

Research on the Influencing Factors of Peasants' Autonomy to Play in Post-earthquake Reconstructions ——A Case Study of Wenchuan Earthquake in China

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Abstract

In this article, five villages in Sichuan earthquake-stricken area are selected for study as examples. By building Logistic of binary choice models to analyze the influencing factors of peasants' autonomy to play in post-earthquake reconstructions, authors found there was a positive correlation between education, subjective cognition of reconstruction, willingness to participate, effectiveness of improving the living environment after reconstruction and the autonomy of peasants to participate in post-disaster reconstruction. There was a negative correlation between cognition about the source of reconstruction funds, decision-making subjects of reconstruction and the autonomy of peasants in post-disaster reconstruction. Whether or not to actively participate in post-disaster reconstruction had no significant correlation to gender, age, effectiveness of increase in redevelopment projects, effectiveness of science and technology extension in redevelopment projects, leading subjects of reconstructions, government's respect for the wishes of peasants, or peasants' satisfaction for the performances of government in reconstruction.

Keywords: Post-earthquake reconstructions, Peasants, Autonomy, Influencing factors, Wenchuan Earthquake in China

Introduction

After Wenchuan Earthquake on May 12th, 2008, earthquake relief has become one of the important works of governments. Because of the large geographical spread of this earthquake, the disaster area of Sichuan is about 100 thousand km², involving more than 27 million people. Many infrastructures in rural communities were completely destroyed. So, the post-earthquake rehabilitation and reconstruction of rural communities were extremely arduous. As direct beneficiaries and builders of post-disaster reconstruction, peasants' enthusiasms to a large extent determined the effectiveness of the construction of new rural communities. QiuBaoxing suggested that the traditional post-disaster housing reconstruction method which most of the housing reconstruction is involved by the government, will kill the most houseowner's self-reliant housing redevelopment initiative (Jun Song, Hu Ruifa, Huang Jikun, 1998). ChenGuang and others summarized international and domestic experience from places such as Japan, Pakistan and China Taiwan, which shows that effective post-disaster reconstruction

should focus on the affected people, and stand in the position of the affected people to do planning (Jiehong Zhou, 2006). Zhang Shasha holds that post-disaster reconstruction should fully mobilize the initiative and enthusiasm of the victims to participate in, listen to the views of victims, and the Government should give full play to democracy so that citizens can have more opportunities and ways to participate, which make the affected people set up a high degree of motivation and take an active part in reconstruction work (Leeuwis C, 2001). In addition, Han Wei has studied the mechanisms of mobilizing the initiative of the broad masses of peasants to organize the implementation of the sustainable post-disaster reconstruction, and thinks that community involvement of the reconstruction project is an effective way to accurately express the real needs of local people (Shengzu Gu, 2008).

Some files, such as "Guidances on Good Work for Restoration and Reconstruction after Wenchuan Earthquake from the State Council", "Opinions on Support of Policies and Measurements for Restoration and Reconstruction after Wenchuan Earthquake from the State Council" and "Resolutions on Working Solidly to Speed up Relief Work and Rebuild Their New Beautiful Homeland" from Sichuan Provincial Committee, all paid the same emphasis on self-reliance, hard working, full mobilization of the masses' enthusiasm, initiative and creativity to work hard and help by themselves for rebuilding their homeland. How to fully mobilize the enthusiasm of the farmers and ensure its dominant position is a major problem in the construction of new rural communities in the Sichuan earthquake-stricken areas. According to this, authors did in-depth investigations and studies on five villages in Shifang City, Mianzhu City, Dujiangyan City and Anxian of Sichuan Province to analyze the influencing factors of peasants' autonomy to play in post-earthquake reconstructions, and then some relevant recommendations are made.

1. Materials and methods

1.1 Variable

1.1.1 Explained variable: peasants' autonomy in post-disaster reconstruction

This paper selected the topic whether the peasants actively participated in post-disaster reconstruction as a variable.

1.1.2 Set of explanatory variables

For the peasants, the influencing factors of whether to involve in post-disaster reconstruction are very complex. According to the peasants' behavior characteristics in the reconstruction and field experience in investigation, authors analyzed the influencing factors of whether to involve in post-disaster reconstruction from the following four aspects: characteristics of individual peasants, their awareness of the situation on the post-disaster reconstruction, the degree of harmonious relations between the government and the masses in post-disaster reconstruction and the effectiveness of post-disaster reconstruction.

