Asian Economic and Financial Review
ISSN(e): 2222-6737
ISSN(p): 2305-2147
DOI: 10.18488/journal.aefr.2020.1012.1410.1429
Vol. 10, No. 12, 1410-1429.

URL: www.aessweb.com

A STUDY ON THE INFLUENCING FACTORS OF RURAL WOMEN'S POVERTY IN NORTHEAST CHINA

Changhong Nie[1]
Huangang Wang[2+]

[1]*Institute of Zoology, Chinese Academy of Sciences, Beijing, China.*
Email: 1500200804@qq.com Tel:18700784027
[2]*School of Economics and Management University of Chinese Academy of Sciences, Beijing, China.*
Email: 979419281@qq.com Tel:15313911090

(+ Corresponding author)

Article History
Received: 12 October 2020
Revised: 3 November 2020
Accepted: 27 November 2020
Published: 9 December 2020

Keywords
Poverty of women
Income model
Expenditure model
Stepwise regression
Poverty factors.

ABSTRACT

Every country in the world has faced poverty to varying degrees. Poverty eradication is the primary development goal of the United Nations. The problem of poverty has attracted more and more attention from around the world. In China, women's poverty is more serious than men's due to historical and current social and economic structural reasons. Women have their own vulnerabilities, and at the same time, play a special role in the family. Therefore, women's poverty has attracted more and more attention from many different areas. Poor women in China are mainly concentrated in rural areas, which is of great theoretical and practical significance when studying the problem of rural women's poverty. In this paper, the poverty situation of rural women in China was investigated through interviews and questionnaires. The variables of the family income model and expenditure model of poor women were determined based on the understanding of the poverty situation of women and the economic knowledge they have acquired by means of stepwise regression. Finally, the paper puts forward effective suggestions for a national poverty alleviation policy.

Contribution/Originality: This study contributes to the existing literature on women's poverty and used a new estimation methodology to study the poverty factors of rural women in China.

1. INTRODUCTION

Poverty is an eternal historical problem that perplexes mankind in both developing and developed countries and is a continual topic in the field of economics and sociology. The ultimate goal of human beings is to eliminate poverty and pursue basic social equity. Every country makes unremitting efforts to solve the problem of poverty in the process of national development to alleviate the gap between the rich and the poor to ensure a more harmonious and stable society. China's fight against poverty through the continuous efforts of several generations has achieved remarkable success. At present, almost all regions and poor groups that were easier to bring out of poverty have achieved poverty alleviation. However, the state has given priority to areas where it is more difficult to eliminate poverty and has implemented vigorous poverty alleviation policies. We will spare no effort to lay a solid foundation for China's overall poverty alleviation by 2020. Of course, the higher the cost of poverty alleviation, the greater the difficulty coefficient is, but we firmly believe that under the leadership of the party and the state, in 2020, our country will be able to achieve the ultimate goal of comprehensive poverty alleviation. In the future, China should

not only reach its goal of countrywide poverty alleviation, but also ensure national stability and long-term social stability.

Women's poverty is one of the most significant phenomena in poverty and it is also easily ignored. Because women play a vital role in the family, they are spiritual pillars for children and the spiritual harbors of children and are very important to their growth. At the same time, women are the source of their husbands' work power and the magnetic core of the whole family bringing strong cohesion. Women's poverty often has negative impacts, not only on themselves, but also on their families and society. Therefore, women's poverty alleviation is extremely important for the liberation of women and social stability. Poor women are mainly located in rural areas. Due to the continuous advancement of China's urbanization process in recent years, a large number of rural labor force has been transferred to cities and towns, and due to their own limitations and vulnerability, the proportion of women transferring to urban areas is lower than that of men. The women who are left behind in rural areas become vulnerable in the wave of urbanization and are more likely to fall into poverty. Over the past half century, the international community has paid more and more attention to the groups of poor women. The United Nations has been making use of international conventions, declarations and conference resolutions to formulate action programs to ensure women's rights. This is enough to prove that protecting women's rights and interests to help women eliminate poverty has become a global issue. Under the trend of international women's poverty alleviation, China began to pay attention to women's legitimate rights, interests and personal development and formulated the outline of Chinese women's development.

The Fourth World Conference on Women, held in Beijing, China from September 4 to 15, 1995, with the theme of action for equality, development and peace, identified "poverty and women" as one of the 12 major areas of concern. As a matter of fact, as early as 1994, when our country determined the August 7 poverty alleviation plan, poor women was one of the key groups focused on by poverty alleviation policies, and this was the start of a comprehensive system of women's poverty alleviation policies. The Chinese women's development program was formulated in detail to reduce the level of women's poverty and contained objectives, tasks and strategies to strengthen the efforts of helping women to help the poor. In the outline of China's rural poverty alleviation and development, it is clearly defined that poverty-stricken women should be regarded as key poverty alleviation groups, and priority should be given to women's poverty alleviation projects under the same conditions. China has also adopted a policy for women that offer financial discounts for small, guaranteed loans to provide some financial support for poor women who are willing and able to start their own businesses. Taking the gender index as one of the work contents of rural poverty monitoring, including the alleviation of women's poverty in the goal of anti-poverty into the national economic and social development plan, establishing social assistance, security and strengthening the support for poor women provides a solid and powerful policy guarantee for the overall alleviation and even elimination of women's poverty.

In 2013, the state formulated a new strategy for targeted poverty alleviation, which has transformed the work on poverty alleviation from extensive to targeted to maximize the effectiveness of efforts. First of all, China should give enough recognition and attention to women's poverty and ensure that poor women can finally escape poverty in terms of system and resource allocation. According to the latest data released by the National Bureau of Statistics on February 15, 2019, by the end of 2018 the number of poor people in China was 16.6 million, which is 13.86 million fewer than 2017, and the poverty incidence rate was 1.7%, which is 1.4% lower than in 2017. Since the 18th National Congress of the Communist Party of China, China's rural poverty population has decreased by 82.39 million. By the end of 2012, the total number of poverty-stricken people in China was 98.99 million and the poverty incidence rate was 10.2%. In a period of six years, China has reduced the incidence of poverty by 8.5% and has exceeded the poverty reduction target for six consecutive years, which is extremely rare in world history. In 2019, China's poverty alleviation goal was to reduce the rural poverty-stricken population by more than 10 million, and at the same time achieve the removal of approximately 300 counties from poverty to ensure that China's rural poverty-

stricken population is brought out of poverty by 2020. In the process of poverty alleviation, we should make great efforts to tackle the difficulties in the deeply poverty-stricken areas. As these areas may have their own limitations, such as poor geography and environment, the state needs to implement sufficient policies and carry out continuous follow-up monitoring and evaluation to ensure all areas are included. At the same time, we should continually strive to improve the quality of poverty alleviation, prevent the return of poverty, constantly consolidate the achievements of poverty alleviation and establish a sound, stable and long-term poverty alleviation mechanism. At the same time, we must focus on the groups of poor women in rural areas and help these women escape poverty for good. Practice has proved that only when women can escape poverty in an all-round way can their families finally move on. In the final critical process of poverty alleviation, we should not abandon or give up on any of these women, so that they can walk out of the mire of poverty and face their future lives with confidence.

