

## Management of Labor Force Flow in Poverty-stricken Villages

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**Abstract:** In order to achieve common prosperity, China's poverty alleviation work to implement the precise poverty alleviation strategy, Dinghequan Villages in Binzhou as one of the poor village, the village's labor force population movement, the village's economic development and the stability of the villagers' lives have multiple effects. Through on-the-spot investigation, on the basis of the analysis of the general situation of Dinghequan Village, the situation of labor force population movement and the relevant factors affecting labor force population movement, the relevant understanding of the influencing factors of labor force population movement in Dinghequan Village is obtained. In view of the above factors, this paper puts forward some countermeasures and suggestions on the labor migration in Dinghequan Village.

### 1. Introduction

The impoverished villages are an important focus in China's tough poverty alleviation battle. Their labor force population mobility is the key to enforcement of the strategy on high-precision poverty alleviation, which has a direct bearing on precise implementation of this task. High-precision poverty alleviation is a presently important task in China, the purpose of which is to precisely identify, support and manage those living under the poverty line by using scientific and effective methods based on the environments of poverty-stricken areas and conditions of poverty-stricken farmers. The study on the labor force population mobility in poverty-stricken areas can help implement the poverty alleviation policy more precisely.

In domestic researches, Ai Liying and Meng Yongguo (2006) pointed out that, the mobility of rural population was the only way of China's rural economic development as well as an important way of migration of a large number of surplus rural labor in China, so there was need to maintain moderate mobility of rural population, and governments shall take necessary measures to eliminate its negative impact[1]. Liu Xuemei (2014) thought that informal employment had still been a primary choice of rural labor force in migration and employment for a long time to come[2]. He Jianxin (2013) analyzed the current situation of migration of surplus rural labor in China and pointed out the existing problems: low migration efficiency, diversification of migration modes, and change of employment pattern and characteristics of migrated labor groups[3].

Liu Jianping (2010) thought the direct causes of rural labor mobility in poverty-stricken areas were family poverty and labor surplus. In terms of individual characteristics, human capital status of laborers was considerably important. According to his research results, as far as family factors concerned, population, labor force and size of tillable land had a positive impact on the labor force's decision on going out; the number of children attending the school had a negative impact on the decision of family members on going out; the affluence degree of a family and the education degree of the head of the household had a significant inverted U-shaped impact on the labor force's decision on going out[4]. Liu Xiaoyu and Zhang Linxiu (2008) explored the impact of rural land property rights system on rural labor migration through using the first-hand data of investigation on rural areas in China, and concluded that the investments on road traffic in rural areas helped promote the non-agricultural migration of rural labor force and that stable rural land property rights system could effectively maintain and promote the non-agricultural migration of rural labor force[5]. Hui Yun and Qin Lijian (2015) conducted a study on the factors influencing rural laborers' migration areas by

using the MLogit model. Their results showed that, migrant laborers with college education or above tended to work “outside the county but within the city” or in farther regions, larger size of household land significantly inhibited migration of rural labor force and integration into city and the number of migrant laborers in the same village for business had played a significant role in promoting the migration of rural labor force[6]. In addition, the research result of Liu Qinfei (2016) showed that, when the pulling force generated by better opportunities in the target area was greater than the thrust force generated by poor opportunities in the outflow area, people were easily attracted to the areas with higher expected salary[7].

Regarding the issue of labor force migration in poverty-stricken areas, these scholars basically had the same view points. The direct cause of labor force migration is labor surplus. However, the migration of surplus labor migration has inevitably brought about some problems such as education degree, cultivated land area, family values, etc. Although the mobility of labor force population can promote the economic development of the outflow places, it brings unstable factors to the inflow areas; so it is necessary to take the corresponding countermeasures to regulate it.[8]-[14].

