Research on Sustainable Development of Reservoir Resettlement in the Background of Rural Revitalization: Based on the Survey Data of Ji'an

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Abstract: Implement the strategy of rural revitalization, adhere to the overall goal of agricultural and rural modernization, and adhere to the general policy of giving priority to agricultural and rural development. During the implementation of the late support policy for reservoir resettlement, the development strategy of national rural revitalization was fully considered, focusing on improving the infrastructure construction of the resettlement village, innovative industrial integration, improving the living environment, and promoting the income increase of the migrants. In combination with the development of the late support work for reservoir resettlement in Ji'an City, this paper analysed the main factors affecting the well-being of the migrants, and explored the path to promote the healthy development of reservoir resettlement. It provides reference ideas for reservoir resettlement under the background of rural revitalization.

1 INTRODUCTION

On May 17, 2006, the State Council issued "Opinions on Improving the Post-Relocation Support Policy for Large and Medium-Sized Reservoirs", which further clarified the scope, objectives and standards of post-relocation support for reservoirs, and standardized the methods of post-stage support. and implemented the source of support funds in the later stage, which has played an important role in accelerating the resolution of the outstanding problems in the production and life of the reservoir resettlement, helping the reservoir resettlement get rid of poverty and becoming rich, promoting the economic and social development of the reservoir area and resettlement area, and ensuring the healthy development of water conservancy and hydropower. Remarkable results have been achieved. Since the 19th National Congress of the Communist Party of China, the country has proposed the implementation of rural revitalization from a strategic height. The implementation of the rural revitalization strategy runs through the development of the entire socialist modernized country, and also promotes the realization of the "two centenary" goals. Therefore, the requirements of the national rural revitalization strategy should be fully considered in the process of supporting and implementing the late-stage resettlement of the reservoir, focusing on the development of the resettlement industry, the improvement of infrastructure, the improvement of the living environment, and the increase of resettlement income to innovate the late-stage support and development model of resettlement, and help the resettlement of the reservoir area (Chen 2020, Diao 2021). This paper focuses on the development of the post-immigration support work in Ji'an City, combined with the requirements of implementing the rural revitalization strategy, puts forward the ideas and measures for the post-immigration support and development, and puts forward suggestions from the aspects of resettlement policy, management system and financial guarantee. Increase the intensity of post-immigration support and innovate the way of post-immigration support to promote the rural revitalization of immigrants in the

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reservoir area. Promote the common prosperity and development of immigrants and farmers, and promote the integration of rural industries and urban-rural integration.

2 OVERVIEW OF THE STUDY AREA AND DATA SOURCES

2.1 Overview of the Study Area

Jian City is a county-level city affiliated to Tonghua City, Jilin Province. It is located in the southeast of Jilin Province. There are 5 large and medium-sized reservoirs in Ji'an City that are included in the scope of later support, including 1 large-scale reservoir and 4 medium-sized reservoirs. As of 2021, 69,772 immigrants will be included in the scope of later support, and immigrants will be distributed in 15 townships (towns) and 127 administrative villages; the city's total population is 207,000, of which 89,000 are non-agricultural and 118,000 are agricultural. The immigrant population is about 70,000. Since the implementation of the resettlement policy, the city's resettlement housing conditions and living environment have been significantly improved. Taking into account the types of resettlement villages in Ji'an City, the progress of relocation implementation and other factors, three typical resettlement villages, namely Dahuang Village, Jianjiang Village and Jiangkou Village, were selected to carry out empirical research.

2.2 Data Sources

The data used in this paper comes from the resettlement survey data of large and medium-sized reservoirs in Ji'an City, focusing on the living and production capacity of local immigrants, to better understanding of the status quo of migrant society and to understand the profound impact of resettlement relocation on farmers' well-being, and then the reservoir resettlement support in the later stage Research on sustainable development strategies. The survey adopted a combination of questionnaire survey and symposium interview. A total of 125 questionnaires were distributed, the questionnaire recovery rate was 100%, and the questionnaire was 96 percent effective. Among the survey respondents, the youngest was 32 years old, the oldest was 88 years old, and the average age was 60 years old. Among them, immigrants aged 45-60 accounted for more than 95%. The respondents were mainly middle-aged and elderly people with males accounting for 51.1% and females for 48.9%. The proportion of male and female respondents is relatively balanced, and they are all agricultural hukou. The respondents have a low education level, 98% are primary school and below, and 2% are junior high school and above. Semi- structured interview is adopted to obtain relevant information in the village in the form of small seminars with village cadres and residents of the Immigration Bureau, and to extract data again through field observation, in-depth interviews with insiders, data analysis and other methods.

