

Study on the expectation differences between the both sides of farmland transfer at the level of farmer

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Abstract: The expected consistency between the both sides of farmland transfer is the key to the success or failure of transfer. We use the participatory rural appraisal method, carry out a questionnaire survey of farmers in Yunnan Province, and analysis empirically the expectation differences on the will, price, duration, objects and contract between the both sides of farmland transfer. The research shows that: farmers in the suburban village tend to be willing to transfer out rather than transfer in, while farmers in the outer suburbs village tend to prefer to transfer in rather than transfer out. They are relatively small in the expectation of will, duration, objects and contract between the both sides of farmland transfer, and the transfer price "gap" is the most important factor that impedes the farmland transfer. Measures should be taken to promote the farmland transfer from three aspects, such as the promotion of farmland protection regulations, the establishment and improvement of transfer institutions and the opening of transfer price.

1. Introduction

Reasonable and effective utilization of farmland resources is the basic guarantee of food security in China. Farmers are the micro subjects for the use and protection of farmland, and the attitude and behavior of farmers are the key factors for the protection effect of farmland^[1]. Under the current environment of farmland protection system, instead of the intrinsic motivation of farmland protection, farmers have developed the use of abandoned land, negative tillage and other behaviors^[2]. Under the background of mass transfer of rural labor force, farmland transfer is the way to realize effective utilization of farmland. It is the key to solve the problem of "who is to plant the land"^[3]. Thus, farmland transfer by the academia has carried out a number of studies, based on the level of farmer, research mainly involves farmers' willingness to farmland transfer^[4], farmers' decision, behavior and its' influence factors^[5] and price of farmland transfer^[6] etc. But they are rare research on the expectation differences for the both sides of farmland transfer. Therefore, in order to provide policy support for the farmland transfer, this research adopts the participatory rural appraisal method, carries out a questionnaire survey of farmers in Yunnan Province, and then empirically research on the expectation differences between both sides of farmland transfer.

2. Materials and methods

2.1. Questionnaire design

After repeated discussion and revision of the questionnaire, the questionnaire is confirmed by the questionnaire. After that, we will try to investigate and verify the test report, and finally, we will



discuss the final draft of the questionnaire according to the experience and the questions. In order to further unify the survey caliber and content, we will organize the investigators to conduct unified training and communication before the formal investigation. The questionnaire mainly focuses on four aspects: situation of family members, status of farmland use, cultivation and transfer intention and knowledge of farmland protection. Among them, the farmer's perception of farmland protection mainly includes the cognition of farmers on the importance of farmland protection, farmer's preference to the chemical fertilizer and cognition on the hazardous of chemical fertilizer, farmers' cognition on the change and reasons of farmland quality, etc.

2.2. Stratified sampling method

The stratified sampling method for typical village and farmers was determined. Firstly, the group selected a large grain producing county or city as typical county in the northwest, northeast, central, southwest and southeast of Yunnan Province. Then, in each county, a total of 10 typical investigation villages were selected from the suburban villages and the outer suburbs villages. In the end, about 50 farmers were randomly selected to carry out questionnaires in each typical village.

2.3. Semi-structured interview method

The semi-structured interview^[7] in the participatory rural survey evaluation method was used to survey the farmers. This method is flexible and can collect a lot of information in a relaxed atmosphere and it is not restricted to the place. During the questionnaire survey, the investigators interviewed with farmers "one-to-one" and fill in questionnaires personally. It took about 1 hour to complete a questionnaire. Through interviews with 538 farmers, 525 valid questionnaires were obtained.

3. Results and analysis

3.1. Willingness of farmers to farmland transfer

3.1.1. Farmers' willingness to farmland transfer in. From table 1, it can be seen that the farmers generally show that "unwilling" > "willing" > "uncertain". This shows that the majority of farmers are "unwilling" to transfer the farmland, while only a small number of farmers are "willing" to transfer the farmland, and the farmers generally prefer "unwilling" to the farmland. In terms of zoning, farmers in suburban villages "unwilling"> > "willing", while farmers in outer suburbs villages "willing" > "unwilling". This suggests that, for the farmland transfer in, farmers are "willing" and "unwilling" to the wishes of the basic quite in outer suburbs villages, and farmers' "unwilling" are much stronger than "willing" in suburban villages, the farmers in suburban villages overall obviously prefer to "unwilling" to transfer in farmland.

