchange institution in China which can be regarded as the core step for achieving rural property capitalization (CDAEE, 2015). Since then, the property exchange had been gradually established in various districts and regions in both urban and rural areas. It also successfully built a rural property rights circulation service system, effectively promoted the transformation from rural resource to capital (IESM, 2011).

The government realized it is important to build a marketized mutual sharing mechanism to balance the benefit of land use. Also, carried out the 'CUR' policy that means 'connecting an increase in urban construction with a decrease in rural

construction land'. The policy effectively alleviated the shortage in the land for urban construction as well as improved overall efficiency for rural construction land (Qu et al. 2011: 134). In 2005, Ministry of Land and Resources approved Chengdu as CUR pilot city. The main content of the policy is to connect an increase in urban construction with a decrease in rural construction land. It uses the differential graded land revenue to push further coordinated urban and rural development as well as to enhance rural-urban integration (IESM, 2011). With the help of this CUR policy, the government can expropriate rural construction land for urban construction. The land can be used more efficiently under overall planning and arrangement (Wei et al., 2014). The policy rationally redistributed productive factorial resources, generated maximum level economic and social benefit, enhanced mutual prosperity for both urban and rural areas. Not only urban area received larger development space for its expanding industrialization, the rural area also received more high-quality arable land and capital inflow. Part of capital was used to the construction of Farmers' concentrated residential community and other related rural infrastructure (IESM, 2011). The CUR policy has become the realistic carrier for urban-rural integration, new-type urbanization and agricultural modernization that made resource complement between urban and rural area realized in Chengdu.

All policies listed beyond can be seen as a part of 'three concentration program' in terms of land. Concentration of land has two major parts contains concentrating and de-segmenting fragmented land, at first to concentrate the construction land, and second to re-organize and turn certain parts of the land into farm uses and urban expansion. (Chen & Gao, 2011). The city protected the land-use-right transaction, and also encouraged rural farmers move into new residential communities. Based on the current urban system structure, Chengdu has improved

its urban planning mechanism based on the principle of urban-rural integration and regional coordination. Traced back to 2003, the government pushed out its 'three concentration program'. Namely, "industry concentrates in the centralized development area, peasant concentrates in the centralized community, and land concentrates on large-scale management" (Bao 2008: 36). The Metropolitan has constructed and fostered several small-sized cities and county-level cities and gradually guiding farmers to reside centralized in townships and small size cities new established. The city also transformed farmer's identity and provided corresponding employment training and social protection service to provide them higher living conditions. The city also efficiently constructed large amount of new-type urban and rural communities, improved its urbanization level greatly in recent years (IESM, 2011).

Along with the urbanization process, also benefit from the relaxed household registration policy. There were a large number of young labors moved out the village, migrated to the urban area and engaged in non-agricultural sectors. However, the young group left the countryside women, children and elderly which make efficient modern farming impossible. Based on this situation, Chengdu government encouraged modern agribusiness enterprises to lease contiguous parcels of agricultural land and develop large-scale modern mechanized farming operations (Ye et al. 2013: 132). Under the original economic model, agriculture in southern China was characterized as small-scale peasant economy. The small parcel, out-of-shape and large road covering also characterized farmland in Chengdu, which could not meet the demand for modern agricultural development. Land consolidation has become an essential measure to push urban-rural integration (IESM, 2011). Since 2004, Chengdu carried out series of policies and mobilized land consolidation movement, had invested 3.8 billion RMB for land

consolidation, rebuilt amount of large-scale farmland protection demonstration areas (IESM, 2011). Besides that, based on the current household contract responsibility system, the government also deepened rural collective economic management system to achieve land into large-scale management centralization also strengthened the new-type rural collective economy. With the improvement of agricultural productivity, the general income of rural residents had been enhanced which contributed to further rural-urban migration. (IESM, 2011)

II. Construction for Urban-Rural Integration

Substantial economic development is the key factor and also the basic foundation to break the traditional dual economy. Constantly creating and expanding new modern sectors in the urban area to absorb more surplus labor from the rural area is still the most important task the government has to achieve. Since the coordinated urban and rural development program was implemented, Chengdu's government concentrated on several reforms to destroy barriers and obstacles for rural-urban migration. The government firstly planned functional zones for industrial clustering and improved the working conditions for migrant workers. Secondly, it reformed the household registration 'hukou' system to enable more surplus labor to engage in non-agricultural production. Thirdly, the government developed modern agriculture and rural tourism to increase the general income of farmers (Ye et al. 2013: 129).

Under the impact of 'three concentration program', a large amount of small industrial parks formerly scattered throughout the metropolitan region has been concentrated into a series of industrial function zones. Besides that more than a thousand new communities have been constructed to concentrate scattered farms

and small settlements (CCURDC, 2010). Along with the rural residents concentrating into cities and new communities, the average of land resource each family owns has increased. The agricultural productivity has been greatly promoted with the help of new farming approaches and large-scale farmland production methods. Along with the improvement of agricultural productivity, the general increase of rural household's income played a positive role for promoting rural modernization and non-agricultural sector development (Jiao, 2011).

The industrial function zone was not a new product when the program was carried out in Chengdu. Back in 1990s the zone fever reached its peak and there were thousands of economic zones being established all over China. This occupied a large amount of arable land in the countryside. Chengdu had 116 industrial zones in 2003, and most of them located in the peri-urban area (Ye et al. 2013: 130). After that, the government readjusted, shut down some of the industrial zones and regrouped many small and medium size enterprises into 13 municipal-level and 49 county-level strategic function zones. Most of the industrial zones were specializing in electronic information and software, automobile manufacturing, biopharmaceuticals, petrochemical engineering, and other industries. It changed the previous industrial development pattern that could be characterized as a one village, one factory model (Ye et al. 2013: 130). Chengdu had successfully attracted a large number of foreign direct investments. As a benefit from the newly planned and concentrated industrial zone, the level of agglomeration economy increased. The general working efficiency of all kinds of infrastructure was improved as well. All of this played a positive role in enhancing the international competitiveness of Chengdu (Jiao, 2011).

In recent years, Chengdu government started to push the urban-rural planning

integration further and insisted on considering village and county construction as part of the whole urban planning system. The first transition of the urban-rural relationship happened in decision makers' mind. Urban planners in Chengdu broke the traditional dual urban-rural planning ideology and gradually combined both urban and rural planning to one system. The second transition is to break the fragmentation of planning management and establish an integrated planning management system. The planning bureau of Chengdu extended their administrative organization into the village level, establishing local planning stations in towns to manage the planning affairs in the rural area (Jiao, 2011). Chengdu is also the first city in China employing many rural planners. For their better knowledge of rural livelihood they are put in charge of planning management in the rural area (Ye et al. 2013). The city implemented a series of urban planning guides, including the Public Facility Planning Guide and the Socialist New Village Planning Guide to ensure the new type of urbanization could facilitate public services in the rural part particularly focusing healthcare, employment, birth control, cultural activities, and other fundamental needs (Hu, Hui, Zeng & He, 2009). A new mode of urban and rural integration patterns has been formulated to avoid a lack of rural planning and low-level unchecked construction. The Chengdu Planning Bureau enhanced its original community infrastructure and service standards to meet the demand of sustainable development and human urbanization. It also established a four-level planning hierarchy that covers all municipal, district/county, township, and village/community levels (Ye & LeGates, 2013).

Similar with vast of cities in China, Chengdu expanded its infrastructure investments and accelerated construction speed in recent years. Today, the city has already built its core traffic infrastructure to cover both urban and rural areas. It

ensured that every county and village is connected to the road, water, electricity and gas network (IESM, 2011). At the same time, the city decreased the digital gap, including telecommunication, broadcast and television, amongst different regions, to make sure both urban residents and rural residents can share the benefit of modern civilization and thereby greatly improve the human capital in the countryside (IESM, 2011).

To implement industry ‘re-feeding agriculture and urban supporting rural development mode’ is an enormous and complicated systematic project, which Chengdu has to tackle to reduce the regional gap. The project includes infrastructure construction, industry park construction, rural new-type community construction as well as public service construction. This requires a large amount of investments. In order to solve the problem ‘where the money comes from’, Chengdu established a diversified investment and financing mechanism. It established several modern agricultural development investment companies, small county construction investment companies as well as modern agricultural logistic companies. Companies established for investment played an effective role in motivating a social capital flow into the agricultural sector and rural development (IESM, 2011).

III. Public Service and Administration Reform

Public administration reform is needed to change the situation of overlapping functions and urban-rural separation, in order to meet the demand of coordinated urban and rural development. Through department division and incorporation, the government implemented an amount of functional adjustment, promoted public administration and service convergence and streamlined governmental organs to

improved administration efficiency (Chen & Gao, 2011). As a part of the ‘three concentration program’, the government stimulated rural residents to move into the new higher density residential communities with better-constructed facilities. It helped them settling in small cities and towns in the countryside (Chen & Gao, 2011). Besides, Chengdu government launched several public service and administration reforms regarding urban residence, entitlement to social security and welfare and public services. It deepened the household registration system reform and made a contribution to the rural-urban migration process (Chen & Gao, 2011).