Table 1: Characteristics of valid questionnaire samples.

Variable	Options	Number of people	Proportion (%)
Gender	Male	246	51.2
	Female	234	48.8
Household	Registered agriculture	480	100
Age	20-44 years old	41	8.6
	45-65 years	346	72
	66 years and over	93	19.4
Education level	Primary school and below	459	95.6
	Junior high school	10	2
	Senior high school	7	1.4
	College	3	0.6
	Bachelor degree or above	2	0.4

3 RESEARCH METHODS

3.1 Measurement Model

Immigrant well-being is the basic material needs, health, social relationships, security and freedom of choice and movement to maintain a high quality of life. Amartya Sen pointed out that well-being consists of a set of feasible capabilities, which reflects the combination of functional activities that an individual possesses, can achieve, and can freely choose. The connotation of well-being has multiple attributes such as complexity, multi-dimensionality, and hierarchy. It is a complex task to generally discuss the groups of factors that affect well-being, and the evaluation model needs to take into account the multi-dimensional indicators (Walter 2016). Ordinary econometric simultaneous equation models can only deal with complex relationships between measurable variables, while structural equation models (SEM) can not only deal with the mutual causal connections between measurable variables, but also use factor analysis to construct multiple "" Latent Variables", and discusses the complex relationship between latent variables or between latent variables and measurable variables (observed variables), this model provides measurement possibilities for variables that are highly abstract and difficult to measure (Li 2018, Hu 2020). In view of this, this paper chooses structural equation modelling as the research method to explore the complex factors affecting the well-being of immigrants.

Structural equation model consists of two parts: measurement model and structural model. The measurement model is used to describe the relationship between latent variables and observed variables, and the structural model is used to describe the relationship between latent variables and consider the influence of variation and error terms.

The measurement structure model is expressed as:

$$X = \Lambda_x \zeta + \delta$$
$$Y = \Lambda_y \eta + \varepsilon$$

In the formula, X and Y are exogenous explicit variables and endogenous explicit variables, respectively; δ and ε are the error terms of X and Y variables, respectively; ζ are external latent variables; η are internal latent variables; Λ_x factor loadings for ζ pairs of X variables; Λ_y actor loadings for η pairs of Y variables.

Structural models can describe the relationship between latent variables and can take into account the effects of variation and error terms. The matrix equation for the structural model is expressed as:

$$\eta = \beta\eta + \Gamma\xi + \zeta$$

In the formula, η is the internal latent variable; ξ is the external latent variable; ζ is the residual of the internal latent variable; β is the structure coefficient matrix between the internal latent variables; Γ is the structure between the external latent variable and the internal latent variable coefficient matrix.

3.2 Selection of Indicators

As involuntary resettlement of large and medium-sized reservoirs, they face social remodelling and other problems after relocation. The resettles in the new environment are vulnerable to new economic and social risks, which further lead to psychological risks. The government plays an important role in the involuntary resettlement process, and the government and government policies have always had a major impact on the well-being of immigrants. At the same time. The selected indicators refer to the monitoring and evaluation index system for the late support of large and medium-sized reservoir migration published in the Notice on Strengthening the Supervision and Inspection of the Implementation of the Late Support Policies for Reservoir Migration published by the Ministry of Water Resources, including the release of funds, project implementation, the guarantee system for the implementation of the late support policies, and the implementation effect of the late support (Li 2017). Therefore, the selection of immigrant well-being indicators needs to consider various factors such as policy, economy, society, health, family, environment, psychology, and external well-being. Based on the perspective of sustainable development, this study selects a number of indicators that can reflect the functional areas of immigrant life, and characterizes the influencing factors of immigrant well-being in multiple levels and dimensions.

