

FOCUS ON COMPARISONS OF URBANIZATION PROCESSES AND PROBLEMS BETWEEN SOUTH KOREA AND CHINA*

/Study of Urban Development Plan on South Korea and China/

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***Abstract:** This research compared with problems that generated during urbanization process in Korea and China. Additionally, the current study analyzed solutions for issues such as public policies and reform plans. In 2014, the urbanization levels (% of total) were 91.7% in South Korea, whereas the rate in China was 54.3% that is nearly half of urbanization levels in Korea. It showed that China in a transition stage of urbanization. To look at the issues during urbanization process in Korea and China, it showed the problems of environment, suburbs, lands, transportations, rushed developments and etc. in Korea. Meanwhile China showed the issues of social tensions, suburbs, city environment, initial city developments leading to administrative problems, migrant workers and etc. This study extracted both countries' similarities and differences to benchmark reform plans.*

Keywords: *Urbanization process, Urbanization problems, Benchmarking*

1. Introduction

China is currently undergoing the fastest economic growth in the world. After reforms and liberalization in 1978, China experienced 10%

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GDP growth every year for the past thirty years. Now, China stands as one of the top three economic powers in the world as a strong trade nation. In 2003, China's GDP per capita exceeded \$1000; moreover, this value is expected to rise to 1.4 billion people with \$3000 GDP per capita by 2020. To accomplish such goals, China intends to build a "Xiao Kang" [Period of peace and prosperity, [小康] society that encompasses thorough economic growth plans. China is expected to surpass both US and Japan to claim the top spot in GDP that is expected to reach 20 billion dollars by 2020.

Even though the economic growth saw benefits in society as well as continuously raising the national income level and quality of life, whereas the exclusion of farmers from industrialization of cities had a slowing effect on their net income per capita growth. In particular, for those farmers in major staple crop producing regions, they did not reach the national average growth rate. Furthermore, the net incomes of full-time farmers were either stagnating or declining; thus, the farmers' incomes reached only a third of the urbanites in China. The rate of growth of the farmers' income became only a fifth of the urbanites in the past seven years and the farmers' income thereby ended with marginal growth. The income disparity between the urban and the rural continued to show the trends of increase, until it decreased slightly in 2014 [1985, 1.86:1 → 1995, 2.71:1 → 2005, 3.22:1 → 2010, 3.23:1 → 2014, 2.59:1] (National Bureau of Statistics of the People's Republic of China, 2015).

The first meeting of "Communist Party of China (CPC) Conference" was held in December 4th, 2013, led by the newly elected Xi Jinping Administration. China later held "Central Economic Work Conference" in 15th and 16th of the same month. The meeting's expectations were high because it determined the direction of new administration's public policies. The focus was on the transition of its current economic structure to better meet the needs of the domestic demand in China through "Chǐngshìhuà" [urbanization] plan (潘家华, 2011). The major point discussed in the meeting was to raise the total urban population (%) to 60% by year 2020 (51% in 2011). On the 24th, the National Development and Reform Commission completed the draft "Motion for Stable Urbanization Development Plan (2011-2020)". The announcement of the comprehensive urbanization reform plan soon followed.

孔铎 and 刘士林 described that the urbanization was a process of population shift to the city and the development of rural areas into urban areas (2011). Through this process, total number of cities increased as well as population and city area expansions. The total percentage of urban population similarly rose to show measurable progress into urbanization. Therefore, the proportion of urban population to rural population is an important indicator of urbanization. In practical terms, urbanization commits farmers in the fields to change into secondary and tertiary industry jobs resulting in the population to become more concentrated towards a city. This transformative process greatly changed the daily routines of many and changed the structure of cities. The positive and the negative effects were clear as urbanization continued in China. On the one hand, the positive was the rapid increase in China's economy due to the national economic policies aided by urbanization process. On the other hand, however, the negative effects were prevalent during the urbanization process. The focus on growth and development led to the environment damages such as reduction in biodiversity, soil pollution, sinkholes, reduction of arable lands, air pollution, urban heat-island effect⁴, and etc. Above factors created worsening conditions in China and put various resources under strain (梁书民, 2008).

Previous studies of urbanization were conducted by researchers from both Korea and China. Zhang Xiaode (张孝德, 2006) argued that the process of urbanization was tame in comparison to the actual speed of economic growth in China, therefore this served as the paradox of the Chinese government policies.