The ‘Hukou’ reform could be one of the most important initiatives for coordinating urban and rural development. Today the city has established one of the most open systems in China. Chengdu gradually eliminated restrictions for rural-urban migration and allowed rural residents to work and live freely in the city. It also permits people from rural areas who migrate to the urban area to retain rural residency rights, including their usage rights of agricultural land (Ye & LeGates, 2013). For Chengdu residents it does not matter whether they are from rural or urban areas. As long as they have paid their social security insurance fees for more than one year, all residents have the right to live anywhere in the municipal. They are also entitled to enjoy all public services in the place where they live (Ye et al. 2013: 130). The integrated open ‘hukou’ system provides rural residents with the fundamental right to enjoy the same level of public service as the urban population does.

The equalization of public services is another major initiative Chengdu implemented to break down the dualistic economic structure. The equalization process brought forth a positive effect and covered all urban, peri-urban and rural

areas. By constantly enhancing its education, job training, healthcare and other related public services, the government provided a better institutional environment for migrant workers. They have it easier to adapt to modern economy and urban life as well as to settle down and integrate in the urban area (Ye et al. 2013: 128). The Government launched a series of policies to ensure the employment of rural migrants in the city. Examples for those are providing subsidies to urban firms for migrant workers training, providing micro-loans for rural migrants for self-employment efforts and providing subsidies to firms that give the same social insurance to rural migrant workers as to urban workers (Chen & Gao, 2011).

In terms of education the government was dedicated to reduce the education quality gap between rural and urban parts. It invested hugely to realize mutual sharing of high quality educational resources in both urban and rural area. The educational quality and teachers' qualifications in rural areas have been greatly enhanced. The government has also successfully upgraded hardware facilities for hundreds of primary and middle schools (Hu et al. 2009). In the last decade, the city has built more than 400 standardized new middle schools with modern classrooms, playgrounds, restrooms, cafeterias, and dormitories meeting the same standards as urban middle schools. Meanwhile the educational content in rural areas is identified as being of the same level as in the urban areas (Hu et al. 2009). Chengdu is also the first city dedicated to achieve the same level of popularity of high school education between urban and rural region in western China. By establishing an urban rural integrated employment system to fully protect employment for graduates, it basically achieved full employment for urban and rural residents (Ye et al. 2013: 128).

For health care, in recent years, Chengdu established a large amount of public

hospitals in the counties and fully finished constructing standardized health centers in townships as well as village health posts in rural areas. It contributed largely to extend healthcare coverage from urban areas into rural areas. Meanwhile, the city has explored various types of urban-rural integrated social protection patterns and established its endowment insurance system for farmers and county residents. Besides that the government also implemented a comprehensive insurance institution for non-urban citizen employees. The city combined a new rural cooperative medical system and basic medical insurance for urban residents, further realizing the integration of the medical insurance system for both urban and rural residents (Ye et al., 2013).

Chengdu attached great importance to pushing its democratic progress in recent years. It effectively motivated and encouraged political participation in rural areas and also promoted decision transparency and public supervision. The village council is a little bit different as the village committee in the rest of China. It is elected for three years with one vote per person. The village council is entitled to address significant issues such as how to use collective assets, allocate available financial resources, and set the boundaries of agricultural land to which households have usage rights (Ye etc. 2013: 133). Thanks to the well working system of grassroots democracy, land rights clarification work can be finished successfully and effectively which enables rural residents to hold both House Property Right Certifications and Certifications of Arable Land Use Right Contracts (Ye etc. 2013: 133).

5.3 Shanghai Model: Industry Re-feeding Farming, Township Enterprises Driving

Shanghai as one of the most influential and developed cities in China, always at the leading position during China's transformation process, contributed hugely to economic development in the country for several decades. The city now is dedicated to constructing the international center of economy, finance, trade, and shipping. The development is not only for Shanghai itself but also for promoting the regional integration of the Yangtze River Delta as well as the national development of China (Wang et al., 2013). To achieve comprehensive modernization in the city, Shanghai hopes to balance its urban and rural development by pushing the transformation of economic structure and development. Meanwhile, Shanghai puts its livelihood enhancing and harmonious society building as a crucial position to stimulate further economic growth and to achieve urban-rural integration (SADR, 2013). As the economic center of China, policies implemented in Shanghai have to adapt the requirements of national macro development trend and internal city conditions. Along with the rapid growth of the vast cities in the country, Shanghai is now facing an enormous challenge and competition, especially from rivals like Shenzhen, Tianjin, Beijing and Chongqing (Wang et al., 2013). To keep its leading position in development, the urgency to push new urbanization patterns has gradually appeared. In the recent years, many cities like Chengdu and Beijing accelerated their coordinated urban and rural development process. In some domains, the development outcome those cities achieved are tremendous compared to what Shanghai has got (Chinadaily, 2011). The situation forced Shanghai to deepen its reforms and to attach more importance to its coordinated urban and rural development in order to finally achieve urban-rural integration and to break the dual economy structure.

The integrated urban and rural development could contribute to accelerating urbanization processes and to realizing coordinated growth among investment, export and consumption effectively. It would bring benefit for the service sector development in the peri-urban and rural area, to increase the ratio of the service sector in the region and to formulate a new service sector preference economic structure. The program helps the city to establish a newly patterned city frame system to break the traditional mononuclear urban development mode (SADR, 2013). Therefore, in recent years, to push development transformation, Shanghai Municipal Government carried out a series of measures to further accelerate the urban-rural integration. It optimized the layout of the urban space, guided resource factors to assemble in the rural area, and extended infrastructure construction and public service to the grassroots in rural area (Gu, 2006). Throughout the last decade the importance of developing rural areas in Shanghai, has constantly became more important. The city created a sound pattern of urban and rural development to achieve mutual prosperity and to push further socio-economic transformation in the municipality (Gu, 2006).

Since 2007, the scientific outlook of development and harmonious society building has become the fundamental principle of China's development. The people-centered development principle and the improvement of people's livelihood have become the main target for the country (Hu, 2007). The coordinated urban and rural development policies Shanghai carried out are urgently needed to enhance the general living standard of people. Shanghai insisted on reforming its original developmental system and launched a series of policies and measures. The institutional reform contains urban planning and public administration and services to solve the most direct and real issues of citizens (ZFS, 2005).

Different as Chengdu, Shanghai started its pace much earlier and the process can be traced back to the mid-1980s. Shanghai has now entered the mutual period of the urbanization process and has a higher socioeconomic development record than the west of China (ZFS, 2005). In general the coordinated urban and rural development process can be divided into three phases. The first phase began 1984 when Shanghai started its coordinated urban-rural planning and construction. It readjusted the sector structure, stimulated rational distribution of urban-rural resources and accelerated social development in both urban and rural areas (Shanghaigov, 2012). The Yangtze River Delta is the first region in China to develop a rural collective industry to push rural industrialization and urbanization processes. Shanghai also established its mode of industry re-feeding farming in the rural area at that time. Since then, the traditionally separate urban and rural development systems have gradually been eliminated (ZFS, 2005).

The coordinated urban and rural development program helped Shanghai to break free from planned economy and helped the rural industry to develop. Due to the rapid expansion and development of enterprises in townships and villages (TVEs), there was an amount of surplus labor that got employed in the secondary and tertiary sector (ZFS, 2005). Meanwhile the large profit gained by TVEs is used for further rural construction. The rapid transformation of the agricultural economy into an industrial economy stimulated migration processes and enhanced the general improvement of people's livelihood. The industry re-feeding agriculture mode provided a solid financial foundation for social development and infrastructure construction in the rural area (ZFS, 2005).

In 1990s, the Coordinated Urban and Rural Development entered the second

phase. Shanghai accelerated its urban-rural integration process. However, the construction of the urban center was much faster than that of the rural area, which widened the development gap between these two areas (Shanghaigov, 2012). In 1992, China formally established its socialist market economy. Shanghai achieved remarkable economic growth. Along with the rapid rural urbanization and modernization, the general income of rural resident increased. Enterprises in townships got further developed, the industry park had been expanded, rural infrastructure conditions have been enhanced greatly (ZFS, 2005). Meanwhile, along with the deepening processes of industry re-feeding agriculture and city re-feeding countryside, rural social affairs in Shanghai improved all the time (Zhou, 2014). In 1992, Shanghai expanded its rural endowment insurance pilot and fully covered all its townships later. As China opened up the market under the guidance of the government, large amounts of capital, technology and skilled labor rushed into small townships and rural areas and provided more employment opportunities for rural surplus labor (ZFS, 2005).

From the beginning of 21st century, the coordinated urban and rural development entered the third phase (Shanghaigov, 2012). Governments on all levels increased their investments for rural construction and accelerated the coordinated urban and rural development process after 2007, when the central government re-emphasized the importance of the program. Although the economy developed rapidly the situation of a widening income gap has not been changed. Shanghai paid attention to eliminating the dualistic structure and to reducing the development gap between urban and rural areas (Wang, 2013). In 2011, Shanghai launched its 12th five-year plan which provided new blueprints and directions for further urban and rural development. In the recent years, some policies and measures Shanghai carried out, unfolded a positive effect in the new pattern

modernization in the city (Shanghaigov, 2012).

I. Land Reform and Management

Shanghai is now facing the enormous challenges of land reforms and management; the mega city has to stay well balanced between rapid urban expansion and the preservation of the fertile agricultural land in the rural parts. The city not only has to stimulate its manufacturing development but at the same time counteract severe environmental degradation. The issue of an aging infrastructure had negative impact on the investment environment keeping its leading position in the country (Wu, 1999; Yuan & James, 2002). Although Shanghai produced a high percentage of China's GDP with its enormous city population, almost two-thirds of the land in Shanghai was classified as agricultural. Therefore, maintaining this high ratio of agricultural land as well as distributing urban land usage within the remaining area is a complex challenge for the government (Ren et al. 2008).