(1) Post-support policies: including fund distribution, project implementation, guarantee system for post-support policy implementation, and post-support policy implementation effects.

(2) Economic and living standards: including income, consumption, housing, cultivated land, education, medical care, transportation, drinking water. There are seven objective indicators were selected: annual net income, annual total expenditure, per capita housing area, per capita arable land area, education level, toilet type and cooking energy use mode of the interviewed immigrant households; at the same time, 4 subjective indicators of satisfaction with education, medical care, transportation and drinking

water are considered. The subjective and objective indicators of the road better fit the actual living standard of immigrant families, so as to effectively characterize their well-being.

(3) Health level: Evaluate the health level of immigrants in terms of physical health and happiness, pay attention to whether there are sick people (especially those with chronic diseases or serious diseases) in the family, and whether there are disabled members or members who are unable to work for other reasons. The villagers' subjective evaluation of the family's health status provides basic information on the health status (Xu 2019). In addition, focus on the improvement of the mood of the immigrants after the relocation, and reflect the implementation of the immigration policy.

(4) Social adaptation: In order to reflect the adaptability of the relocated farmers to the relocated land to the greatest extent, the social and psychological changes caused by the resettlement were observed from the degree of adaptation after the relocation and the perception of the village's status.

(5) Cultural environment: Culture and environment have an important impact on the well-being of immigrants. Therefore, the villagers' participation in leisure activities and whether they participate in related leisure activities were investigated, and the overall environmental satisfaction of the village was investigated.

(6) Social connection: Analysis the status quo of social connections among farmers' families from three aspects: interpersonal network, social trust and social relations. For this reason, "satisfaction with village cadres" and "village relations" are selected as subjective cognitions for analysis.

Table 2: Factor values of migrant welfare.

Potential variables	Observed variables and definitions	Symbol	Factor values
Production and living standards (η_1)	Per capita housing rea	Y_1	0.864
	Per capita cultivated land area	Y_2	0.592
	Household consumption expenditure	Y_3	0.845
	Household ownership of durable consumer goods	Y_4	0.570
	Satisfaction degree of drinking water	Y_5	0.764
Health level (η_2)	Physical health status	Y_6	0.804
	Number of long-term illnesses in families	Y_7	0.793
Realization of life(η_3)	Life adaptability	Y_8	0.849
	Happiness perception	Y_9	0.836
Olicy conditions (ζ)		X_1	0.870
	Satisfaction degree of direct subsidy distribution	X_2	0.746
	Satisfaction with infrastructure and community services		
	Satisfaction with social integration	X_3	0.634

This research is based on literature review, related theoretical research and resettlement situation. In order to reveal the relationship between the influencing factors of ecological resettlement welfare, and to explain the effect strength and direction of each influencing factor on resettles' well-being, according to the "hypothesis-model verification-result analysis" to carry out the research, and hereby put forward the following hypotheses:

Hypothesis 1: Production and living standards, external well-being and psychological well-being all have an impact on the level of relocated migrants' well-being.

Hypothesis 2: The health level, social adaptation, cultural environment, and social connection of relocated families have a positive impact on their overall well-being to varying degrees.

Hypothesis 3: The well-being of relocated people is significantly affected by economic living standards, health levels and social adaptation.

Hypothesis 4: Policy conditions not only directly affect the well-being of immigrants, but also affect the well-being of immigrants by affecting the economic level, health level and other endogenous latent variables.

Table 3: Test of overall fitting of the model.

Statistic	CMIN	df	P	CMIN/df
Model indicators	217.33	128	0.00	1.69

4 RESULTS AND ANALYSIS

From the perspective of farmers' well-being, external well-being has the greatest impact on farmers' well-being. Among them, the regression coefficients of social connection and cultural environment are 0.38 and 0.11, respectively. It can be seen that the urgent need of farmers after relocation is to improve the external environment to maintain the existing level of well-being. In terms of psychological well-being, post-support policies and social adaptation were 0.09 and 0.13, respectively. Compared with external well-being and psychological well-being, the impact of family well-being is slightly less obvious, the health level is 0.21, and the two aspects of living standard and safety have no significant impact on the improvement of well-being. This shows that Hypothesis 1 is not fully established.

