



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

# Influence Factors of Farmers' Willingness to Poverty Alleviation Relocation in South Shaanxi Province

Liang GUO\*, Bo YANG, Yanling CHI

School of Economics and Management, Xi'an Technological University, Xi'an 710021, China

**Abstract** In southern Shaanxi, far from the core areas of politics and economy, the conditions are inconvenient and farmers have been threatened by geology, floods for many years, resulting in a large population of poor people. The relocation of poverty alleviation project in southern Shaanxi is helpful for improving living standards of people in disaster-stricken areas. Based on the field survey, this paper analyzed 274 valid questionnaires and established a Logistic Regression Analysis Model. The result shows that the health status of head of household, road type before relocation, annual loss of disasters, and changes in the family income after relocation have a greater influence on the relocation willingness of farmers, while the educational level of householder, the distance from the original place of residence to the town and market, the condition of household electricity before relocation and other factors have a little influence on the relocation willingness of farmers.

**Key words** Disaster-stricken areas of southern Shaanxi, Poverty alleviation relocation, Willingness of farmers, influencing factors

## 1 Current situation of researches about relocation in southern Shaanxi

Since the 20th century, there have been tremendous changes in the production and life style, and the contradiction between population, resources, and environment is increasingly aggravating. From the perspective of developing economy, protecting environment, restoring ecology, and avoiding natural disasters, the relocation is to relocate highly separate people living in vulnerable environment to areas with suitable living environment, to realize the objective of coordinated development of population, resources, environment, economy, and society. Southern Shaanxi is located between Qinling-Bashan Mountains and Han Jiang River. Surrounded by mountains, southern Shaanxi has complex geological conditions and is prone to natural disasters such as mountain torrents, landslides, and mud-rock flow. Due to the harsh natural environment and the remote location, the problem of returning to poverty is prominent. In order to solve this problem fundamentally, Shaanxi Provincial Government formally launched the poverty alleviation and relocation work in southern Shaanxi in May 2011.

In China, the relocation is mainly due to construction of large water conservancy project, prevention of natural disasters by farmers, or shaking off poverty by peasants in poor areas. Relocation involves many aspects such as farmers, funds, land and supporting government policies, thus the problem is often very complex. Through analyzing the source and structure of funds for relocation, Zhang Pengyang *et al.* [1] came up with recommendations for raising funds and solving the problem. Through analyzing the land re-

sources, funds, and industry development in the process of relocation, He Degui *et al.* [2] summarized main factors restricting the relocation of poverty alleviation projects. From the perspective of economics, Feng Mingfang *et al.* [3] analyzed problems such as supply and demand of funds, land, and employment in the relocation activities, and pointed out possible solutions. Combined with the overall planning requirements for relocation and resettlement in southern Shaanxi, Lian Haibo [4] initially proposed a set of indicator system suitable for site selection of relocation projects in southern Shaanxi through field survey, questionnaire survey, and expert consultation. Taking Ankang City as an example, Zhang Jingxiao *et al.* [5] stated that the relocation of poverty alleviation planning should strengthen the ecological protection and increase the relocation between different regions, to ensure orderly implementation of relocation projects under the new urbanization. Yu Mimi *et al.* [6] summarized the recent three years' experience and practice of Ankang City, and analyzed the impact of supporting facilities and industry structure on community size from sustainable development of economy, ecology, and society, to provide theoretical and practical reference for relocation of poverty alleviation projects in southern Shaanxi. In view of low land use efficiency and poor livelihood conditions after relocation, Yan Wen *et al.* [7] recommended solving the problem through ecological protection, industrial support, and skill training, to realize the objective of sustainable development of livelihood of relocated population. From the perspective of cost-benefit and non-cost-benefit, Shi Peng *et al.* [8] made an exploratory analysis on the influence of relocation projects in southern Shaanxi on income level and structure of farmers. Based on the "Framework for Sustainable Livelihoods" and using the field survey in Ankang in southern Shaanxi, Li Cong *et al.* [9] analyzed the influence of relocation on livelihood strategies of farmers. Liu Shuxin *et al.* [10] conducted a field survey on the satisfaction of farmers living in Yunjisi Town of Zhen'an County after relo-

Received: October 10, 2017 Accepted: December 5, 2017

Supported by Social Science Planning Project of Shaanxi Province in 2017 (2017D010); Young Scholar Project of National Natural Science Foundation (71603205).

