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# A Study of Human-Land Linking Policy Based on Urbanization Away from Home: A Case Study of Anhui Province

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**Abstract** This paper analyzes the features and trends of urbanization away from home in Anhui Province, and believes that the cross-city floating population in the province shows an expanding scale, and dual cores of the province has obvious attractiveness. This paper also analyzes the relations between urban-rural construction land and urban-rural population transformation in the province, and expounds the possibility and necessity of carrying out human-land linking policy northern Anhui-Wanjiang. Based on the factors affecting human-land linking policy, this paper recommends that we should establish cross-regional trading policy system for land development rights in Anhui Province from four key links (urban entry, urban integration, rural exit, common urban-rural development), in order to effectively promote migrant workers' citizenization.

**Key words** Urbanization away from home, Human-land linking, Homestead, Land market

## 1 Introduction

In 2016 government work report, Premier Li Keqiang points out that it is necessary to deepen the reform of the household registration system, soften the terms on settlement in cities, establish and improve the "human-land – money" linking policy<sup>[1]</sup>. As early as 2012, Central Plains Economic Zone Plan (2012 – 2020) approved by the State Council allowed the Central Plains Economic Zone including northern Anhui to steadily push forward the human-land linking and alleviate the waste and inefficient use of land. Anhui Province is in a period of rapid development of urbanization, but there are many problems such as large regional disparities, mismatch between population distribution and resources distribution, and irrational urban scale and structure. In order to get rid of the predicament of serious human resource drain and difficult internal flow, achieve sustained economic development based on rational allocation of resources, optimize population distribution, economic layout and urban element configuration, ensure the supply of human resource, land and other resources in the core areas, achieve stable and adequate urbanization and promote the construction of ecological civilization, Anhui Province needs to enhance the urbanization away from home for the cross-city population in the province, promote the population to cluster in Hefei, Wuhu, and the city belt along the Yangtze River and Huaihe River, and moderately transfer the population in northern Anhui.

## 2 Current situation of urbanization away from home in Anhui Province

### 2.1 Characteristics and trends of population flow in Anhui Province

Anhui Province is adjacent to the Yangtze River Del-

ta, with convenient transportation, and has gradually developed into the largest province of rural labor migration. The population working outside home for more than half a year occupies more than 30% of rural population (Table 1). However, with economic and urbanization development in Anhui Province in recent years, the continued fast interprovincial outflow of population has been changed, and the scale of population flow within the province continues to grow. Hefei and Wuhu as economic cores show strong appeal for the population.

**2.1.1** The interprovincial outflow of population in Anhui Province has been reversed. The sixth census data show that Anhui Province is the largest province in terms of interprovincial population outflow scale and proportion. According to *Statistical Yearbook of Anhui Province*, the scale of population working elsewhere for more than half a year continued to growing during 2000-2011, except a slight decline in 2008 due to financial crisis. But the interprovincial population outflow scale peaked in 2011 (11.99 million), and then it continued to decline, and the scale was 10.53 million in 2014. Thus, the interprovincial outflow of population in Anhui Province has been reversed.

**2.1.2** Anhui has increasing appeal for population. Transfer of industry brings transfer and return of the population, and Anhui Province, as population inflow place, has increasing appeal for population. The sixth census data show that most of people in Anhui Province flow out to the Yangtze River Delta region, accounting for 77.5% of total people flowing out. Since 2010, the projects and funds of the Yangtze River Delta region have continued to shift to Anhui Province, and the growth rate of projects and funds flowing to the province is more than 25%. With the accelerated capital inflow, the population flowing out tends to continuously return.

**2.1.3** The regions along the Yangtze River have stronger appeal than northern Anhui. By analyzing the changes in various cities' appeal for population, the cities in the provinces can be divided

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into three categories according to the growth rate and proportion of cross-city floating population working outside home for more than half a year (average growth rate of 6.4% and average proportion change of 0% in the province). (i) Strong areas (rising proportion, fast-growing scale): Hefei, Wuhu. (ii) Equilibrium areas (steady proportion, fast-growing scale): Chizhou, Huangshan, Xuancheng, Lu'an, Ma'anshan, Chuzhou, Anqing. (iii) Weak areas (decreasing proportion, slow-growing scale): Fuyang, Bozhou, Huainan, Huaibei, Bengbu, Suzhou, Tongling. From the distribution of strong and weak areas, it is found that the regions along the Yangtze River have stronger appeal than northern Anhui, six cities in northern Anhui are all weak areas, and Tongling City is ranked last due to the impact of resource depletion and economic slowdown.