## **2. Investigation and Analysis of Mobility Status of Labor Force Population in Dinghequan Village**

### **2.1 Introduction of Dinghequan Village.**

**Natural Conditions.** Dinghequan Village is affiliated to Wei ji Town, Huimin County, Binzhou City, which is located 5 kilometers south of Wei ji Town. This village was formed in the Yuan Dynasty, which had been surrounded by the Daqing River during the Yuan Dynasty, the Ming Dynasty and the Qing Dynasty. The villagers were mainly surnamed “Ding”, so this village was named Dinghequan Village. Dinghequan Village is a provincial-level high-precision poverty alleviation village, which occupies the total area of 2.1 square kilometers and the cultivated area of 1.56 square kilometers. The crops in this village are mainly wheat, corn and cotton.**Population Status.** There are 326 households and 1,320 villagers in Dinghequan Village. Viewed from sex ratio, there are 762 male villagers and 558 female villagers, respectively accounting for 57.7% and 42.3%; obviously, their sex ratio is not balanced. Viewed from the age level, there are 342 villagers under the age of 16, 550 villagers aged 16-60 (at working age) and 428 villages over the age of 60 (at non-working age), respectively accounting for 25.9%, 41.7% and 32.4%. The students and the villagers who have lost their ability to work are included in the working-age population, so, actually, only 499 villagers can participate in the labor normally.**Characteristics of Labor Force Population.** Dinghequan Village has a labor force population of 550, accounting for 41.7% of the total population. Of them, there are 485 migrant laborers, accounting for 88.2% of the total labor force. Of the mobile labor force population, the migrant population with agricultural registered permanent residence is 483, accounting for 99.6% of the total migrant labor force. Viewed from the sex ratio, there are 319 male laborers and 231 female laborers, respectively accounting for 58% and 42%. In addition, the labor force is mainly young and middle-aged adults aged 22-45, which account for 84.5%.

### **2.2 Survey Method and Samples.**

In this study, the method of comprehensive survey is used. There are 1,320 people in Dinghequan Village, including the labor force population of 550. As the population of migrant laborers is 485, the total number of samples involved in this comprehensive survey is 485.

### **2.3 Regional Distribution of Mobile Labor Force Population in Dinghequan Village.**

**Overall Income Situation.** Viewed from regional distribution of migrant labor force, about 45% of laborers choose to work in other counties in Binzhou City, which were Bincheng District, Boxing County, Zhanhua District and Wudi Count in the descending order of laborers’ number. About 20% of laborers work nearby Huimin County and 27% of laborers work nearby Wei ji Town. There are fewer laborers migrating to other cities. They just account for 5% of the village's mobile labor force,

mainly concentrating in Dongying, Qingdao and Weifang. Only 14 laborers migrate out of their home province, accounting for 3%.

#### **2.4 Industrial and Occupational Distribution of Mobile Labor Force Population in Dinghequan Village.**

Viewed from industrial distribution of mobile labor force, their percentages in the primary, secondary and tertiary industries are respectively 13.2%, 42% and 44.8%. In the secondary and tertiary industries, the employment of labor force mainly concentrates in construction, manufacturing, catering, textile, retail and transportation industries. There are 258 villagers working in the construction industry, who account for 53.2% of the total migrant labor force in the village; the villagers working in the manufacturing industry account for 31.7%, ranking the second. After analysis of their specific jobs in the construction industry, it is found that most of them engage in the housing construction, building installation and decoration industries, specifically, they build houses, install power lines, water pipelines and sewer pipes in the buildings, interior and exterior decorations of buildings. In manufacturing industry, they mostly engage in the manufacturing work of clothes, toys, plastic products and chemicals. Therefore, viewed from industrial distribution of mobile labor force in Dinghequan Village, the labor-intensive industry is dominant; so their occupational distribution mainly concentrates on the occupations in which physical strength is paid for income.

#### **2.5 Time Distribution of Mobile Labor Force Population in Dinghequan Village.**

Viewed from time distribution of mobile labor force, there are 371 villagers working outside for 180-280 days, accounting for 76.5% of the total migrant labor force; the villagers working outside for 90-180 days account for about 10.5%; only 16 villagers work outside for less than 90 days, accounting for about 3.3%. From the above data, it can be concluded that most of mobile labor force in Dinghequan Village work outside for a long time; that is, they usually work outside unless in busy seasons and on special holidays.