The level of well-being is hierarchical and complex. Family well-being, external well-being and psychological well-being represent the rich connotation of farmers' well-being from well-being construction, well-being maintenance and well-being enhancement. The research shows that the ecological migrant well-being of Ji'an selected this time presents the following: Features:

(1) Farmers' well-being is mainly affected by external well-being, and family well-being and psychological well-being have a significant impact on farmers' well-being. The impact at the physical level is comparable, but the impact at the level of family well-being is relatively weak.

(2) From the perspective of multiple life functions, the well-being of farmers is most affected by social connections. However, the role of security in improving well-being is not obvious.

(3) Social connection not only directly affects farmers' well-being, but also affects the living standards, health and well-being of households and safety, indirectly affecting the well-being of farmers.

(4) Fair rights are realized by affecting the social adaptation and life of farmers, and also indirectly affect farmers' well-being.

5 CONCLUSION AND DISCUSSION

From the perspective of subjective perception, this study constructs a multi-dimensional well-being index system for immigrants, and uses the SEM model to measure the complex influencing factors of immigrants' well-being. The study found that: (1) Immigrant well-being is jointly affected by multi-dimensional factors, and social connection and health level have the most significant impact on the well-being of immigrants (Ma 2019). Among them, the impact of the living environment on the well-being of immigrants is weak, while the direct effect of social security and policy conditions on the psychological well-being of immigrants is not significant. (2) Although the direct impact of policy conditions on the well-being of immigrants is not significant, it has an indirect impact on the well-being of immigrants through significant effects on the living environment, health level and social security. It is worth noting that the effect of policy conditions on the economic level is not significant, and the government needs to increase the implementation of employment training work. (3) The health level not only has a direct impact on the well-being of immigrants, but also has an indirect impact on the well-being of immigrants through a significant impact on the economic level.

To promote the sustainable development of migrants in the reservoir area, it is necessary to take into account the economic level, health level, living environment and other dimensions, and pay attention to the connection between policy implementation and the psychological well-being of migrants, and improve the psychological well-being of migrants through key guarantees and all-round support of government policies. Therefore, the following specific measures are proposed:

(1) Actively explore the path of "industrial ecologicalization and ecological industrialization", cultivate and build a modern ecological industrial system in the reservoir area, comprehensively and deeply promote the high-quality green development of the entire reservoir area, and lay an industrial and

economic foundation for the sustainable development of the reservoir area.

(2) Intensify employment training, provide immigrants with convenient services such as information acquisition channels and employment guides, focus on cultivating immigrant employment skills and entrepreneurial skills, and aim to improve immigrant vocational skills and adaptability to occupational changes, and play the role of government organizations, to realize the effective connection between migrant employment training needs and training resources.

(3) Continue to improve the social security system and establish a social security system covering both urban and rural residents. The first is to improve the old-age insurance system and build a multi-level old-age insurance system including personal savings old-age insurance and commercial insurance; the second is to improve the medical insurance system, improve the new rural basic medical care, and establish a health path and welfare system for immigrants focusing on preventive health care. , to encourage the development of supplementary medical insurance, accidental injury insurance for the elderly, etc.

To promote the sustainable development of reservoir resettlement in Ji'an City, different strategies should be adopted according to existing projects and new projects. For the existing projects, adopt the development plan of promoting the integration of immigrants, and optimize the construction method by gathering the population; at the same time, strengthen the overall planning of regional construction, and accelerate the construction of an urban and rural spatial pattern of coordinated development between the reservoir area and the surrounding areas. For new projects, we will actively promote the integration of various policies, explore the benefit-sharing mechanism of immigrants, promote the continuous increase of income of immigrants, strengthen the interaction and integration between immigrants and aborigines, and achieve zero growth of immigrants in new projects. The integrated development of innovative industries promotes the innovative development of industries in the reservoir area; attracts young labor to return to the village for development, and creates channels for immigrants to increase their income; guarantees the living and medical standards of elderly immigrants.

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