Analysis on the Changes of Farmers' Welfare from House Demolition and Relocation in the South-to-North Water Transfer

A Case Study of Jiulong Township, Dengzhou City, Henan Province*

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Abstract—Since the commencement of the South-to-North Water Transfer Project in 2003, the population involved for house demolition and relocation has exceeded 340,000, while the changes of welfare levels before and after the resettlement of rural households reflect the rationality and implementation effect of the governmental resettlement policy to a certain extent. This paper makes an investigation on the welfare level of relocated farmers from the aspects of economic welfare and non-economic welfare after a field visit for the rural families moving from Chengang Village, Xianghua Town, Xichuan County, Danjiangkou Reservoir Area to Jiulong Township, Dengzhou City, and then puts forward countermeasures and suggestions for improvement of the welfare level of migrated farmers according to the research results.

Keywords—South-to-North Water Transfer; migrated farmers; farmer’s welfare

I. INTRODUCTION

The South-to-North Water Transfer Project is the most strategic project with the largest investment and the widest coverage since the establishment of China; it involves a large number of migrants, and the change of the welfare level of migrants after house relocation reflects the resettlement effect of the Project, which also has very practical significance for the formulation of migration policies. taking the migrants of Jiulong Township, Dengzhou City, Henan Province as the research object, this paper makes a study on the living conditions of the farmers before and after their migration, to know the overall living conditions of the farmers and their overall satisfaction of the resettlement, and then makes an evaluation on the implementation effect of the resettlement policy, providing the basis for the government to formulate and improve the policy.

II. DATA SOURCE

As the only moved-out and the main big resettlement county in Henan Province for the South-to-North Water Transfer Project, Xichuan County has its 165,000 migrants moved out of the Danjiangkou reservoir area for the project. The survey was conducted among the farmers who moved from Chengang Village, Xianghua Town, Xichuan County, Henan Province to Jiulong Township, Dengzhou City, Henan Province, and a total of 60 questionnaires were answered, of which 54 were effective, with an effective rate of 90%. The sample has the characteristics as shown in "Table I".

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TABLE I. SAMPLE FEATURE

|               | Frequency | Proportion (%) |
|---------------|-----------|----------------|
| **Gender**    |           |                |
| Male          | 23        | 42.59          |
| Female        | 31        | 57.41          |
| **Age**       |           |                |
| 18-24         | 3         | 5.56           |
| 25-34         | 7         | 13.96          |
| 35-44         | 13        | 24.07          |
| 45-54         | 12        | 22.22          |
| 55-64         | 13        | 24.07          |
| 65 and over   | 6         | 11.11          |
| **Education Level** | |                |
| Illiteracy    | 14        | 25.93          |
| Primary school| 15        | 27.78          |
| Junior middle school | 17 | 31.48        |
| High school   | 8         | 14.81          |
| **Identity**  |           |                |
| Cadre         | 1         | 1.85           |
| Masses        | 53        | 98.15          |
| **Total**     | —         | 100.00         |

III. ANALYSIS OF CHANGES IN THE WELFARE FOR MIGRATED FARMERS

This paper believes that the welfare for migrated farmers includes both economic welfare and non-economic welfare, of which economic welfare refers to the cash or in-kind benefits of migrants like their income, assets, medical and health care, social insurance, and government subsidies, and non-economic welfare are more concerned with the subjective feelings of migrants, mainly including their evaluation on children’s education, social integration, social security in the migrant village as well as their life happiness.

A. Economic Welfare

The analysis on economic welfare is mainly made from the perspective of family income, employment and governmental compensation.

1) Analysis of income of migrant families: From "Table II", we can see the relocation has no effect on the income of most farmers, and even slightly increased for a small number of farmers, while nearly one-third of farmers believe that they have suffered some economic losses.

|               | Frequency | Proportion (%) |
|---------------|-----------|----------------|
| **Increase**  | 6         | 11.11          |
| **Basically unchanged** | 31 | 57.41          |
| **Reduce**    | 17        | 31.48          |
| **Total**     | 54        | 100.00         |

2) Analysis of reemployment of migrated farmers: Generally, nearly half of the respondents believe that they have difficulties in their reemployment, and even about one-tenth of the farmers think that they have very difficulties in their reemployment.

3) Satisfaction of economic compensation: Nearly half of the respondents were satisfied with the economic compensation for the South-to-North Water Transfer Project, 40.74% were basically satisfied with the compensation, and only 1.85% were very satisfied with the compensation, but 11.11% were not satisfied with the compensation, from which we can see that the farmers have no very high satisfaction of the economic compensation for the South-to-North Water Transfer Project.

B. Non-economic Welfare

The analysis of non-economic welfare is made mainly from four aspects: basic living conditions, children's education, social security and social integration. Different from the analysis of economic welfare, the analysis of non-economic welfare pays more attention to the subjective feelings of the migrated farmers and the invisible benefits from the infrastructure that the government provides to the farmers.