\* Corresponding author. E-mail: 1150835480@qq.com

cation and analyzed dissatisfaction factors of farmers, to provide references for the follow-up relocation plan. Sang Wanqing<sup>[11]</sup> studied the poverty alleviation and relocation in poverty-stricken areas in Sichuan Province and came up with pertinent recommendations in view of problems.

At present, the research on this issue mainly has two aspects: (i) analysis on problems and risks of relocation at macro and policy levels and providing strategies; (ii) analysis on factors influencing relocation willingness of farmers from the perspective of farmers. However, there is still no systematic quantitative research about relocation willingness of farmers and influencing factors. In view of such situation, through the field survey in poverty-stricken areas of southern Shaanxi, using theoretical analysis and combining Logistic model, we analyzed factors that influencing willingness of farmers to participate in the plans of relocation of poverty alleviation, and finally came up with pertinent recommendations.

## 2 Theoretical analysis framework, variable hypothesis and data

**2.1 Building of the theoretical model** After the relocation of farmers in southern Shaanxi, because it is far from original farming place and the traffic is inconvenient, the cost of farmers for farming is very high, most farmers choose to do migrant work. Hypothesis: there is close correlation between relocation willingness ( $W$ ) of farmers and changes in family income of farmers after relocation ( $V$ ), expressed as:

$$W = f(V) + H + \varepsilon \quad (1)$$

where  $f'(V) > 0$  means there is positive correlation between willingness of farmers and changes in family income;  $H$  denotes the non-cost income factor, such as ecological cognition and understanding of policies;  $\varepsilon$  is the stochastic error term. The expression formula for the expected family income of farmers ( $V$ ) after relocation is as follows:

$$V = \int_0^k \{ \theta [P'(t) - AC'(t)] Q'(t) + (1 - \theta) \sum_{i=1}^n P'_i(t) \cdot w'_i(t) - \zeta [P(t) - AC(t)] Q(t) - (1 - \zeta) \sum_{i=1}^n P_i(t) \cdot w_i(t) \} e^{-rt} dt + R - C \quad (2)$$

where  $P(t)$  and  $P'(t)$  denote the price of agricultural products sold in original production place and resettlement place if farmers continue to engage in agricultural production;  $Q(t)$  and  $Q'(t)$  denote the yield of agricultural products before and after relocation;  $AC(t)$  and  $AC'(t)$  denote the intermediate cost for production of agricultural products. When farmers do non-agricultural production such as migrant work,  $P(t)$  and  $P'(t)$  denote the probability of the  $i$ -th family members of farmers finding jobs, and  $w_i(t)$  and  $w'_i(t)$  are corresponding annual wage rate of urban areas.  $\zeta$  and  $\theta$  denote the proportion of agricultural income to total income of potential farmers before and after relocation;  $k$  denotes the period of farmers living in resettlement area;  $n$  is the total number of family members;  $r$  is rate of discount;  $R$  denotes the government subsidy for farmer relocation;  $C$  denotes the tangible

and intangible losses of farmers due to relocation. For the purpose of expression, take:

$$D = \int_0^k \{ \theta [P'(t) - AC'(t)] Q'(t) + (1 - \theta) \sum_{i=1}^n P'_i(t) \cdot w'_i(t) - \zeta [P(t) - AC(t)] Q(t) - (1 - \zeta) \sum_{i=1}^n P_i(t) \cdot w_i(t) \} e^{-rt} dt \quad (3)$$

The formula (2) can be expressed as follows:

$$V = D + R - C \quad (4)$$

where  $D$  is the net discount value of the income level to future income between the resettlement place and original place of residence within a certain period after relocation;  $(R-C)$  denotes the net government compensation obtained by farmers for relocation, it is the current stock;  $V$  is the sum of the former two values, and both influence the relocation willingness of farmers together.

**2.2 Selection of variables** There are some factors influencing willingness of farmers to participate in the plans of relocation of poverty alleviation, including the basic information of farmers, living environment, ecological environment, economic income after relocation, and farmers' understandings and suggestions on relocation policies. Considering the high correlation between variables, we selected representative variables as much as possible. The specific selection method is as follows:

(i) Status of family members of farmers. Those farmers with families of elders and children had higher requirements for living environment. After relocation, if their children could receive better education and elders could enjoy more convenient living environment, they would have strong willingness to participate in the plans of relocation of poverty alleviation.

(ii) Health status of head of household. Farmers with worse physical condition had stronger willingness to relocate to areas with more convenient transportation, better infrastructure and less labor intensity. Otherwise, farmers would have lower willingness to participate in the relocation of poverty alleviation plans.

