

Article

Analysis of the Influencing Factors on Resettled Farmer's Satisfaction under the Policy of the Balance between Urban Construction Land Increasing and Rural Construction Land Decreasing: A Case Study of China's Xinjin County in Chengdu City

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Abstract: The purpose of this study is to explore what are the influencing factors on resettled farmer's satisfaction and occupancy under the policy of the balance between urban construction land increasing and rural construction land decreasing in Xinjin County, Chengdu City. Questionnaires, statistical analysis and logistic regressions were employed. The results indicate that the higher educated farmers will be more satisfied with the relocation areas. An increase in the number of public facilities and the associated maintenance costs will decrease the resettled farmer's satisfaction. Farmers who have moved to new communities are more satisfied with infrastructure, supporting facilities and property management, especially the living environment. The main tasks completed by farmers are the tillage land and to do work for their new community. The positive factors that contribute to the famer's satisfaction, include land-rights guarantees, compensation for land consolidation, sewage treatment and the living environment. In contrast, public facilities, commercial service networks and resettled area's maintenance are negative factors for farmer's satisfaction. Meanwhile, the key factors to promoting harmony between urban and rural construction are to establish relevant laws and regulations, reasonable operation and management mechanisms,

farmer-rights protection mechanisms, and to protect famer household income, as well as to improve agricultural production and farmer's non-agricultural employment opportunity.

Keywords: land use; urban and rural construction land; farmer's satisfaction; logistic regression; Xinjin County; Chengdu City

1. Introduction

China has experienced a rapid and far-reaching transition in the past three decades with a mass rural immigration to urban areas [1]. Rapid industrialization and urbanization has produced a phenomenon of village hollowing [1], and has also posed a challenge for urban land use. In 2000, according to the statistical data from the Ministry of Land and Resources of China (MLRC), rural housing land accounted for 67.3% of China's total construction land amounted to 165,000 km² in China [2,3]. In 2006, China's urban built-up area totaled 33,660 km², with rural area accounting for the remaining 99.4% of the country [4]. Meanwhile, farmland and rural housing land are treated as the two most important land-use types depicting urban-rural development [5]. The urban-rural-connecting model has been put forward to guarantee healthy and effective development. One of the primary goals of this model is to increase urban construction land by reducing the amount of rural construction land. Namely, the government plans to expropriate rural construction land for urban construction, without changing the quantity or quality of agricultural land areas in the project, so that land can be used more effectively through a sustainable arrangement [6]. In this model, rural construction land that is planned to be reclaimed as tilled land (namely the old plot) is combined with the land planned as urban construction (namely new plot) to form a new-and-old-plot project. Within the new-and-old-plot project, the aim is to stay unchanged for the quantity and quality of agricultural land and total construction area, so that the lands will be used more effectively by a sustainable arrangement [6]. Since the project of urban-rural-connecting model was put forward, the results of each pilot stage were mixed. As one of the first provinces that carried out the Connecting Model Project organized by the MLRC [7], Sichuan province has made an active effort to explore how to balance urban and rural development and construct a new socialist countryside. Such exploration has gathered plentiful experience and formed the unique Build-on-Remove Model within Sichuan, which has been highly appreciated by the MLRC [8]. During 2010, around 1,198,000 square meters of different kinds of buildings were removed in Chengdu, then 2,160,000 square meters of rural communities, with a capacity of 136,644 households, occupancy rate up to 90%, were built [9,10]. Meanwhile, in Xinjin County, one of the key demonstration areas of this policy, 38 rural communities had been built with a population of 57,000 farmers, accounting for 28% of the county's agricultural population. For outstanding performance in this project, Xinjin County was praised as a Target-Achieving Advanced Unit and has been considered a highlight of rural community construction in the western area [11].