### 3 The conditions for Anhui to implement human-land linking policy

Based on the overall land use plans in various cities of Anhui Province (2006-2020), the second land survey results in Anhui Province and Anhui Statistical Yearbook, we analyze the rural residential land use change in Anhui Province in 2005 and 2010 (Table 2). "Double population" is roughly calculated by subtracting rural population from agricultural population. If we take simple conversion method and believe that "double population" occupies all of the original homestead in countryside, then the population of "double population" to agricultural population (Table 3) is equal to the population of the land occupied by "double population" to total rural residential land (Table 4)<sup>[2]</sup>.

**Table 1 The floating population working across the city in Anhui Province for more than half a year during 2007-2013 (%)**

	2007	2008	2009	2010	2011	2012	2013
Hefei City	47.99	47.33	51.45	43.98	48.95	49.19	51.97
Huaibei City	4.78	4.19	4.22	6.20	3.79	4.53	3.46
Bozhou City	1.19	0.46	1.12	1.57	0.99	0.73	1.01
Suzhou City	2.47	1.28	1.46	2.64	2.54	1.68	1.55
Bengbu City	4.90	3.48	3.93	4.09	4.74	3.83	3.49
Fuyang City	2.45	2.11	2.21	3.10	3.03	2.62	2.12
Huainan City	7.13	7.80	6.46	6.75	5.72	6.81	5.20
Chuzhou City	2.33	3.16	1.78	3.87	2.22	1.82	2.48
Lu'an City	1.77	2.17	1.71	2.73	2.20	2.76	1.92
Ma'anshan City	3.96	4.35	4.88	5.28	3.90	3.77	4.13
Wuhu City	9.79	12.43	8.79	8.53	11.66	12.16	11.80
Xuancheng City	1.07	0.82	1.19	1.74	1.30	1.07	1.41
Tongling City	3.92	3.96	3.40	2.77	2.52	2.64	2.02
Chizhou City	0.89	1.26	1.76	1.67	1.15	1.23	1.44
Anqing City	4.27	3.82	4.15	3.39	3.39	3.40	4.32
Huangshan City	1.10	1.37	1.46	1.68	1.93	1.77	1.67

**Table 2 Rural residential land use change in Anhui Province in 2005 and 2010**

Areas	Rural residential area (ha)		Agricultural population		Rural per capita residential area (m <sup>2</sup> )	
	2005	2010	2005	2010	2005	2010
Hefei City	62787.65	64036.10	2707922	2791081	231.87	229.43
Huaibei City	29954.00	31474.00	1274533	1242869	235.02	253.24
Bozhou City	96416.00	107120.00	4954086	5339342	194.62	200.62
Suzhou City	105561.70	120792.00	5308471	5553162	198.86	217.52
Bengbu City	55203.00	58647.00	2572535	2598805	214.59	225.67
Fuyang City	131713.44	149044.00	8259398	8837754	159.47	168.64
Huainan City	21356.36	22933.00	1291183	1303960	165.40	175.87
Chuzhou City	100105.00	108701.00	3419833	3511902	292.72	309.52
Lu'an City	118788.36	140100.00	5816989	6060067	204.21	231.19
Ma'anshan City	10074.33	13527.00	664752	645516	151.55	209.55
Wuhu City	23225.25	27496.00	1314660	960779	176.66	286.18
Xuancheng City	41051.00	57805.00	2266188	2280197	181.15	253.51
Tongling City	7195.64	7954.00	325479	308032	221.08	258.22
Chizhou City	26134.47	29420.00	1303158	1319410	200.55	222.98
Anqing City	99033.00	115315.00	5031621	5044170	196.82	228.61
Huangshan City	13450.00	17786.22	1133228	1116672	118.69	159.28
Chaohu City	72363.16	75213.74	3832180	3849172	188.83	195.40
Total	1014412.36	1147364.06	51476216	52762890	196.00	225.03