Shanghai is one of the earliest cities to renovate its original land policy since the reform in the 1980s. It started to experiment with transfers of land usage rights for payment in 1987. After that land has gradually become one of the important revenue sources of the local government (Wang, 2013). During this decade, most of the land in the city has been converted into high-end residential or commercial zones. Developers made large profits from the construction and development and caused land prices to increase significantly, which rendered ordinary local residents unable to afford housing in the city's core area (Yue et al. 2014).

As a part of land reform, Shanghai dedicated to push its 'three concentration program'. The program contains to push peri-urban industry concentrate in

Industry Park, to push farmers in the rural area concentrate in town and to push land use concentrate on scale management (Shanghaigov, 2004). The policy was set to realize further urban-rural integration, agricultural modernization, rural urbanization and farmer citizenization. The concentration program Shanghai carried was much earlier than it was launched in Chengdu. It can be traced back to 2004 when Shanghai Municipal Government released its No. 45 document 'Pushing Three Concentration Program to Speeding up Suburban Development in Shanghai' (Shanghaigov, 2004).

At first, to push peri-urban industries to concentrate into industry parks, the government implemented a series of policies including infrastructure planning, integration and project layout unification (ZFS,2005). The concentration program helped with the elimination of the borders between urban and rural areas. It also encouraged enterprises in the urban areas to joint ventures to invest in and develop the industrial park in the peri-urban area (Yue et al., 2014). As the result of this concentration program, the basic economic structure in the peri-urban region changed strongly. The density of industrial sectors increased while the environmental conditions in the city had been improved (ZFS,2005). Today, Shanghai has created a large number of modern industrial clusters that cover important position in the world including microelectronics, automotive, chemical industry, iron and steel, modern equipment manufacturing and shipbuilding sectors (Wang et al. 2013).

Secondly, based on the prerequisite to respect the wishes of farmers, the government guided farmers in the countryside to move and concentrate in townships in rural and peri-urban areas (ZFS, 2005). It also carried out a Homestead Replacement Policy to exchange farmers' original housing for newly

built modern, concentrated housing equal in space or to compensate farmers monetarily, estimating the value of their original house. Homestead replacement policy enabled farmers to obtain the real estate and improved their family's assets (ZFS, 2005).

Based on new mode's farmers' joint cooperation, Shanghai encouraged small scale farming to concentrate on large-scale production. It attracted a certain amount of rural investment corporations to develop large-scale agricultural production in the rural area. It strengthened the connection between farmers and markets, established large amount of rural collectives, which involves all categories of agricultural production, and stabilized the rural employment rates (ZFS, 2005).

Besides the 'three concentration program', the city effectively deepened its rural reform and construction projects to meet the demand of the new mode urbanization and new-type countryside construction (Feng & Wang, 2010). Similar to Chengdu, a series of policies such as homestead replacement, urban construction land increase and rural construction land decrease systems and the circulation of usage rights for collective land were released. Re-planned villages in the rural area strengthened rural resource consolidation, increased efficiency in the use of monetary capital and accelerated the improvement of the villages' appearance.

II. Integrated Urban and Rural Planning

In the recent years, Shanghai has been accelerating its reform pace to further push urban and rural integration. It made significant progress in breaking the old dual

system apart and gradually approached integrated urban-rural planning. Following the requirements of urban-rural integration, Shanghai brings rural socioeconomic development consideration into the whole urban planning system instead of planning both urban and rural areas separately as before. The city gradually shifted the focus of economic, industry and infrastructure development from the center of the urban area toward peri-urban and rural areas (Li & Ren, 2008). Meanwhile, Shanghai effectively pushed its urban-rural construction and management integration forward, trying to change its original urban planning ideology that can be characterized as ‘urban biased policy’ (Li & Ren, 2008). The city updated its initial urbanization strategy to achieve the new-pattern urbanization mode which was well coordinated with the construction of other cities in the Yangtze River Delta. It successively formulated an interactive and integrated urban-rural planning pattern. (Yue et al., 2014)

Shanghai has devoted itself to push for new township construction in the suburban region, guiding urban population and industry concentrate on new town agglomeration. It created a city-industry which successfully combines living and business in an appropriate urbanization development pattern (Sun, 2010). The construction of new towns in suburban areas stimulated not only the urban-rural integration in Shanghai, but also promoted regional integration in the Yangtze River Delta. It further enhanced the general living standard of people who live in the region between the city and the countryside (Sun, 2010). Meanwhile, the city also readjusted the relationship between urbanization processes and agricultural production. To further push its new-type countryside construction in the rural area, it broke the traditional extensive mode of urban-rural planning through rearrangement of land concentration (Sun, 2010). As a result, the efficiency of land usage has been enhanced dramatically and the intensive urban-rural

construction mode has gradually been formulated.

To achieve coordinated Urban and Rural Development, well-conditioned infrastructure is crucial. Shanghai invested massively in the infrastructure construction in both urban and rural areas particularly focusing on the rural area. From 2001 to 2009, the infrastructure investments increased from 51 billion to 211 billion RMB (Lv, 2014). The strongly enhanced public transportation system that connects countryside, townships and peri-urban regions with the center of the urban area increased the density of the road network. (Lv, 2014). The city also promoted infrastructure related water supply, environmental protection and farming irrigation to improve the agricultural productivity and the general living standard of the farmers. (Lv, 2014) However, as some scholars criticized, the infrastructure construction is still not evenly distributed; the districts producing more economic output tend to be more likely to receive higher investments (Yue et al. 2014).

Along with the new wave of city construction, Shanghai improved its public administration. The city formulated a modern civil service system that covers both rural and urban areas and promoted a city grid management that established a high-efficiency long-term mechanism of city management (SADR, 2013). Besides that, the city reformed its administrative examination and approval institution, effectively delegating power and rights related to project approval, land use, urban construction, traffic management and city greening to lower level administrative units. This was done to raise work enthusiasm and efficiency at the county and district level government agencies (SADR, 2013). The newly formulated public administration in Shanghai, particularly in peri-urban and rural area, effectively integrated all regions into one, eliminating obstacles for further pushing

urban-rural integration (SADR, 2013).

III. Deepening rural socioeconomic reform

As part of Shanghai's strategic development plan to keep its economic advantage, the government had to reform and invest heavily in public service, to further improve its education, healthcare, and other living facilities (Wang et al., 2013). To ensure both urban and rural residents can equally share the achieved development outcome, Shanghai constantly promoted and enhanced its social service and protection system. At the same time the city is dedicated to achieve agricultural modernization to use its agricultural production improvement and modernization to promote a coordinated urban and rural development as well as to eliminate dual economic issues (Wang et al., 2005). Shanghai is one of the first Chinese cities that completely canceled the agriculture tax. Based on the achievements of the reform of rural taxes and fees, the city continued accelerate its reform pace in rural community shareholding cooperatives as well as rural employment and resource allocation optimization (SADR, 2013). At the same time, it encouraged farmers to organize all kinds of communities, like the land and professional stock cooperative economic organizations to ensure individual farmers obtain long-term profits from land use (SADR, 2013).

The city reformed its rural employment institution and largely canceled restrictions concerned with migrant workers. It has required employers to sign the same working contracts and provide the same wages and social insurance for migrant workers and urban residents (SDRG, 2012). Meanwhile, it enhanced the original employment system in the urban areas and established training programs for migrant workers. It also optimized the employment environment in the urban

areas and strengthened the working ability of migrant workers (GOVCN, 2015). The city implemented policies providing spatial employment credit for surplus labor and low-income farmers who engage in non-agricultural sectors to further encourage surplus labor to escape from the rural area and agricultural production (SDRG, 2012).

Shanghai prioritized rural public service development and the improvement of general living conditions for rural residents. For coordinating its public services in both urban and rural areas as well as to reduce the development gap, the city relocated the public resources and expanded social service resources, particularly those of education and healthcare in peri-urban and rural areas. It effectively improved the public service level outside the city and ensured that rural residents have access to high-quality public services (Gu, 2006). The city increased its investment in rural education and encouraged social capital flow to the countryside to further push the development of education. It also increased the education development budget of townships and the peri-urban area to achieve a balanced development of education in urban and rural areas (Shi & Chen, 2008). Since 2005 Shanghai canceled the tuition fee for primary and secondary public education in rural areas. The city established the Special Fund for a Public Educational Platform and enhanced the overall planning for both urban and rural education development. The city strives for the installation of compulsory education and to reduce the education quality gap between different areas of the city (SADR, 2013). At same time, it implemented the urban-rural education integration project, rationally distributed the layout of schools, guided high quality educational resource flows into rural areas to expand the high quality education coverage and also invested more to provide other public educational resources for township residents, farmers in rural areas and migrant farmers in the city (SADR,

2013).

Besides the development of education, the city increased its financial subsidies for pushing for a balanced development of healthcare. It built a cooperation platform for hospitals to share the technology, talents and administration, to effectively enhance the general public healthcare service level to provide a more convenient service for both urban and rural residents. The city trained large amounts of medical doctors for the township and community hospitals which enabled residents in peri-urban and rural area to access high quality health resources (SADR, 2013).

