

Research on the Impact of Land Expropriation on Farmers' Welfare

-- Take Hefei City, Anhui Province as an Example

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Abstract

Through field interviews and questionnaire surveys of landless farmers in Shushan District, Feixi County, Feidong County and other areas of Hefei City, Anhui Province, this paper obtains relevant information about farmers' lives after land expropriation. Using the multiple regression model to analyze the influencing factors of the welfare of landless farmers, it is found that farmers' welfare is affected by the personal characteristics of farmers, land use after land acquisition, housing compensation policy and social security, etc., land compensation and reasonable housing compensation methods improve the level of farmers' welfare, and farmers' education and gender make the changes of farmers' welfare heterogeneous. China has 600 million farmers, and implementing a reasonable land expropriation policy is essential for stabilizing society. It is of great significance to improve the welfare level of farmers. Land compensation policies should be further improved, secondary industries should be developed, and the gap between urban and rural areas should be narrowed to enhance farmers' happiness.

Keywords

Farmers; Welfare; Land Expropriation; Non-Farm Employment.

1. Introduction

China is a big agricultural country with 600 million farmers and 1,917.9 million mu of arable land, but with the development of the economy, the increase in urbanization rate is irreversible, and in 2022, China's urbanization rate reached 64.7%. A large amount of agricultural land has been repurposed under the transfer of land led by the government, a large number of farmers have lost their sources of income and residence, and the survival and development of landless farmers after land acquisition has become an important issue of common concern in society.

Current academic research has found that there are many factors affecting the changes in farmers' welfare. First of all, external factors lay the foundation for welfare changes, and scholars believe that the problems in the process of land acquisition such as irregular land acquisition procedures, imperfect resettlement compensation mechanisms, and lack of social security for landless peasants in cities and towns have significantly damaged the welfare status of some farmers after land requisition[1]. Changes in farmers' welfare in the process of land acquisition are also closely related to the area of land acquisition[2] and the stage of urbanization development[3]. At the same time, the influence of internal factors of farmers, such as age, education level, non-agricultural employment degree, etc., makes the changes in farmers' welfare before and after land acquisition vary greatly, Zhan Peng et al. empirically analyze the multi-dimensional impact of land circulation on the economic welfare of rural households by using the semi-parameter multiple choice treatment effect model, and believe that its income increase effect has "asymmetry", although it promotes the optimal allocation of

household resources, but there is an obvious "Matthew effect" in the process, which is more conducive to high-economic level farmers.

Based on the existing research, this paper argues that the land acquisition policy is the root cause of welfare changes, and the heterogeneity of farmers themselves amplifies the impact of the policy. Therefore, this paper will analyze the welfare differences between farmers due to heterogeneity based on the changes and development of China in the past ten years, starting from internal factors, and further explore. Through field interviews and questionnaire surveys of landless farmers in Shushan District, Feixi County, Feidong County and other areas of Hefei City, Anhui Province, the influencing factors of the welfare of landless farmers were analyzed by using the regression model, so as to formulate reasonable land acquisition policies and industrial measures, promote urban-rural integration, and alleviate relative poverty.

2. Research Design

2.1. Model Setting

The dependent variable set by the model is the satisfaction of landless farmers with land expropriation, with values ranging from 0 to 100, which are obtained by farmers' independent scores.

There are many factors affecting the changes of farmers' welfare after land acquisition, such as the level of economic development[4], the personal characteristics of household heads[5], the characteristics of peasant households[6], and the location of land[8], which have been empirically studied and confirmed by many scholars using the number of provinces. In addition, factors such as land compensation, housing compensation policies, and regional industrial development have an important impact.

Based on this, this paper combines the specific situation of Hefei City, Anhui Province, to interview and investigate landless farmers in Shushan District, Feixi County, Feidong County and other areas of Hefei City, and mainly considers and collects 10 main variables: personal characteristics of farmers (gender, age, health level, years of education), characteristics of rural households (dependency ratio, number of family size), reasons for land loss, housing compensation methods, sources of income before land acquisition and income changes after land acquisition. Preliminary prediction and analysis of individual factors based on real-world experience:

2.2. Personal Characteristics of Farmers

The survey of the personal characteristics of household heads mainly includes gender, age, health level and years of education, because the difference in the personal characteristics of these heads of households will affect whether farmers can successfully achieve non-agricultural employment and regain a stable source of income after land acquisition, for example, many farmers with female sex were mainly engaged in agricultural production before land acquisition, but after land acquisition, due to physical strength, employment experience, age and other restrictions, they have been in a state of unemployment.