In China, Previous researches on land use transition focused more on village hollowing [1], grain production [12], the sloping land conversion program [13], rural transformation development [12], but little on rural residential areas. In addition, researches on famers' satisfaction evaluation in rural residential areas mostly depended on social mentality surveys and analysis [14–18]. Nevertheless,

the degree of famer satisfaction for rural residential areas is influenced by numerous and varied factors [19,20]. The slowing economic development growth, lack of employment opportunities and unsound essential services are the major factors for low satisfaction in rural areas. Some foreign researchers had proposed the above conclusion, through investigating and researching the resident's migration in rural areas [21–23]. Meanwhile, logistic regression has been widely used in spatial analysis to investigate the influence of driving factors *et al.* [24,25], but it is rarely used for satisfaction evaluation. Also, it is more characterized by good precision and accuracy, compared with social mentality analysis. For this class of residents, satisfaction surveys can help the government to better understand the real needs and opinions of farmers, strengthening farmers' trust in government policy, improve the applicability and flexibility of policy, and provide better and more coordinated services to the development of urban and rural areas. This paper, accordingly, aims to contribute to the analysis and critique of famers' satisfaction degree on rural residential areas in the resettlement areas by the Logistic Analytical Model. The data in this model are from sampling surveys in experimental resettlement areas for Connecting Model Project in Xinjin, Chengdu.

2. Basic Information and Features of the Investigating Area and Respondents

2.1. Basic Information and Features of the Investigating Area and Respondents

Xinjin County lies in the south of Chengdu, in the western part of Sichuan basin. This county, with a population of 306,300, an area of 330 km², and consists of 11 towns and one village, is an important crossroad and material distribution center in the Western Chengdu Plain [26] (Figure 1).

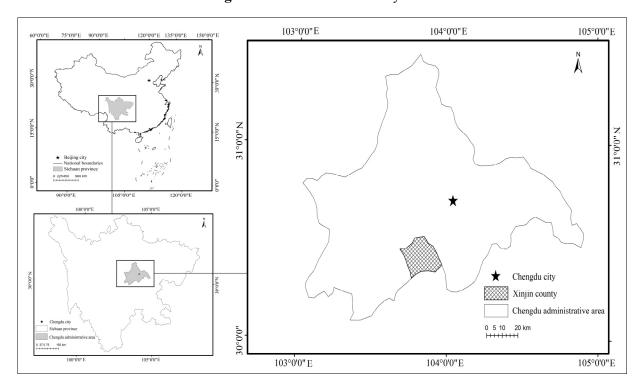


Figure 1. The location of study area.

In the field survey, 240 questionnaires were handed out, among which 223 returned completed, so that the effective rate of the survey was 92.92%. Of these effective responses, 76 returned from Puxing Town (Yuanshan Community), 77 were from Dengshuang Town (Minjiang Community) and 70 were responses from those polled in Xinping Town (Taiping Community), among which Puxing Town (Yuanshan Community) is a provincial-level demonstration. For the representativeness of the survey, farmers in household were set as a unit and household surveys have been carried out.

2.2. Essential Features of the Respondents

To get useful information of the famer households, the respondents were requested to be the main family members of the households of families that had already been moved into the new residential settlement. Age groups of the 223 effective investigation samples were appropriately distributed and among whom 42.24% were male, 57.75% were female. Such distributions could clearly reflect the satisfaction degree. Educational level is also an influencing factor of how farmers are satisfied with the residential settlement. According to this research, the higher the educational level is, the more they're satisfied with the residential settlement. At the same time, they have more choices when job-hunting, so that the revenue of the family increases. This result exactly corresponds with the conclusion of professors, like Shen Minghao [27]. When choosing jobs, 68.20% of farmers surveyed worked in the field and were peasant-workers, 24.21% of them had no work ability and were not yet employed. Because of the above, 70.32% of the farmer households' net income per year was below 5000 RMB; among which 47.57% didn't even reach the level of 2000 RMB (Table 1).

Table 1. Rural households' basic living statistics.

| Essential information | | | Variable (%) | | | |
|---|---|---|--|--|--|-----------------------|
| Floor space (%) Standard of culture (%) | Under100 m ² (27.29%) Primary school and under the it (47.62%) | 100 to 150 m ² (63.63%) Junior high school (40.75%) | More than 150 m ² (9.08%) Senior high school (10.32%) | More than senior high school (1.31%) | | |
| Family size (%) | Under the three persons (19.29%) | 3 to 4 persons (54.08%) | 5 to 6 persons (24.32%) | More than 6 persons (2.31%) | | |
| Time of life (%) | 18 to 30 years (15.52%) | 31 to 40 years (24.66%) | 41 to 50 years (26.27%) | 51 to 60 years (13.86%) | More than 60 years (19.69%) | |
| Family's net income of year (%) | Under the 2000 yuan (47.57%) | 2000 to 5000 yuan (22.75%) | 5000 to 10000 yuan (18.25%) | 10000 to 20000 yuan (9.16%) | More than 20000 yuan (2.27%) | |
| Farmers' works | be engaged in agriculture (39.36%) | work part-time (28.84%) | be engaged in business (3.97%) | Working in government or enterprises (1.35%) | Working in education or hospital (2.27%) | These others (24.21%) |

