Analysis and Appraisal of the Venture Financing of Farmers Losing Land to Urban New District Construction

Guoqu Deng
Henan University of Science & Technology
Luoyang 471003, Henan, China
The Rural Development Institute, Chinese Academy of Social Sciences
Beijing 100732, China
Tel: 86-379-6428-0562   E-mail:dengguoqu@163.com

Abstract
Taking Luonan New District as an example, from the aspects of financing channels, financing scales, financing costs, financing income and financing efficiency this article analyzes the venture financing of farmers losing land to urban new district construction. It is believed that internal financing plays a main part, but its proportion decreases year by year; the limitation of self-accumulation and institutional supply makes the financing demand of farmers losing land unable to be met; and internal financing efficiency is higher than external financing efficiency. Therefore, a resultant force from the farmers losing land, the government, the society and the community should be formed, so as to solve the problem of the venture financing of farmers losing land.

Keywords: Farmers losing land, Venture financing, Analysis and appraisal

1. Research approaches and elucidation
The analysis in this article is mainly based on a survey of the venture financing by farmers losing land in Luonan New District in Luoyang City, including questionnaire, forum, interview, literature and data gained without participation and observation.

This time there are two questionnaires, one of which is entitled “Questionnaire of the Venture Situation of Farmers Losing Land”. The sampling of the survey is according to the resettlement communities in Luonan New District in Luoyang City. The government of Luonan New District has resettled all the farmers losing land by building eight communities: Longxiang Community, Longtai Community, Longrui Community, Longhe Community, Longxing Community, Longfu Community, Long’an Community and Longkang Community, which covers 1,500,000 square kilometers and in which more than 50,000 people can reside. We carried out a community-by-community research, and chose 80 samples from No. 4 Building and No. 8 Building of each community, altogether 640 samples (Note 1), among which 603 ones are valid (see Table 1).

Insert Table 1 here
The other one is called “Questionnaire of the Venture Financing by Farmers Losing Land”. Among the 603 valid samples of “Questionnaire of the Venture Situation of Farmers Losing Land”, 76 ones are entrepreneurial farmers, and we surveyed all of them in the form of questionnaire.

Besides, we also carried out some research work in the form of forum. Five forums are held respectively by the Development Office of Luonan New District in Luoyang City, the Government of Luolong District in Luoyang City, the Kaiyuan Road Office in Luolong District in Luoyang City, the Baicun Village Committee in Luolong District in Luoyang City, and ten Baicun villagers.

2. Analysis of the venture financing of farmers losing land to new district construction
Self-employment is an effective way to increase employment of farmers losing land as well as their income, so it merits our close attention. However, on the one hand, there exist many problems and obstacles in the venture process of farmers losing land, among which the biggest problem is financing (35%), and the following ones are talents (17%),
projects (14%) and skills (14%) (Figure 2). On the other hand, the farmers’ demand for venture financing is heavy. From Figure 2 we can see that on the whole the farmers’ demand for capital tends to be heavy, for the proportion of “very heavy” is 27%, over a quarter, while the proportion of “heavy” is 40%, more than one third. Thus, there is a discrepancy between financing demand and financing reality, which merits our attention and thought. The venture financing of farmers losing land will be thoroughly analyzed and discussed as follows.

Insert Figure 1 here
Insert Figure 2 here

2.1 Analysis of financing channels

The capital of farmers losing land mainly comes from compensation for expropriated land, family savings and loans from relatives (Figure 3), among which family savings are of the biggest proportion (36%). This demonstrates that the present venture financing of farmers losing land mainly takes the form of self-owned funds and their venture mainly depends on their own accumulation, which is in accordance with the basic rules of Chinese farmers’ self-accumulation and self-development. Loans from relatives is also of big proportion (28%), which is in fact a further demonstration and extension of consanguinity, the band that holds together the venture of farmers losing land and Chinese petty farmer tradition. Compensation for the land expropriated also takes a higher proportion (18%). But on the whole it is limited, because most of the compensation money is spent by farmers losing land on purchase of the new house supplied by the government as well as daily expenditure in the interim. Besides, a certain amount of the compensation money hasn’t been granted in time. For instance, though the original standard is 27,000 yuan per mu, what the farmers actually receive ranks from 10,000 yuan per mu to 20,000 yuan per mu, not as much as they should receive.