2.3. Characteristics of Farming Households

When the original housing is expropriated, the housing fee that the family has to pay after entering the town is an important expense for the family, the larger the family size, the larger the housing area required, and the higher the rent of the house that needs to be paid. In addition, the cost of living for families with high dependency ratios will increase relatively, and the cost of living will increase because families move to towns, but because of the high dependency ratio, income will not increase in a corresponding proportion. The mismatch between income and expenditure increases the satisfaction of residents.

2.4. Housing Compensation Policy

The current housing compensation policy mainly includes compensation for rebuilding resettlement housing, cash compensation, housing ticket compensation, commercial housing compensation, etc. In the survey, it was learned that most farmers prefer to renovate resettlement housing compensation, a policy that allocates the size of the house according to the size of the household, and the larger the family size, the larger the living area. And as China's housing prices continue to grow, the remaining policies may make landless farmers face the dilemma that compensation is insufficient to pay for their homes.

2.5. Changes in Personal Work

Land acquisition forced farmers to move to towns and take off-farm employment, while the process of urbanization and industrialization required a large number of laborers. Whether landless farmers can successfully switch to non-farm employment and obtain a stable source of income is an important factor affecting welfare assessment.

Let y be the explanatory variable satisfaction and x_1 - x_{11} be the explanatory variable, and the model constructed in this paper is:

$$y = c + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \beta_8 x_8 + \beta_9 x_9 + \beta_{10} x_{10} + \beta_{11} x_{11}$$

2.6. Variable Description and Assignment

The gender, age, health level, number of years of education, number of family size, reasons for land loss, housing compensation methods, personal work changes and income changes before and after land acquisition were assigned to peasants who lost land: 0 for men and 1 for women; Factors such as age, health level, reasons for land loss, housing compensation methods, and income changes are assigned according to the Likert five-point scale method, and appropriate changes are made according to specific circumstances; the dependency ratio and satisfaction are based on the actual values collected, and the specific assignment rules and description statistics of the variables are shown in the table.

Table 1. Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
satisfaction	192	62.29167	10.21033	43	88
gender	192	.4791667	.5021882	0	1
age	192	2.875	1.078498	1	4
health	192	3.458333	.7386569	1	4
edueyear	192	10.08333	2.81973	5	18
reason	192	1.947917	.4441382	1	3
Use	192	1.614583	1.340619	0	6
work	192	1.25	.580381	0	2
incomevary	192	2.989362	2.029326	0	6
incomebefore	192	.4404514	.4110018	0	1
rear	192	.3184028	.2430132	0	0.66667
compensation	192	4.525773	1.118898	1	6

3. Analysis of Empirical Results

Using the stata software to adopt the stepwise regression method for the variables, after empirical analysis, the model believes that three variables have a significant impact on the explanatory variables at a significance level of 0.05. They are gender, land use after land acquisition, and housing compensation policy. Among them, the gender variable had a negative

impact on the satisfaction of land acquisition, while the land use and housing compensation policies were positively correlated after land acquisition.

Table 2. Result of regression

F(11, 82)	10.83
Prob > F	0.0000
R-squared	0.5923
Adj R-squared	0.5376

The specific results are as follows:

Table 3. Result of OLS regression analysis

satisfaction	Coef.	Std.Err	t	P> t
gender	-3.22363	1.554989	-2.07	0.041
age	-1.142645	.8275597	-1.38	0.171
health	.5607059	1.041986	0.54	0.592
eduyear	.5002608	.3332861	1.50	0.137
reason	2.926587	1.75591	1.67	0.099
use	1.432743	.6279835	2.28	0.025
work	-1.72534	1.58843	-1.09	0.281
incomevary	.4132995	.4792162	0.86	0.391
rear	-.1886732	3.280397	-0.06	0.954
compensation	6.332521	.7283569	8.69	0.000
_cons	24.11592	8.638595	2.79	0.007

(1) The gender variable showed a negative correlation with satisfaction with land acquisition, which was the same as the assumed expectation. Affected by the traditional Chinese family division of labor, women are more responsible for household affairs, before the expropriation, women can still farm in their spare time, but when they lose land, women have less chances of obtaining full-time jobs than men, many women are unemployed, and the change in income growth is lower than that of men, making women less satisfied with the changes in welfare after land expropriation than men.

(2) After land acquisition, land use and land acquisition satisfaction showed a positive correlation, and there were four uses after the government expropriated land: the first is for infrastructure construction, such as highways; The second is for factory construction; The third is that it is still in a state of untapped development. After the land is used to build infrastructure, it will greatly improve the speed and convenience of the transportation network, and provide many conveniences for people's lives and work; these factories have created many local jobs, and landless farmers have gained new sources of livelihood after losing their land.