The farmers are satisfied with the policy that floor area for a rural registered permanent residence in the residential settlement should be 35 m² per person. As informed during the interview, resettlement houses in Puxing Town (Yuanshan Community) were planned by the government and built by famers themselves. The other resettlement houses were planned in the same way, but built by construction companies that succeeded in an open tender bidding system, by attracting investment in which farmers participated with rural construction land as stock or flow. The surveyed spots also show the status as follows.

- (1) Puxing Town (Yuanshan Community)
 - As this community is a provincial-level demonstration of the Urban-Rural-Connecting Model in Sichuan Province, more attention was placed on the construction in this area. The resettlement allowance there was 6000 RMB per household for the first relocated farmers, and 15,000 RMB per household for the second ones.
- (2) Dengshuang Town (Minjiang Community)
 - The resettlement allowance payment of Dengshuang Town (Minjiang Community) was 25,000 RMB per unit of area and the farmers' relocation to the settlement was to occur in three waves. Before the survey was carried out, only the first wave of farmers had been relocated into their new houses and had received their allowance because of the absence of compensation. Contractors would rent the rural land at the price of 1000 RMB per unit of area and 3.2 RMB per kilogram of grain price, and has promised to compensate the farmers at the market price.
- (3) Xinping Town (Taiping Community)

 The payment from the contractors for renting the rural land was 600 RMB per unit of area.

 Meanwhile, the government would compensate the farmers for the agricultural land at about 20,000~30,000 RMB per unit of area on the condition that farmer households pay 300 RMB per square meter to supplement the resettlement construction costs before they moved in.

3. Survey Results and the Logistic Regression Analysis Model

3.1. Modeling in Theory and Variable Designs

According to the conditions in logistic regression modeling with statistical package for the social sciences (SPSS), suppose that P is the probability for something to happen and that x_1, x_2, x_3, \ldots is a group of vectors relative to Y, then when we take the logarithm of P per (1 - P), so that we get log [P per (1 - P)], which is the logistic transformation represented as logic (P) [28,29].

$$Y = \log \frac{p}{1 - p} = \alpha + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_n x_n$$
 (1)

Letter P in the formula above can be the probability, the qualitative variable or a variable with a binary feature. Farmer households' satisfaction degree with the residential settlement was classified into five levels, which are quite unsatisfied, unsatisfied, satisfied, relatively satisfied and quite satisfied. Given P as the probability that the farmer household is satisfied and that of unsatisfied is "1 - P". Let α be the constant term, x_i are influencing factors of the satisfaction degree, and β is the partial regression coefficient in the logistic regression. Quantitative analysis is taken in the logistic regression and the definitions of variables in this model are stated as below (Table 2).

Table 2. Define model variables.