Zhu Linxing (朱林兴, 1996) concluded that urbanization is a process for rural population to transition into city population, furthermore the process had positive influences on the overall land economies of cities. Increases in city population led to the increases in the total number of cities. Chang (1992) categorized the kinds of urbanization as, metropolis [large city], industrial city, satellite city, provincial city, and tourism city. He also researched the characteristics of each city in his study. Park (2010) systematically analyzed the Chinese urbanization process. Chang established that after the Chinese Economic Reform (1978), the key characteristics of

⁴ The phenomenon when city center is hotter than its outskirts. This forms an area of high heat or, 'heat-islands'.

many cities were connected in a network that formed a great economic bloc. Chang claimed that this was the fundamentals of “chǐngshìqūn” [metropolitan areas]. The interests about urbanization in China continue to rise because of China’s strong growth in its economy. Consequently, many Korean researchers conducted studies into China’s urbanization. However, additional research citing on-site information is required in order to provide more accurate analysis to offset the limitations of insufficient data currently available to us.

This research begins with the notion that Korea’s successes and planning towards urbanization can be of good reference and value to China’s own urbanization process. However, the urbanization of both countries can differ in many aspects such as different time and place of the urbanization process. There are also differences in politics, social structures, and etc. Thus, careful comparative analysis is needed to fully research the practical implications between two countries’ urbanization processes.

The purpose of this research is to review the problems, planning structure, systematic problems, and other factors of urbanization processes arising in Korea and China. Our research performed comparative analysis to find similarities and differences between two nations. It is our intention to convey to the reader in great extent about implications of the urbanization processes. Solutions to problems that occur as result of urbanization are also explored in this study.

2. Research Materials and Methods

When the 5th politburo took power as the new party leaders, they presented a cure for city diseases and revitalization of domestic affairs as one national policy. This was the first time that urbanization has been selected as national policy; therefore, it demonstrated the government’s active efforts to solve recent ten years of problems wrought from urbanization.

Foremost, in order to present expansion plans for China’s urbanization goals, the current investigation studied the implications of current China’s urbanization policy through situational comparisons with Korea. In Korea’s urbanization, parts of theoretical backgrounds, society, economy, policy, and other examples were utilized for the comparison.

The examples of successful urbanization results were researched within economic growths of both countries, unbalanced growth occurring in inner social circles, and upward trends of regional conflicts from dual-economic growth policy. By analyzing these data, it is possible to find deterministic factors and find possible solutions for these urbanization problems.

As for literary sources on urbanization processes in Korea and China, this study examines publications from administrative departments, works related to urbanization, research papers, news articles, and etc. Statistics related to urbanization were also drawn from China that dates back from 1949 to present. These data statistics included contemporary social problems and environmental problems. Thorough backgrounds of plans for urbanization allowed progress into “Xiao Kang” society to achieve its intended goals and innovation. The details of these developments were then analyzed and compared with Korea’s own urbanization process to seek preliminary solutions. Korea started its urbanization process in 1960 then slowed in 2014 to span total of 54 years of urban developments. As for China’s period of urban developments, reforms and liberalization took place from 1978 to 2014 to span 36 years.

Similar time periods have been used many times in the past for international studies based in history, however case study into China entailed many variables that cannot be collected or measured for reliable data. Consequently, the time periods for China’s urbanization process have been narrowed down to shorter length and data from single institution was used for this study.

As for finding details necessary to understand urbanization process and problem, the assessments are limited to their direct and indirect effects on each country. Solutions to the urbanization problems are found using comparative analysis utilizing theoretical arguments and objective statistics.

3. Urbanization Processes and Problems in Korea and China

1) Korea’s Urbanization Process

This study selected the phases of urbanization process in Korea after the conclusion of the Korean War. The process is divided into four phases: The first phase starting in the 60s saw the events of economic recovery efforts through reconstruction actions and urbanization. The second phase in

the 70s was marked by serious urbanization efforts through the first national land development plan enacted during that time. The third phase of 80s was highlighted by the slowing stable progress into urbanization; therefore, it started the second land development plan. The final fourth phase spans the 90s to the present (Park, 2014).

The urban population was 28 % in 60s and this increased rapidly in Korea. It rose to 33.6% in 1966 and 50.1% in 1980. The rapid urbanization was the result of sudden industrialization, population shift from rural to urban, an overall population shift from rural to urban, and an overall population increases resulted. 1970's 50.1% urban population increased to 59.4% in 1975 and 68.7% in 1980. The 70s urbanization saw trends of buildup of major cities such as Seoul and appearances of periphery cities caused from formation of industrial bases. This period also experiences many of rural population giving up farming to seek jobs into the city areas. The 70s phase of development can be characterized by the continuation of the trends in the 60s.