Shanghai formulated its social protection system. It upgraded, integrated and perfected its original social insurance institution and accelerated the construction of the new model urban-rural coordinated social protection mechanism. The city also carried out a new type of a rural social endowment insurance system, which achieved full comprehensive endowment insurance coverage in the rural area (Tang, 2011). This was done to constantly reduce the financial gap between rural and urban areas in the new rural cooperative medical care. During these years, Shanghai perfected its urban-rural integrated social assistance system and reduced the gap between different areas. It built up a comprehensive multi-level social assistance system including the basic living allowance, health care, education, housing subsidize, emergency rescue and social rescue to maintain the basic living condition of vulnerable households. The city also developed its social welfare and charity system in order to reduce the size and amount of vulnerable groups (SADR, 2013).

5.4 Similarities and Differences of Shanghai and Chengdu Models

During recent decades, the general urbanization strategy in the country has been put into practice through various stages in many cities including Chengdu and Shanghai. Like other developing countries in the world, in the 1950s and 1960s, China firstly implemented an industrial and urban preference development model that defines development as basic structural transformation (Stuart & Gareth, 2010). Before the implementation of China's opening up and reform policy, goods and services produced in rural areas were underpriced while goods flowing from urban areas to rural areas were overpriced due to severe urban bias development patterns, which has also been confirmed by Lipton. Various agricultural taxes and fees levied by local governments and other departments also greatly increased the farmer's burden (Lipton, 1977). Meanwhile the population was strictly restricted from its free movement, the establishment of household registration, known as the 'hukou' system, demonstrates that the elites who govern China in the urban area formed political alliances to prevent social resources to flow into rural areas. These actions caused an increasing disparity between urban and rural development (ibid.). As stated by Lipton:

“The rural sector contains most of the poverty, and most of the low cost sources of potential advance; but the urban sector contains most of the articulateness, organization and power. So the urban classes have been able to ‘win’ most of the rounds of the struggle with the countryside; but in doing so they have made the development process slow and unfair” (Lipton, 1977: 1).

After China opened up, the economic model has been shifting from planned

economy towards market economy. To achieve rapid economic growth, free labor movement is indispensable. The process of labor migration and capital accumulation accelerated and brought rapid economic growth and led to the improvement of living standard in both rural and urban areas. Most of the surplus labor released from agricultural production led to the creation of migrant workers in the city (Zhao, 2004). However, in this stage, the main ideology held by the government can be summarized as what Gunnar Myrdal and Albert Hirschman call the growth pole theory (Desai & Robert 2008:83). China still put a large effort on city construction, social development and economic growth in the urban center. It deeply believed that the development outcome will gradually spread and trickle down to rural villages. Indeed, rural areas in both Chengdu and Shanghai had changed noticeably; rural livelihood got further enhanced. Nevertheless, in general GDP growth became the solely important target to achieve for local governmental officials, whereas human development improvement was neglected, environmental conditions deteriorated, and income and regional inequality were hugely extended. The opening up of the country did not reduce the development disparity and failed to break the traditional dual system between urban and rural area.

The coordinated urban and rural development program for both, Chengdu and Shanghai, is set to solve the unbalanced development conditions. It aims to further stimulate migration processes and improve human development, and finally to achieve urban-rural integration to break the traditional dual economic structure.

Based on the Lewis-Ranis-Fei model, to further stimulate economic development in the region requires a constant migration process created by surplus labor as well as capital accumulation for the modern sector. (Lewis 1954; Ranis & Fei 1961) As

part of the program, both cities further diminished their household registration restrictions, removed barriers to the migration process and set series of employment protection mechanisms in the urban region to attract and encourage rural surplus labor escape from the rural area and agricultural production to engage in urban modern sectors. (Tang, 2011) Meanwhile, Chengdu and Shanghai put significant focus on their industrial development and succeeded. The ‘three concentration program’ had built a better investment environment that allowed attracting domestic and foreign investment, and ensured that modern sectors could fully absorb the surplus labor released from the rural area.

One of the reasons why these two cities could implement coordinated urban and rural development programs is that both cities have strong economic and modern sector foundations. Their industrial sectors are big enough to re-feeding and further support rural and agricultural development (Zhou, 2010). The experience from Chengdu and Shanghai shows that both secondary and tertiary sectors hugely contributed to rural-urban migration. Factories located in the industrial parks and townships attracted plenty of rural residents and enabled them to migrant to the urban area and to be employed (Ye et al. 2013). Simultaneously, the benefits of non-agricultural sectors effectively improved the public service level in peri-urban and rural area. It indirectly improved the general living standards of farmers and reduced the gap of living standard between rural and urban residents (Ye et al. 2013).

Many theorists claim that the agricultural development is the foundation for a country’s further industrialization and modernization process. Jorgenson argued that labor factors demanded by rapid industrialization are heavily relying on the improvement of agricultural development and human capital of rural residents

(Jorgenson, 1967). Under the guidance of the Scientific Development Outlook and People-Centered Development ideology China's central government advocates, both cities re-emphasized the importance of promoting further agricultural development and enhancing general living standards of rural residents. The program implemented in Chengdu and Shanghai placed rural development at a crucial position, and dedicated to solve 'three agricultural issues'. The two cities increased the infrastructure and public service construction in the rural area to further stimulate urban-rural integration. Chengdu and Shanghai both defined the improvement of the living conditions of rural residents as the main task and breakthrough to achieve coordinated urban and rural development. Both cities put great focus on human development, especially on education and health care, in order to effectively enhance agricultural productivity and human capital in the rural area, and to ensure that rural residents benefit from a higher living standard resulting from the program. The program greatly reduced the gap of individual capacity between urban and rural residents, also improved the adaptability of surplus labor in the urban area.

These two cities launched similar integrated urban planning systems, which considered both urban and rural development. First, these cities carried out land reforms to stimulate urban and industrial expansion and urbanization processes; secondly, they protected current arable land to increase land use efficiency. The implementation of the land reform enabled farmers to capitalize their agricultural resources, increased their working enthusiasm as well as reduced farmer's vulnerability. The Confirmation of Land Rights in Chengdu and the Homestead Replacement Policy launched in Shanghai greatly increased farmer's assets, and accelerated the process of citizenization of rural residents.

However, Chengdu and Shanghai encountered different challenges and obstacles when putting forward integrated urbanization processes, and therefore the application of the urban and rural development was different in those cities. Shanghai faced larger challenges with the institutional reform due to the fact that it is a more capitalized, and urbanized city compared to Chengdu (SADR, 2013). Therefore, Chengdu went further than Shanghai in relation to its property rights reform, the household registration reform and the development of a grassroots democracy in the rural area. As a result, Chengdu gradually became the pilot city on urban rural integration and farmer citizenization in the country, even though Shanghai started the implementation earlier (Ye et al. 2013) even though Compared with Chengdu, the process taking place in Shanghai is considered of less importance within academia or in state propaganda.

5.5 The Impact of the Program

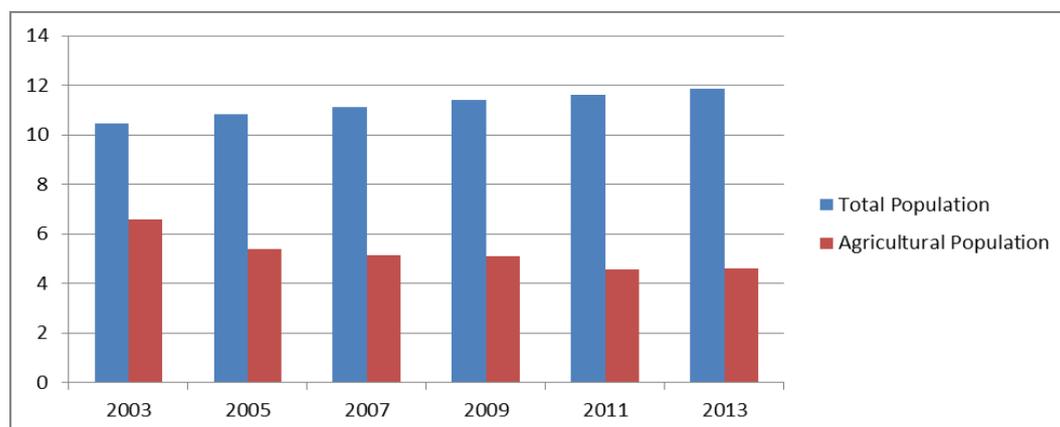
In general, the coordinated and balanced urban-rural development in Chengdu and Shanghai can be characterized by the industry propping up agriculture, which demonstrates how the urban area supports the rural area by the benefits generated by the combination of aspects of economics, politics, and society. The basic essence of the program is to change the development ideology and to shift China's urbanization strategy. It is not easy to conclude which policy or measurement belongs to the coordinated urban and rural development program. All policies are intertwined, reinforced and contributed together in different aspects. Therefore, to show which policy directly generated the specific development outcome is not an easy task.

In this section, I will draw on literature about the topic to quantitatively assess the

development achieved within the last decade. In addition, I intend to explore how the ideological change influences urban – rural relationship in both cities and how policies influenced people’s daily life especially for rural residents. According to statistics, the program stimulated rural development and promoted urban-rural integration to a certain degree. Nevertheless, the achievements today do not demonstrate that the dual economy has been overcome, even if rural life has greatly been improved (CSB, 1999-2013; SBS, 1999-2013).