In recent years, an increasing number of scholars have studied the problem of women's poverty. Academic research on rural poverty is no longer limited to the family as the research unit and has begun to pay attention to poor women. In fact, with the concept of poverty feminization put forward, people began to pay attention to the gender problem within the poor population. The study found that the proportion of poor women is much higher than that of poor men with women described as being the poorest of the poor. Women's poverty is not only reflected in the lower economic income, but also reflected in the lack of women's cultural levels and various rights. Scholars' views on the definition of poverty types among women in China can be divided into power poverty, rational poverty and structural poverty (Liang, 2018). Through the empirical analysis of poor women and children from a multi-dimensional perspective, it was found that women's poverty is not only reflected in low income, but also in education, health care, social integration, social rights and basic living security (Zhang, 2018).

Based on a field survey in the poverty-stricken areas of South Africa, it was found that females are more vulnerable to poverty crisis than males, and a family structure with a female head of household is more vulnerable to poverty than those with a male head of household or a husband and wife head of household (Case & Deaton, 2015). By sampling and analyzing poor people in the West Bengal state of India, this paper evaluates men and women, respectively, and determines the gender poverty line, which shows that women are more vulnerable to poverty than men (Goswami & Majumdar, 2015).

Many scholars have studied the causes of women's poverty. Through investigation and research on poor Nepalese women suffering from domestic violence, it was found that woman with lower education levels and who were married as children were more likely to suffer from domestic violence and face the problems of humanistic poverty. The government and non-governmental poverty alleviation organizations should also focus on offering assistance regarding humanistic poverty while helping them increase their economic income (Atteraya, Murugan, & Pandey, 2016). While comparing the poverty situation in 25 European countries, it was found that the poverty risk of single mothers is relatively high. The institutional arrangement in the labor market and the welfare policies formed by existing gender inequality are believed to have a great impact on the poverty risk of single mothers (Hübgen, 2018). Through our experimental study, we found that women are more likely to suffer from poverty than men, and divorced women are more likely to face poverty when they form a family (Munoz Boudet, Buitrago, & Benedicte, 2018). The traditional concepts of "men being superior to women" and "the three obedience's and four virtues" have been present in China's feudal society for more than two thousand years, which put women in a subordinate position. This kind of feudal and decadent ideology still affects people's thinking and behavior to this day. In the labor market, compared with men, poor women have fewer employment opportunities. In the same industry, jobs with higher technical content, status and income have a lower preference for women; even in the same jobs, women's income is lower than men's. This kind of gender discrimination in the labor market has deepened women's poverty and increased the difficulty of eliminating poverty (Nie & Wang, 2019). Some poor women are constrained by traditional concepts and their choice of employment is limited. Women's daily unpaid housework takes up a lot of time and they are unable to go out to work and choose their own jobs. At the same time,

women's education levels are low leading to a specific cultural quality and leaving them unable to keep up with the process of modernization. This leads to difficulties in achieving competence for technical work, and ultimately means that these women have no source of income (Gulibusitan, 2020).

Research has shown that the main reason why some poor rural areas in China may not eliminate poverty for a long time is because of the intergenerational transmission of poverty. Women play a vital role in the family and housewives are the main transmitters of intergenerational poverty. Intergenerational transmission not only makes poverty unlimited, but also limits the efforts of targeted poverty alleviation policies (Cai, 2016). In some poverty-stricken areas, intergenerational poverty exists for a long time. The best way to take precautions against and stop intergenerational transmission is poverty alleviation through education (Xu, 2017). A good family education environment is considered very important for children's early development, and this is an effective measure to prevent intergenerational transmission of poverty (Wang, Luo, Zhang, Liu, & Sun, 2018). Knowledge of poverty leads to intergenerational transmission. It is deeper than income poverty and is the "root cause" of poverty (Zhao & Cai, 2020).

Scholars' research on the significance of women's poverty alleviation emphasizes that in order to eliminate it, it is very important to help poor rural women out of poverty and ensure they have a good quality of life. It is necessary to focus on the training and education of poverty-stricken women to give them the ability to get out of poverty and finally give them opportunities to earn a living (Zhang, 2016). It is considered that the necessary premise of fighting the battle of poverty alleviation is to focus on the key group of poor rural women and recognize the unique role that poor rural women play in the family and society to help them find their strengths and join the fight against poverty (Hasyeti, 2016). Through investigation and research on the indigenous poor women in San Cristo baldraskas, it was found that the poverty rate of women is directly related to the infant mortality rate. Poor women may not enjoy good health care treatment during pregnancy, thus increasing the risk of infant mortality (Colom & Colom, 2018).

To sum up, the problem of poor rural women in China needs extensive attention from all walks of life. All sectors of society should attach great importance to this special group of women to help the country realize the ideal of a well-off society in 2020. In this paper, 120 poor women from nearly 30 villages in two counties of Inner Mongolia were studied via a questionnaire and authentic and reliable data was obtained. At the same time, we gained a real understanding of the living conditions of poor women and the implementation of local poverty alleviation policies. Through the use of a mathematical model to process the data obtained from the survey, and ultimately understand the influencing factors of rural women's poverty in Northeast China, we can make the country more targeted to help poor women out of poverty as soon as possible.

