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# Reasons for and Countermeasures against Gradient Transfer of Rural Population——A Case Study of Chongqing

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**Abstract** We take Chongqing as an example to analyze reasons for rural population gradient transfer from such factors as social system, industrial development, urban planning, and living costs. Finally, we present four policies and suggestions, including promoting urban construction, increasing investment in rural areas, pushing forward construction of labor market, and bringing safeguarding function into full play.

**Key words** Rural population, Gradient transfer, "One-hour economic circle" and "two wings", China

Rural population transfer is a dynamic process of optimizing the allocation, and also an inevitable requirement of industrialization and urbanization. Chongqing is a big agricultural city. It has typical features of dual economic structure, such as "big city, big countryside, huge poverty and large-scale migration". In 2007, Chongqing was established as a pilot area of balancing urban and rural development, then the rural population transfer becomes a major problem to be planned and solved. Since Chongqing becomes a municipality directly under the Central Government, its urbanization process has been speeding up. In 2009, its urbanization rate reaches 51.6%, which is 5% higher than the average national level<sup>[1]</sup>. Nevertheless, large-scale transfer of rural labors is spontaneous and blind, bringing certain negative effect to social stability and economic development. In combination with the plan of "One-hour economic circle" and "two wings", overall development of urban and rural areas, living and social guarantee, we should establish rural population gradient transfer mode under overall development of urban and rural areas, so as to achieve orderly and layer transfer. This is of realistic significance in boosting agricultural productivity, promoting urban and rural economical development, and improving farmers' living conditions. We cite rural population gradient transfer mode and base on the typical city—Chongqing to have a detailed discussion.

## 1 Reasons for rural population gradient transfer

As to classical theories of labor transfer, no matter Lewis model or Todaro model have some defects in assumptions and influence factors. They are particularly unsuitable for actual conditions of Chinese urbanization process, for example, rural labor transfer is confronted with problems of employment and living.

Here, the rural population gradient transfer refers to step by step transfer of rural labors with particular emphasis at a certain industrial gradient (from low level to high level, from labor intensive to capital and technology intensive) and location gradient (from countryside, small towns, small and medium sized cities, and large cities, to integration of urban and rural areas)<sup>[2]</sup>.

**1.1 Social system factor** The general trend shows that limitations of the State on rural residents going to cities are gradually removed. Policies of migrant workers are also turned to protection and service from standardized management. Many protection and service policies for migrant workers have been issued. However, the implementation of these policies needs time. In addition, some policies are not perfect. Social exclusion still exists in many policies. They are mixed with macroscopical social and economic background, urban and rural division, as well as management system of separate administration of areas. For instance, the social security and social services for migrant workers are still at lower level or even not existing<sup>[3]</sup>. Due to inertia of previous system and other reasons, fences of rural labor flow are not completely removed. The threshold and cost for employment in cities are relatively high. Rural labors are discriminated in many aspects. Their just rights and interests cannot be effectively protected. Besides, government has not attached much importance to services for rural labor employment. Government's lack of employment management and service for rural labors not only leads to mass unemployment in rural areas, but also restricts rural development. What's worse, the negative systems and policies still increase costs of rural labor transfer, cut down employment income and initiative of migrant workers, and restrict urbanization and coordinated development of urban and rural economy and society. Spread of "shortage of migrant workers" proves from opposite side that costs they paid and income they obtained are seriously not matched. Thus, even in such large population of China, "unlimited supply of labor" is conditional.

After Chongqing becomes a municipality directly under the Central Government, its regional economic development strate-