Table 1. South Korea's Urbanization Process

	Population (in thousands)			Average Population Growth (%)			Urban Population (% total)
	City	Rural	Total	City	Rural	Total	
1960	6,997	18,015	25,012	5.79	2.06	3.03	28.0
1966	9,810	19,626	29,436	5.79	1.26	2.55	33.6
1970	13,609	18,632	32,241	8.53	-2.04	2.21	50.1
1975	20,516	14,765	35,281	8.56	-4.49	1.7	59.4
1980	25,974	12,150	38,124	4.83	-4.18	1.57	68.7
1985	31,260	9,546	40,806	3.77	-4.33	0.99	74.2
1990	35,913	6,956	42,869	2.81	-3.98	0.99	79.6
1995	38,520	6,573	45,093	1.41	-4.08	1.01	83.9
2000	42,055	5,909	47,964	1.5	-3.6	0.84	88.3

2005	43,445	5,337	48,782	0.9	-6.1	0.21	90.1
2010	45,278	5,237	50,524	0.83	-0.37	0.46	90.9
2014	46,451	4,877	51,328	0.73	-2.42	0.41	91.7

Source: MOLIT, Statistic Korea (2016).

2) China’s Urbanization Process

After the Chinese Civil War, the recovery from war (1949-1952), and the first Five Year Plan (1953-1957), China entered the urbanization phase in a modern sense. With the founding of People’s Republic of China in 1949, China followed the Soviet-like development plans of focusing on heavy industries. The number of cities increased from 120 in 1949 to 176 in 1957.

From 1958 to 1965, “The Great Leap Forward” (1958-1960) policy’s excessive push for industrialization saw large scale shift of rural population into cities. Henceforth, the total percentage of urban population increased and the failure of “The Great Leap Forward” led to nation-wide famine and food shortages. In response, a reverse direction of urban development plan “Down to the Countryside Movement” was enforced, showing a period marked by unstable urbanization in China. During the “Great Proletarian Cultural Revolution” (1966-1977) the Chinese government forcibly moved intellectuals and city youths into rural, with approximately 14 million to 18 million youths moving to rural, and through the strict control of family registry the possibility of rural workforce moving back into cities have been heavily regulated. After the Chinese Economic Reform (1978-1987), the city youths and intellectuals who were forcibly moved from the “Down to the Countryside Movement” returned to cities, thereby the policy of developments in townships and village enterprises led to industrialization of rural and improvements in small towns. Furthermore, the installation of four exclusive industrial zones and opening of fifteen coastal cities led to significant urbanization progress. From 1988, the major theme of urbanization of land reforms took place within the government’s new policy of “long-term rent of government-owned land” filled the much-needed tax revenue, and by using that same revenue to invest in the regional governments, they were able to construct new city housing and

infrastructure. Moreover, China’s economy saw rapid developments thanks in part to large scale attraction of capital investments from foreigners in the coastal regions. However, this led to the hasty expansions of real estate business in China.

After China’s entry into WTO (2001-2011), urbanization in China accelerated due to liberalization of China’s economy and intensifying economic reforms. During this period, China’s economy saw high growth of annual GDP increase of 10% from revitalization of domestic economy, exports, and expanding foreign investments. In this same period, government of China recognized the part of big cities’ contributions to continued economic growth, and thereby presented a different policy of urbanization different from the past. To follow the same pattern, Chinese government’s urbanization policy differed from the past by shifting focus from developing small towns to 11th Five Year Plan of “Chǐngshiqūn” plan⁵ (2006-2011).

Table 2. Urbanization Process in China

	Characteristics	Urban P. (% Total)	Population (100 M)	Cities (one)	Major Events and Gov. Action
1949~57	Initial Urbanization Stage	15.4	0.99	176	<ul style="list-style-type: none"> • Development plan of heavy industries • The First Five Year Plan • Introduction of Family Registry

⁵ ‘Chǐngshiqūn’ is aggregate cities’ concentrated and spatial distribution into special areas. By standardizing transportation system and natural environment to account different cities’ sizes and variation; the intercity connections are strengthened to form and develop intercity network.