2. DATA DESCRIPTION AND SELECTION OF VARIABLES

2.1. Data Description

In order to effectively understand the living conditions of poor rural women in deeply poverty-stricken areas of China, we conducted a 12-day interview and questionnaire survey on two typical poverty-stricken counties in Inner Mongolia, which is an autonomous region of Northeast China, from June 24, 2019 to July 5, 2019. We randomly selected two or three townships from each county, five or six villages from each township, and asked four or five poor women from each village to complete a questionnaire to collect real and reliable data. The selected samples are typical impoverished counties in Northeast China and the samples are relatively scattered. Northeast China has high commonality in terms of humanities, geography and climate, and the influencing factors of women's poverty in Northeast China are very similar. Therefore, the 120 samples selected are typical and representative. The two poverty-stricken banner counties in Inner Mongolia are mainly inhabited by Mongolian, Han, Hui, Manchu, Oroqen, Zhuang and other ethnic minorities. This survey determined the number of subjects from different ethnic groups according to the proportion of the population of each group in the local population. As the proportion of the

local Mongolian and Han nationalities accounts for more than 80%, there are more than 100 poor Mongolian and Han women included in the survey. During the interviews with the minority nationality women, where there was a language barrier, we used the help of local bilingual people to translate.

In the process of delving deep into field research in poverty-stricken areas, we also carried out interview research. The first stop of our field investigation was a visit to the county government. We visited the main leaders of the local women's federation, civil affairs, the poverty alleviation office and other relevant departments at the county level. Through the interviews we gained an understanding of the work done by the local government in the process of poverty alleviation and the national poverty alleviation policies in the local area. At the same time, we discovered the poverty status, characteristics and causes of poverty of local women. We had interviewed village cadres before entering the households. Village cadres are branch secretaries or village directors who are representatives of villagers. They are also staff members serving at the grass-roots level and are the people who are most familiar with the implementation of poverty alleviation policies. Talking with them can not only truly help us to understand the reality of the situation regarding local women's poverty, but also understand some problems existing in the actual operational processes of implementing poverty alleviation policies. We also interviewed people living in poverty so that we could intuitively and closely understand the real situation of local poor women and let them describe their living conditions, causes of poverty and their most authentic views on the implementation of poverty alleviation policies. By speaking to these women directly, we can not only comprehensively understand the implementation of poverty alleviation policies, but also understand the inner world of poor women to better fight for greater discourse of power and welfare.

2.2. Selection of Variables

This paper studies the economic poverty of rural women in China, because the economic situation of poor women is closely related to the economic situation of their families. If the family is poor, then the women in the family must be poor. Therefore, to study the economic poverty of women is to study the economic poverty of their families. The reason why rural women suffer from economic poverty is that their family income is low and their expenditure is large, which eventually leads to their expenses exceeding their income. Through field investigation and interviews, it was found that the main causes of rural women's poverty are illness, lack of education and lack of labor force, and these factors mainly affect the expenditure and income of poor families. This paper used the econometric method to study the family income model and the expenditure model of rural poor women in Northeast China. The possible influencing factors of rural women's poverty in Northeast China were quantitatively analyzed and tested from the perspective of income and expenditure, which determined the influencing factors of rural women's poverty in Northeast China.

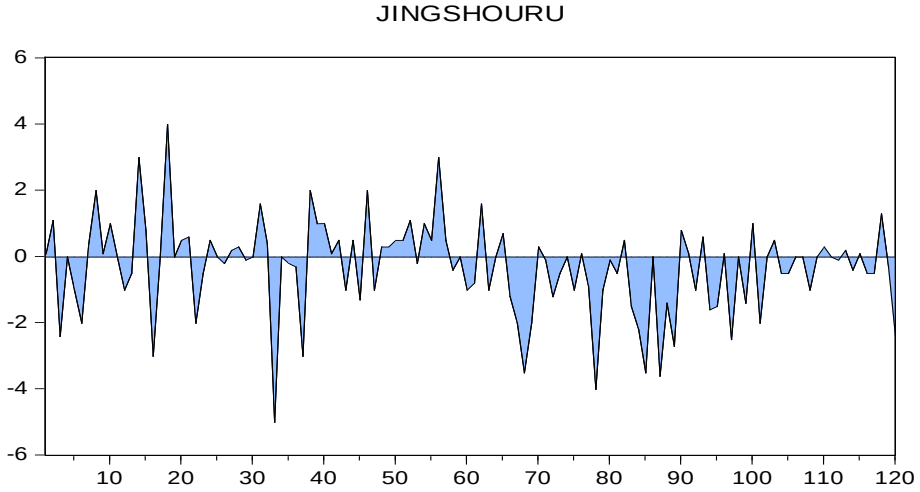

Figure 1. Annual net income of respondents.

In Figure 1, the abscissa is the sample size, and the ordinate is the size of net income, with the unit of RMB 10000. From Figure 1, it can be seen that the poverty-stricken women surveyed are generally living beyond their means and most of their families' annual income is less than their annual expenditure.

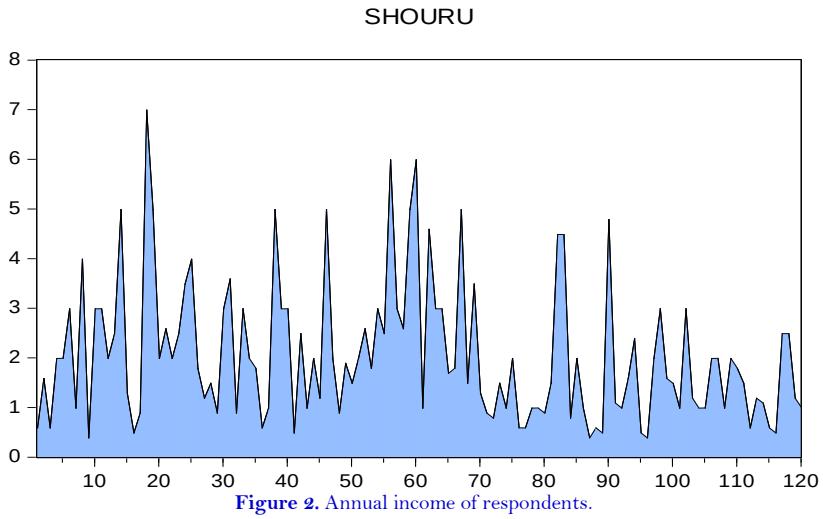

Figure 2. Annual income of respondents.