(1) personal characteristic variables

This paper chooses three variables: peasants' age, sex and educational level to be the personal characteristics variables that influence whether the peasants actively participate in the reconstruction.

The effect of peasants' sex and age to their behaviors can be positive or negative (Jun Song, Hu Ruifa, Huang Jikun, 1998). A large number of empirical studies have shown that the education level of peasants has a positive correlation to their behaviors of accepting new things (Jiehong Zhou, 2006). The cognitive of reconstruction with high education will be advantageous. Therefore, the higher the peasants' education levels are, the faster they accept new things and new knowledge; the more easily they get the information of post-disaster reconstruction; the more advantageous it is for them to actively participate in post-disaster reconstruction; thus, it's helpful for improving the effectiveness of the reconstruction. So, this article assumes that the higher educated the farmer accepted, the greater enthusiasm they have to participate in post-disaster reconstruction, and vice versa.

(2) awareness of post-disaster reconstruction

This article chooses three variables: subjective cognition of reconstruction, recognition of funding for reconstruction and aspiration for participating in the reconstruction as variables which will affect the peasants' active participation in the reconstruction.

Lewis (Leeuwis) (Leeuwis C. 2001) raised "individual acts of the basic variables" model in his book "Rural Innovative Communication" in 2004, and strived to explain from a cognitive point of view, "why people do something at a certain time." The model is built on the theories of rural sociology, anthropology and social psychology. And the model believes that the behavior can be divided into multiple levels, a number of areas and in the dynamic changes over time. The factors that affect the behavior of individual peasant are numerous and complicated. From cognitive considerations, it mainly includes four basic variables: self-knowledge and self-judgments of peasants' own effectiveness, cognitive of environmental effectiveness, cognition and judgments on social relations and social pressure, cognitive and judgments on evaluation framework.

For peasants in the post-disaster reconstruction, "self-knowledge and self-judgments of peasants' own effectiveness" is reflected in "subjective cognition of reconstruction"; "cognitive of environmental effectiveness" is reflected in "recognition of funding for reconstruction" and "cognition and judgments on social relations and

social pressure” is reflected in “aspiration for participating in the reconstruction”. Different perceptions of the reconstruction make possible the active participation of peasants in post-disaster reconstruction and also may produce the opposite result.

(3) the effectiveness of reconstruction

Behaviors of individuals are affected by socio-culture, economic income, individual educational level and other factors; otherwise, the psychological situation of the individual's future expectations is an important factor influencing their behaviors. Expectation refers to the actors' forecast about the future values of some uncertain variables in the current decision-making. In the post-disaster reconstruction, the effectiveness of reconstruction that had already had directly influenced the peasants' expectation for the future reconstruction, thereby, the current decision-making. The effectiveness of the reconstruction is mainly reflected on the improvement of living environment of peasants in the affected areas, the increase of income and promotion of the role of science and technology from post-disaster reconstruction and so on. This paper assumes that the better rebuild effect we gain; the greater enthusiasm peasants have to participate in post-disaster reconstruction.

(4) The degree of harmonious relations between the government and the masses in post-disaster reconstruction

In the post-disaster reconstruction, the degree of harmonious relations between the government and the masses directly affects whether reconstruction can be carried on smoothly and whether physical reconstruction and spiritual reconstruction can be achieved actually. On the one hand, the Government's leading role can not be ignored. Gu shengzu(Shengzu Gu. 2008) emphasized both the construction of self-reliance mechanism and the leading role of the government in post-disaster reconstruction. The powers of the government should coordinate with the function of the market. On the other hand, we must fully understand the peasants' principal role in the post-disaster reconstruction. Many scholars have stressed that we must persist the peasants' main role in promoting rural reconstruction work in order to prevent them from restraining their initiative and creativity for reconstruction just because they are excluded as well as to prevent the negative tendency to help increasing peasants' possible passive dependency in a certain extent. Qiu baoxing believes that reconstruction work should be handed over to local peasants to make decisions and we must respect people's common wishes and fundamental property rights(Qiu, Baoxing. 2008) and their autonomy and creativity of self-built work. Based on the researches that have been made by scholars and the realities of post-disaster reconstruction, this paper assumes that the more harmonious the relationship between the government and the masses is, the more actively peasants tend to participate in post-disaster reconstruction, and vice versa.