1) Basic living conditions: Respondents were more satisfied with the water, electricity and household gas after the relocation, and more than 94% of migrated farmers think it is convenient and even very convenient, by which we can see that the supply of water, electricity and gas is relatively complete and stable in the resettlement area and basically meets the needs of migrants.

From "Table III", we can see that the access rate of cable TV has increased by 40.74% after the migration and the Internet access rate has also increased by 40.74%. The access rates of cable TV and of Internet have been greatly improved after the migration.
for 3.7% of the farmers are not satisfied with the road conditions, so the migrants are very satisfied with the road conditions in the resettlement sites.

98.15% of the respondents thought that the travel convenience was achieved, and felt that the convenience of medical treatment and shopping had reached 100%, by which we can see that the travel conditions, medical conditions and shopping conditions are very convenient in the resettlement site.

From "Table V", we can see that there is no farmer who feels unhappy after the relocation, and the farmers who feel moderately happy have increased by 7.41%, the farmers who have very happy after the relocation had increased by 1.85%, by which we can see that some farmers had improved their happiness after the relocation, but a small number of farmers have weakened their happiness slightly.

From "Table VI" and "Table VII", we can see that more than 60% of the migrants are satisfied with the resettlement housing and living environment, with a higher satisfaction.

2) Children’s education: From "Table VIII", we can see that nearly half of the migrated farmers are more satisfied with the children’s education in the migrant villages, 46.30% of the farmers feel that the children’s education is more general in the migrant villages, but 1.85% of the farmers are not satisfied with the children’s education in the migrant villages, and even 1.85% of the farmers are very dissatisfied with the children’s education in the migrant village. According to the above data, the migrated farmers are not very highly satisfied with the children’s education in the migrant villages, and only half of migrants have achieved satisfaction and above.

From "Table IX", we can see that more than 60% of the respondents believe that the quality of the teaching in the migrant village is similar with that of in previous place of residence, nearly 30% of the farmers think that the quality of the teaching in the migrant village is slightly higher than that of in the previous place of residence, but about 5% of respondents believe that the quality of teaching is lower than that in the previous place of residence. By these, we can see that the quality of teaching in migrant villages has not improved significantly compared with that before migration.

3) Social security: More than 80% of the migrants are satisfied with the cooperative medical care and endowment insurance system in the resettlement area, by which we can see that the migrated farmers are more satisfied with the above two services in the resettlement area, with a higher

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**TABLE IV. SATISFACTION DEGREE OF ROAD CONDITION**

|          | Frequency | Proportion (%) |
|----------|-----------|---------------|
| Very satisfied | 23        | 42.59         |
| Moderately satisfied | 29        | 53.70         |
| Somewhat dissatisfied | 2         | 3.70          |
| Dissatisfied | 0         | 0.00          |
| Total     | 54        | 100.00        |

**TABLE V. HAPPINESS CONTRAST**

|          | Before Proportion (%) | After Proportion (%) |
|----------|-----------------------|----------------------|
| Very happy | 3 5.56                | 2 3.70               |
| Moderately happy | 28 51.85          | 32 59.26             |
| Commonly   | 21 38.89             | 20 37.04             |
| Unhappy    | 2 3.70               | 0 0.00               |
| Very unhappy | 0 0.00             | 0 0.00               |
| Total      | 54 100.00            | 54 100.00            |

**TABLE VI. HOUSING SATISFACTION**

|          | Frequency | Proportion (%) |
|----------|-----------|---------------|
| Very satisfied | 6        | 11.11         |
| Moderately satisfied | 35       | 64.81        |
| Commonly      | 9        | 16.67         |
| Somewhat dissatisfied | 3        | 5.56         |
| Dissatisfied  | 1        | 1.85          |
| Total        | 54       | 100.00        |

**TABLE VII. SATISFACTION OF LIVING ENVIRONMENT**

|          | Frequency | Proportion (%) |
|----------|-----------|---------------|
| Very satisfied | 7        | 12.96         |
| Moderately satisfied | 34       | 62.96        |
| Commonly      | 8        | 14.81         |
| Somewhat dissatisfied | 5        | 9.26         |
| Dissatisfied  | 0        | 0.00          |
| Total        | 54       | 100.00        |

**TABLE VIII. SATISFACTION OF CHILDREN’S EDUCATION**

|          | Frequency | Proportion (%) |
|----------|-----------|---------------|
| Very satisfied | 1        | 1.85          |
| Moderately satisfied | 26       | 48.15        |
| Commonly      | 25       | 46.30         |
| Dissatisfied  | 1        | 1.85          |
| Very dissatisfied | 1        | 1.85         |
| Total        | 54       | 100.00        |

**TABLE IX. COMPARISON OF TEACHING QUALITY WITH THAT BEFORE RELOCATION**

|          | Frequency | Proportion (%) |
|----------|-----------|---------------|
| Great improvement | 0       | 0.00          |
| A little improvement | 16     | 29.63        |
| Unchanged      | 35       | 64.81         |
| Decrease      | 2        | 3.70          |
| Considerable decrease | 1     | 1.85         |
| Total         | 54       | 100.00        |
satisfaction of the endowment insurance than that of the cooperative medical care.