| Influencing factors | Variables | Short-cut process | Defining variables |
|---|---|-------------------|---|
| | Farmers' income (X ₁) | 1~5 | 1 = very dissatisfied; 2 = dissatisfied; 3 = general; 4 = satisfied; 5 = very satisfied |
| Living | Farmers' employment status (X ₂) | 1~5 | 1 = very dissatisfied; 2 = dissatisfied; 3 = general; 4 = satisfied; 5 = very satisfied |
| conditions of family | Building quality (X ₃) | 1~5 | 1 = enormous implications; 3 = a little influence; 5 = make no difference |
| $(X_1 \sim X_5)$ | The electricity/gas/water supply (X ₄) | 1~5 | 1 = very dissatisfied; 2 = dissatisfied; 3 = general; 4 = satisfied; 5 = very satisfied |
| | Traditional festivals (X ₅) | 1~5 | 1 = enormous implications; 3 = a little influence; 5 = make no difference |
| | The p -values of land rights guarantee (X_6) | 1~5 | 1 = very dissatisfied; 2 = dissatisfied; 3 = general; 4 = satisfied; 5 = very satisfied |
| | The <i>p</i> -values of land consolidation compensation (X ₇) | 1~5 | 1 = very dissatisfied; 2 = dissatisfied; 3 = general; 4 = satisfied; 5 = very satisfied |
| Government policies | Information on land consolidation (X ₈) | 1~5 | 1 = No publication; 3 = occasional publication; 5 = frequent publication |
| $(X_6 \sim X_{11})$ | The factor of employment channels (X ₉) | 1~5 | 1 = not helpful at all; 3 = somewhat helpful; 5 = very helpful |
| | Use of farmland hire (X_{10}) | 1~5 | 1 = barely understood; 2 = don't know much; 3 = general; 4 = know a little bit; 5 = fully understand |
| | Housing's soft terms (X_{11}) | 1~5 | 1 = very dissatisfied; 2 = dissatisfied; 3 = general; 4 = satisfied; 5 = very satisfied |
| | Rural infrastructure (X ₁₂) | 1~5 | 1 = very bad; 2 = not so well; 3 = general; 4 = good; 5 = very good |
| Communalfaci | Means of transportation (X_{13}) | 1~5 | 1 = high inconvenience; 2 = a little inconvenience; 3 = general; 4 = a little convenience; 5 = very convenience |
| lities $(X_{12}\sim X_{16})$ | Public facilities (X ₁₄) | 1~5 | 1 = very dissatisfied; 2 = dissatisfied; 3 = general; 4 = satisfied; 5 = very satisfied |
| | The business service of network system (X_{15}) | 1~5 | 1 = very inconvenience; 2 = a little inconvenience; 3 = general; 4 = a little convenience; 5 = very convenience |
| | Safety installation (X_{16}) | 1~5 | 1 = existence; 3 = dimness; 5 = nonexistant |
| Property | The relocation areas maintenance (X ₁₇) | 1~5 | 1 = bad; 3 = general; 5 = good |
| Property management $(X_{17}\sim X_{19})$ | Social security (X ₁₈) | 1~5 | 1 = very dissatisfied; 2 = dissatisfied; 3 = general; 4 =satisfied; 5 = very satisfied |
| (A17~A19) | Property management fee (X_{19}) | 1~5 | 1 = very dissatisfied; 2 = dissatisfied; 3 = general; 4 =satisfied; 5 = very satisfied |

| Influencing factors | Variables | Short-cut process | Defining variables |
|------------------------|--------------------------------------|----------------------|--|
| Ecological and | Sewage treatment (X_{20}) | 1~5 | 1 = enormous implications; 3 = a little influence; 5 = no influence |
| environmental quality | Environmental sanitation (X_{21}) | 1~5 | 1 = very bad; 2 = not so well; 3 = general; 4 = a little good; 5 = very good |
| $(X_{20} \sim X_{22})$ | Living conditions (X ₂₂) | 1~5 | 1 = very dissatisfied; 2 = dissatisfied; 3 = general; 4 = satisfied; 5 = very satisfied |

Table 2. Cont.

3.2. Alpha Reliability Analysis of the Variables

In order to test the stability of variables, Alpha reliability of the influencing factors in Chart 2 was tested through SPSS. The Cronbach's Alpha of each influencing factors are as follows; the Alpha of living condition is 0.631, government policy is 0.707, public facilities in the residential area is 0.287, estate management is 0.590 and the location's environment is 0.428. Although the Cronbach's Alpha of public facilities, estate management and the location's environment are below 0.6, the overall reliability of these variables from questionnaires is relatively high for the Conbach's Alpha of overall influencing factor is 0.849.

| Influencing factors | Cronbach's Alpha | Cronbach's Alpha based on standardized Items | N of Items | |
|--------------------------------------|---------------------|--|------------|--|
| Living conditions of family | 0.631 | 0.628 | 5 | |
| Government policies | 0.707 | 0.713 | 6 | |
| Communalfacilities | 0.287 | 0.437 | 5 | |
| Property management | 0.590 | 0.596 | 3 | |
| Ecological and environmental quality | 0.428 | 0.480 | 3 | |
| Constant | 0.849 | 0.846 | 22 | |

Table 3. Variables' reliability analysis.