(iii) Type of original houses. Farmers with poor housing conditions such as adobe or thatched houses had stronger willingness to take part in relocation of poverty alleviation project; farmers with better housing conditions such as brick and tile-roofed houses or buildings had weaker willingness to participate.

(iv) Type of road in original place of residence. Farmers living in areas with inconvenient transportation and poor living conditions such as muddy road had great difficulty in going out, so they had stronger willingness to participate in the relocation of poverty alleviation plans; however, farmers living in places with convenient transportation had weaker willingness.

(v) Distance of original place of residence to towns and markets. Farmers with original place of residence far from towns and markets had stronger willingness to participate in the relocation of poverty alleviation plans, while those with original place of residence close to towns and markers had weaker willingness.

(vi) Occurrence of natural disasters and degree of losses. With higher proportion of occurrence of natural disasters and greater economic losses, farmers had stronger willingness to participate

in the relocation of poverty alleviation plans; otherwise, their willingness would be weaker.

(vii) Changes in the family income after relocation. If the family income after relocation increases and the living standards get improved, the farmers would be willing to take part in the relocation of poverty alleviation plans. ; if the family income decreases and the income source is not stable after the relocation, farmers had weaker willingness.

(viii) Farmers' understanding of and satisfaction with relocation policies. If farmers understand relocation policies and are satisfied with relocation policies, they would have stronger willingness to participate in the relocation of poverty alleviation plans; otherwise, they would have weaker willingness.

**2.3 Data source** We carried out the field survey on the basis of random sampling. During June and December 2014, our team

carried out a survey in Zhashui County and Zhenan County in Shangluo region, Hanyin County and Ziyang County in Ankang region, and Nanzheng County in Hanzhong region. During the survey, we distributed a total of 300 copies of questionnaires and collected 274 valid copies. The survey included basic information of farmers, living environment, ecological environment, economic income after relocation, farmers' understanding of relocation policies and suggestions. In the 274 valid copies, 248 farmers were willing to take part in the relocation of poverty alleviation plans. , the proportion was up to 90.51% ; 26 farmers were unwilling to participate in the relocation of poverty alleviation plans. , only accounting for 9.49% , indicating that most farmers were willing to partake in the relocation . The statistical results of this survey were listed in Table 1.

**Table 1 Basic information of the survey of farmers' relocation willingness**

Survey item	Option	Quantity of samples	Percentage // %
Willingness	Yes	248	90.51
	No	26	9.49
Structure of family members	Having elders in the family	145	52.94
	Having children in the family	242	88.24
Health status	Healthy	109	39.78
	Excellent	108	39.42
	General	45	16.42
	Poor	12	4.38
Type of house	Thatched house	13	4.74
	Adobe house	171	62.41
	Brick and tile-roofed house	79	28.83
	Multi-storey building	11	4.01
Road type	Muddy road	183	66.79
	Highway	91	33.21
Distance to towns	Less than 5 km	52	18.98
	5 (included) – 10 km	85	31.02
	10 (included) – 20 km	74	27.01
	Longer than 20 km (included)	63	22.99
Occurrence of natural disasters	Yes	218	79.56
	No	56	20.44
Degree of losses of disasters	No influence	41	14.96
	Minor (0 – 2 000)	155	56.57
	Mild (2 000 – 5 000)	62	22.63
	Severe (above 5 000)	16	5.84
Changes in family income after relocation	Increase	76	27.74
	Decrease	113	41.24
	No change	85	31.02
Understanding policies	Yes	198	72.26
	No	76	27.74
Satisfaction with policies	Yes	155	56.57
	No	43	15.69

### 3 Model building and result analysis

According to the theoretical analysis and actual survey, the relocation willingness of farmers in southern Shaanxi was influenced by many factors. We divided the relocation willingness into "willing"

and "unwilling", and adopted binary dependent variable Logistic model to conduct regression analysis on the relocation willingness of farmers and the influencing factors. In this study, we defined "willing" as  $Y = 1$ , and "unwilling" as  $Y = 0$ , and set the fol-

lowing function model:

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_n X_n + \varepsilon \tag{5}$$

where, when farmers are unwilling to relocate,  $Y = 0$ ; when farmers are willing to relocate,  $Y = 1$ ;  $X_1, X_2, \cdots, X_n$  denote varia-

bles of basic information of farmers, living environment, ecological environment, economic income after relocation, and relocation policies. According to 274 valid copies of questionnaire, we assigned the variables as listed in Table 2.