The data shows that the employment becomes the most important problem after the migration, followed by the housing, then the difficulty of living, and there are some small problems of children’s schooling and old-age care, and finally the problems of land.

4) Social integration: From the "Tables X", we can see more than one-quarter of the respondents indicated that they have little or no contact with local residents, one-third of the farmers have a common frequency of contact with local residents, and more than one-third of the farmers said that they have frequent contract with local residents. In addition, the contact with local residents is also different in gender; the female among the residents with more contact, have a higher frequency than the male, and the male among the residents with less contact, take a higher proportion than the female.

| Intercourse frequency | Total Amount | Proportion (%) | Male proportion (%) | Female proportion (%) |
|----------------------|--------------|----------------|---------------------|-----------------------|
| more                 | 14.81        | 3             | 13.04               | 5                     |
| many                 | 24.07        | 6             | 26.09               | 7                     |
| Commonly             | 33.33        | 7             | 30.43               | 11                    |
| Seldom               | 25.93        | 7             | 30.43               | 7                     |
| No contact           | 1.85         | 0             | 0.00                | 1                     |
| Total                | 100.00       | 23            | 100.00              | 31                    |

IV. CONCLUSION

A. Research Conclusion

In terms of economic welfare, the reemployment gets more difficult after migration. Some farmers certainly suffer economic loss, with agricultural income reduced by nearly half because of the reduction of land, but the economic compensation is not very enough. Generally, the farmers have no high satisfaction of the economic compensation for the South-to-North Water Transfer Project.

In terms of non-economic welfare, the life is very convenient after the migration, mainly reflected in the electricity, gas, cable TV and Internet, travel, medical treatment, etc. The migrated farmers are more satisfied with the new living environment in the children’s education the migrant villages, as well as the social security such as cooperative medical care and endowment insurance. The living standard of migrants has been improved slightly after the migration, and the welfare level has improved slightly.

The problems of employment, housing and difficulties in living after migration and resettlement are more prominent. For the migrated farmers, on the one hand, “giving the fish” — that is, it is very important to ensure the existing welfare of the farmers is not reduced, and by present conditions, the relevant policies and supporting facilities established by the government basically meet the needs of the migrated farmers; and on the other hand, “Giving the fishing method” — that is, it is also very important to ensure the farmers quickly integrate into the local society after migration and have a stronger employ-ability, which is also a task for the government to further implement in the process of resettlement and migration.

B. Policy Recommendations

It is necessary to vigorously publicize and popularize migration policies, improve the awareness of migration policies, and encourage migrants to participate in the implementation of policies and further to achieve better implementation results and get good feedback for timely updating and improvement of specific policy terms.

It is necessary to set up a migration working group to implement the follow-up work of resettlement by the specific responsible person. The working staff should visit and check the use conditions of the resettlement housing on time, and if finding problems of housing, make timely repair or compensation. Beautify and improve the environment of the migrant village where the migrated farmers live, increase the area of greening, set up waste sorting and placing sites, purchase and arrange some fitness equipment, to improve the satisfaction of the migrants for the living conditions.

It is necessary to focus on the introduction of quality education talents, improve the salary and welfare level of teachers, to attract the brilliant high-quality talents will hometown mood to return and make contribution to rural education, and further improve the teaching level and teaching quality of schools in migrant village.

It is necessary to explore the business potential in the village, vigorously attract investment, provide jobs, to attract the surplus labor in the migrant villages to work nearby, and further solve the problem of difficult employment of villagers in the migrant villages.

It is necessary to organize relevant cultural and recreational activities, encourage the migrated farmers and local residents in the migrant villages to actively participate in it, promote the exchange and integration of cultures between the two places, eliminate the loneliness of farmers after migration, and make them fit in local life and adapt to the new environment as soon as possible.
REFERENCES

[1] Nie Xin, Wang Han, Guo Jiewen, Zhang Anlu. Survey on the Willingness of Migrants in the Reservoir Area from the Perspective of Micro-Welfare [J]. China Population, Resources and Environment, 2010, (09): 159-164. (in Chinese)

[2] Yang Haijing. Study on the Perception of Affiliation of Migrants for the South-to-North Water Transfer Project [D]. Hubei University of Technology, 2013. (in Chinese)

[3] Zhu Binbin. Research on the Happiness of Migrants for the South-to-North Water Transfer Project [D]. Hubei University of Technology, 2014. (in Chinese)

[4] Zhang Ying. Study on the Welfare Changes of Migrants for Ecological Farmland-returning-to-woodland area in Wuling Mountain [D]. Huazhong Agricultural University, 2015. (in Chinese)

[5] Sun Haibing, Zhao Xu. Research on the Impact of Land Acquisition for Water Conservancy and Hydropower Projects on Reservoir Migrants' Happiness [J]. Hydroelectric Engineering, 2016, (11): 12-15. (in Chinese)