1958~65	Unstable Urbanization	18	1.3	169	<ul style="list-style-type: none"> • Great Leap Forward(1958-60) • The reverse-urbanization from “Down to the Countryside Movement” economic reform
1966~77	Policy of Urbanization	17.6	1.67	190	<ul style="list-style-type: none"> • The Great Proletarian Cultural Movement • The reverse-urbanization from renewed second “Down to Countryside Movement”
1978~87	Rural Industrialization, Liberalization	25.3	2.77	381	<ul style="list-style-type: none"> • Chinese Economic Reform • Development of small towns from growth of townships and village enterprises • Rapid urbanization of coastal regions from creation of exclusive industrial zones

1988~00	Urbanization through land reforms	36.2	4.59	663	<ul style="list-style-type: none"> • 1988 Land Reform • Expansion of large cities, development of cities and towns
2001~11	Accelerated Urbanization	51.3	6.91	657	<ul style="list-style-type: none"> • Rapid economic growth after entering WTO • Accelerated urbanization through stable investments towards city expansion

Source: 陈甬军(2012)

3) The Problems of Urbanization Processes in South Korea and China

To summarize the problems of Korean & Chinese urbanization process are as follows <Table 3>: The Korean urbanization problem can be summed as city developmental problems of environment, housing, land, transportation, and rushed development. First, urbanization process changed the living space to become increasingly inhumane and factories and cars generated serious pollution. Second, sudden increases of townhouse and apartment constructions created lack of parking structures and fire lanes. Third, soaring real estate prices from urbanization intensified the gap between rich and poor. Fourth, concentrated urban population increased volume of traffic resulting in traffic congestions and lack of parking spaces. In conclusion, rapid progression of industrialization made efficient planning difficult to the point of tax wastes and inadequate urban infrastructure.

China’s urbanization process problems were social tensions, housing, city environment, administration after development, and migrant workers. To begin, display of corruption by regional public officials led to protests creating social tensions. Secondly, speculative real estate investment brought about rises in its prices, widening the gap between rich and poor. Thirdly, environmental pollution created from city development and formation of inhumane treatment of others resulted in many city environment problems. Fourthly, historical sites (cultural ruins and others) were either damaged or destroyed due to poor planning and management. The loss in cultural heritage was significant. In essence, there have been problems of migrant workers from rural moving into the cities for work. Unplanned urbanization leading to exponential growth of migrant workers meant that their standards of living could not be guaranteed by the government.

Table 3. Comparison of Urbanization Processes of Both Countries

South Korea	China
1. Environment Problems - Inhumane city spaces, pollution	1. Social Tensions - Corrupt public officials (Abuse of power) - Mass protest
2. Housing Problems	2. Housing Problems - Speculative real estate → rise in housing price
3. - Lack of parking structures and fire lanes	3. City Environment Problems
4. Land Problems - Expensive real estate, gap between rich and poor	4. Initial City Development Leading to Administrative Problems - Historical Site Damages
5. Transportation Problems - Traffic congestion, lack of parking spaces	5. Migrant Workers Problem - Lack of guarantees for migrant workers’ quality of life
6. Rushed City Development - Waste of public funds, lack of necessary city infrastructure	

4) Plans of urban developments in Korea and China

This study collected data about problems caused by urbanization processes in Korea and China to provide which parts both countries can benchmark about. In the case of Korea, overcrowding of cities led to rises in problematic factors of housing, roads, environment, and others.

Nevertheless, the increases in housing capacity gradually eased the problem. Therefore, China should increase the capacity of its cities, using the experiences of Korean urbanization as a basis. At the same time, there's a great need for China to ease population shifts, as well as pursuing sustainable city development plans after careful review.

In order to reduce thoughtless city development, Korea introduced development restriction zone laws, Seoul Metropolitan Area Realignment Planning Act, and etc. Moreover, to minimize the negative impacts of city development businesses, impact assessment system for population, environment, transportation, and etc. have been also introduced. Recently, systems for “transparency” and “community participations” systems were introduced to make city planning more democratic and transparent. Thanks to these systems, residents can now voice their opinions to their local government, attend public hearing, and etc. We predict that similar systems introduced to China's urbanization process will have positive impacts in the future.

China is a socialist state but at the same time it adopted plans such as “Chǐngshiqǔn” plans of growth and concentrated efforts and mutual city development plan. To reiterate, China's policy is not to redistribute development effort by limiting one area, but to allow regions to develop key characteristics through competition and cooperation from all participating areas. Thereby, the policy aims to achieve both balance and growth in the city development plans.