Insert Figure 3 here
Insert Figure 4 here

Bank loans, which are supposed to play an important role in the venture financing of farmers losing land, only takes a tiny proportion in the real venture financing practice by farmers losing land (4%). From Figure 4 we can see that the main reason for entrepreneurial farmers’ failure of loan is the lack of guarantee (42%), and another important reason is that they do not know how to start with this. They have no connection (23%), and they have no idea of the basic procedures and rules of loan (11%). In these entrepreneurial farmers’ view, bank loans are impossible and beyond their ability.

In addition, government venture funds and cooperation funds should be a very good channel for government’s as well as civilians’ venture financing. However, during the research we find that these two channels take a rather small proportion (5%), which shows that the government hasn’t done enough to direct and support the venture by farmers losing land, and that the entrepreneurial farmers’ sense of venture cooperation financing is not strong enough. Though civilians’ financing is more active (9%), its overall scale is limited and it also lacks support.

2.2 Analysis of financing scale

From the overall financing scale of our research samples we can see that it is in an ascending state (Figure 5). From 2003 to 2007 it rises from 580,000 yuan to 860,000 yuan, a 48.28% growth. On the other hand, the annual growth rate of the venture financing by farmers losing land is in an ascending state (Figure 6). Especially in 2007, the growth extent grows rapidly to 16.22%.

Insert Figure 5 here
Insert Figure 6 here

Meanwhile, we noticed that the average annual financing scale of farmers losing land is very small. In 2003 it is less than 6,000 yuan, and until 2007 the average annual financing of farmers losing land is only 13,120 yuan (Figure 7).

Moreover, the financing scale of the sample farmers losing land is mostly smaller than 10,000 yuan (53%), and the proportion of 10,000-30,000 yuan financing scale is not small either (23%), but the proportion of 50,000 yuan financing scale is only 8%, and the proportion of 100,000 yuan financing scale is even smaller, only 4% (Figure 8). On the whole, the venture financing scale of farmers losing land is very limited.

Insert Figure 7 here
Insert Figure 8 here

2.3 Analysis of financing cost

In the common sense of economics, financing cost is the outcome of the division of capital ownership and capital access. The essence of financing cost is the recompense given by capital users to capital owners. Because enterprise financing is a market dealing activity, as long as there is a deal there is dealing cost, and in order to get capital access capital users have to pay some related fees. In fact, enterprise financing cost consists of two parts: financing fees and capital
utilization fees. Financing fees refer to the all kinds of fees charged in the process of the enterprise’s capital raising, and capital utilization fees refer to the recompense paid by the enterprise to the capital supplier. What is worth mentioning is that the meaning of financing cost talked above is just the financial cost of the enterprise’s financing, which can be called explicit cost, too. Besides financing cost, there is also opportunity cost in the enterprise’s financing, which can be called implicit cost, too.

Here we mainly talk about capital utilization fees and financing fees. Capital utilization fees refer to interest rates. We chose the venture financing of 52 farmers losing land in 2007 for discussion. As for financing terms, most of them are short-term loans shorter than one year, and loans longer than one year only take 12% (see Table 2).

Insert Table 2 here

On the whole the interest rate of cooperation funds is the lowest, the interest rate of bank loans is the second lowest, and the interest rate of civilian loans is the highest. Take the average annual interest rate of 6 months to 12 months for example, the interest rate of cooperation funds is 4.05%, the interest rate of bank loans is 6.93%, and the interest rate of civilian loans is 24.5%. The interest rate of civilian loans is 504.93% of that of cooperation funds and 253.54% of that of bank loans.

As for the financing fees paid by entrepreneurial farmers losing land, which mainly include treat, presents, transportation fees, communication fees, etc., we chose the venture financing of 52 farmers losing land in 2007 for discussion. Though the interest rate of civilian loans is the highest, its financing fees are the lowest. The financing fees of bank loans are the second lowest and those of cooperation loans are the highest (Figure 9). The average fees of a single loan of cooperation funds are 117.65% higher than the average fees of a single loan of bank loans, and 30.03% higher than the average fees of a single loan of civilian loans.

Insert Figure 9 here

Insert Figure 10 here

2.4 Analysis of financing income

Financing income refers to the income brought about by the capital financed through all kinds of financing channels for the financing party. Financing income is an important yardstick to measure the utilization performance of financing capital, and also an important yardstick to assess financing efficiency.