In Figure 2, the abscissa is the sample size and the ordinate is the income. The unit is RMB 10000. It can be seen from Figure 2 that the annual income of most poor women's families is low at less than 40000 yuan and few poor families have a higher annual income of more than 50000 yuan.

Combined with the above analysis, this paper used the income model and the expenditure model to systematically analyze the influencing factors for income and expenditure of poor women, so that we can fully understand the main factors of rural women's poverty in Northeast China. The choice of variables is based on the economic knowledge and the real situations found in the field research. Finally, the independent and dependent variables were determined.

2.3. Income Model

2.3.1. Dependent Variable

The dependent variable is the annual family income of poor women. In the questionnaire survey of poor women, it was found that the value obtained by directly inquiring about the family income of poor women is very low and there is obvious distortion. Therefore, in the questionnaire survey, the amount of land owned by the poor women's family, the number of livestock and the amount of government subsidies each year were taken into account for total revenue.

2.3.2. Independent Variables

2.3.3.1. Age

While understanding the general distribution of the age of poor women, we examined whether their age has an impact on their income. The field survey found that the local poor women are generally middle-aged and elderly, and their labor capacity, physical health and earning ability will decline with age.

2.3.3.2. Education

Education is measured by the educational level of local poor women, and the main indicators are whether they have attended school, primary school culture and junior high school culture. The education level of poor women directly affects their ability to understand concepts and how quickly they can learn new skills, which will further

affect their earning ability. Therefore, it is necessary to study whether education level affects the poverty of rural women.

2.3.3.3. Number of Domestic Animals

According to the local actual situation, we can divide the livestock of poor women into two categories: cattle and sheep. Therefore, the livestock measurement index refers to the number of cattle and sheep in the family. Through field investigation and visits, it was found that one of the main economic sources of poor women's families in rural areas is animal husbandry. Therefore, we chose to record the number of two kinds of livestock in poor women's families as independent variables in the income model and then study whether the poverty of rural women is related to the number of livestock in their families.

2.3.3.4. Land

Through field investigation and visits, it was found that the most important source of income for poor women's families in rural areas is their own land. Therefore, the land owned by poor women's families was selected as the independent variable for the income model. The measurement of land includes the total area of land owned by poor women's families and whether they cultivate their own land; the unit of land area used is mu. The annual income of poor families is determined by whether or not they cultivate their own land. Generally, the income of people who do their own farming is about 100 yuan more than those who rent out land.

2.3.3.6. Getting Subsidies

According to the investigation, it is known that the main way for poor women's families to obtain subsidies is from the government. Whether poor women receive government subsidies will directly affect their family income, so we chose this as an independent variable of the income model.

2.3.3.7. Marital Status

The main measure of marital status is whether the respondents are single mothers. This independent variable was selected to consider whether the family income of poor women is related to their marital status. Considering that the family income of a single mother family may decrease due to the lack of labor force, the marital status of poor women was taken as an independent variable of income model.

2.4. Expenditure Model

2.4.1. Dependent Variable

The dependent variable of the expenditure model is the annual household expenditure of poor women. In general, the total family expenditure of poor women has not been calculated for one year. Therefore, in the questionnaire survey, we considered whether there are children in school in the poor women's family, the grade of the children in school and the disease status of family members. Finally, the total family expenditure of the poor women in one year was calculated from all respondents.

2.4.2. Independent Variable

2.4.2.1. School Children

The school children measure is the number of children in school among the poor women. Through the investigation, we found that part of the reason for women's poverty is due to the large number of children who are home-schooled. Every year, families bear more expenses related to children's schooling. Therefore, this was chosen as an independent variable.

2.4.2.2. Nationality

Through talking with local poverty alleviation cadres, we learned that different nationalities may have different consumption habits, so we chose this nationality as an independent variable. We verified whether the annual expenditure of poor women's families is related to nationality. Through investigation, it was found that the majority of the local people are Mongolian or Han, so the nationality measurement indicators are mainly divided into these two nationalities.

2.4.2.3. Physical Condition

Because the health status of poor women directly affects the amount of medical expenses that families incur each year, the health status of poor women was chosen as an independent variable. Specific indicators were divided into chronic disease, whether they often feel uncomfortable, or whether they suffer from serious disease.

2.4.2.4. Parents of Husband and Wife

Parents of both the husband and wife measure the number of living parents and the amount of money spent each year to support their parents. This independent variable was chosen to test the impact of expenditure on supporting the elderly parents of poor women's families on poverty.

2.4.2.6. Family Population

The family population measurement index is the total number of families living together, including the parents supported by the respondents and any unmarried non-school children who are not separated. The main consideration here is that the annual household expenditure will rise with the increase of the family population. Therefore, the number of family members was chosen as an independent variable for the expenditure model.

2.4.2.7. Model Building

This paper uses a multiple linear regression model to construct the annual income and annual expenditure models of poor women's families. The annual income of poor women's families is often affected by many variables, including age, education level, family-owned land and government subsidies among other factors. The annual expenditure of poor women's families is often affected by many variables, including the number of children in school, their physical condition and the number of family members. After building the income and expenditure models of poor women, we used the stepwise regression method to solve the annual income and annual expenditure models of poor women's families. Stepwise regression is the introduction of independent variables one by one. Each time an independent variable is introduced the selected independent variables should be checked one by one. When the original variable is no longer significant due to the introduction of a later variable it is eliminated. This process is repeated until no significant variable is put into the equation and no insignificant independent variable is removed from the regression equation.

2.4.2.8. Income Model Construction

Based on the above theoretical analysis and the choice of variables, this paper constructed the influencing factors model of the poor rural women's family income in the Inner Mongolia Autonomous Region. The details are as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + e$$

Among them, the explained variable Y is the annual family income of the respondent with the unit of 10000 yuan. X_1 is age, X_2 is whether they went to school or not, X_3 is primary school culture, X_4 is junior high school

culture, X_5 is the number of cattle, X_6 is the number of sheep, X_7 is the land area (Mu), X_8 is whether they cultivate their own land or not, X_9 is whether they receive government help or not, X_{10} is whether they are a single mother or not, e is the random error after the influence of these ten independent variables on Y, also known as the residual.