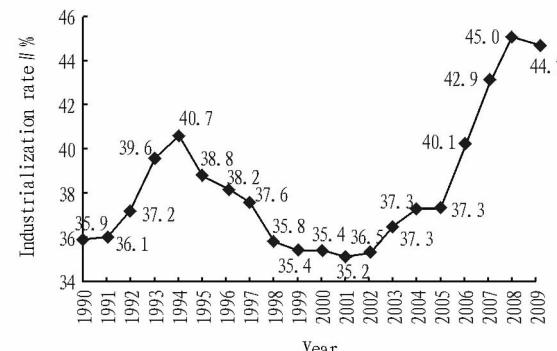
gy undergoes several adjustments from "three major economic zones", "four economic blocks" to "One-hour economic circle" and "two wings", and from balanced to unbalanced. Its regional economy is increasingly active. In the system design and policy conveying, districts and counties within "One-hour economic circle" of Chongqing have convenient information channel. They are higher sensitive to information and acute in grasping for policies, cutting down transaction costs and opportunity costs. Apart from 9 major districts in districts and counties of "One-hour economic circle", there are 4 regional central cities, which have the policy autonomy that other districts and counties do not enjoy. They have higher degree of freedom in discretionary right of policies, so they have comparative advantages in promoting agricultural production and increase of farmers' income. However, this also widens the gap of social and economic development. Once the gap becomes obvious, it is required to ensure space for sustainable development of the whole city's economy, avoid interest conflict or other conflicts of underdeveloped districts and counties, quantize development goals and properly subdivide groups with regional characteristics. All of these play an important role in boosting rational transfer of rural population. From analysis of influence factors of economic development of districts and counties, we believe that it is required to promote regional central cities in "One-hour economic circle", push forward industrial adjustment and upgrading of major cities and towns in growth pole of "Two wings", and increase labor employment, so as to prevent massive rural population blindly flowing to downtown, to achieve gradient transfer and give impetus to regional economic growth.

**1.2 Industrial development factor** For historical and system reasons, China's rural labor flow is quite different from western developed countries and general developing countries, that is simultaneous happening of urbanization and rural non-agriculturalization. The urbanization means centralization of rural labors in urban formal sectors and informal sectors, while the rural non-agriculturalization refers to farmers leaving the farmland but not one's hometown and centralization in their local or nearby township enterprises or non-agricultural sectors. Flowing of rural labors to cities and rural non-agriculturalization are historic results of China's distinct system, and are unique phenomena that will not appear in other developed or developing countries.

Compared with labors directly transferred from agriculture to urban informal sectors, transfer of labors of non-agricultural or township enterprises to urban informal sectors can cultivate those labors, and improve overall quality of urban labors. In the later period of 1990s, township enterprises develop slowly and some of these enterprises go bankrupt, leading to labors returning to agriculture, and consequently forcing agricultural surplus labors to flow to urban informal sectors and putting considerable pressure on cities. If government can formulate and perfect proper policies to promote labor market between non-agricultural sectors or township enterprises and urban informal sectors, labors in non-agricultural sectors or township enterprises will be easy to flow to urban informal sectors, thus it is able to

establish an appropriate gradient transfer route of "agricultural sectors-non-agricultural sectors or township enterprises-urban informal sector-urban formal sectors".

From the industrial layout of Chongqing, it is shown that we should take more account of convenient traffic and industrial chain supporting policies when distributing districts and counties in "One-hour economic circle". Due to weak industrial basis of "two wings" areas before Chongqing becomes a municipality directly under the Central Government, there is serious industrial hollowing in two wings areas. Therefore, the unbalanced location effect in industrial layout is also an important reason for disorderly transfer and flow of labors. Compared with "one-hour economic circle", there is big gap with "two wings" in industrial structure, employment structure, as well as structure of fixed assets investment. Consequently, it is hardly for economic structural factors of two wings to promote economic development and labor employment. Thus, the advantage is not predominant.



Note: Data is selected from *Chongqing Statistical Yearbook 2010*.

**Fig. 1 Industrialization rate in Chongqing from 1990 to 2009**

Industrial and urban development is closely related to agricultural development, and agricultural production itself plays a great role in pushing forward the industrial development. If industrial and urban development is restricted or encumbered with agriculture, it will be difficult to form impetus to rural labor transfer. As a result, the urbanization process and transfer of surplus rural labor stagnate. We should promote industry through agriculture and push forward urban employment through agricultural development, so as to realize reasonable flow of rural population in Chongqing, and achieve gradient transfer.