**Table 2** Assignment of variables

Variable	Definition of variable	Min.	Max.
Relocation willingness $Y$	Willing = 1	0	1
	Unwilling = 0		
Educational level of head of household $X_1$	Primary school and below = 1	1	4
	Junior middle school = 2		
	Senior middle school = 3		
	College and above = 4		
Health status of head of household $X_2$	Healthy = 1	1	4
	Excellent = 2		
	General = 3		
	Poor = 4		
Type of house before relocation $X_3$	Thatched house = 1	1	4
	Adobe house = 2		
	Brick and tile-roofed house = 3		
	Building = 4		
Distance from original place of residence to towns $X_4$	<5 km = 1	1	4
	5 km (included) - 10 km = 2		
	10 km (included) - 20 km = 3		
	$\geq 20$ km = 4		
Type of road before relocation $X_5$	Muddy road = 1	1	2
	Highway = 2		
Electric supply of the house before relocation $X_6$	Excellent electric supply = 1	1	3
	Electric supply but often power failure = 2		
	No electric supply = 3		
Occurrence of natural disasters before relocation $X_7$	Yes = 1	1	2
	No = 2		
Degree of losses from natural disasters $X_8$	No influence = 1	1	4
	Minor (0 - 2 000) = 2		
	Mild (2 000 - 5 000) = 3		
	Severe (above 5 000) = 4		
Annual family income before relocation $X_9$	< $10^4$ yuan = 1	1	4
	$10^4$ yuan (included) - $3 \times 10^4$ yuan = 2		
	$3 \times 10^4$ (included) - $6 \times 10^4$ yuan = 3		
	$\geq 6 \times 10^4$ yuan = 4		
Understanding relocation policies $X_{10}$	Yes = 1	1	2
	No = 2		
Changes in family income after relocation $X_{11}$	Increase = 1	1	3
	Decrease = 2		
	No change = 3		
Satisfaction with relocation subsidy method $X_{12}$	Satisfied = 1	1	2
	Dissatisfied = 2		
Income source before relocation $X_{13}$	Planting grain crops = 1	1	4
	Planting cash crops = 2		
	Self-operating industry and commerce = 3		
	Migrant work = 4		

Using the Logistic model estimation method in Eviews8.0, taking the relocation willingness of farmers as explained variable and constant term  $X_1, X_2, \cdots, X_n$  as explanatory variable, and

using the maximum likelihood method, we obtained factors influencing the relocation willingness of farmers. The results were listed in Table 3.

**Table 3** Output results of model estimation

Variable	Parameter value	Standard error	Z statistic	P value
$C$	-2.517 111	2.455 869	-1.024 937	0.305 4
$X_1$	-0.252 104	0.327 924	-0.768 787	0.442 0
$X_2$	-0.727 947	0.275 754	-2.639 840	0.008 3
$X_3$	0.245 842	0.315 012	0.780 422	0.435 1
$X_4$	0.561 255	0.605 357	0.927 147	0.353 9
$X_5$	0.588 805	0.230 063	2.559 318	0.010 5
$X_6$	-0.072 718	0.483 333	-0.150 452	0.880 4
$X_7$	-0.775 992	0.595 806	-1.302 424	0.192 8
$X_8$	1.649 314	0.421 094	3.916 731	0.000 1
$X_9$	0.584 505	0.386 975	1.510 445	0.130 9
$X_{10}$	0.015 523	0.197 539	0.078 580	0.937 4
$X_{11}$	0.778 817	0.323 837	2.404 968	0.016 2
$X_{12}$	-0.106 206	0.564 449	-0.188 159	0.850 8
$X_{13}$	-0.407 127	0.573 188	-0.710 284	0.477 5
$McFR^2$	0.273 785	Mean dependent Var.		0.905 1

According to Table 3, the likelihood ratio  $McFR^2$  is  $0.273\ 8 > 0.2$ , indicating that the model has high degree of fitting. Variables  $X_2$ ,  $X_5$ ,  $X_8$  and  $X_{11}$  passed the test at 95% confidence level, with  $P$  values of 0.008 3, 0.010 5, 0.000 1 and 0.016 2, respectively, all lower than 0.05, indicating that these four variables have strong significance, while  $X_1$ ,  $X_3$ ,  $X_4$ ,  $X_6$ ,  $X_7$ ,  $X_9$ ,  $X_{10}$ ,  $X_{12}$ , and  $X_{13}$  are not significant. At 0.05 significance level, we compared the Z statistic of the above variables and  $Z_{0.025} = 1.96$  in the standard normal table,  $X_2$ ,  $X_5$ ,  $X_8$  and  $X_{11}$  passed the significance test. Based on the above analysis, we obtained the following regression equation:

$$\hat{Y} = -2.517\ 1 - 0.727\ 9X_2 + 0.588\ 8X_5 + 1.649\ 3X_8 + 0.778\ 8X_{11} \quad (6)$$