(3) There is a positive correlation between housing compensation policy and land acquisition satisfaction, and there are five compensation methods, including resettlement housing, monetary compensation, commercial housing conversion, housing ticket compensation, and undemolished houses. Landless peasants generally prefer compensation for rebuilding their resettlement houses supplemented by monetary compensation. They do not need to spend extra time and energy looking for future permanent residences, while living conditions have been improved, and supporting measures near their places of residence have increased the sense of welfare of landless peasants.

There were other factors, although less significant, that also had an impact on the outcome: age, length of education, reason for land acquisition, job before land acquisition, change in income.

Age and nature of work before land acquisition were negatively correlated with satisfaction with land acquisition, while years of education, reasons for land acquisition, income changes were positively correlated with satisfaction with land acquisition.

(1) Age is negatively correlated with land acquisition satisfaction, and young people are more adaptable than older people, able to adapt to life from the countryside to the city, and have easier access to job opportunities and stable sources of income.

(2) The work before land acquisition is divided into non-agricultural employment and agriculture, which is negatively correlated with the satisfaction of land acquisition, that is, the satisfaction of agricultural land acquisition before land acquisition is higher, because the income increase brought by non-agricultural employment after land acquisition, land acquisition subsidies and the reduction of labor intensity have improved the quality of life of farmers, and the satisfaction of land acquisition is higher than that of people who have engaged in non-agricultural employment before land acquisition.

(3) The number of years of education was positively correlated with the satisfaction of land acquisition, and the higher the education level, the higher the satisfaction with land acquisition. The first reason is that highly educated peasants are more adapted to urban life, and cash compensation and housing compensation after housing expropriation are more suitable for their needs; The second reason is that higher education makes them more competitive in the labor market than other farmers, and it is easier to adapt to non-farm employment and get ideal jobs, while older farmers with only primary school education can only look around for narrow land to continue farming or engage in tiring manual work, and the working conditions have not been greatly improved compared with before land acquisition, which will affect their satisfaction with the welfare of land acquisition.

(4) The reasons for land acquisition were positively correlated with the satisfaction of land acquisition, that is, farmers who voluntarily chose non-agricultural employment and were far away from land were more satisfied with land acquisition, while farmers who were forced to requisition had lower satisfaction with land acquisition. For farmers who voluntarily choose non-farm employment, land is no longer the main source of income for their lives, but subsidies for land collection will bring them additional income, improve living standards, and enhance happiness and satisfaction.

(5) The change in income was positively correlated with the satisfaction of land acquisition. Obviously, when farmers requisition land, due to the government's land acquisition subsidies, job changes and other factors to increase income, farmers' living standards are improved, and satisfaction with land requisition will also increase.

4. Research Conclusion and Policy Recommendations

Through empirical analysis, this paper discusses the important factors affecting the changes of farmers' welfare after land acquisition. The results show that the four variables of gender, land use after land acquisition, housing compensation policy, and education years have a significant impact on the welfare changes of farmers after land acquisition. Among them, the gender variable had a negative impact on the satisfaction of land acquisition, while land use, housing compensation policy and education years were positively correlated after land acquisition. Therefore, this article makes the following recommendations:

(1) The local area needs to continue to vigorously develop the secondary and tertiary industries and create sufficient employment opportunities for landless farmers. At the same time, relevant preferential policies will be formulated, and grassroots organizations will conduct training for landless farmers in entrepreneurship and employment, enhance farmers' ability and awareness of reemployment, and also pay more attention to the employment and living conditions of female farmers.

(2) Appropriately and steadily increase infrastructure construction, the improvement and development of transportation and communication networks have facilitated people's life and work, and are of great significance to the welfare of local people. Moreover, the use of land will affect the psychological expectations of farmers, and selling land to real estate developers will bring fiscal revenue to the government, but compared with the construction of infrastructure, farmers' psychological expectations for welfare will be reduced.

(3) Adopt appropriate land acquisition compensation policies and diversified compensation methods, through preliminary investigation and drawing on existing experience, such as the housing compensation policy in which landless farmers are more inclined to rebuild resettlement houses, if the situation permits, appropriate compensation policies with high public satisfaction should be selected to achieve a win-win situation.

(4) Continue to increase investment in education, pay attention to the development of basic education and higher education, and cultivate vocational education, so that people can obtain sufficient knowledge and skills, can gain advantages in the labor market, and can still obtain stable economic resources and living security after land acquisition.

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