This paper finally chose four categories with 13 explanatory variables, and the definitions of the relevant variables, that is their expecting role on variables explained, are shown in Table 1, where the marks “+ / -“ indicate the positive or negative correlation between all variables and peasants' participation in post-disaster reconstruction according to our expectation .

1.2 Model

Based on the above description and analysis, we set the relation between whether the peasants' actively participate in post-disaster reconstruction and its influencing factors as the form as follows:

Peasants' active participation in post-disaster reconstruction = f(Peasants' personal characteristics, Awareness of the situation in post-disaster reconstruction, Effectiveness of reconstruction, The degree of harmonious relations between the government and the masses in post-disaster reconstruction, and other factors)+ Random disturbing term.

Because it is difficult to directly express and measure behaviors by values, we use "0-1" index method to represent peasants' active participation in post-disaster reconstruction, in which "1" indicates that the peasants actively participated in post-disaster reconstruction, and "0" indicates that the peasants did not actively participate in post-disaster reconstruction . Because the dependent variable's range of traditional regression model is from negative infinity to positive infinity, this study only values in [0,1] interval. So we use Logistic regression model. We set the probability of $y = 1$ for P , and calculate the probability P whose variable is 1 : $P(y_i = 1 | x_i, \beta) = F(-x_i' \beta)$. By using maximum likelihood estimation of regression parameters of the model, we estimate the log-likelihood function as follows:

$$P_t = F\left(\alpha + \sum_{i=1}^m \beta_j X_{ij}\right) = 1/[1 + \exp(-\alpha + \sum_{i=1}^m \beta_j X_{ij})] + e_i \quad (1)$$

Above P_t is the probability of peasants' active participation in post-disaster reconstruction, β_i is the regression coefficient of factors, m indicates the number of factors that influence the probability; X_{ij} is the independent variable, indicating that the first j kinds of factors; α expresses the return of the intercept, e_i indicates the random disturbance.

1.3 Data

Using six towns of five villages in Shifang City, Mianzhu City, Dujiangyan City, Anxian of Sichuan Province as typical sample areas, and from the perspective of development of science and sociology, we carry out an in-depth

investigation and study in 2008 through a questionnaire survey, semi-structured interviews, group interviews, and etc. In this study a total of 160 questionnaires were issued while 155 questionnaires were usable. According to our statistical processing of the questionnaire, we give the definition of each variable as shown in Table 2.

2. Results and discussion

2.1 Model estimation results

This study carried out Logistic regression analysis on 155 copies of data by using statistical software SPSS13.0. The selected variable standard level $\alpha = 0.05$, excluding the standard level $\alpha = 0.10$. Results of estimation on model are in Table 3.

2.2 Discussion on Results

2.2.1 Personal characteristics of peasants

After calculating, we find that, among three characteristic variables: sex, age and educational level, education level is significant below the level of 5% in backward remove, which illustrates that in the individual characteristic variables, the level of education has more significant effects than the other factors on whether the individual actively participated in the reconstruction and the educational level of peasants has a significant impact on whether they actively participated in the reconstruction. It is in good agreement with the hypothesis. The higher the educational levels of peasants were, the more willing they were to actively participate in post-disaster reconstruction; The higher the educational levels of peasants were, the higher degree of awareness of the reconstruction's significance to the nation and persons they can achieve; The higher the educational levels of peasants were, the more able they were to consider the overall situation when understanding the national policies on post-disaster reconstruction; the more easily they accepted knew knowledge and new skills, which would make them more willing to actively participate in post-disaster reconstruction with clearer understandings to the roles of their own in the post-disaster reconstruction, then they can be more active in participation in post-disaster reconstruction.

According to the data in Table 3, in Enter, the regression coefficient of sex is 0.633, and regression coefficient of age is -0.395. Solely seeing from the positive and negative view of regression coefficient, it consistent with the hypothesis. The older the peasants are, the less possible they were to actively participate in the reconstruction. Men are more likely to actively participate in the reconstruction than women. But performances of these two factors in the model are not significant. So age and sex are not seriously affected whether they actively participated in post-disaster reconstruction. This is consistent with the actual investigation. According to the actual survey, when facing disaster, they would not give up participation in post-disaster reconstruction just because of their sex and age, which is not the important factor in affecting peasants' active participation in the reconstruction.