The institutional reforms, such as the establishment of land property rights, hukou innovation, the grass-roots democracy and the three concentrations all played a positive role in breaking down the dual economy structure in Chengdu (Yang et al., 2011). The most important is to give back the basic freedom to rural residents, to ensure that people living in the countryside enjoy the same rights of the people living in the city (Naisbitt, 2012). According to the Statistics Yearbooks published by the Statistics Bureau of Chengdu, the city has successfully achieved massive social economic development and a series of structural transformations in the last decade (CSB, 1999-2013).

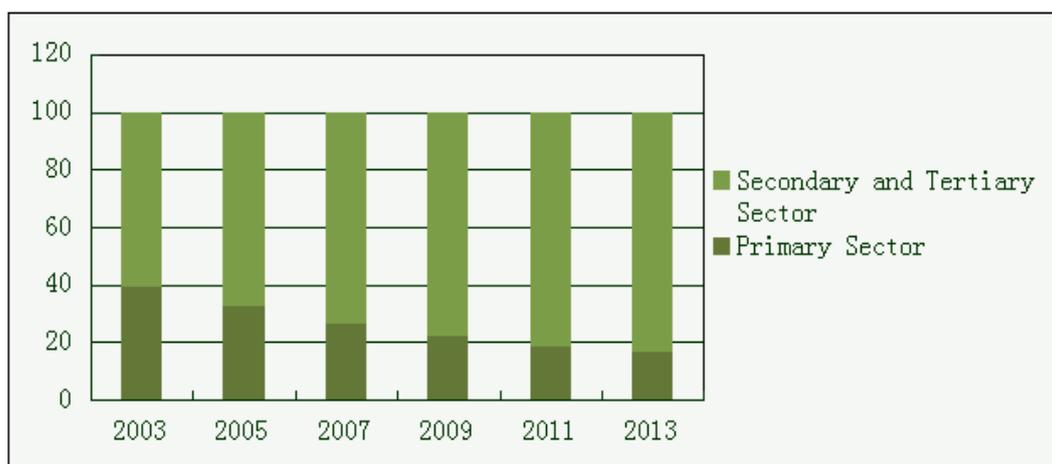
Figure 10. Number of Total and Agricultural Population in Chengdu (million), (2003 – 2013)



Source: Chengdu Statistics Bureau (CBS). 2003-2013

First of all, a change has occurred in terms of demographic structure, as Figure 10 shows. The registered population constantly increased and reached 11.87 million in 2013 compared with 10.44 million in 2003. Simultaneously, the percentage of the agricultural population decreased from 63% in 2003 to 39% in 2013. A lot of rural residents moved into the urban area. In 2005, 1.32 million people moved away from the countryside to seek their career in the urban area; the number increased to 1.58 million in 2007. From 2003 to 2010, Chengdu's urbanization rate increased dramatically from 48 percent to 65 percent, and reached a level of 2.43 percent annually. Along with the migration process, the number of people engaged in the primary sector decreased gradually while the amount of secondary and tertiary sector employees increased. As Figure 11 shows, the number of primary sectors labor occupied 39 percent out of total labor in 2003, and the number decreased to 16.7 after ten years in 2013 (CSB, 2003-2013).

Figure 11. The percentage of Labor engages in Primary Sector and Other Sectors in Chengdu. (2003 - 2013)

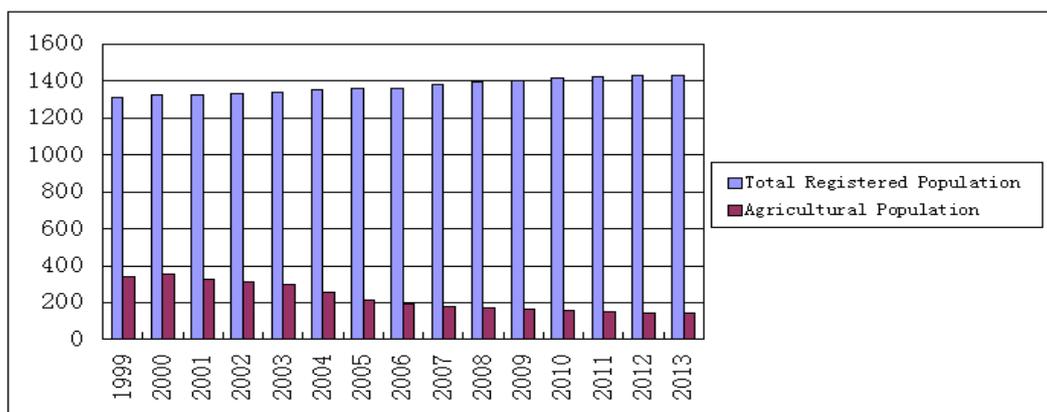


Source: Chengdu Statistics Bureau (CBS). 2003-2013

The condition in Shanghai is different to the one in Chengdu. Due to a long-term

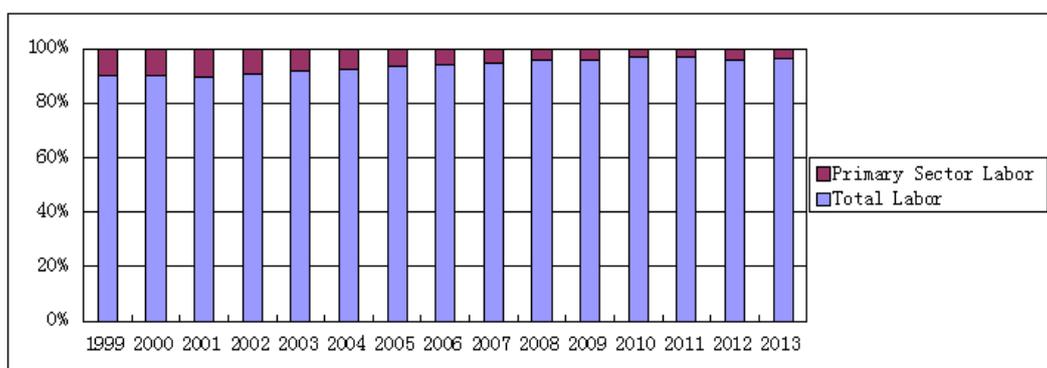
economic transformation, the agricultural population only occupied less than 25 percent out of the total population which is much lower than Chengdu at times when the coordinated urban and rural development was formally implemented. Although within the economic integration of China, a large amount of labor force flow into Shanghai from other provinces and countries. However as Figure 12 shows, the registered population hold Shanghai ‘hukou’ only increased slightly in last decade, from 13.13 million in 1999 to 14.32 million in 2013 (SBS, 1999-2013).

Figure 12. Number of Total and Agricultural Population in Shanghai (10,000), 1999 – 2013



Source: Shanghai Bureau of Statistics (SBS). 1999-2013

Figure 13. The percentage of Primary Sector Labor out of Total Labor in Shanghai, (1999-2013).

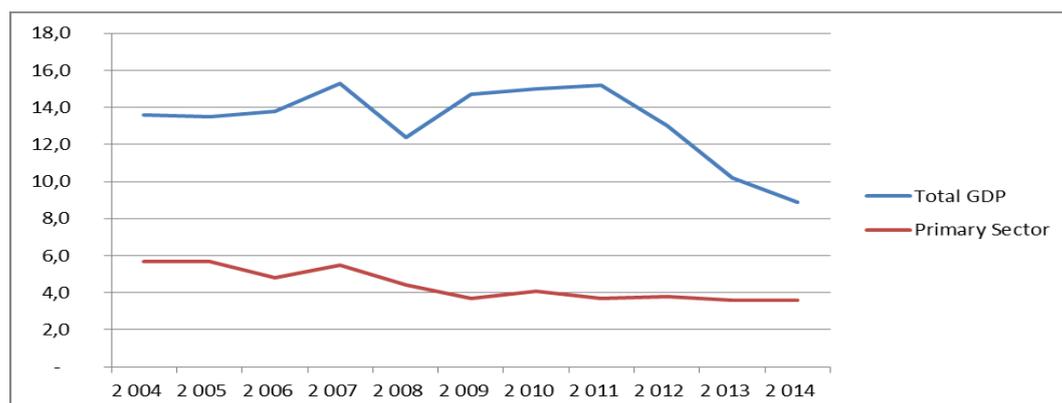


Source: Shanghai Bureau of Statistics (SBS). 1999-2013

Similar to Chengdu, the agricultural population decreased as well, as Figure 13 shows, from 3.4 million in 1999 down to 1.4 million in 2013, and kept stable in recent years. Along with the improvement of agricultural productivity and economic transformation, people who are engaged in the primary sector declined as well. The number decreased from 0.92 million to 0.46 million in the same period. The surplus labor Shanghai released was much lower compared with Chengdu (SBS, 1999-2013).

Secondly, both cities realized high-speed economic development in terms of GDP growth in the last decade. From 2004 to 2014, the average annual GDP growth rate reached double-digit; Chengdu was also one of the fastest growing cities in the country. As Figure 14 shows within the same period, the agricultural sector achieved a stable development and realized 3 percent annual growth in the last decade despite the fact that the population engaged in agricultural development had been declining constantly.