There are quite a few yardsticks to measure financing income, and here we mainly chose two of them to research on: yearly income (gross output value) which is an absolute yardstick, and the transformation of living standards which is a psychological reception yardstick.

Among entrepreneurial farmers losing land we selected those who had financing activities from 2003 to 2007, and research finds out that their financing income is fairly satisfactory no matter it is measured by gross, the average level or the growth rate of average annual income (see Table 4). The average venture financing income of entrepreneurial farmers losing land from 2003 to 2007 is 123,180 yuan, and the growth rate of average income is 34.72%.

Insert Table 3 here

Research on the transformation of the living standards of entrepreneurial farmers losing land indicates that “obvious improvement” and “improvement” of living standards take 75%, which shows that their living standards have mostly improved and venture has played an obviously important role in the improvement of their living standards. Only 10% of entrepreneurial farmers losing land feel that their living standards have degenerated (Figure 10). They are mostly units that have failed in venture, and they bear great pressure after their entrepreneurial failure, which merits our close attention. The first point is how to direct and educate farmers losing land to start venture, and the second point is how to solve the basic living problems of the farmers losing land who have failed in venture. But on the whole, the living standards of entrepreneurial farmers losing land tend to improve, which proves that the venture financing benefit of farmers losing land is very apparent.

2.5 Analysis of financing efficiency

Financing efficiency refers to the financing capability which may create venture value for farmers losing land. Specifically, it refers to the ratio of the cost of the capital financed by the venture enterprise run by farmers losing land through different financing methods to the utilization efficiency of the capital, and the extent of the optimal allocation of the capital resources.

The ratio of the cost of the capital financed by the venture enterprise run by farmers losing land to the utilization efficiency of the capital can be reflected by three factors: financing cost, capital arrival rate and capital utilization ratio. The extent of the optimal allocation of capital resources may be embodied by the standardization extent of financing mechanism, the liberty extent of the financing subject and capital liquidity. From the six factors mentioned above this article mainly analyzes the financing efficiency of three different financing methods and the overall financing...
efficiency\[2\] of the enterprises run by entrepreneurial farmers losing land. The three financing methods refer to the internal financing which includes family savings, compensation money for the expropriated land and money borrowed from relatives, debt financing which includes bank loans and civilian loans, and equity financing which includes government venture funds and cooperation funds.

Single-factor financing efficiency comparison can only reflect a certain factor’s influence over financing efficiency, so the conclusion is not sufficient. In order to get more reasonable evaluation results, fuzzy analysis method should be employed to synthetically evaluate the financing efficiency of venture enterprises run by farmers losing land.

By adopting Delphi Method we get the following weight set of six factors: financing cost, capital arrival rate, capital utilization ratio, capital liquidity, the standardization extent of financing mechanism and the liberty extent of the financing subject.

\[ F = (f_1, f_2, f_3, \cdots, f_m) = (0.25, 0.20, 0.18, 0.15, 0.12, 0.10) \]

The single-factor matrix of the three financing methods is as follows:

<table>
<thead>
<tr>
<th>Financing</th>
<th>R\text{internal financing}</th>
<th>R\text{debt financing}</th>
<th>R\text{equity financing}</th>
</tr>
</thead>
<tbody>
<tr>
<td>internal</td>
<td>0.8 0.2</td>
<td>0.6 0.4</td>
<td>0.4 0.6</td>
</tr>
<tr>
<td>debt</td>
<td>0.8 0.2</td>
<td>0.7 0.3</td>
<td>0.4 0.6</td>
</tr>
<tr>
<td>equity</td>
<td>0.2 0.8</td>
<td>0.4 0.6</td>
<td>0.6 0.4</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0.2 0.8</td>
<td>1 0</td>
</tr>
</tbody>
</table>

Through fuzzy transformation of the single-factor matrix and the weight set mentioned above, we get the following fuzzy overall evaluation model:

\[ R\text{internal financing} = FOR\text{internal financing} = (0.73, 0.27) \]

\[ R\text{debt financing} = FOR\text{debt financing} = (0.51, 0.49) \]

\[ R\text{equity financing} = FOR\text{equity financing} = (0.37, 0.63) \]

According to Maximum Membership Degree Law, among all kinds of financing methods, the internal financing by entrepreneurial farmers losing land is of highest efficiency, 0.73, while equity financing is of lowest efficiency, 0.37.