2.2.2 Awareness of the situation in post-disaster reconstruction

From model estimation results in Table 3, awareness of the situation in post-disaster reconstruction had significant effects on their active participation in post-disaster reconstruction. Positive and negative nature of effects is consistent with the hypothesis.

In Remove Backward, the coefficient of Subjective cognition of reconstruction is 0.804, which is significant below the level of 1%. It indicated that peasants' subjective cognitions of reconstruction had very significant impacts on their active participation in post-disaster reconstruction. The coefficient is positive, which indicates that the more likely they thought themselves to be subjects in reconstruction, the easier they were to actively participate in post-disaster reconstruction.

In Remove Backward, the coefficient of Cognitive of sources of funds for reconstruction is -0.492, which is significant below the level of 10%. The coefficient is negative, which indicates that peasants who thought the post-disaster reconstruction funds should come from the Governments would actively participate in post-disaster reconstruction. If the peasants need to pay some funds for post-disaster reconstruction, their autonomy of participation in post-disaster reconstruction was reduced. It was true in the actual investigation. Once they were asked to pay, their resistance would increase, and enthusiasm would be greatly reduced.

In Remove Backward, the coefficient of willingness to participate is 0.976, which is significant at the level of 1%. It indicated that peasants' willingness to participate had more significant impacts on their active participation in post-disaster reconstruction. It is consistent with common sense of living conditions and practical study. Among 71 people who chose to actively express their views in post-disaster reconstruction, 62% of them actively participated in the post-disaster reconstruction. The probabilities of the peasants with strong willingness to participate to actively participate in post-disaster reconstruction are larger.

2.2.3 Reconstruction results

According to the data in Table 3, in Enter, the coefficient of Effectiveness of the improvement of living environment after reconstruction is 0.234; the coefficient of Effectiveness of income increase on reconstruction projects is 0.308; the coefficient of Effectiveness of promoting science and technology on reconstruction projects is 0.384. Solely seeing from the positive and negative view of regression coefficient, the coefficients of all three

indicators are positive, which are consistent with the hypothesis. The better the improvement of living environment after reconstruction was, the more obvious the effects of income increase on reconstruction projects were and the more skills they could be led to master, then, the more actively they participated in the post-disaster reconstruction. It was almost consistent with the actual situation. However, the performances of these three factors in the model were not significant, so, the effectiveness of the reconstruction just had small influence on peasants' active participation in the post-disaster reconstruction.

It is noteworthy that, in Remove Backward, the improvement of living environment after reconstruction is significant below the level of 5%. A more reasonable explanation for this situation is that, as peasants had just experienced the big earthquake, the house collapsed heavily. They were very concern about improvement of living conditions including housing construction. The effectiveness of improvement had a direct impact on the peasants' initiative for active participation in post-disaster redevelopment. And the effects of rebuilding to the improvement of living conditions were very obvious. In some areas, the rebuilt-houses had beautiful designs and firm structures, which would easily drive the peasants to actively participate in the reconstruction. However, effectiveness of income increase on reconstruction projects and effectiveness of promoting science and technology on reconstruction projects had a certain lag, and would not show directly. They had little influence on peasants' active participation in the post-disaster reconstruction.

2.2.4 The degree of harmonious relations between the government and the masses in post-disaster reconstruction

According to the data in Table 3, Decision-making subject in reconstruction had a significant impact on peasants' active participation in the post-disaster reconstruction below the level of 5%. In Remove Backward, the coefficient of Decision-making subject in reconstruction is -0.425, which is negative. It shows if the cadres were decision-making subjects in reconstruction, the peasants would more actively participate in the post-disaster reconstruction, and vice versa.

Also, it can be seen from Table 3, in Enter, the coefficient of Commanding subject in reconstruction is positive, indicating the more peasants engaged in commanding in reconstruction, the more active they were to participate in the post-disaster reconstruction. The coefficients of the degree of government's respect for peasants' wishes and the degree of peasants' satisfaction with the performance of the government in reconstruction are positive, which are consistent with the hypothesis. It shows that the more respect the governments showed to the wills of peasants, the more possible it was for peasants to actively participate in the post-disaster reconstruction.