3.3. Operation Results from Logistic Regression Model

Using the data from the effective questionnaires, logistic regression analysis of the influencing factors in Chart 2 is taken. In this analysis, 22 variables are introduced to analyze the factors influencing satisfaction degree. Farmers' satisfaction degree were given numerical values (quite unsatisfied = 1, unsatisfied = 2, satisfied = 3, relatively satisfied = 4, quite satisfied = 5) and we get the influencing factors' regression coefficient valuations are as shown as Table 4.

Variables are introduced into the logistic regression model according to their definitions to test statistical significance of each variable. In this way, final statistical results of factors influencing farmers' satisfaction degree are figured out with each p-value (sig.) as Table 4. The p-values of land rights guarantee (X_6), and that of business service network systems (X_{15}), are statistically significant at the 0.01 level. The p-values of land consolidation compensation (X_7), public facilities (X_{14}), the relocation area maintenance (X_{17}), sewage treatment (X_{20}) and living conditions (X_{22}) are statistically significant at the 0.05 level. The other variables do not show statistical significance.

Table 4. Variables in the equation of logistic model.

| Variables | Regression coefficient (B) | S.E. | Wald | df | P (sig.) | Exp (B) |
|--|----------------------------|-------|--------|----|----------|---------|
| Farmers' income (X ₁) | -0.198 | 0.365 | 0.295 | 1 | 0.587 | 0.820 |
| Farmers' employment status (X_2) | -0.018 | 0.381 | 0.002 | 1 | 0.962 | 0.982 |
| Building quality (X ₃) | -0.198 | 0.193 | 1.046 | 1 | 0.306 | 0.820 |
| The electricity/gas/water supply (X ₄) | 0.125 | 0.306 | 0.166 | 1 | 0.684 | 1.133 |
| Traditional festivals (X ₅) | 0.804 | 0.510 | 2.484 | 1 | 0.115 | 2.235 |
| The p -values of land rights guarantee (X_6) | 1.118 ** | 0.347 | 10.365 | 1 | 0.001 | 3.058 |
| The p -values of land consolidation compensation (X_7) | 0.910 * | 0.400 | 5.170 | 1 | 0.023 | 2.484 |
| Information of land consolidation (X_8) | 0.124 | 0.233 | 0.283 | 1 | 0.595 | 1.132 |
| The factor of employment channels (X_9) | 0.575 | 0.319 | 3.243 | 1 | 0.072 | 1.777 |
| Use of farmland hire (X_{10}) | 0.116 | 0.198 | 0.344 | 1 | 0.557 | 1.123 |
| Housing's soft terms (X_{11}) | 0.232 | 0.355 | 0.428 | 1 | 0.513 | 1.262 |
| Rural infrastructure (X_{12}) | 0.043 | 0.322 | 0.018 | 1 | 0.894 | 1.044 |
| Means of transportation (X_{13}) | -0.293 | 0.319 | 0.847 | 1 | 0.357 | 0.746 |
| Public facilities (X_{14}) | -1.362 * | 0.598 | 5.192 | 1 | 0.023 | 0.256 |
| The business service Network system (X_{15}) | -1.151 ** | 0.442 | 6.786 | 1 | 0.009 | 0.316 |
| Safety installation (X_{16}) | -0.110 | 0.181 | 0.370 | 1 | 0.543 | 0.896 |
| The relocation areas maintenance (X_{17}) | -0.611 * | 0.268 | 5.185 | 1 | 0.023 | 0.543 |
| Social security (X_{18}) | 0.407 | 0.286 | 2.025 | 1 | 0.155 | 1.503 |
| Property management fee (X_{19}) | 0.350 | 0.269 | 1.694 | 1 | 0.193 | 1.419 |
| Sewage treatment (X_{20}) | 0.521 * | 0.263 | 3.931 | 1 | 0.047 | 1.683 |
| Environmental sanitation (X_{21}) | 0.284 | 0.493 | 0.332 | 1 | 0.565 | 1.328 |
| Living conditions (X_{22}) | 1.547 * | 0.653 | 5.620 | 1 | 0.018 | 4.697 |
| Constant | -7.792 | 3.087 | 6.372 | 1 | 0.012 | 0.000 |

Variable (s) entered on step 1: Nagelkerke $R^2 = 0.652$, Cox & Snell $R^2 = 0.488$, -2 Log likelihood = 159.131; the "*" presentation parameter estimates changed by less than 0.05; the "**" presentation parameter estimates changed by less than 0.01.