#### **2.6 Seasonal Distribution of Mobile Labor Force Population in Dinghequan Village.**

The sowing and harvesting time of spring maize is respectively in May and September; the summer maize is sowed in mid-June and harvested in early October; the winter wheat and spring wheat are sowed respectively after September and October and after the Spring Festival and they are harvested respectively in April and May and in August and September next year. Viewed from seasonal distribution of migrant villagers, the time of their working outside mainly concentrates on early spring, summer and winter. However, although the sowing and harvesting time of crops has a certain impact on seasonal distribution of migrant labor force, due to existence of some laborers staying at home and impact of agricultural modernization, migrant laborers are only required to return home in the busy season. As their delay at home is too short, the seasonal distribution of mobile labor force is not significantly obvious.

#### **2.7 Gender Distribution of Mobile Labor Force Population in Dinghequan Village.**

Viewed from the gender distribution, there are 300 male migrant laborers and 185 female migrant laborers, respectively accounting for 62% and 38% of the total labor force population in the village. Therefore, male labor force is dominant. Due to factors such as physical fitness and family values, some women still work in the village to care for the elderly and children. However, according to the analysis of population mobility in recent years, the number of female migrant laborers is on the rise.

#### **2.8 Age Distribution of Mobile Labor Force Population in Dinghequan Village.**

Viewed from the age distribution, there are 29 migrant laborers aged 16-22, accounting for only 6%; there are 393 migrant laborers aged 22-45, accounting for 81%; there are migrant laborers aged 45-60, accounting for 13%. The data shows that the mobile labor force in Dinghequan Village is mainly young and middle-aged adults. Of them, the adults aged 25-40 are dominant, accounting for about 76%.

## **2.9 Income Distribution of Mobile Labor Force Population in Dinghequan Village.**

Due to various factors such as laborer's occupation and regional economic development level, only 13 migrant laborers in Dinghequan Village can gain a stable monthly income of more than RMB 5,000, accounting for 2.7% of the total migrant labor force in this village. In addition, there are 278 migrant laborers getting a monthly salary of RMB 3,000-5,000, accounting for 57.3%; the labor force with a monthly salary of less than RMB 3,000 accounts for about 40%. Migrant laborers in the Dinghequan Village mostly work in labor-intensive industries, so most of them pay physical strength for benefits. As women are inferior to men in terms of physical strength and quality, some jobs are hard for them. Therefore, of the laborers with a monthly income of less than RMB 3,000, women make up the majority. Of the laborers with a monthly income of more than RMB 5,000, truck drivers usually have the highest monthly income. The monthly income of a truck driver even reaches about RMB 11,000, which is the highest income in Dinghequan Village.

## **2.10 Return of Labor Force in Dinghequan Village.**

Although most laborers in Dinghequan Village choose to go out to make a living, there have still been a few people who choose to return. They usually have these features: (1) They have difficulty in working outside; specifically, as the labor intensity of the industry they engage in is too high, they cannot adapt to it and they have to return to make another living. (2) The problems of raising parents and educating their children keep them from leaving home to work outside; (3) As they have accumulated a certain amount of wealth by working outside, they are ready to invest in the home village. Of those who have returned, quite a few people still say that they will choose to go out again if conditions are right.

## **3. Factors Affecting the Mobility of Labor Force Population in Dinghequan Village**

### **3.1 National Policy.**

On the economic front, with steady advancement of China's agricultural modernization and continuous improvement of China's grain production capacity, farmers' hands have been freed to the greatest extent so that rural labor force can have time and energy to go out to work for improving their life quality. In addition, with comprehensive development of China's education industry, rural education has obviously been enhanced. As the government has strived to provide fair and excellent education for each child, this allows rural migrant laborers to leave their children in urban areas without any worry about their children's education. In terms of social security, in accordance with the requirements of "ensuring the bottom line, weaving a net with full coverage, building a sound mechanism", China is strengthening the construction of social security system; meanwhile, China is improving various insurance systems, including basic endowment insurance system for urban employees as well as that for urban and rural residents, unified basic medical insurance system for urban and rural residents as well as that for major diseases, unemployment and work-related injury insurance system, urban and rural social assistance systems, minimum living security system, care system for rural left-behind children and women and the elderly in the villages. The continuous improvement of social security system has alleviated the worries of rural migrant labors.