Figure 14. Total GDP and Primary Sector GDP Growth Rate in Chengdu (%), 2004 – 2014



Source: Chengdu Statistics Bureau (CBS). 2004-2014

As Figure 15 shows, the economic structure has been transformed continuously

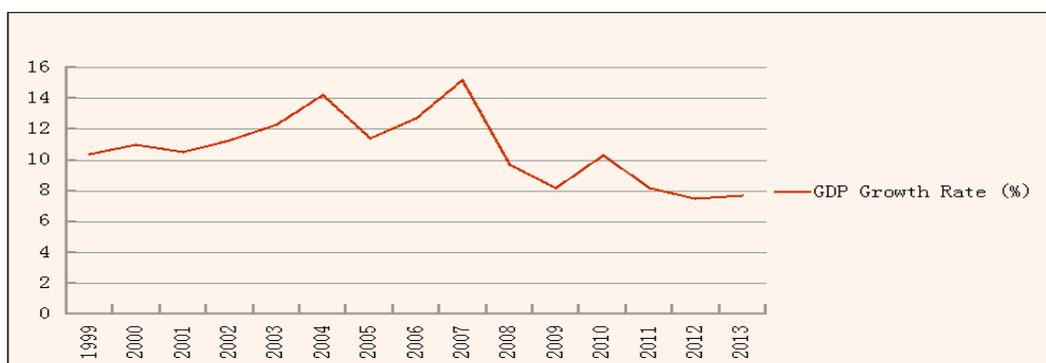
with a declining primary sector occupation. In the year when the Coordinated Urban and Rural Development Program was launched, the primary sector occupied 8.2 percent of total GDP produced in the city- The number decreased to 3.9 percent at the end of 2013. The rapid economic development and massive urbanization process changed the basic economic structure. Like many other cities in China, Chengdu gradually transformed itself from an agricultural based city toward manufacturing and service-based city (CSB, 2003-2013).

Figure 15. The percentage of GDP produced in Primary Sector and Other Sectors in Chengdu, (2003 - 2013)



Source: Chengdu Statistics Bureau (CBS). 2003- 2013

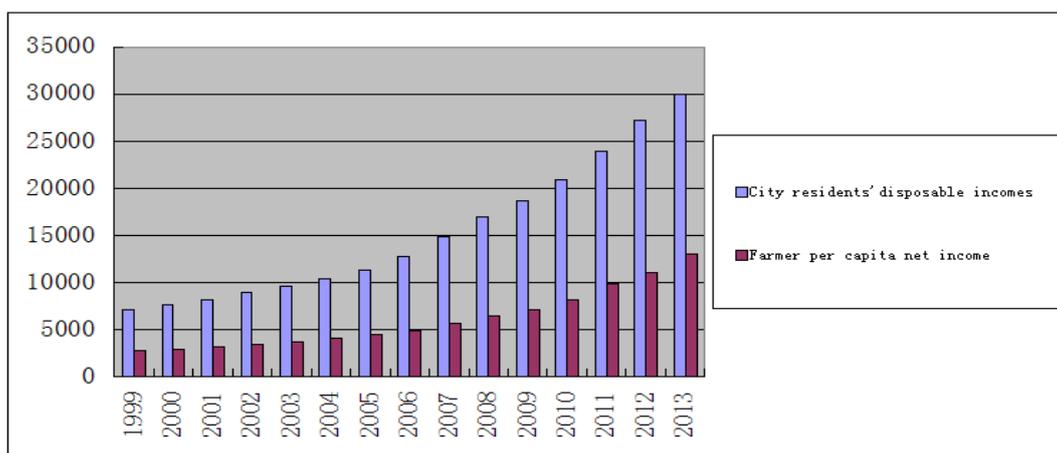
Figure 16. The GDP Annual Growth Rate of Shanghai, 1999-2013.



Source: Shanghai Bureau of Statistics (SBS). 1999-2013

Similar to Chengdu, Shanghai achieved massive economic growth as well, as shown by Figure 16. Especially in 2007, the annual GDP growth rate reached 15.2 percent. The long term high economic growth consolidated Shanghai as the economic center of China. However unlike Chengdu, the agricultural development in Shanghai contributed negatively to the economic growth in recent years. The improvement of agricultural development was much slower compared to the development of other sectors in Shanghai (SBS, 1999-2013).

Figure 17. City Residents' Disposal Income and Farmer per Capital Net Income in Chengdu, (1999 - 2013)



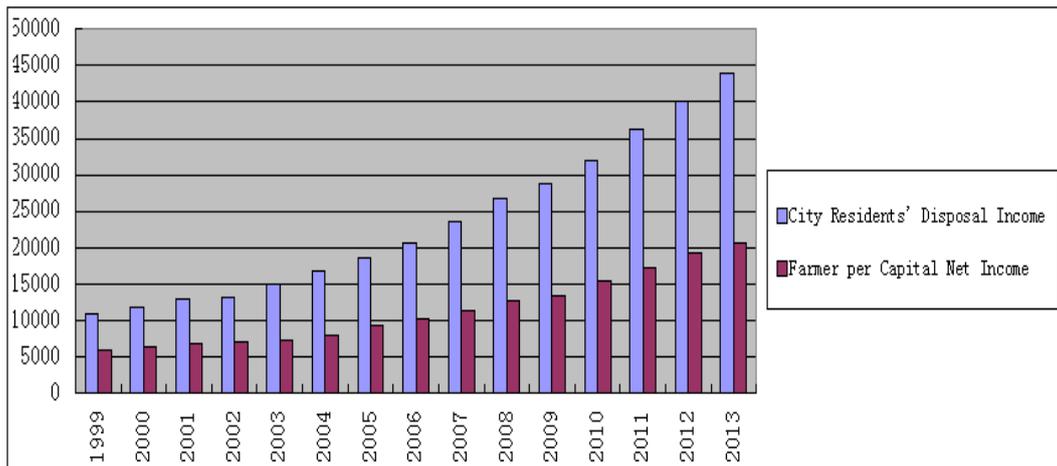
Source: Chengdu Statistics Bureau (CBS). 1999-2013

Benefiting from heavy infrastructure investment in the rural area and re-balanced development policies especially policies related to ‘three agricultural issues’, the agricultural productivity and the general living standard of rural resident had been enhanced greatly in both cities. The program indeed brought massive socioeconomic development in the rural area and hence, gives confidence to rural farmers for their future life. As Figure 17 demonstrates, the improvement of agricultural productivity directly improved the farmer’s per capita net income in Chengdu. According to the statistics, the farmer’s annual income increased

dramatically from 2783 yuan in 1999 to 12985 yuan in 2013.

In contrast to Chengdu, the condition in Shanghai is much better, as Figure 18 shows. The farmer's annual income was 5924 yuan in 1999 and increased to 20742 in 2013. Although Shanghai's average income was much higher than Chengdu during the entire time, the general income in Chengdu increased more dramatically than in Shanghai. The farmer's income in Chengdu increased more than three times from 1999 to 2013; however the farmer's general income in Shanghai only increased by 2.5 times (CSB, 1999-2013; SBS, 1999-2013).

Figure 18. City Residents' Disposal Income and Farmer per Capital Net Income in Shanghai, (1999 - 2013)



Source: Shanghai Bureau of Statistics (SBS). 1999-2013

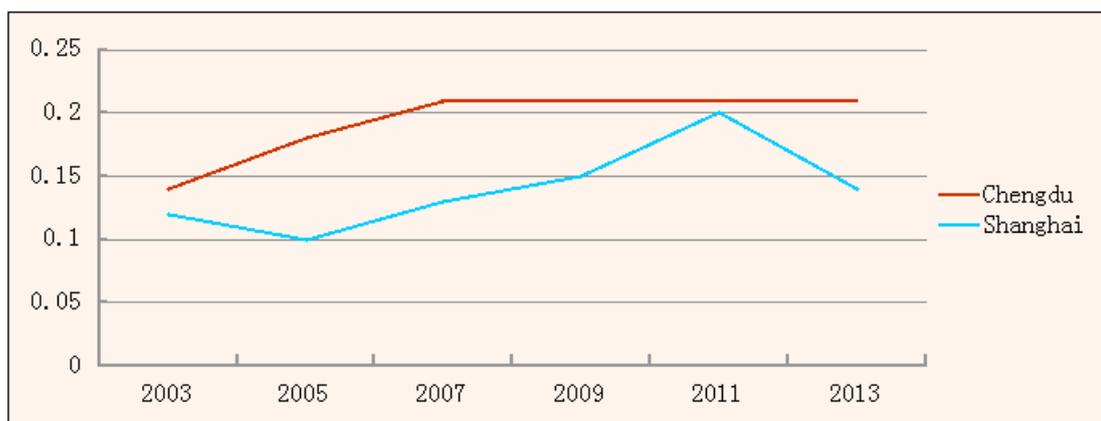
However, all achievements presented above based on data collected from the Statistics Yearbook published by Chengdu and Shanghai cannot directly prove that the dual economic structure was eliminated. I am enlightened by some literatures conducted in China, analysis based on the calculation of both, dualistic contrast coefficients and Index of the income gap between urban and rural residents, is

necessary to elaborate further to what extent dual structure had been eliminated (Yang, 2004). The dualistic contrast coefficient is a common index used to show the width of urban and rural disparity as well as to visualize how strong the dual economy structure is in China. (Yang, 2004) The dualistic contrast coefficient is the ratio of comparative labor productivity between the agricultural sector and non-agricultural sectors. The smaller the number, the stronger is the dual economy structure. The computation formula will be:

$$B_1 = \frac{G_1/G}{L_1/L}; B_2 = \frac{G_2/G}{L_2/L}, R_1 = \frac{B_1}{B_2}$$

B represents comparative labor productivity; G is the total production number; L represents the number of labor; 1 and 2 are agricultural, respectively non-agricultural sectors. R1 is the final dualistic contrast coefficient. According to international experience, the R1 number is normally located between values from 0.31 to 0.45 for developing countries and between values from 0.52 to 0.86 for developed countries (Yang, 2004).