According to fuzzy distribution law, the order of the maximum membership degree of all kinds of financing methods is: 0.73.>0.51.>0.37. So we can draw the conclusion that the order of the financing efficiency of all kinds of financing methods adopted by entrepreneurial farmers losing land is: internal financing efficiency.>debt financing efficiency.>equity financing efficiency.

3. Appraisal of the venture financing of farmers losing land to new district construction

Through the above quantitative description and analysis, we can see some basic facts and features of the venture financing by farmers losing land which are discussed as follows.

3.1 Internal financing playing the main part with an annually decreasing proportion

There are mainly two methods for entrepreneurial farmers losing land to get capital: internal financing and external financing. Research analysis shows that the financing scale of venture enterprises run by sample farmers losing land tends to expand, and the amount of internal financing is always greater than that of external financing. By the end of 2007, the amount of internal financing by sample enterprises has reached 540,000 yuan, 320,000 yuan greater than that of external financing. Analyzed from the internal financing structure of venture enterprises run by sample farmers losing land, the four main sources of internal financing are family savings, resettlement compensation money, capital and retained earnings. Since internal fund raising is mainly internal stock-holders’ fund raising, no venture enterprise run by sample farmers losing land has ever adopted the method of staff fund raising.

From the proportion internal financing takes in financing total we can see that the proportion of internal financing decreases year by year from 2003 to 2007, from 83.72% in 2003 to 62.79% in 2007, a 20.93% decrease. What is opposite to it is the proportion external financing takes which increases from 16.27% in 2003 to 37.21% in 2007, a 20.94% increase. Therefore, in the financing structure of small and medium-sized enterprises, though internal financing
plays the leading role, the proportion of external financing grows year by year, which demonstrates that the external financing environment for small and medium-sized enterprises is improving step by step.

3.2 Limited self-accumulation and insufficient institutional supply unable to meet the financing demand of farmers losing land

The demand for venture financing from farmers losing land is very heavy, but this demand can hardly be satisfied and there is still a gap. It is an indisputable fact. Then what is the underlying problem?

On the one hand, the self-accumulation of farmers losing land is rather limited. Venture enterprises run by farmers losing land are mostly small-scaled (Figure 11). Due to the insufficiency of management experience and ability as well as the young age, venture enterprises mostly make small profits, and some of them even suffer loss (Figure 12). Under such a situation, many enterprises can simply maintain their business, and their internal financing ability must be affected and limited.

On the other hand, institutional supply is insufficient. Venture financing by farmers losing land can not only increase employment, but also effectively increase the income of farmers losing land. So it is good for the country as well as the people, and deserves the government’s encouragement and support, esp. institutional support for the venture financing by farmers losing land. But during the research we find that the government’s support for the venture financing system for farmers losing land is rather limited. The total of bank loans, government venture funds and cooperation funds is insufficient (less than 16% in 2007). Moreover, because of the inland location, civilian financing hasn’t developed sufficiently (less than 4% in 2007) and thus cannot play a very supportive role in the venture financing by farmers losing land.

Of course, besides these there are problems such as policy imperfection, guarantee difficulty and the imperfection of credit system; anyway, the demand for venture financing by farmers losing land cannot be well satisfied.

3.3 Internal financing efficiency higher than external financing efficiency

As for the external financing by farmers losing land, due to the increase of farmers’ financing cost resulted from credit restriction and the discrepancy between their loan cycle and production cycle, its utilization efficiency is affected. The large number of entrepreneurial farmers losing land, their small scale and great dispersion determine the following features of the capital demand from entrepreneurial farmers losing land. Firstly, the scale of family businesses determines the small amount of loans needed by entrepreneurial farmers losing land. Secondly, because they have few assets for mortgage or guarantee entrepreneurial farmers losing land hope to use loans with little mortgage or no mortgage at all. Thirdly, entrepreneurial farmers hope that the loan procedures are simple, flexible and timely, because their loan demand is greatly restricted by time and season and trivial procedures will dally away time. There is no special small-amount credit service for farmers losing land in formal Chinese financial departments, but the frequent risks faced by entrepreneurial farmers losing land mean an increase in their dealings with financial departments. Furthermore, the small amount of loans causes the operating cost of financial institutions to increase, and the possibility for farmers to get loans decreases due to a lack of mortgage. Our research also finds that formal financial organizations have complicated rules and regulations, they need mortgage or guarantee, the procedures are trivial and the cost of fulfilling credit contracts is too high. Therefore, most entrepreneurial farmers losing land are unable to obtain satisfactory credit services from formal financial organizations, and thus entrepreneurial farmers are discouraged to apply loans from formal financial institutions. In order to obtain loans, high costs must be paid, and in the utilization process they are restricted by the loan cycle and utilization direction, which makes its utilization efficiency greatly decreases.