3.4. Partial Correlation Analyses of Variables

Statistics of the 22 variables in the logistic regression model show that there are still 15 variables that are statistically insignificant. In order to minimize the influence from the variables' relativity, the Partial correlation method in SPSS is taken to control these 15 variables and estimated correlation between land rights guarantee (X_6), land consolidation compensation (X_7), public facilities (X_{14}), business service network system (X_{15}), the relocation areas maintenance (X_{17}), sewage treatment (X_{20}) and living conditions (X_{22}).

Sustainability **2014**, 6

 Table 5. Variables analysis of partial correlation.

| | | Influencing factors | | | | | | | |
|---|---|--|---|--------------------------------------|--|--|---|---|--------------------------------------|
| Control variables | Varibles | Correlation Significance | Land rights guarantee (X ₆) | Land consolidation compensation (X7) | Public facilities (X ₁₄) | Business service network system (X ₁₅) | The relocation areas maintenance (X ₁₇) | sewage treatment (X ₂₀) | Living conditions (X ₂₂) |
| $X_1, X_2, X_3, X_4,$ $X_5, X_8, X_9, X_{10},$ $X_{11}, X_{12}, X_{13},$ $X_{16}, X_{18}, X_{19}, X_{21}$ | Land rights guarantee (X_6) | Correlation Significance (2-tailed) df | 1.000 | | | | | | |
| | land consolidation compensation (X ₇) | Correlation Significance (2-tailed) df | 0.369 ** 0.000 206 | 1.000 | | | | | |
| | Public facilities (X ₁₄) | Correlation Significance (2-tailed) df | -0.102 0.143 206 | 0.000 1.000 206 | 1.000 | | | | |
| | Business service network system (X ₁₅) | Correlation Significance (2-tailed) df | -0.108 0.119 206 | -0.041 0.558 206 | 0.015 0.829 206 | 1.000 | | | |
| | the relocation areas maintenance (X_{17}) | Correlation Significance (2-tailed) df | 0.107 0.126 206 | -0.026 0.711 206 | -0.006 0.935 206 | -0.036 0.609 206 | 1.000 | | |
| | Sewage treatment (X ₂₀) | Correlation Significance (2-tailed) df | 0.038 0.582 206 | 0.028 0.619 206 | -0.002 0.973 206 | -0.151 0.029 206 | 0.257 ** 0.000 206 | 1.000 | |
| | living conditions (X ₂₂) | Correlation Significance (2-tailed) df | -0.086 0.219 206 | 0.086 0.214 206 | 0.483** 0.000 206 | 0.021 0.768 206 | 0.025 0.724 206 | 0.088 0.204 206 | 1.000 |

The "**" presentation parameter estimates changed by less than 0.01.

After controlling the relativity between the 15 variables in the logistic regression model, the conclusions are as follows. (1) Although probabilities of the three relativities between land rights guarantee (X_6) and land consolidation compensation (X_7); public facilities (X_{14}) and living conditions (X_{22}); the relocation areas maintenance (X_{17}) and sewage treatment (X_{20}) are all below 1‰, the relativity between these three groups of variables are relatively low because of their low correlation coefficient of 0.369, 0.483 and 0.257, respectively. (2) The significance of business service network systems (X_{15}) and sewage treatment (X_{20}) is relatively low despite their statistical significance.

3.5. Analysis of Factors Influencing Satisfaction Degrees

By logistic regression modeling, the 22 variables are fitted and the results are stated below. On the one hand, the positive factors in this model include land rights guarantee, land consolidation compensation, sewage treatment and living environment. On the other hand, the negative factors influencing satisfaction degree include public facilities, business service network systems and the relocation areas maintenance. Which means, the more farmers' land rights are guaranteed, land consolidation are paid, sewage is cleaned and the living environment is improved, the more farmers are satisfied with the residential settlement. In this way, the more public facilities are set, business service networks are established and the relocation areas maintenance are carried out, the lower the satisfaction degree. With partial correlation method, factors influencing farmers' satisfaction are analyzed as below. The probability that there is no correlation between land rights guarantee and land consolidation compensation, public facilities and living environment, relocation areas maintenance is below 1% (Table 3). However, due to the low correlation coefficient, the influence on the operation result in the logistic regression model is relatively faint.