The above analysis indicated that the health status of head of household ( $X_2$ ), type of road before relocation ( $X_5$ ), degree of losses from natural disasters ( $X_8$ ), and changes in family income after relocation ( $X_{11}$ ) have greater influence on the relocation willingness of farmers. The reasons are as follows: In mountainous areas, the labor intensity of agricultural production is great, thus the health status of the head of household and the strength of the labor force have a great influence on the planting. If the transportation is convenient, infrastructure is well established, and labor intensity is low in the resettlement area, farmers will have strong willingness to relocate. Therefore, the health status of head of household ( $X_2$ ) has a significant influence on the relocation willingness of farmers. (ii) Farmers living in areas with inconvenient transportation and poor living conditions such as muddy road have great difficulty in going out, so they will stronger relocation willingness; however, farmers living in places with convenient transportation had weaker relocation willingness. Therefore, the type of road before relocation ( $X_5$ ) is also a significant influencing factor. (iii) For farmers living in mountainous areas, natural disasters such as droughts and floods often result in drop in production or even threaten the safety of life and property. Therefore, farmers often suffering from natural disasters and having great losses from natural disasters are more willing to relocate. (iv) Farmers care most about how to make a living or increase income after reloca-

tion. After relocation, complete changes in original income structure possibly lead to decrease in family income or unstable income source, and it may lead to unwillingness of farmers. Therefore, the change in family income after relocation is also a significant influencing factor.

By comparison, educational level of head of household ( $X_1$ ), type of house before relocation ( $X_3$ ), and distance from original place of residence to towns ( $X_4$ ) have less influence on the relocation willingness of farmers. (i) In the original place of residence, most farmers live in cultivated land and are mainly engaged in manual labor. Educational level has little influence on agricultural production and farmers' life. Thus, this factor is not a significant influencing factor of relocation willingness of farmers. (ii) Farmers in mountainous areas generally have low requirements for houses. As long as houses are safe, there is no big difference between thatched houses, adobe houses or brick and tile-roofed houses. Thus, the influence of this factor on the relocation willingness of farmers is not significant. (iii) The distance from original place of residence to towns ( $X_4$ ) mainly influences collection of farmers. However, most farmers in original place of residence do farming work, their necessities are self-sufficient and they have little to collect, thus the distance from original place of residence to towns ( $X_4$ ) has little influence on the relocation willingness of farmers. (iv) Since the 1980s, the remote mountainous areas have been provided with electricity. In the aspect of electric supply, there is no difference between the original place of residence and the place of resettlement, and farmers' life is not influenced, thus the influence of this factor on the relocation willingness of farmers is not significant. (v) For farmers living in mountainous areas, natural conditions are relatively adverse. However, their ancestors lived there for a long time. If the occasional small-scale natural disasters bring little threat to farmers' life, the factor will have little influence on the relocation willingness of farmers. (vi) Annual family income before relocation ( $X_9$ ) and income source before relocation ( $X_{13}$ ) mainly influence the living standards of farmers in original place of residence before relocation. Most farmers in original place of residence do farming work, there

is no big difference in the income level between families, and it basically can satisfy basic living needs, thus farmers have no drive to relocate and this factor has low influence on the relocation willingness of farmers. (vii) Policy factors are exogenous variables and uncontrollable to some extent. Farmers care little about these uncontrollable and unchangeable factors, so the influence of this factor on the relocation willingness of farmers is insignificant.

#### 4 Conclusions

According to field interview, questionnaire and quantitative analysis, problems, such as insufficient funds, farmers' misunderstanding of policies and unstable income sources after relocation, seriously influence the smooth implementation of relocation and resettlement. Therefore, it is very important to raise the motivation of farmers to relocate and formulate support policies by relevant departments. In sum, we came up with the following recommendations.

(i) Providing adequate financial support for farmers. Although the government has implemented several financial support policies, such as credit and low interest rate loan policies, most policies are simple in form but complex in procedure, have high requirements for credit line of farmers, and have great limitations. Therefore, it is recommended to take measures such as simplifying loan approval procedures, lowering the credit line for relocation farmers, raising the loan amount and allowing installments, to broaden the channels for financial support and solve the problem of shortage of funds during relocation.