### **3.2 Per Capita Income Level.**

According to the survey, the per capita net income of laborers in Dinghequan village engaging in agricultural production in 2016 was RMB 4,800 or so; the per capita net income of migrant laborers was RMB 45,000 or so. However, in 2016, the per capita net income of rural households in Shandong Province was RMB 6,8024.5, much higher than that of Dinghequan Village. There exists a large income gap between farming and working outside; moreover, the laborers in Dinghequan Village are also facing huge life pressures such as supporting parents and raising children. These factors drive more and more people to go out to work.

Table 1 Comparison of Education Level of Migrant Laborers in Dinghequan Village

Education level	Labor force population (Number of people)	Mobile labor force population (Number of people)	Mobile labor force population/Labor force population (%)
No schooling	49	43	87.80%
Primary school	82	74	89.00%
Junior middle school	77	76	98.70%
Technical secondary school	41	37	90.20%
Senior middle school	135	89	65.90%
Junior college	134	134	100.00%
Undergraduate	27	27	100.00%
Postgraduate or above	5	5	100.00%
Total	550	485	—

### 3.3 Education Level.

Viewed from the education level of migrant laborers in Dinghequan Village, most of them have just received the education of senior middle school or below, accounting for 65.7% of the total mobile labor force in the village. The laborers having the college diploma account for 27.6% (See Table 1). It can be seen from Table 1 that there is a significant positive correlation between the education level and the migrant labor population and the ratio between mobile population and labor force population in Dinghequan Village takes on an increasing trend with continuous improvement of education level. The data in Table 1 shows that the laborers with a degree of education in colleges and above all choose to go out to work. Therefore, viewed from education level of migrant laborers, if their education level is higher, their overall quality is better than that of overall labor force in Dinghequan Village.

### 3.4 Skill Level.

The mobile labor force in Dinghequan Village mainly concentrates in the labor-intensive industries such as manufacturing, construction and catering industries; in other words, there are fewer people engaging in technology-intensive industries. Moreover, their work is mostly physical, not intellectual. Obviously, the industry distribution of mobile workforce is unreasonable. Those engaging in intellectual and technical work not only have higher income than manual workers, but also they are superior to manual workers in terms of welfare and social security. The workers with skills are more inclined to work in cities. Therefore, there is a significantly positive correlation between skill level and labor force mobility.

### 3.5 Per Capita Farmland Area.

The area of cultivated land in Dinghequan Village is 156,000 square meters, and the per capita farmland area is 1,200 square meters, which is basically consistent with that in Binzhou City. In Dinghequan Village, most laborers choose to allow large professional households to contract part of their cultivated land in the way of subcontracting; they retain only a small part of cultivated land for planting wheat, cotton, green beans and other crops, hence emancipating productivity while enabling effective migration of cultivated land. Therefore, the laborers with less land choose to go out to work to earn more.

### 3.6 Estrangement with Urban Residents and Family Issues Affecting Labor Return.

According to the survey data, after entering the city with better economic conditions, migrant laborers in Dinghequan Village don't expect to settle down in it for a long time. There are three reasons for this: (1) Most laborers make a living on manual labor in the labor-intensive industries

after entering the cities; higher labor intensity and lower social status of these jobs lead to their psychological estrangement with urban residents; (2) There have existed a certain gap between migrant laborers and urban residents in terms of income level, consumption level and living environment so that they cannot be well integrated into the city; (3) Influenced by family issues, children's education issues and issue of supporting parents, migrant laborers may have the idea of returning home; however, at the present stage where national educational cause has continuously developed and social security system has continuously improved, the probability of returning labor is declining for various reasons.

#### **4. Countermeasures and Proposals for Mobile Labor Force Population in Dinghequan Village Improve Technical Level and Adjust Agricultural Production Structure**

##### **4.1 Promoting the Integration of Urban and Rural Compulsory Education and Attaching Great Importance to rural education.**

On one hand, we should attach great importance to rural education and strive to make every child receive fair and high-quality education through fully implementing pre-school education and compulsory education. On the other hand, we should continuously promote the integration of urban and rural compulsory education and make rural children receive the same level of education as urban children through improving rural education environment and financial support system for rural students.