The degrees of influences from the factors are not the same according to the logistic regression coefficient. Firstly, the most essential positive factor is the living environment and the one that makes the worst effect on satisfaction degree is public facilities with a β of -1.362 (Table 4). There are two reasons for that. The first one is the increasing requirement for the quality of living conditions due to the background of new a socialist countryside. The second reason is that cutting off of water and electricity supply has a great effect on farmers' life and their residential condition. All in all, improvement of living conditions in the residential areas plays an important role in raising the satisfaction degree.

Secondly, the farmers are highly concerned with land rights guarantees and land consolidation compensation. These two factors also make much effect on the farmers' satisfaction degree following only their living conditions. According to the household surveys, most farmers are satisfied with the consolidation and reclamation of rural construction land. However, due to the collection of the rural construction land consolidation index and the slow progression in rural land consolidation, farmers are not very satisfied with the land consolidation compensation. So, farmer households pay much attention to getting more compensation to support their family and invest in business operations. These research conclusions are consistent with Zhong's research [31].

Thirdly, the positive factor with the least effect on farmers' satisfaction comes from sewage treatment with a β -value of 0.521 (Table 4). The relocation areas maintenance is negatively relative with the farmers' satisfaction. It is obvious that the more maintenance happens, the more fees exist. According to the household survey, governments provide the fees for sewage and maintenance, and the fees beyond

the first five years may come from the residents themselves. This may be one of the reasons that maintenance has a negative effect on the satisfaction degree in the angle of time.

Fourthly, business service network is one of the negative influencing factors. Which means, the more business service networks there are, the lower the degree of farmer satisfaction. The result of household interviews show that most residents still mostly subsist on the food planted and stored by them and the family income can only support the basic expenses. Therefore, too many business service networks have nothing to do with expanding their consumption ability.

Fifthly, the results of the logistic regression show that the factor of employment channels (X_9) has a significance level of around 0.05. However, most farmers have been used to this because that this factors depends much on market mechanisms and the environment of social economy, so this has little effect on the farmers' satisfaction degree. All other influencing factors do not show much statistical significance.

4. Conclusions

It is a full affirmation that the country authorized Chengdu to plan and carry out the city and countryside synthesis coordinated reforms for finding the new breakthrough of China's land reforms. As a national city and countryside coordinated reform pilot area, Chengdu has been actively exploring the coordination of urban and rural development space and optimizing urban and rural land-use, structure and layout. At the same time, Chengdu also pays much attention to the reasonable allocation of land resources in villages to relieve urban and rural land-use of the contradictory supply and demand of urban and rural integration of space development. However, all the achievements are just the beginning of the urban and rural construction land connection and many pilot projects are still under construction. Therefore, the first pilot areas were chosen as the site of study to research, explore and test a theory on the factors influencing degree of satisfaction of farmers. The results show the following: (1) Farmer households are relatively satisfied with the basic facilities and estate management in the residential settlement. They are most satisfied with the living environment in the resettlement areas. However, because of the short time since the plan of work, consideration of their family income is still not enough. So the farmers' domestic economic situation is still an unsolved problem; (2) When adjusting the ownership of rural construction land, farmers' land may decrease, lose or suffer from profit loss because of the variable position regarding cropland responsibility. In order to solve these problems, the sum of compensation should be raised and there should be more supervision so that farmers' land rights and interests will be protected; (3) Farmer households' wishes should be respected in land consolidation, so that their social and economic benefits will be fully protected and their satisfaction degree will be raised.

Consequently, it is still of strategic significance to pay attention to farmers' long-term position through guaranteed land rights [30], improving the agricultural industry and farmers' non-agricultural employment, protecting land ownership by legislation and promoting the rational use of the land [31–33]. Not only whether the respondents are satisfied should be considered, but also what are the factors that may influence the satisfaction degree should also be studied, such as the farmers' employment and income. This research may be particular and limited because the conclusions are based on three towns in Xinjin, Chengdu, where the Connecting Model is constructed.

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Author Contributions

Wei Shui designed research; Wei Shui and Jianping Bai performed research; Jianping Bai analyzed the data; all authors who were Wei Shui, Jianping Bai, Su Zhang, Yiping Chen wrote the paper. All authors read and approved the final manuscript.

Conflicts of Interest

All authors declare no conflict of interest.

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