China explains that the nature of big city-focused development plans is to effectively respond to globalization. Hence, China plans to sustain its high economic growth through development of world-class cities that incorporate benefits of globalization and in turn, benefit the cities' surrounding areas. The new age of global economy lessened the importance of country to country competition and competition between key regions rose to prominence. In this situation, China's “Chǐngshiqǔn” plan highlights its intention to restrict growth of the capital city and shift focus towards developing key regions. These points provide important lessons for Korea to formulate new strategies of development.

China's expansion of new cities mostly contains various forms of "development zone". The concentrated positioning of housing and commercial districts into these "development zone" is similar to Korea's formation of "Free Economic Zone". However, they differ from one another as China's new cities are either directly connected to large cities or part of its area. Plans of development are mostly similar to Korea's new city development plan, but key characteristic of china's city development is the formation of self-sustaining cities where they can produce their own supply of goods.

China's control of population shifts between rural and cities may have solved the problems of overcrowded cities in the short term, but in the long term there are potential side effects of structural problems from separation of city and rural, transition to developed nation's growth model of production and consumption limiting growth, and other problems all can adversely affect China. In practice, China already encourages growth policy of revitalization of domestic production in the aftermaths of 1997 Asian Financial Crisis. Despite this, China's urbanization has not yet reached the point where domestic demand can keep up with growth.

Although Korea's policies implemented in China's urban planning will have definite positive effects due to difference in systems, theories for urbanization, and etc., China should consider Korea's ongoing policy of systems for "transparency" and "community participation" systems for review as emerging confusion from growth of China's cities and increasing societal participation of citizens. Similarly, Korea should consider introduction of China's mutual city development plans.

CONCLUSION

This study introduces examples of urbanization process and compares each country's distinctive problems; additionally, through this effort we hope to find solutions to these problems. And because China is in the stagnant stage of urbanization, policies that can be applied from Korea's ongoing urbanization policies should be researched in order to minimize the negative impacts of urban development. China's rapid development and significant urbanization progress means that China should review examples

of developed nations which already completed its urbanization. Potential problems should be prevented through careful selection of applicable policies and thus accomplish sustainable growth.

This research additionally compared urbanization process and policies country by country; however, we did not discuss individual country's regional characteristic problems. This is due to each country's different timeframes of development may not necessarily adjust well to the situation. The comparison between Korea's past and China's present and their common problems can have too similar context and insufficient analysis as result. We hope that by presenting current prominence of China's urbanization problems, more research will be funded and continued.

To review previous studies up to the present, there are many researches on each country's urbanization problems and their solutions, country to country comparative research is rare, and research data on the China's current urbanization plans are lacking.

The greatest challenges for gathering research data on China were either missing or classified information. Thus, problems and solutions were discussed, however we were unable to put forth overall solutions or provide a masterplan. Specifically, priorities for tasks, analysis of trade-offs between each other, and specific suggestions were all details of the plan dismissed in this research. We recognize the limitations of the research due to lack of data on applicable masterplans, and further research will be needed in the future.

By doing comparative research between two nations' urbanization, it is our aim to provide one way of reducing chances for failure while providing more opportunities. Despite above limitations, we hope that the study will help China and South Korea better understand each other and offer progress in solving the problems of urbanization.

REFERENCES

1. Chang, S. H. 1992. A Study on the Urbanization Characteristics of Korea. Graduate School of Dankook University.
2. Ministry of Land, Infrastructure and Transport(MOLIT). Urbanization Statistic DATA.
3. National Bureau of Statistics of the People's Republic of China, 2015
4. Park, I. S. 2009. Urbanization and development axis in China. Hanwool.
5. Park, J. K. 2014. Urbanization Process and the Policy Solutions for Urban Problem in China, The Architectural Institute of Korea, 30(306): 169~180.
6. Statistics Korea(kosis.kr).
7. 孔铎 刘士林. 2011.我国逆城市化研究发展评选. 学术界. 162: 214~222
8. 梁书民. 2008. 中国城镇化发展与食物均衡战略. 中国农业出版社. p.43
9. 潘家华. 2011. 中国城市发展报告. 社会科学文献出版社.
10. 張孝德. 2006. 關於建立新農村建設長效机制的思考. 科學對社會的影響 3: 31~34.
11. 朱林兴. 1996. 关于农村土地城市化的经济和规划问题, 财经研究, 3: 47~51
12. 陈甬军. 2012. 中国城市化发展的新阶段与新任务. 社会科学研究. 1: 34~37