##### **4.2 Building a Modern Agricultural Industrial System.**

On the basis of developing agricultural modernization, we should reduce the relevant costs as much as possible so that farmers can truly benefit from modernized production, promoting the organic connection of small farmers with modern agricultural development.

##### **4.3 Strengthening Skill Training to Improve Employment Quality and Income Level.**

We should regularly provide the relevant skill training for laborers in batches so that laborers can acquire more skills for making a living. In addition, Dinghequan Village Committee should encourage villagers to receive higher level of education to enrich their own knowledge and improve their own quality, thereby improving their employment quality and income level.

#### **5. Conclusions**

Due to the existence of urban-rural income gap, most of rural laborers go out for work in order to seek more work remunerations; moreover, the number of migrant laborers has shown an upward trend. One of the reasons for this trend is that continuous advancement of agricultural modernization, continuous improvement of rural education and continuous enhancement of the construction of social security system in China have solved potential worries of rural laborers. However, due to low education level and low skill level of rural laborers, they are more likely to engage in labor-intensive industries, causing structural employment conflicts.

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#### **References**

[1] Ai Liying, Meng Yongguo. Mobility of Rural Population and Stability of Rural Society [J]. Journal of Xinjiang Finance & Economics Institute, 2006, 01: 54-57. (in Chinese).

- [2] Liu Xuemei. Research on Rural Labor Migration and Employment Policies in the New Urbanization Process [J]. *Macroeconomics*, 2014, 02: 81-86. (in Chinese).
- [3] He Jianxin. Analysis of the Status Quo and Path of Rural Surplus Labor Force Migration in China [J]. *China Population, Resources and Environment*, 2013, S2:234-236. (in Chinese).
- [4] Liu Jianping. The Factors Affecting the Decision of Migration of Rural Labor Force in Poverty-Stricken Areas [J]. *Population & Economy*, 2010, 05: 8-14. (in Chinese).
- [5] Liu Xiaoyu, Zhang Linxiu. Analysis of the Relationships between Stability of Rural Land Property Rights and Labor Migration [J]. *Chinese Rural Economy*, 2008, 02: 29-39. (in Chinese).
- [6] Hui Yun, Qin Lijian. Analysis on the Influential Factors of Rural Migrant Laborers [J]. *Journal of Luoyang Normal University*, 2015, 12:129-132. (in Chinese).
- [7] Liu Qinfei. Analysis of the Influential Factors of Rural Labor Migration in China [J]. *China Journal of Commerce*, 2016, 01:181-183. (in Chinese).
- [8] Belton M. Fleisher, Dennis Tao Yang. Problems of China's Rural Labor Markets and Rural-Urban Migration [J]. *Chinese Economy*, 2006, 03:1-25.
- [9] Mathan Satchi, Jonathan Temple. Labor markets and productivity in developing countries [J]. *Review of Economic Dynamics*, 2008, 06:183-204.
- [10] Wen Jun, Wu Yuefei. Villages with A Loss of Villagers: The Transformation of the Traditional Villages and Reflections on Rurality [J]. *Sociological Studies*, 2017, 04: 22-45. (in Chinese).
- [11] Han Jiali, Wang Zhizhang, Wang Hanjie. Impact of Labor Mobility in Poverty-stricken Areas on Farmers' Multidimensional Poverty [J]. *Economic Science*, 2017, 06: 87-101. (in Chinese).
- [12] Zhao Man, Cheng Xiangyu. Research on the Impact of Labor Force's Outflow on Rural Family Poverty: Evidence from Four Poverty-stricken Areas in Hubei Province [J]. *Chinese Journal of Population Science*, 2016, 03: 104-113. (in Chinese).
- [13] Qin Lijian, Chen Bo. Analysis of the Impact of Medical Insurance on the Integration of Migrant laborers into Cities [J]. *Management World*, 2014, 10: 91-99. (in Chinese).
- [14] Wang Zhiqiang, Liu Chao. Research on the Influencing Factors of Rural Labor Migration in China — An Empirical Analysis Based on Probit Model [J]. *Modern Economic Sciences*, 2011, 01: 56-61. (in Chinese).