Figure 19. The dualistic contrast coefficient in Chengdu and Shanghai (2003-2013)



Source: Calculated based on data published by Chengdu Statistics Bureau (CBS) and Shanghai Bureau of Statistics (SBS).

According to the dualistic contrast coefficient (Figure 19), we find generally during the period during 2003 to 2007, according to these numbers, both cities benefited from the coordinated urban and rural development; the index goes up from the position of 0.1 to 0.15 to the maximum 0.2 in 2011. After that, the index remained stable in Chengdu and declined slightly in Shanghai (see Figure 20).

Figure 20. Index of income gap between urban and rural residents in Chengdu and Shanghai, (1999-2013)



Source: Calculated based on data published by Chengdu Statistics Bureau (CBS) and Shanghai Bureau of Statistics (SBS).

The second index that can be calculated is called the Index of the income gap between urban and rural residents. It equals the number of one minus the ratio of farmer per capital net income divided by city residents' disposal income. This index demonstrates the living standard gap between urban and rural residents. From empirical studies, when the index is larger than 0.5, the dual economy structure exists. When the index is smaller than 0.5 but larger than 0.2, the region is in a transformation period from the dual economy toward the monistic economic structure. Finally, when the index is smaller than 0.2, the dual economy structure has been eliminated (Qu & Feng, 2009).

From statistical calculations as illustrated in Figure 20, the Index of the income gap between urban and rural residents in both cities is located above the value of 0.5. Moreover, the index discloses a strong dual economic structure in both cities after ten-year development. Chengdu benefited from the program to a certain extent as the development gap between urban and rural parts was reduced. However, against expectations, Shanghai's condition deteriorated. The income gap between urban and rural residents is still widening even though Shanghai's urbanization rate nearly reached 90 percent in 2013. Although both indexes show that the development condition in the rural area is getting better, however, the dual economic structure in both cities is still severe compared to the international level. Consequently the problems have not been fundamentally solved in last decade (see Figure 22).

According to the series of data listed above, including GDP and labor structure as well as the productivity of agricultural and industrial sectors, we find that the coordinated urban and rural development program established a preferable environment for capital accumulation and labor inflow for the modern sector. As stated by Marco and Zheng, the rapid economic development in both Chengdu and Shanghai, being the largest cities of China are driven by the non-agricultural modern sectors in urban area (Marco & Zheng, 2010). By comparing the evolution of labor productivity for both, agricultural and non-agricultural sectors in these two cities, it is visible that productivity dramatically increased. Nevertheless, the gap of these two sectors is still widening. In addition, the agricultural marginal productivity is still much lower than the institutional wage. In contrast to the rural area, the vast improvement of worker's wage in urban area shows the 'signal' of labor scarcity in the city, without implying that there is no

surplus labor in rural parts. But the rapid rise of worker's wage in urban area is also caused by some other factors. (Knight, 2007) Besides that, along with the agricultural modernization process in China, there will be a large amount of surplus labor being released from rural areas in the future. The phenomenon marks both cities and has reached the second phase of the Lewis-Ranis-Fei model but has yet not entered phase three (Marco & Zheng, 2010).

The long-term existence of dual economy has not been eliminated and still leaves issues of unbalanced urban and rural development to be solved. The indicators show that the picture of urban bias development ideology has not been fully eliminated.

Firstly, the income gap between urban and rural area still remains enormous. Although the income gap in Chengdu has reduced a little; Shanghai shows the opposite picture in which the income inequality is still widening. The living standard between urban and rural residents is even becoming larger due to an unbalanced social welfare system. The rapid improvement of agricultural productivity caused agricultural commodities to be underestimated and the increase of rural farmer's income could not catch up with the goods price rising in urban area. Together, this further restricted their activity in the city. (Tang, 2011) Rural development and the livelihood of rural residents today are still greatly neglected and discriminated. The rural development continues to suffer from the inequality of factor allocation created by some institutional obstacles despite the efforts of both governments to solve the 'three agricultural issues' and the removal of barriers for urban-rural integration (Li et al., 2014).

Secondly, the welfare and public service between rural and urban area remains

uneven. The general educational and health care levels in the countryside leave large space of improvement to achieve the same level as urban regions (SADR, 2013). The phenomenon of the migrant workers caused series of social problems in villages. The poor welfare system also insufficiently takes care of family members, elderly and children who have been left behind by young labor leaving for urban areas. As a consequence, the poor welfare level in the countryside restricts human development not only for the current generation, but also for future generations. (Yu & Zhong, 2009)

Thirdly, the household registration ‘hukou’ systems have particularly not been annulled in its entirety in big city such as Shanghai. It impedes migrant workers and other rural residents to fully share the fruits of development in urban areas (Lu & Wan, 2014). The ‘hukou’ system greatly limits upward mobility for rural residents and migrant workers in urban area, even for their second generations. Cheap labor is not only generated by the low agricultural marginal productivity but also caused by this ‘hukou’ system that leads to urban-rural divide. This system normally prohibits changing ‘hukou’ statues from rural area towards urban area without a personal social status change. The government has to keep the wages low to keep its export comparative advantage (Chan, 2015).

Finally, the political reform has stagnated for a long period in China. Although the country achieved grass-roots democracy on the village level, elections have frequently been reported to be unfair and unable to represent the fundamental interests of local farmers. Series of economic, social and political issues in both urban and rural area further generated vulnerability in the country; because vulnerable groups have been eliminated and regenerated along with these massive structural transformations occurring in the country.

5.6 Dual Social Structure in Urban Area

In August 2014, The United Nations Development Programme (UNDP) published its latest Human Development Report “Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience” in 2014. This report highlighted once more that if a country fails to pay specific attention and allocate related resources to vulnerable groups, this group will be in danger of falling behind with its development process. This implies, that the post-2015 agenda and the goal of human development will also not been achieved (HDR 2014: 2). The publication of the book encouraged me to do a specific research on the vulnerability issue in China, focusing in particular on the relation with the urban-rural dual economic structure. The term “vulnerability” can be defined as a complex and comprehensive concept, as outlined by Coudouel and Hentschel:

“Vulnerability is a broad concept, encompassing not only income vulnerability but also such risks as those related to health, those resulting from violence, and those resulting from social exclusion – all of which can have dramatic effects on households” (Coudouel and Hentschel 2000: 34).

During these 30 years of development, social structures in China have been changed fundamentally: some new social strata were generated and people were able to move upwards, while some others moved downwards and reduced to vulnerability. (Yang, 2013) All these changes were caused by China’s massive economic development, institutional reforms, industrial upgrading and rapid urbanization. It has created both, a decent life for some and social injustice for others at the same time. In general, farmers and workers gradually moved down to the lowest social class in both, urban and rural area (Yang, 2013). Today, farmers,

migrant workers, and workers can be regarded as the most poor and vulnerable social classes in relation to urban-rural development. These groups possess comparatively less human, economic and social/reputation capital than others in the country, and most of them can be categorized as low-income groups (Yang, 2013). Farmer and migrant workers were the groups targeted most by the coordinated urban and rural development program, and still these groups remain the lowest social class living in poverty. The program indeed improved their general living conditions, however, did not totally eliminated the vulnerable conditions. (Yu & Zhong, 2009)

The concept of 'vulnerability' can be interpreted from various angles and explained from different the perspective of different disciplines. In general, the disciplines include economics, sociology/anthropology, disaster management, environmental science, and health/nutrition (Alwang et al., 2001: 1). Normally, it addresses the ability of how household can respond and cope with the risks and refers to the relationship between poverty, risk, and efforts to manage risk (World Bank, 2000). The ability to respond or manage the risk is heavily determined by the resources owned by the households. Risk management also involves both ex-ante and ex-post actions which mean actions that happened before and after the risky events have taken place respectively (Alwang et al., 2001: 3).