2.4.2.9. Expenditure Model Construction

Based on the above theoretical analysis and variable selection, this paper constructed the influencing factors model of annual expenditure of rural poor women's families in the Inner Mongolia Autonomous Region. The details are as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + e$$

Among them, the explained variable Y is the annual family expenditure of the respondent with the unit of 10000 yuan. X_1 is the number of children in school, X_2 is Han, X_3 is Mongolian, X_4 is whether they suffer from chronic disease or not, X_5 is whether they suffer from serious disease, X_6 is whether they often feel uncomfortable or not, X_7 is the number of living parents of both husband and wife, X_8 is the annual expenditure on supporting the elderly (unit: RMB 10000 yuan), X_9 is the family population, e is the random error after the influence of these nine independent variables on Y, also known as the residual.

2.5. Empirical Analysis

2.5. 1. Income Model Test and Analysis

2.5. 1.1. Solving Income Model by Stepwise Regression

This study used a stepwise regression method to regress the income model and we used EViews 9.0 to process the data obtained. The dependent variable is followed by the list of always increasing registers box and we entered the list of independent variables that are always included after the dependent variable: $Y\ C$, and then entered the independent variables to be searched in the list of search regressors boxes: X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9, X_{10}. The step-by-step method was selected and we set the elimination criterion p-value of < 0.05. Finally, we got the following results.

The below results show that the probabilities corresponding to t test values of independent variables X_1, X_5, X_6 and X_{10} are 0.0335, 0.0000, 0.0029 and 0.0466, respectively, and all are less than 0.05. Therefore, the original hypothesis is rejected at the significance level of 0.05. The results show that X_1, X_5, X_6 and X_{10} have a significant influence on Y, and the independent variables of X_1, X_5, X_6 and X_{10} are retained. The other independent variables, $X_2, X_3, X_4, X_7, X_8, X_9$, failed the t test, and their adjoint probabilities are greater than 0.05, so the original hypothesis could not be rejected. Therefore, the independent variables of X_2, X_3, X_4, X_7, X_8 and X_9 were deleted. It can be seen from Table 1 that $R^2 = 0.344099$ and adjusted $R^2 = 0.321286$ in the income model and the fitting effect is good. Moreover, the adjoint probability of the F test is 0.000000. Under the significance level of 0.05, the original hypothesis is rejected, indicating that the income regression equation passed the significance test. Therefore, the income

regression equation is significant; among them, X_1 is age, X_5 is the number of cattle, X_6 is the number of sheep, X_{10} is whether they are a single mother or not and Y is the annual family income of the respondent with the unit of RMB 10000 yuan.

Table 1. The results of the stepwise regression.

Dependent Variable: Y
Method: Stepwise Regression
Sample: 1 120
Included observations: 120
Number of always included regressors: 1
Number of search regressors: 10
Stopping criterion: p-value forwards/backwards=0.05/0.05

Variable	Coefficient	Std. Error	t-Statistic	Prob*
C	2.845396	0.583942	4.872735	0.0000
X5	0.138758	0.029141	4.761627	0.0000
X1	- 0.021708	0.010089	- 2.151545	0.0335
X6	0.026662	0.008774	3.038928	0.0029
X10	- 0.627271	0.311771	- 2.011964	0.0466

R-Squared	0.344099	Mean dependent var	2.070000
Adjusted R-squared	0.321286 1.158686	S.D. dependent var	1.406444
S.E. of regression	154.3937	Akaike info criterion	3.173225
Sum squared resid	- 185.3935	Schwarz criterion	3.289370
Log likelihood	15.08287	Hannan-Quinn criter	3.220392
F-statistic	0.000000	Durbin-Watson stat	1.735169
Prob(F-statistic)			

2.5. 1.2. Heteroscedasticity Test of Income Model

Before the heteroscedasticity test, the residual diagram was created to preliminarily diagnose the heteroscedasticity. The residual diagram can directly and simply judge whether there is heteroscedasticity and can provide general information. The residual diagram is as follows:

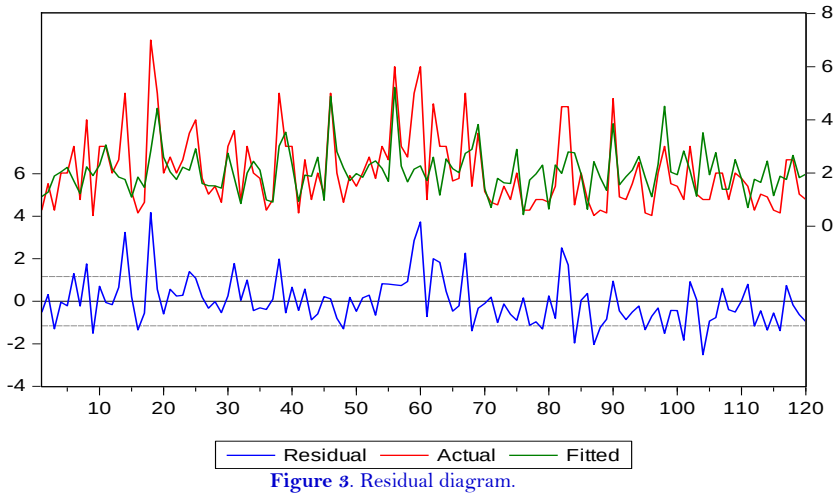

Figure 3. Residual diagram.

The abscissa in Figure 3 is the sample size and the blue line is the residual value. It can be seen from the residual diagram in Fig.3 that the distribution is relatively stable, and there may be no heteroscedasticity according to the preliminary judgment, but this cannot be accurately judged.

In the preliminary judgment of residual diagram, heteroscedasticity may not exist meaning that we need to achieve a more accurate verification. Next, based on the results of the stepwise regression, we tested the heteroscedasticity of the model. In this paper, the white heteroscedasticity method with cross product term and

white heteroscedasticity method without cross product term were used to test whether there is heteroscedasticity. The test results are shown in the following table:

Table 2. White test result of heteroscedasticity (including cross product term).