References


Note 1. We only chose one member from a family as a sample to represent the whole family.

### Table 1. Basic Information about the Research

<table>
<thead>
<tr>
<th>Research area</th>
<th>Gender</th>
<th>Age</th>
<th>Education background</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Male</td>
<td>Below 18</td>
</tr>
<tr>
<td>Longxiang Community</td>
<td>78</td>
<td>64</td>
<td>14</td>
</tr>
<tr>
<td>Longtai Community</td>
<td>73</td>
<td>57</td>
<td>17</td>
</tr>
<tr>
<td>Longrui Community</td>
<td>76</td>
<td>48</td>
<td>28</td>
</tr>
<tr>
<td>Longhe Community</td>
<td>74</td>
<td>51</td>
<td>13</td>
</tr>
<tr>
<td>Longxing Community</td>
<td>74</td>
<td>57</td>
<td>17</td>
</tr>
<tr>
<td>Longfu Community</td>
<td>76</td>
<td>66</td>
<td>10</td>
</tr>
<tr>
<td>Long'an Community</td>
<td>73</td>
<td>62</td>
<td>11</td>
</tr>
<tr>
<td>Longkang Community</td>
<td>78</td>
<td>66</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>603</td>
<td>471</td>
<td>122</td>
</tr>
</tbody>
</table>

### Table 2. Interest rates of the venture financing by farmers losing land (2007)

<table>
<thead>
<tr>
<th>Year</th>
<th>Less than 3 months Average interest rate (%)</th>
<th>3 months to 6 months Average annual interest rate (%)</th>
<th>6 months to 12 months Average annual interest rate (%)</th>
<th>More than 12 months Average annual interest rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperation funds</td>
<td>3.65</td>
<td>3.88</td>
<td>4.05</td>
<td>4.95</td>
</tr>
<tr>
<td>Bank loans</td>
<td>6.04</td>
<td>6.12</td>
<td>6.93</td>
<td>7.02</td>
</tr>
<tr>
<td>Civilian loans</td>
<td>21.4</td>
<td>22.8</td>
<td>24.5</td>
<td>26.2</td>
</tr>
</tbody>
</table>

### Table 3. Venture income of farmers losing land

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual gross income (10,000 yuan)</th>
<th>Number of financing units</th>
<th>Average income (10,000 yuan)</th>
<th>Growth rate of average income (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>253</td>
<td>44</td>
<td>5.75</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>469</td>
<td>42</td>
<td>11.17</td>
<td>94.26</td>
</tr>
<tr>
<td>2005</td>
<td>674</td>
<td>56</td>
<td>12.04</td>
<td>7.79</td>
</tr>
<tr>
<td>2006</td>
<td>768</td>
<td>48</td>
<td>16.00</td>
<td>32.89</td>
</tr>
<tr>
<td>2007</td>
<td>865</td>
<td>52</td>
<td>16.63</td>
<td>3.94</td>
</tr>
<tr>
<td>Total</td>
<td>3029</td>
<td>242</td>
<td>12.318 (average)</td>
<td>34.72 (average)</td>
</tr>
</tbody>
</table>
Figure 1. Restricting factors of the venture financing of farmers losing land

Figure 2. Demand expectation of the venture of farmers losing land

Figure 3. Proportion of the venture financing channels of farmers losing land

Figure 4. Proportion of the reasons why entrepreneurial farmers losing land fail in getting bank loans

Figure 5. Transformation of the venture financing scale by farmers losing land

Figure 6. Transformation of the annual growth rate of the venture financing by farmers losing land
Figure 7. Transformation of the average annual venture financing scale of farmers losing land

Figure 8. Proportion of the venture financing scales of farmers losing land

Figure 9. Average fees of a single loan of the venture financing of farmers losing land (2007)

Figure 10. Transformation of the living standards of entrepreneurial farmers losing land

Figure 11. Transformation of the average annual assets of the venture enterprises run by farmers losing land

Figure 12. Transformation of the average annual profit of the venture enterprises run by farmers losing land