**1.3 Urban planning factor** Small and medium sized cities and small towns play an important role in prompting the population transfer. Since the access threshold is relatively low, small and medium sized cities and small towns have powerful attraction towards migrant workers. In the course of rural labor transfer, Taiwan adopts decentralized transfer. Gradually, it established multiple-level urban spatial structure with big cities as the center, medium sized cities as backbones, small cities as links, and central towns as cells. Besides, it attracts numerous rural labors through developing rural non-agricultural industries. This not only can realize urbanization, but also can avoid prob-

lems in South Korea and India, such as overflow of rural labor to big cities, ineffective use of rural internal mechanism, malignant expansion of big cities, huge rural and urban gap, poor quality of transfer, and impossible to achieve regional transfer and industrial transfer, *etc*<sup>[4]</sup>. Therefore, it is required to select proper way of urbanization and effectively develop non-agricultural industries, so as to promote rural labor transfer and coordinated development of social economy.

"One-hour economic circle" districts and counties in Chongqing are distributed within one hour drive of downtown. Population and industrial gathering and economic radiation abilities are great, traffic is convenient, and residents' income is higher than other districts and counties. Northeastern areas of Chongqing are districts and counties located at central zones of reservoir area of Three Gorges. With a long time of demonstration of Three Gorges Project, the industrial layout and development are postponed, and industrial hollowing occurs during restructuring enterprises in reservoir area. Thus, nearly the entire industrial system needs rebuilding. These areas are hard to get to, mountains and hills coexist, land is barren, and residents have difficulties in realizing income increase. Southeastern Chongqing is situated in Wuling mountain area. The distance is far and the mountain is high. It is an area of big mountain and big countryside. All of these are inborn obstacles to increase of residents' income. In addition, the industrial development foundation is weak. Only in reliance on natural climate, residents there can hardly increase their income through decentralized land contracting management. Due to inferior location, weak foundation, industrial hollowing and single structure in "two wings", the acceleration rate of development is still much lower than that of "one-hour economic circle". Unbalance of economic development is increasingly prominent in "one-hour economic circle" and "two wings". It is due to difference in natural, social and economic conditions between different regions that we should not adopt a uniform urbanization mode. We should adhere to principle of comparative advantages, base on resource conditions, population scale, and economic development level, suit measures to local conditions, make scientific planning, and properly combine development of megalopolis, big cities, medium sized cities with development of small cities and towns, to constantly improve vitality of regional economy.

**1.4 Living cost factor** At present, high living costs in big cities pose a great problem for rural population transfer. Farmers constantly move out, but their arrangement and settlement in cities are not solved. Housing, traffic, communication, food, medical treatment and education, *etc.* will bring enormous expenses, so their income from migration is not enough to cover their expenses. Especially for those rural people who fail to find proper jobs and wait for opportunities, the urban fringe life and adverse conditions are great tests. Those who fail to pay living costs of target cities will be called floating population, not immigrants. Large floating population gathering in urban fringe areas also creates difficulty for city management and planning and leads to disorder and chaos. Comparatively speaking, small and medium sized cities are low in living costs, and not far from

rural areas, so the migration costs will be greatly reduced.

As for Chongqing, large floating population flowing into downtown will increase burdens on urban communication and transportation and public facilities. Roads in Chongqing downtown are rough and rugged, and city traffic is always a serious problem. With numerous people flowing into downtown, the traffic problem there is much more prominent, and traffic congestion clearly rises. In particular, there is serious overload of buses in urban fringe areas where floating people live (Shuangbei – Shapingba – Jiefangbei, Hongqihengou – Guanyinqiao – Jiefangbei, Lijiatuo – Nanping – Jiefangbei, *etc*). Although encircled by two rivers, large population flowing into Chongqing results in increasingly intense water resources, and we have to implement water rationing policy at floating people gathering areas. What's worse, housing and electric power supply are also serious problems. Investigations show that about 6 to 20 migrant workers live in 18 to 20 m<sup>2</sup> rented rooms. In some places, lights are just like fireflies and televisions don't work<sup>[5]</sup>. Therefore, instead of leaving rural people stranded with big cities and downtown, it is better to bring into play functions of central cities, and create more employment opportunities in districts and counties. As to regional central cities and small cities, the industrial structure level is low, so there is great potential and capacity to exploit. In addition, the living costs there are low. With proper distribution and construction, they will have stronger attraction towards rural population.