Heteroskedasticity Test: White

F-Statistic	1.045369	Prob.F(13,106)	0.4147
Obs*R-squared	13.63641	Prob.Chi-Square(13)	0.3999
Scaled explained SS	23.94876	Prob.Chi-Square(13)	0.0316

Test Equation
Dependent Variable RESID^2
Method: Least Squares
Sample: 1 120
Included observations: 120
Collinear test regressors dropped from specification

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	-2.158319	5.538026	-0.389727	0.6975
X5^2	-0.005028	0.014903	-0.337354	0.7365
X5*X1	0.004148	0.009591	0.432554	0.6662
X5*X6	-0.007895	0.008824	-0.894737	0.3730
X5*X10	-0.167406	0.332628	-0.503281	0.6158
X5	-0.061942	0.609049	-0.101703	0.9192
X1^2	-0.002219	0.001866	-1.189007	0.2371
X1*X6	-0.000678	0.002106	-0.321873	0.7482
X1*X10	0.089232	0.097651	0.913789	0.3629
X1	0.182953	0.203848	0.897495	0.3715
X6^2	-0.002471	0.001626	-1.519176	0.1317
X6*X10	-0.127974	0.151850	-0.842766	0.4013
X6	0.193773	0.154244	1.256275	0.2118
X10^2	-5.702162	6.416330	-0.888695	0.3762

Table 3. White test result of heteroscedasticity (excluding cross product term).

Heteroskedasticity Test: White

F-Statistic	1.738092	Prob.F(4,115)	0.1464
Obs*R-squared	6.841065	Prob.Chi-Square(4)	0.1445
Scaled explained SS	12.01452	Prob.Chi-Square(4)	0.0172

Test Equation
Dependent Variable RESID^2
Method: Least Squares
Sample: 1 120
Included observations: 120

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	2.567185	0.692214	3.708660	0.0003
X5^2	-0.002037	0.003651	-0.558023	0.5779
X1^2	-0.000353	0.000204	-1.726155	0.0870
X6^2	4.00E-05	0.000324	0.123305	0.9021
X10^2	-0.622288	0.680080	-0.915023	0.3621

According to the results of the white heteroscedasticity test with cross product in Table 2, the adjoint probability corresponding to Obs*R-squared is 0.399, which is greater than 0.05. Therefore, at the significance level of 0.05 we cannot reject the hypothesis of homovariance, which means that there is no heteroscedasticity in the model. Additionally, according to the white heteroscedasticity test with cross product in Table 3, the adjoint probability corresponding to Obs*R-squared is 0.1445, which is greater than 0.05. Therefore, at the significance level of 0.05, we cannot reject the hypothesis of homovariance, which means that there is no heteroscedasticity in the model. The results of the white test with or without cross product items cannot reject the hypothesis of the same variance, so the income model does not have heteroscedasticity.

2.5.1.3. Economic Significance Test of the Income Model

The income model established by the stepwise regression method is as follows:

$$Y = -0.021708X_1 + 0.138758X_5 + 0.026662X_6 - 0.627271X_{10} + 2.845396$$

The model shows that under the assumption that other conditions remain unchanged; the annual family income of poor women will decrease by 217.08 yuan after age of 45. As rural poor women are concentrated in the middle-aged and above groups, the health status of these women generally decreases with age and their earning ability decreases. Therefore, with the increase of the age of poor women, the annual income of families will reduce. The annual income of poor women's families will increase by 1387.58 yuan for every additional animal raised. In recent years, the market of animal husbandry has been relatively good, and due to the unique geographical conditions of Inner Mongolia it is suitable for the development of animal husbandry. The benefit estimates obtained from the model are largely consistent with the findings of the investigation. The annual income of poor women's families will increase by 266.62 yuan for every additional sheep raised. The estimated impact of raising a sheep on a family's annual income by the model is consistent with the situation reflected by the investigation of poor women. Under the same conditions, the annual family income of single mothers is 6272.71 yuan less than that of non-single mothers. Because a single mother's family lacks the main labor force, their economic income is greatly reduced. The estimated impact of the model on income is consistent with the actual investigation. The constant term of 28453.96 yuan is the annual fixed income. The fixed income includes the land owned by poor families (each household in Inner Mongolia has more land), the state's agricultural subsidies, the state pension subsidies and the government's poverty subsidies. The basic income estimated by the model is consistent with the actual investigation and the local economic level. In this paper, the independent variables of the income model determined using the stepwise regression method are consistent with the influencing factors of poor women's family income obtained through the field investigation, and the regression coefficient determined by the stepwise regression method is also consistent with the actual local situation. To sum up, the income model obtained by the stepwise regression method is consistent with the theoretical analysis and empirical judgment, and the income model has passed the test of economic significance.

2.6. Expenditure Model Test and Analysis

2.6.1. Solving Expenditure Model by Stepwise Regression

This paper used the stepwise regression method to regress the expenditure model and we used EViews 9.0 to process the data obtained. The dependent variable is followed by the list of always increasing registers box, we entered the list of independent variables that are always included after the dependent variable: $Y\ C$, and entered the independent variables to be searched in the list of search regressors boxes: X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9. The step-by-step method was selected from the options and we set the elimination criterion p-value of < 0.05. Finally, we got the following results:

Table 4. The results of stepwise regression.

Dependent Variable: Y
Method: Stepwise Regression
Sample: 1 120
Included observation: 120
Number of always included regressors: 1
Number of search regressors: 9
Stopping criterion: p-value forwards/backwards = 0.05/0.05

Variable	Coefficient	Std. Error	t-Statistic	Prob*
C	0.821048	0.312732	2.625407	0.0098
X9	0.363768	0.104698	3.474448	0.0007
X5	0.858817	0.299385	2.868601	0.0049
X1	0.515422	0.180685	2.852593	0.0051
R-Squared	0.294648	Mean dependent var		2.382500
Adjusted R-squared	0.276406	S.D. dependent var		1.516501
S.E. of regression	1.290002	Akaike info criterion		3.379928
Sum squared resid	193.0361	Schwarz criterion		3.472845
Log likelihood	-198.7957	Hannan–Quinn criter		3.417663
F-statistic	16.15227	Durbin–Watson stat		1.597105
Prob(F-statistic)	0.000000			

The above result shows that the probabilities corresponding to the t test values of independent variables X_1, X_5 and X_9 are 0.0051, 0.0049 and 0.007, respectively, and are all less than 0.05. Therefore, at the significance level of 0.05, the original hypothesis is rejected. The result shows that X_1, X_5 and X_9 have a significant influence on Y and the independent variables of X_1, X_5 and X_9 are retained. The other independent variables, X_2, X_3, X_4, X_6, X_7 and X_8, failed the t test, and their adjoint probabilities are greater than 0.05, so the original hypothesis could not be rejected. Therefore, the independent variables of X_2, X_3, X_4, X_6, X_7, X_8 were deleted. It can be seen from Table 4 that $R^2 = 0.294648$ and adjusted $R^2 = 0.276406$ in the income model and the fitting effect is good. Moreover, the adjoint probability of the F test is 0.000000. Under the significance level of 0.05, the original hypothesis is rejected indicating that the expenditure regression equation passed the significance test. Therefore, the expenditure regression equation is significant, and among them X_1 is the number of children in school, X_5 is whether they suffer from serious disease, X_9 is the family population and Y is the annual family expenditure of the respondent with the unit of RMB 10000 yuan.