Most of time, vulnerability is defined or limited by the economic perspective and being researched quantitatively being measured by money metric approaches. Indicators can identify poverty, measured in terms such as income and consumption levels, which shows the shortfalls in access to services, food insecurity and so on (Alwang et al. 2001: 6). Also, some non-money metric indicators like landholding size, household headship or distance from markets can

also suggest to what degree a household falls into poverty (Glewwe and van der Gaag, 1988). In the last decade, China achieved a great success in poverty reduction, benefited from the program. In summary, the scale of extreme poverty population was reduced and the coverage of social service and other protection was extended. (Yu & Zhong, 2009) The land and management reform implemented in both cities enabled farmers to capitalize their agricultural resources and increased their ability to resist living risks. Meanwhile, a series of social service and employment system reforms in the city indirectly increased the income of migrant workers', and their career opportunities. Due to this, the rights of migrant works can further be secured. (Yu & Zhong, 2009)

However, some sociologists may argue that by only focusing on the economic perspective, this overlooks other important dimensions of the concept of vulnerability. That reminds us that solely focusing on poverty alleviation is not sufficient to reduce vulnerability. There are many factors beyond economic metric such as the capability and status of the human being which play a significant impact on the general livelihood of people. The term 'social vulnerability' is frequently used by sociologist as opposed to 'economic vulnerability' (Loughhead and Mittai, 2000). Many scholars argue that the vulnerable group was identified based on broad household characteristics. It is not only defined in economic outcomes (Alwang, et al. 2001: 18), but also encompasses "the insecurity of the well-being of individuals, households, or communities in the face of a changing environment" (Moser and Holland 1998: 2). The human welfare level can strongly influence the general income, the consumption of food, educational level and health condition for people. Also, persons who are lacking proper social welfare can be categorized as vulnerable due to the lack of Human Capital (Lok-Dessallien 1998: 7). Just as stated by Baulch and Hoddinot, households with

greater endowments and greater returns would tend to be less vulnerable to shocks (Baulch and Hoddinot, 2000).

Due to the massive manufacturing development and urban expanding in both cities, Chengdu and Shanghai successively attracted a large number of migrant workers in the city (Ge, 1999). However still today, many of them can not share the same descent life as traditional residents in the urban area do due to the restriction of 'hukou'. Nevertheless, the general living standard of them increased a lot compared with their original life in the countryside (Zhang et al., 2014). According to statistics, there exist a high percentage of people who migrated to cities that engage in the Production-Transportation-Building sectors including the manufacturing sector. The industrial concentration policy implemented in both cities pushed migrant workers away from the central part of the city. Moreover, most of them are living in the suburban region of the 'Village in Town' or industrial parks. These groups are lacking a good living environment and abundant social welfare (Xu, Liao, Shen, Zhang, & Mei, 2007). People who engage in the service sector are better situated than the manufacturing employees, but they are also less likely to reside near to their workplaces. (Mahadevia et al., 2012). According to Harris and Todaro, the activity of rural-urban migration is sometimes driven by the high ratio of uneven expected wage levels between urban and rural area (Harris & Todaro, 1970). However, the high unemployment rate in cities means that the urban region did not absorb the total surplus labor released from the rural area. Additionally, the choice of new technology in the manufacturing sector reduced labor involved in factories (Zhou, 2013). This implies that people who could not get a job in the city are transformed into vulnerable groups. (Liu et al., 2013)

In the last decade, the real estate market has rapidly developed which caused a constant rising for housing prices in many major cities in China. People who are unable to receive their household (hukou) registration, especially low-income floating populations, are deprived from their possibility to be subsidized or wholly provided by the governments (Huang, 2004, 2012; Wu, 2004). Most of the migrant workers in the urban area cannot afford a stable house. As a consequence, the privatized market becomes the only one platform for finding shelter (Wu, 2002, 2004). Most probably, these groups end up living in the ‘village in town’ and renting a low-quality house provided by former local farmers which are the groups whose farmland was acquired and converted into urban land use due to urban expansion (Liao & David, 2015). As many scholars claimed, “floating population had to resort to private rentals in suburban towns or inner urban housing quarters with deteriorating conditions.” (Liao & David, 2015) To a certain degree, the new coordinated urban and rural development program and China’s rapid economic transformation did not allow to rural resident or migrant workers to successfully settle down and fully integrate into urban life. Instead, the new policy decentralized them from the city center and increasingly places them into the outer rings, in prominent spatial clusters of neighborhoods. (Liao & David, 2015)

Besides the economic and social perspective, migrant workers are moreover all situated in disadvantaged conditions in the urban area in terms of social capital and political freedom. Some scholars argue that the social exclusion, social capital also plays a significant role for generating vulnerability. A social exclusion framework to analyze the relationship between migration and chronic poverty as utilized by Kothari (2002) shows how the social exclusion concept:

“Can capture the range of economic and non-economic processes which inhibit or allow the movement of people and enables an understanding of the implications of migration in sustaining or overcoming exclusionary processes” (Kothari 2002: 11)

Similar to some other developing countries, social capital, relationship or ‘guanxi’ in Chinese is one of the most important symbols of the social status of households. According to Tudawe, “social relationships facilitate access to information, finance, state services, equipment, food and goods that raise the capacity of households to survive and prosper” (Tudawe 2002: 33). The groups have no option to directly express their opinion and to influence the government’s decision making through a democratic mechanism and social capital. Since people moved out of the village, they may not anymore be fully protected by their original grass-roots democracy system. Additionally, most of time these groups have little judicial and political resources to protect their legitimate rights and interests. (Liu et al., 2013)

In general, until today migrant workers are discriminated by policies related to household registration, social service, and welfare as well as the judicial system. All this factors prevent migrant farmer from moving upwards to a higher social class and consolidates their vulnerability along with development. As Amartya Sen argues, freedom is also an important method and objective for development. Freedom, to some extent, can be interpreted as a kind of capacity of individuals to choose their lives (Sen, 1999). However, in such a long time individual’s right and freedom, particularly for the lowest social class in China, were suppressed during China’s rapid transformation process. Along with rapid migration processes in the country, the new dual social structure composed of migrant workers and urban

residents was created. The rapid development of China was unable to address and reduce the vulnerability of migrant workers. (Liu et al., 2013)

Chapter 6. Conclusion

The thesis introduced the implementation of the coordinated urban and rural development program in both, Chengdu and Shanghai. Based on theories of the dual economic model and unbalanced development model, combined with data released and calculated, the thesis evaluated the impact of the program for the dual economic structure and urban-rural integration in both cities.

The thesis presented China's dual economic structure and how the urban-rural development model was established and consolidated. Furthermore, it explained the obstacles and barriers to push further the rural-urban integration in the country. It also elaborated in detail on the measurements and policies carried out in Chengdu and Shanghai. In general, under the guidance of the Chinese central government, the policies launched are similar in both cities. However, they differ in terms of measurement and implementation methods. All implemented policies can be categorized as land, public service, and administration reform, also the infrastructure construction.

Based on development experience from Chengdu and Shanghai the government revealed to be the main player to push coordinated urban and rural development. To rely only on market mechanism proved to be insufficient to achieve progress. Until today, agriculture represents the most backward sector in China. As human resources, capital, and technology do not automatically flow into rural area, the essence of the coordinated urban and rural development is to readjust the relationship between these two areas as well as to redistribute the development benefit. Governments have made a significant contribution to readjust the investment distribution layouts and to allocate more resources to the rural region.

These contributions played an efficient role to break the institutional obstacles that hindered urban-rural integration. It was achieved through employment, financial, taxation and administration reforms, which enabled rural residents to enjoy relatively equal welfare compared to urban populations. Nonetheless, some scholars argue that the combination of strengthening market forces and transforming the roles of local governments will be indispensable for further urban-rural integration and the elimination of the dual economic structure in Chinese cities such as Shanghai and Chengdu. (Friedman 2005; Logan 2002, 2008; Wu et al. 2007). It is recommended that more efforts should be made in promoting market mechanism in order to further remove both market restrictions and government interventions, and to build a friendlier environment for the further absorption of surplus labor. (Marco & Zheng, 2010)

To conclude, the program did have an enormous impact on both urban and rural residents. Firstly, it removed certain obstacles hindering surplus labor movement and ensured that many abundant labors can be smoothly released from agriculture and can engage in non-agricultural sectors. Also, the program encouraged urban institutions to provide more welfare for surplus labor to help them to adapt to urban life. Many of the surplus labor later becomes the migrant working group in the city, which in turn has made an enormous contribution for industrial expanding and has stimulated rapid economic development under the impact of capital accumulation in both towns. Secondly, the program played a significant role in enhancing the general living standards of the rural residents. Influenced by the program, both Chengdu and Shanghai attached great importance for solving 'three agricultural issues'. As a result, the farming productivity and the general farmer's income increased dramatically, labor migration accelerated and human capital in the rural area has further been improved.

However the coordinated urban and rural development program has not successfully eliminated the traditional dual economic structure for both cities, which remains located within the second phase based on the Lewis-Ranis-Fei model. The general disparity of labor productivity between agricultural and non-agricultural sectors as well as the income level between rural and urban residents has not been reduced significantly. On the contrary, the gap of the living conditions between migrant workers and urban residents remains high. The program has not fundamentally helped the 'floating population' to become integrated with urban life. Moreover, along with the continuing migration process, a new dual social structure composed of 'floating population' and 'urban registered residents' has gradually been created. Under the current conditions of the dual economy with high urbanization processes in Chinese cities, the coexistence of relatively small productivity agricultural sector and high productivity modern sectors will remain for a long time.

The program is of great significance for updating China's urbanization strategy and for promoting human development in the country. It will heavily influence people's daily life related with urban-rural integration in the future. After more than ten years of implementation, it gives the public confidence that the general living standard can be greatly promoted, and that the extending development disparity in the country can be decelerated. It remains unclear when China will enter the third phase of Lewis-Ranis-Fei model, and if it will achieve a real balance between agricultural and non-agricultural sectors to finally integrate urban and rural parts together. However, at least, the program gives the signal that a sustainable and harmonious development cannot be realized without the help of constant institutional reforms. Moreover, sustained socioeconomic development

requires from the government to take more actions to overcome challenges in the future.

Word Count: 21871

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