(ii) Strengthening the financial support. Large-scale relocation of poverty alleviation project in southern Shaanxi Province is a systematic long term project. Relocation process, relocation and resettlement need huge amount of funds, such as relocation of infrastructure construction and subsidies for relocation of farmers need a lot of money. Therefore, both the central and local government should strengthen the financial support in policies and funds.

(iii) Providing employment training and guidance for farmers. Most of the farmers have very low educational level, lack vocational skills and their reemployment capacity is relatively low. Guiding farmers to actively participate in various vocational skill training and job training is a key aspect determining success of relocation work, increasing the income of relocation farmers, and resolving the social conflicts. Therefore, it is recommended to implement policies of providing vocational skill training, guiding and supporting farmers to start their businesses, and do migrant work on the basis of specific conditions of relocation farmers.

(iv) Properly disposing the relocated land. For most farmers in southern Shaanxi, land is the root for their survival. It is important to how to deal with original residence and arable land when peasants moved out. In view of such situation, the government should design proper and reasonable scheme according to the actual situation. If farmers are allowed to hire out their land in the original place of residence to collect rent, to relieve their worry about wasteland after relocation, to a certain extent, it will make

up for the income risk from land loss.

(v) Strengthening the construction of infrastructure in the resettlement place. Government should strengthen the supervision over construction of resettlement sites and improve the construction procedure. It is strictly forbidden to construct the new resettlement site in the place where there is hidden danger of floods and geological disasters. Besides, it is recommended to supervise the infrastructure and house quality during the construction. In addition, it is recommended to improve farmers' sense of happiness through increasing the nursing homes, public entertainment squares, kindergartens and sports facilities, to generate positive demonstration effect on farmers that are not relocated.

(vi) Strengthening communication with farmers. The relocation policy is related to the vital interests of farmers, it is of crucial importance for relevant departments to understand the difficulties of farmers and to listen to their opinions in policy formulation and implementation. The government should not only strengthen propaganda of policies, but also increase the transparency of policies so that relocated farmers can better understand the relocation policies.

#### References

- [1] ZHANG PY, LI Z, HE DG. The capital sources for the relocation of the people in Southern Shaanxi Province and its solutions[J]. *China Economist*, 2013(7): 175–177. (in Chinese).
- [2] HE DG, DANG GY. Study on the social exclusion mechanism in the relocation of people in Southern Shaanxi Province[J]. *Journal of China National School of Administration*, 2012(6): 84–88. (in Chinese).
- [3] FENG MF, PENG H. Analysis on problems of large-scale peasants migration in southern of Shaanxi[J]. *Journal of Anhui Agricultural Sciences*, 2012, 40(31): 15482–15484. (in Chinese).
- [4] LIAN HB. Suitability assessment system preliminary study for site of immigrant relocation area in southern of Shaanxi[J]. *Journal of Catastrophology*, 2015, 30(3): 104–109. (in Chinese).
- [5] ZHANG JX, SHI CL, TIAN SA. On new urbanization and Southern Shaanxi migration, planning and construction[J]. *China Opening Herald*, 2015(3): 72–75. (in Chinese).
- [6] YU MM, REN YY, LIU SH. Study on the immigrant rural community scale of Southern Shaanxi based on sustainable development[J]. *HuaZhong Architecture*, 2015, 33(3): 117–120. (in Chinese).
- [7] YAN W, HE DG. Study on the problem of relocation of the displaced people from the perspective of sustainable livelihood[J]. *Forward Position*, 2014(Z1): 117–119. (in Chinese).
- [8] SHI P, YU J. Analysis on the relocation intention and influencing factors of ecological migration based on the perspective of farmers[J]. *Soil and Water Conservation in China*, 2012(11): 7–9. (in Chinese).
- [9] LI C, LIU W. The impact of emigration on farmer's livelihood strategy—Based on the survey in Ankang Area of South Shaanxi Province[J]. *China Rural Survey*, 2013(6): 31–44. (in Chinese).
- [10] LIU SX, LI SB. Analysis of the survival status and satisfaction of disaster-induced poverty migration in Southern Shannxi Province: A case study of the resettlement site in Yungaisi Town, Zhen'an County[J]. *Urban Studies*, 2015(1): 102–107. (in Chinese).
- [11] SANG WQ. A study on the relocation of poverty-alleviation areas in the concentrated contiguous areas in ethnic areas—Taking Sichuan Province as a case[J]. *Rural Economy*, 2016(3): 50–54. (in Chinese).