2.6.2. Heteroscedasticity Test of Expenditure Model

Before the heteroscedasticity test, the residual diagram was created to preliminarily diagnose the heteroscedasticity. The residual diagram can directly and simply judge whether there is heteroscedasticity present and can give general information. The residual diagram is as follows:

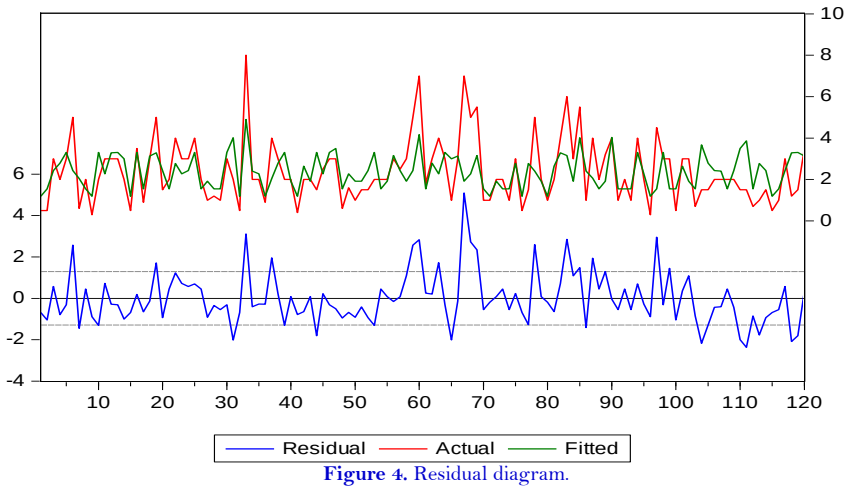

Figure 4. Residual diagram.

The abscissa in Figure 4 is the sample size and the blue line is the residual value. It can be seen from the residual diagram in Figure 4 that the distribution is relatively stable and there may be no heteroscedasticity according to the preliminary judgment, but the heteroscedasticity cannot be accurately judged.

After the preliminary determination from residual diagram that there may be no heteroscedasticity, more accurate verification is needed. Based on the results obtained by stepwise regression, the heteroscedasticity test of the model was carried out. In this paper, the white heteroscedasticity method, with and without cross product term, were used to test for the presence of heteroscedasticity. The test results are shown in the following figure:

Table 5. White test results of heteroscedasticity (including cross product term).

Heteroskedasticity Test: White

F-Statistic	1.490836	Prob.F(8,111)	0.1685
Obs*R-squared	11.64273	Prob.Chi-Square(8)	0.1679
Scaled explained SS	19.81536	Prob.Chi-Square(8)	0.0111

Test Equation
Dependent Variable RESID^2
Method: Least Squares
Sample: 1 120
Included observations: 120
Collinear test regressors dropped from specification

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	0.739856	1.580595	0.468087	0.6406
X9^2	0.032251	0.170781	0.188845	0.8506
X9*X5	-0.183339	0.568294	-0.322614	0.7476
X9*X1	0.288689	0.561002	0.514596	0.6079
X9	0.117831	1.098754	0.107240	0.9148
X5^2	0.750872	0.880373	0.399321	0.6904
X5*X1	2.230870	1.188936	1.876359	0.0632
X1^2	-0.302224	0.841640	-0.359090	0.7202
X1	-0.803705	2.142535	-0.375119	0.7083

Table 6. White test result of heteroscedasticity (excluding cross product term).

Heteroskedasticity Test: White

F-Statistic	2.269738	Prob.F(3,116)	0.0841
Obs*R-squared	6.653456	Prob.Chi-Square(3)	0.0838
Scaled explained SS	11.32385	Prob.Chi-Square(3)	0.0101

Test Equation
Dependent Variable RESID^2
Method: Least Squares
Sample: 1 120
Included observations: 120

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	0.708960	0.466407	1.520048	0.1312
X9^2	0.056709	0.035836	1.582468	0.1163
X5^2	1.123230	0.706865	1.589030	0.1148
X1^2	0.044666	0.219075	0.203882	0.8388

According to the results of the white heteroscedasticity test with cross product in Table 5, the adjoint probability corresponding to Obs*R-squared is 0.1679, which is greater than 0.05. Therefore, at the significance level of 0.05 we cannot reject the hypothesis of homovariance, which means that there is no heteroscedasticity in the model. According to the results of the test without cross product in Table 6, the adjoint probability corresponding to Obs*R-squared is 0.0838, which is greater than 0.05. Therefore, at the significance level of 0.05 we cannot reject the hypothesis of homovariance, which means that there is no heteroscedasticity in the model. The results of the white test with or without cross product items cannot reject the hypothesis of the same variance, so the expenditure model does not have heteroscedasticity.

2.6.3. Economic Significance Test of Expenditure Model

The final expenditure model established by stepwise regression method is as follows:

$$Y = 0.515422X_1 + 0.858817X_5 + 0.363768X_9 + 0.821048$$

The model shows that under the assumption that other conditions remain unchanged, each child in school will increase the average annual expenditure of families by RMB 5154.22 yuan. There is no distinction between grades of children in school. Of course, students in high school and university spend more money than those in primary school and junior high school; this study mainly refers to the average annual expenditure of a poor woman's family for a child at any stage of schooling. At the same time, the family expenditure here is also under the premise of obtaining certain government education subsidies, otherwise the annual cost of sending a child to school at the current economic level would be more. For example, in the Inner Mongolia Autonomous Region, children from poor families are given different subsidies according to their different stages of schooling. A primary school student gets RMB 1800 yuan per academic year, a junior middle school student gets 2000 yuan per year, a senior high school student gets RMB 2400 yuan per year and a university student gets RMB 10000 yuan per year (including current and newly enrolled junior college students and undergraduates). To a certain extent, this will reduce the economic burden of poor women's families and prevent students from dropping out of school due to poverty. Under the same conditions, a poor woman suffering from a serious disease will increase her family's annual expenditure by RMB 8588.17 yuan on average; this is based on the preferential policy of 90% reimbursement for hospitalization for poor families. Poor women with serious diseases are often hospitalized and they spend a lot of money in hospital, even if they only bear 10% of their own expenses, this is not a small expense for poor families. At the same time, the nursing and living expenses incurred during hospitalization are not small. In addition, patients with major diseases need to take medication all year round, and the cost of medicine cannot be reimbursed. Finally, the annual expenditure of patients with serious illnesses is consistent with the actual investigation. Under the same conditions,