**Table 3** The changes in "double population" and its share in agricultural population in Anhui Province during 2004-2014 Unit: 10<sup>4</sup>

Year	Agricultural population	Rural population	Double population	Proportion of double population
2004	5119	4297	822	16.06%
2005	5148	4203	945	18.36%
2006	5160	4147	1013	19.63%
2007	5208	4092	1116	21.43%
2008	5243	4011	1232	23.50%
2009	5277	3934	1343	25.45%
2010	5276	3878	1398	26.50%
2011	5299	3796	1503	28.36%
2012	5322	3693	1629	30.61%
2013	5341	3612	1729	32.37%
2014	5362	3527	1835	34.22%

**Table 4** Total rural residential land and total land occupied by "double population" in Anhui Province in 2005 and 2010 Unit: ha

Year	2005	2010
Total rural residential land	1014412.36	1147364.06
Total land occupied by "double population"	186246.11	304051.48

#### 4 The factors that affect human-land linking policy

There are many factors affecting the labor mobility in the province, and based on relevant research results, we divide the factors that affect urbanization away from home in the province into policy characteristics; personal and family characteristics; domicile environmental characteristics; level of urban development; differences in folk customs and life habits (Table 5). (i) Policy characteristics. From the legislative level, the top-level institutional design is inadequate, and the state and local legislation is not perfect. When Anhui Province makes experiments on human-land linking, it is necessary to fully understand the necessity of having laws for people to follow, and protect the farmers into the city in all aspects of employment, social security, education, census register, so that they can enjoy the legitimate rights and interests. (ii) Personal and family characteristics. Farmers' personal and family characteristics have a significant impact on the labor flow. Anhui Province should have forethought and adopt different ways, and especially during the Spring Festival, it should make a survey of 12.876 million migrant workers to have a clear understanding about the base number of migrant workers returning home, place of domicile and urbanization trends, and predict the amount of land used for urbanization. If it is "urbanization away from home" in the province, the land quota should be supplied by the place of domicile<sup>[4]</sup>. (iii) Domicile environmental characteristics. The level of economic development and economic models in the place of domicile significantly affect the labor mobility. Due to high level of economic development and abundant jobs, the Wanjiang city belt has a strong ability to attract the cross-city labor in the province; due to environmental constraints on traditional resource-based industries and rising costs in northern Anhui, the cross-city

and interprovincial labor mobility is very high. (iv) Level of urban development. From the point of view of city level, Anhui's urban population is increasing and city scale is expanding, but the large and medium-sized cities grow slowly, and there is a shortage of large cities with great driving force. Anhui Province should continue to improve the driving force of the central city of Hefei to promote the province's rapid economic development. (v) Differences in folk customs and life habits. There are great differences in the customs and life habits between north and south of Anhui Province, and human-land linking policy involves a large floating population. If this relationship is not properly handled, it will become a factor affecting social harmony. The migrant workers' integration into the city is a process of accepting urban values, mode of production, ways of communication and thinking, history, geography and other cultural elements from ideas.

#### 5 Recommendations

**5.1 Paying particular attention to key links of reform and policy priorities** The rural labor transfer includes three links: rural exit, urban entry and urban integration of migrant workers<sup>[5]</sup>. Han Jun from Development Research Center of the State Council believes that it is necessary to make a basic bottom line in China, that is, it is impossible to make farmers completely abandon contracted land and homestead to settle in the city the next two or three decades<sup>[6]</sup>. Therefore, it requires us to change ideas, and respect farmer as rational economic man's right to choose, clearly understand the policy priorities, in order to promote urbanization away from home, human-land linking, and orderly farmer citizenization in Anhui Province.

**5.2 Breaking the barriers to urban entry** It is necessary to strengthen population concentration and absorption capacity building, and make the central cities relax the constraints on settling in the province and gradually soften the terms on settlement of the population from other provinces. In the main producing areas of agricultural products, key ecological function areas and prohibited development zones, there is a need to implement a proactive population exit policy. Additionally, it is necessary to strengthen com-