Table 1. The willingness of farmers to farmland transfer

Location	Transfer in (%)				Transfer out (%)			
	Willing	Uncertain	Unwilling	Subtotal	Willing	Uncertain	Unwilling	Subtotal
Suburban village	24.3	5.2	70.3	100.0	49.0	14.9	36.1	100.0
Outer suburbs village	45.8	11.5	42.7	100.0	38.2	12.2	49.6	100.0
Average	35.0	8.4	56.6	100.0	43.6	13.5	42.9	100.0

3.1.2. Farmers' willingness to farmland transfer out. From table 1, it can be seen that the farmers generally show a willingness to transfer out the farmland, and the farmers generally show that "willing" > "unwilling" > "uncertain". This suggests that "willing" farmers are roughly the same as those who "unwilling" to transfer out. In terms of zoning, farmers in suburban villages are "willing" > "unwilling", while farmers in outer suburbs villages are "unwilling" > "willing". The suburban village farmers, therefore, the suburban villages are overall "willing" to transfer out the farmland, but the outer suburbs village farmers are overall "unwilling" to transfer out the farmland, the suburban

villages have stronger will than the outer suburbs villages for farmland transfer out.

3.1.3. Farmers' willingness differences on farmland transfer in or out. From the comparison between the transfer in and transfer out, farmer's overall performance is: "willing" to transfer out > "willing" to transfer in, but "unwilling" to transfer in > "unwilling" to transfer out; For further subdivision, in the suburban villages, the proportion of "willing" to transfer in is lower than "willing" to transfer out, the proportion of "unwilling" to transfer in is higher than "unwilling" to transfer out; but they are the opposite in the outer suburbs villages. Thus, the suburban villages tend to be willing to transfer out and unwilling to transfer in, while the outer suburbs villages tend to be willing to transfer in and unwilling to transfer out.

3.2. Willingness of both sides to the prices of farmland transfer

The transfer price is one of the most important factors affecting the success or failure of the farmland transfer. The transfer price is the result of the game after bargaining. From the comparison between the suburban villages and the outer suburbs villages, for the average expected price of both sides, it shows that: the suburban villages are higher than the outer suburbs villages (table 2). This indicates that the transfer price of the suburban villages is higher than that of the outer suburbs villages, which is consistent with the position theory of agriculture. From the comparison of the price expectation between the transfer in and the transfer out, farmer's overall performance is: the average transfer-in price is lower than the transfer-out price, the difference between the transfer-in price and the transfer-out price is 3,462 yuan/ha. Moreover, the near and distant villages are also very consistent with the overall performance. Thus, there is a price "gap" within both sides of farmland transfer, the average transfer-in price is obviously lower than the transfer-out price. Although a small number of farmers can reach the agreement on transfer price, but both sides, which are willing to participate in the transfer, overall showed that: farmers willing to transfer in cannot afford to the asking price of farmers willing to transfer out, in the case of failing to reach an agreement, the price "gap" will result in the potential farmland transfer ultimately failing to materialize.

Table 2. The expectation of price and duration of farmland transfer

Location	Transfer price (Yuan/ha)		Transfer duration (Year)	
	Turn in	Transfer out	Turn in	Transfer out
Suburban village	6607	10227	3.6	4.5
Outer suburbs village	5300	7913	5.1	5.2
Average	5755	9216	4.6	4.8

3.3. Willingness of both sides to the duration of farmland transfer

Before the official transfer of farmland, the duration willingness of both sides will be one of the factors for the success of farmland transfer. From the comparison between the suburban villages and the outer suburbs villages, for the average expected duration of both sides, it shows that: the suburban villages are shorter than the outer suburbs villages (table 2). This indicates that farmers in the suburban villages hope to have shorter duration than the outer suburbs villages. From the comparison of the duration expectation between the transfer in and the transfer out, farmer's overall performance is: the average transfer-in duration is slightly lower than the transfer-out duration, the difference between the transfer-in duration and the transfer-out duration is small, and it is less than 1 year for the duration between the both sides of farmland transfer in the suburban villages and the outer suburbs villages.

3.4. Preference of both sides to the object of farmland transfer

3.4.1. Object preference of transfer-in to transfer-out. From table 3, it can be seen that, in general, the object preference of transfer-in to transfer-out is: farmer > village group > government > intermediary.