3. Conclusions and recommendations

From the results of the analysis we can see, education, subjective cognition of reconstruction, willingness to participate, effectiveness of the improvement of living environment after reconstruction had positive correlation to peasants' autonomy to participate in the post-disaster reconstruction. Cognitive of sources of funds for reconstruction and decision-making subject in reconstruction had negative correlation to peasants' autonomy to participate in the post-disaster reconstruction. Sex, age, effectiveness of income increase on reconstruction projects, effectiveness of promoting science and technology on reconstruction projects, commanding subject in reconstruction, the degree of government's respect for peasants' wishes and the degree of peasants' satisfaction with the performance of the government in reconstruction had no obvious correlation to peasants' autonomy to participate in the post-disaster reconstruction. Based on the study above, the following recommendations for policies are made:

3.1 Increase the promotion and implementation of the policy and firmly establish the confidence of peasants in disaster areas to rebuild their homes

The results from the analysis conclude that among the four factors of affecting the autonomy of the peasants to play in post-disaster reconstruction, the influence of peasants' awareness to post-disaster reconstruction is the most significant. In the post-disaster reconstruction, we should intensify the openness of information and increase the degree of peasants' awareness to issues and policies related to post-disaster reconstruction. At the same time we should increase the implementation of policies to make them actually and well done. After the people know the changes in post-disaster reconstruction and do benefit from that, the enthusiasm of the peasants to actively participate in post-disaster reconstruction will naturally rise.

3.2 Strengthen skills training for peasants in disaster areas, and actively lead the rural elites to play a leading role in post-disaster reconstruction

Being the subjects in rural reconstruction, the peasants must play the main role. The rural elites with higher education level and strong sense of overall situation are easier to understand the deployment of post-disaster reconstruction, and actively play their role in the reconstruction; at the same time, these people come from the grassroots level, with strong mass base, and it is easy for them to get along with the masses. Their ties and leading role in the reconstruction should be fully played. Meanwhile, skills training for peasants should be paid attention to. The overall quality of the peasants should be improved through a variety of training to help them become the new peasants who are educated, skilled, and well versed in operating, which provides the support of Talent and Chile for rural post-disaster reconstruction.

3.3 Perform well in works of house reconstruction and resettlement, and actively help peasants play the main role in the housing reconstruction

In the selection of models for house reconstruction and specific redevelopment of houses, we must scientific plan on the basis of full respects of peasants' wills. Self-rebuildings and mutual helps can rebuild close neighborhood relationship for the peasants who were psychologically suffered a lot, which can be helpful for the reconstruction of rural ethical order, and then, the development of village self-government order. In addition, Self-rebuildings are more likely to make traditional village-style be restored. At the same time, post-disaster reconstructions in disaster areas should be organically combined with constructions of new countrysides. Governments' time frame for maintenance, reinforcement and reconstruction of rural and urban houses should be practical without unified regulations. Peasants' subjective roles should be fully played in house-rebuilding.

3.4 Combine governments' policy-making with the Peasants' self-government to a scientific and orderly conduct of post-disaster reconstruction

The weakening of peasants' decision-making team is a major obstacle for peasants to play subjective roles in the post-disaster reconstruction. Therefore, the villagers' self-governed organizations should be further improved and the degree of peasants' organizations should be increased. Firstly, the township government should change the way to lead the villages, that is to change from "the government being the whole show" into "the masses self-governing", and establish and improve the democratic decision-making mechanism, in which meetings involving all villagers or representatives should be hold to discuss and ask their opinions on the village's important issues and problems related to the vital interests of the villagers before announcement and implement. Secondly, democratic supervision must be strengthened. After the earthquake, the state had given various helps to people in the disaster areas. Public blackboards should be made to honestly show administrative affairs of village and the actual expenditures in order to be supervised by villagers. At the same time, the financial managements and audits should be improved with posting the whole system on the wall in order for an easy supervision from villagers. Last but not the least, on the key issues concerning the overall situation, the governments should strengthen guidance to improve decision-making.