To sum up, major industrial carrier of urbanization of Chongqing is labor-intensive industry (urbanized industry). Compared with urbanization of downtown, regional central cities and small cities have advantages in industrial development costs and urban living costs. Therefore, rural population transfer of Chongqing should bring into play space carrier functions of regional central cities and small towns, so as to realize gradient transfer and distribution.

## 2 Policies and suggestions

Rural population flowing to cities is favorable to rational flow and allocation of human resources, providing rich labor forces for the secondary and tertiary industries, reducing costs of industrialization, and favorable to promoting development of urban economy and improving competitive power. Besides, multiplier effect produced by rural population transfer is helpful to achieving the change of rural population to urban population, and also effective promotion of urbanization process. Thus, we must strengthen macro control, and enhance the capacity of attracting rural labors to urban areas.

**2.1 Promote construction of regional central cities and small cities and towns** We should promote development of small cities and towns through developing big cities. This is the only way of urbanization process. To enhance motive force of economic development and promote overall development of urban and rural areas, Chongqing should speed up urban development, and focus on development of megalopolis with downtown and 9 districts as the center, as well as 5 regional central cities, including Fuling district, Qianjiang district, Jiangjin dis-

trict, Hechuan district and Yongchuan district. Besides, it should concentrate resources on building Wanzhou into the second biggest city of Chongqing, and actively develop 25 sub-zone central cities, like Changshou. It is required to energetically push forward development of big cities, achieve overall development, and further to raise overall urbanization level of Chongqing.

At present, we should make the best use of the situation to support development of small cities and towns. This is particularly important. It is required to support development of 4 types of small cities and towns. The first is radiating type of big cities and regional central cities. This type of city is in economic zone of big and medium sized cities. Their ability to accept urban radiation is high. The traffic and communication between this type of city and economic regional center are convenient. Besides, way of life in this type of city is similar to that in small cities and towns. For example, those small cities and towns with resident service industry (like food and beverage) or newly developed commodity houses as centers around big and medium sized cities. The second is promoting type of central distinctive industry. It catches the opportunity of labor-intensive and agricultural product primary processing industries gradually quitting in the course of the economic reconstruction of big cities, bases on industrial structure adjustment and reasonable gathering, to form small cities and towns whose economic development is promoted by distinctive industry. The third is market growth promoting type. Mainly in reliance on advantages of convenient traffic, abundant commodities, and smooth channels, this type improves market conditions, expands transaction scopes, and establishes scaled and distinctive specialized commodity market, so as to form small cities and towns through market growing. Those small cities and towns with border trade as pillar of their economy at boundaries between Chongqing and other provinces. The fourth is tourism culture developing type. Depending on local rich natural landscape or historical or ethical cultural landscape resources, and based on moderate development and high quality management and service, this type of small cities and towns reasonably allocate and relatively centralize various tourism elements, to attract tourists to promote their economic development<sup>[6]</sup>.

**2.2 Increase investment in rural areas** Chongqing should increase investment in rural areas through combining development of pilot zone for comprehensive and coordinated reform of urban and rural area integration and construction of new countryside, make numerous rural residents benefit from these investments, and motivate surplus labor transfer. The economic development speed of "two wings" has a considerable influence on gradient transfer of rural population, so it is required to overcome existing unfavorable conditions and to achieve a development speed higher than that of "one-hour economic circle". With proper planning, regions can assist with each other, build distinctive pillar industries, strengthen the effort of building distinctive industrial park, and support to form radiation towards growth poles of all regions through rapid development of industry, trade and business, finance, real estate, etc. Government

should make more regional favorable policies and take various measures to actively introduce private investment to these areas, so as to increase investment in infrastructure and reduce adverse effect of factors like geological location.