This suggests that most of farmers transfer-in are more likely to transfer in farmland from "farmer", while a few are willing to transfer in farmland from "village group", "government" and "intermediary". Moreover, the performance of suburban villages and outer suburbs villages is also in line with the general. In the survey, it was found that the reasons for the more willing to choose "farmer" were mainly from two aspects. Firstly, the farmland transfer directly from the farmers is more convenient and more reliable; Secondly, the price for directly transfer from the farmer is lower than the price after the change trains, thus it can reduce the transfer cost. This indicates that the farmers transfer-in has a higher level of trust in "farmer" than others.

3.4.2. Object preference of transfer-out to transfer-in. From table 3, it can be seen that, in general, the object preference of transfer-out to transfer-in is: farmer > intermediary > village group > government. This suggests that most of farmers transfer-out are more likely to transfer out farmland to "farmer", while a few are willing to transfer out farmland to "village group", "government" and "intermediary". The farmers transfer out has the highest trust in the "farmer", while the trust on the "intermediary" is higher than the "village group" and "government". According to the survey, the reasons for such preferences of farmers transfer-out are mainly from two aspects, the first is the consideration for simple and convenient procedure of transfer; The second is the convenience of taking back equity.

Table 3. Preference of both sides to the object of farmland transfer

Location	Object preference of transfer-in to transfer-out (%)				Object preference of transfer-out to transfer-in (%)			
	farmer	Village group	Government	intermediary	farmer	Village group	Government	intermediary
Suburban village	70.3	17.2	9.4	3.1	63.6	10.1	10.9	15.5
Outer suburbs village	75.8	15.8	7.5	0.8	75.0	12.0	6.0	7.0
Average	73.9	16.3	8.2	1.6	68.6	10.9	8.7	11.8

3.5. Willingness of both sides to the contract of farmland transfer

It can be seen from table 4 that, whether it is the farmers transfer-in or transfer-out, the majority of farmers think "should" sign the transfer contract, while a few farmers think "need not" or "random". Thus it can be seen that majority of farmers agree to transfer contract and have stronger willing to sign contract, but there are also a few of farmers who have a weak consciousness for rights protection, they does not require whether to sign a contract for farmland transfer. From the comparison between the suburban villages and the outer suburbs villages, the farmers transfer-in and transfer-out in the suburban villages have greater proportion of farmers who think "should" sign contract than that in the outer suburbs villages. From the comparison between the both sides of farmland transfer, whether it's in the suburban village or outer suburbs villages, the proportion of farmer transfer-in who think that "should" sign the contract is significantly higher than that of transfer-out, this indicates that the farmers transfer-out have stronger protection consciousness for rights than the farmers transfer-in.

Table 4. The willingness of both sides to sign the contract of farmland transfer

Location	Transfer-in (%)			Transfer-out (%)		
	Should	Need not	Random	Should	Need not	Random
Suburban village	57.8	23.4	18.8	70.5	17.8	11.6
Outer suburbs village	45.0	29.2	25.8	61.0	20.0	19.0
Average	49.5	27.2	23.4	66.4	18.8	14.8

4. Conclusions and suggestions

This research adopts the participatory rural appraisal method and carries out a random questionnaire survey of farmers in Yunnan Province, and analysis empirically the expectation differences on the will, price, duration, objects and contract between the both sides of farmland transfer. The main research conclusions are as follows: farmers in the suburban village tend to be willing to transfer out rather than

transfer in, while farmers in the outer suburbs village tend to prefer to transfer in rather than transfer out. They are relatively small in the expectation of will, duration, objects and contract between the both sides of farmland transfer, and the transfer price "gap" is the most important factor that impedes the farmland transfer. Both sides most trust the "farmer" and most willing to choose the "farmer" as the object of farmland transfer. The majority of farmers of both sides are willing to sign the transfer contract, and the farmers transfer-out have stronger protection consciousness for rights than the farmers transfer-in.

Therefore, in order to further promote the farmland transfer, the government should take measures from the following aspects. Firstly, strengthen the publicity of laws and regulations on the use and protection of farmland, and then guide or encourage the farmers to transfer out their farmland that is unable to cultivate; Secondly, establish and improve the government-lead intermediary agencies for farmland transfer, guarantee the smooth and proper rights and interests of both sides, and then precipitate the both sides of pre-transfer can actually participate in the farmland transfer; Thirdly, open the price of farmland transfer, provide price reference for both sides of transfer, and then avoid excessive or low price fluctuation.

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