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Notes:

Note1: *, **, *** respectively indicates it is significant below the level of 10%, 5% and 1%

Table 1. The direction of the expected role on variables explained from various influencing factors

influencing factors	variables being explained (peasants' active participation in post-disaster reconstruction)
Peasants' personal characteristics	
Age	-
Gender	+/-
Degree of education	+
Awareness of the situation in post-disaster reconstruction	
Subjective cognition of reconstruction	+/-
Cognitive of sources of funds for reconstruction	+/-
Reconstruction will	+
Reconstruction results	
Effectiveness of the improvement of living environment after reconstruction	+
Effectiveness of income increase on reconstruction projects	+
Effectiveness of promoting science and technology on reconstruction projects	+
The degree of harmonious relations between the government and the masses in post-disaster reconstruction	
Decision-making subject in reconstruction	+/-
Commanding subject in reconstruction	+/-
The degree of government's respect for peasants' wishes	+
The degree of peasants' satisfaction with the performance of the government in reconstruction	+

Table 2. Explanation of the model-related variables

Variable Name	Ready state	Variable Definition
Peasants' personal characteristics		
Age	1~5	Under 30 years old = 1; 31 ~ 40 years old = 2; 41 ~ 50 years old = 3; 51 ~ 60 years of age = 4; above 60 years old = 5
Gender	0~1	Male = 1; Female = 0
Degree of literacy	1~5	Illiterate = 1; primary school = 2; junior high school = 3; high school = 4; graduate from college or higher = 5
Awareness of the situation in post-disaster reconstruction		
Subjective cognition of reconstruction	1~5	Government = 1, government-dominated and peasants-supplemented = 2, government and peasants are equally important = 3, peasants-dominated and government-supplemented = 4, farmers = 5
Cognitive of sources of funds for reconstruction	1~5	Totally depend on the government = 1, government-dominated and peasants-supplemented = 2, government and peasants are equally important = 3, peasants-dominated and government-supplemented = 4, Totally depend on the peasants = 5
Reconstruction will	0~1	Unwilling to = 0, willing = 1
Reconstruction results		
Effectiveness of the improvement of living environment after reconstruction	1~5	Much worse than before = 1, not as before = 2, little change = 3, some improvement = 4, a lot of improvement = 5
Effectiveness of income increase on reconstruction projects	1~5	Not high = 1; not too high = 2; average = 3; relatively high = 4; very high = 5
Effectiveness of promoting science and technology on reconstruction projects	1~5	Not high = 1; not too high = 2; average = 3; relatively high = 4; very high = 5
The degree of harmonious relations between the government and the masses in post-disaster reconstruction		
Decision-making subject in reconstruction	1~4	township cadres=1, village committee = 2, the village committee decided after seeking the views of the villagers = 3, the villagers' discussion = 4
Commanding subject in reconstruction	1~4	township cadres=1, village committee = 2, the village committee decided after seeking the views of the villagers = 3, the villagers' discussion = 4
The degree of government's respect for peasants' wishes	0~1	No respect = 0, respect = 1
The degree of peasants' satisfaction with the performance of the government in reconstruction	1~3	Not satisfied = 1, satisfied = 2, very satisfied = 3

Table 3. Results of estimation on model for influencing factors of peasants' active participation in post-disaster reconstruction

Variable	Enter				Backward Remove	
	B	S.E.	Wald	Sig.	B	Sig.
Gender	0.633	0.416	2.316	0.128		
Age	-0.395	0.274	2.082	0.149		
Degree of literacy	0.383*	0.233	2.707	0.100	0.519**	0.020
Subjective cognition of reconstruction	0.607**	0.295	4.228	0.040	0.804***	0.004
Cognitive of sources of funds for reconstruction	-0.480*	0.285	2.838	0.092	-0.492*	0.075
Willingness to participate	1.107***	0.416	7.089	0.008	0.976***	0.008
Effectiveness of the improvement of living environment after reconstruction	0.234	0.226	1.077	0.299	0.438**	0.020
Effectiveness of income increase on reconstruction projects	0.308	0.375	0.675	0.411		
Effectiveness of promoting science and technology on reconstruction projects	0.384	0.369	1.078	0.299		
Decision-making subject in reconstruction	-0.402*	0.219	3.364	0.067	-0.425**	0.028
Commanding subject in reconstruction	0.287	0.285	1.016	0.313		
The degree of government's respect for peasants' wishes	0.146	0.222	0.433	0.510		
The degree of peasants' satisfaction with the performance of the government in reconstruction	0.007	0.268	0.001	0.979		
Constant term	-2.991**	1.379	4.703	0.030	-2.402***	0.004