Furthermore, we should accelerate the transfer of those rural residents living in mountainous areas of "two wings" to areas that have better urbanization and industrial development. Finally, it is expected to realize excellent development of ecological migration through urbanization development and industrial development of immigrants.

**2.3 Push forward construction of labor market** Gradient transfer of labors depends on labor market, so it is essential to build and perfect labor market. We should establish labor market intermediaries, provide information service, and promote information networking, so as to form uniform urban and rural labor market. Besides, we can set up employment agency for labors, and encourage demand and supply parties to register in this agency, then it will become an information center for both supply and demand parties. In addition, we can set up intermediaries like labor exporting service organization, enhance organization level of exporting, and take proper training. It is also possible to communicate with various information centers and establish network in regional range through regional cooperation or in other proper manners. We can communicate information through network, have a coordinated arrangement, and integrate urban and rural labor markets, so as to achieve effective transfer of migrant workers.

Chongqing has made effective attempts in employment training of rural labors. For instance, it provides free secondary vocational education for rural new labors, and builds famous labor service brands, such as Fuqiao Health Caring, Shilong Technician, Wanzhou Sewer, Kaixian Builder, and Yunyang Boatman, etc., in reliance on vocational education and training bases in Yongchuan, Wanzhou and Qianjiang. In addition, it establishes "National E-commerce Platform for Labor Service". Migrant workers register personal information by telephone. The service platform matches enterprises' recruitment information. In this way, it provides jobs for over 50 000 migrant workers. Apart from job service, it also provides policy consultation, working guide, legal advice, etc.

**2.4 Bring into play safeguarding function** Government should take job enlargement as major objective of macro control. Apart from promoting employment and reemployment, it should also implement positive employment policy, make employment development strategy, perfect employment service system, and make efforts to improve employment and entrepreneurial environment, so as to create conditions for market allocating human resources. Furthermore, it is required to make clear the separation of duties of municipal government and local government in employment works, and to bring into full play initiatives of local government at all levels in promoting employment.

Government should also take a series of measures to solve arrangement problem of migrant workers. Firstly, it is required to promote migrant workers to live in peace. For exam-

ple, we can build low-rent house and cheap house to guarantee that migrant workers have place to stay in cities. Secondly, we can establish proper social security system according to characteristics of migrant workers. For instance, Chongqing handles special endowment insurance for migrant workers on the principle of low premium, transferrable and wide coverage. Migrant workers can work and join insurance in the whole city area. If they stay in cities, they will be shifted to urban social insurance; if they return to countryside, they will be shifted to rural social insurance. At the same time, medical insurance methods for serious disease of migrant workers are issued, and 3 232 injury insurance policies are improved for migrant workers. Thirdly, we should properly solve education problem of migrant workers' children. For example, we can send migrant workers' children to attend schools near their working and living areas. In the whole Chongqing city, 380 public schools have been assigned to receive migrant workers' children for compulsory education. It is strictly prohibited to collect tuition and incidental expenses, text book fees, expenses for transferring school, and temporary student fees in any form. Fourthly, we should establish household registration transferring system for migrant workers. Specifically, we can remove the limitation on migrant workers' household registration in all towns outside the downtown, and all migrant workers and their family members having legal domicile (bought or rented) can apply for household registration. Thus, it is expected to gradually separate distribution functions carried by household registration system, and finally achieve the transition to uniform urban and rural management system for household registration<sup>[7]</sup>.

## References

- [1] Chongqing Municipal Bureau of Statistics. Chongqing Statistical Yearbook[M]. Beijing: China Statistical Publishing House, 2010. (in Chinese).  
 [2] ZHANG LS. Urbanization and the gradient transfer model of the surplus rural labor force in China [J]. Journal of University of Science and

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accumulation decreases progressively. The self-contribution of human capital keeps on downward trend. Since the human capital investment is a long and continuous process, we should stick to the corresponding policy of increasing input of rural human capital for a long term, not just for a short period.

## References

- [1] CHU JD, CUI JH. Analysis of four in one's human capital impact on farmers' income[J]. Rural Economy, 2010(1): 52–55. (in Chinese).  
 [2] BAI JH, YUAN F. Analysis of farmer income level and manpower capital relation in rural [ J ]. Journal of Agrotechnical Economics, 2003(1): 16–18. (in Chinese).  
 [3] LIU CY. Effects of human capital on the typical poverty regional farmers' income[J]. On Economic Problems, 2005(6): 55–57. (in Chinese).  
 [4] LI JZ, WANG H, WANG M. Analysis on the influence of human capital investment to the farmers income level[J]. China Statistics,

- Technology Beijing: Social Sciences Edition, 2006, 22(3): 17–20, 35. (in Chinese).  
 [5] ZHANG SF, TANG J, ZHAN SH. To solve the problem of the land – losing farmers feasible strategy: using land for security[J]. Red Flag Manuscript, 2004(8): 32–35. (in Chinese).  
 [6] CHENG MW. China rural labor migration's mechanism, motivation and obstacles[D]. Shanghai: Shanghai Jiaotong University, 2007. (in Chinese).  
 [7] LU YJ. On the influence on social economy exerted by population circulation in Chongqing municipality proper [ J ]. Journal of Chongqing Threecorges University, 2004(2): 69–74. (in Chinese).  
 [8] WANG W. To accelerate the development of urbanization in the duration of prediction of Chongqing—the logistic model based on the modified data analysis[ EB/OL ]. (2009–09–01) <http://www.cqj.gov.cn/UploadFile/20090901102404984.pdf>. (in Chinese).  
 [9] HUANG CY. Urban and rural scout in rural China of Chongqing—the third change of scout in China's rural [ EB/OL ]. (2009–08–12) <http://www.Chinareform.org.cn/cirdbbs/dispbbs.asp?boardid=11&ld=237453>. (in Chinese).  
 [10] LI X, GUO N, SONG FR. Relationship between the cultivated land change and the population and economic development in Shandong Province since 1990[J]. Asian Agricultural Research, 2009, 1(1): 14–17, 33.  
 [11] YU HL, XIA YL, LU QS. A research to village combination and the analysis of the influences of which having on social economy during the urbanization process of Yantai City[J]. Journal of Anhui Agricultural Sciences, 2011, 39(26): 16240–16242, 16262. (in Chinese).  
 [12] WANG DP, PENG JQ, YAN Z. Employment and transfer status of female labor force in rural China[J]. Asian Agricultural Research, 2009, 1(6): 4–9.  
 [13] JIA Y, KONG FC. Grey Correlation analysis on the influence of rural labor flow on the income gap between urban and rural areas [ J ]. Journal of Anhui Agricultural Sciences, 2011, 39(27): 17047–17048. (in Chinese).  
 [14] GAN L, LIU GE, MA N. Resident basic medical insurance and household current consumption [ J ]. Economic Research Journal, 2010 (S1): 30–38. (in Chinese).  
 [15] CHEN L. Research of rural environmental pollution issues in China [J]. Journal of Anhui Agricultural Sciences, 2011, 39(31): 17671–17673. (in Chinese).  
 [16] FENG JH. An analysis of the effect of human capital in increasing farmers' income[J]. Economic Survey, 2008(5): 108–110. (in Chinese).  
 [17] LONG CH. Empirical analysis of the role of human capital on China's rural economic growth [ J ]. Journal of Agrotechnical Economics, 2008(1): 50–56. (in Chinese).  
 [18] ZHANG Q. Dynamic relation between China's rural human capital and peasants' income[J]. Journal of Shanxi Finance and Economics University, 2007, 29(3): 27–31. (in Chinese).  
 [19] WANG AM. Dynamic relation between education and peasants' income—a case study of Jiangsu Province[J]. Journal of Shanxi Finance and Economics University, 2009, 12(2): 7–10. (in Chinese).  
 [20] HUANG JJ. An empirical analysis on the contribution of human capital to the rural economic growth in Henan Province[J]. Hubei Agricultural Sciences, 2010, 49(10): 2617–2620. (in Chinese).  
 [21] GAO TM. Econometric method and modeling: application and examples on EViews[M]. Beijing: Tsinghua University Press, 2009. (in Chinese).