with the increase of the population of poor women's families, the annual family expenditure will increase by RMB 3637.68 yuan. The impact of population on the annual expenditure of poor women's families mainly refers to the basic living expenses of the parents supported by the respondents and the non-school children who are not separated. Finally, the population impact on expenditure estimated by the model is consistent with the actual investigation. The constant of RMB 8210.48 yuan is the basic living expenses of poor women every year. The basic living expenditure estimated by the model is consistent with the actual investigation and local economic situation. In this paper, the independent variables of the expenditure model determined by the stepwise regression method are consistent with the influencing factors of poor women's families' expenditure obtained from the field investigation. The regression coefficient determined by the stepwise regression method is also consistent with the local actual situation. To sum up, the expenditure model obtained by the stepwise regression method is consistent with theoretical analysis and empirical judgment, and the expenditure model has passed the test of economic significance.

3. CONCLUSION AND POLICY RECOMMENDATIONS

3.1. Main Conclusions

In this paper, based on a large number of literature reviews, we purposefully investigated and visited poor rural women in typical poverty-stricken areas of Northeast China. We understand the poverty situation of local poor women and we also obtained the most authentic and effective survey data. This paper mainly studied the influencing factors of rural women's poverty in Northeast China from two aspects, annual family income and annual expenditure. This paper used the data from questionnaire surveys on 120 poor women randomly selected from two typical impoverished counties in the Inner Mongolia Autonomous Region. We chose the stepwise regression method to conduct multiple linear regression analyses, carried out the corresponding empirical tests and established the income and expenditure models of poor women. Therefore, we have determined that the main influencing factors of rural women's poverty in Northeast China are illness, education level, lack of labor force, large family population and few cattle and sheep. The specific conclusions are as follows:

3.1.1. Poverty Due to Age

With increasing age of poor rural women in Northeast China, their working ability and physical condition become worse, so their annual income decreases. The poverty level of rural women in Northeast China is becoming worse, and after middle age, the annual family income of poor women will decrease by 217.08 yuan annually.

3.1.2. Poverty Due to the Lack of Livestock

Poor women's families in Inner Mongolia can raise cattle and sheep to increase their annual income. Because most of the poor women are older and have less physical strength, they cannot carry out heavy agricultural work. However, they can raise cattle and sheep, which does not need too much physical labor, and the benefits of increasing income are obvious. The annual income of a poor woman's family will increase by 1387.58 yuan for every additional cow raised, and by 266.62 yuan for every additional sheep raised, meaning that poor women in Northeast China can raise livestock through their own efforts, reduce poverty and become better off.

3.1.3. Poverty Due to the Lack of Labor

Mothers of single-parent families are more likely to fall into poverty due to lack of labor force. The average annual family income of a single mother is RMB 6272.71 yuan less than that of a non-single mother. In rural areas, the main source of household income is farming and breeding. In recent years, many farmers have come to work in cities, but they all rely on strong labor support. Families with single mothers have low incomes due to the lack of labor force and are, therefore, more likely to fall into poverty.

3.1.4. Poverty Due to Illness

One of the main causes of women's poverty is illness. According to the data obtained from field investigations and visits, 40.3% of local women suffer from poverty due to illness. Poor women with serious diseases spend a large proportion of their family's annual expenditure on medical treatment. Under the same conditions, poor women suffering from serious diseases will increase their family's annual expenditure by RMB 8588.17 yuan on average. At the same time, women suffering from serious diseases often lose their ability to work and they generally need to be taken care of, which has undoubtedly placed a great economic burden on their families.

3.1.5. Poverty Due to Children's Schooling

Another major reason for women's poverty is that their children go to school. According to the data obtained from the field investigation and interviews, the proportion of local women who are poor due to schooling accounts for 30.8%. A child in school will increase the annual expenditure of a family by RMB 5154.22 yuan. Nowadays, families (including poor families) in rural areas are paying more attention to the education of their children. In the current economic environment, even for a rural family, it costs a lot to train a college student. According to the investigation and survey, the minimum annual cost of a local junior high school student is RMB 10000 yuan, and the minimum annual cost of a senior high school student is RMB 20000 yuan. Because of the heavy cost of making up lessons in today's society, most of the students' annual expenses are spent on tuition. Although the local government provides certain subsidies for the education of children from poor families every year, the amount of education subsidies is still insufficient for a student in school.

3.1.6. Poverty Due to the Large Number of Family Members

Another reason for women's poverty is the large number of family members. A larger family population refers to the elderly who need to be supported and children who do not go to school. As these two groups are unable to work, they need basic living expenses every year. Under the same conditions, with the number in a poor woman's family increasing by one person, her annual family expenditure will increase by RMB 3637.68 yuan.

This paper concludes with the influencing factors of rural women's poverty in Northeast China, which are slightly different from previous studies on women's poverty factors. Based on the study of gender differences in relative poverty between men and women in eight industrialized countries, such as the United States and Canada, it was found that the gap between poverty rates of men and women varies with national, religious, cultural and government policies (Casper, Mclanahan, & Garfinkel, 1994). Through the research, it was found that married women in rural China are the most vulnerable to time poverty. When the regional economic structure changes greatly and brings more employment opportunities, married women are more affected by the marginal impact and do not easily adapt to new jobs, while men are not affected and they can easily adapt to new jobs (Chang, 2010). The lack of understanding and low evaluation of women's roles in the family is the main factors leading to general low status and welfare. In the process of helping the poor to reduce poverty, we must pay attention to the important group of poor women (Jain & Banerjee, 2011). Most of the poor rural women in China are older and most of them have low education levels and poor physical conditions meaning that they can easily fall into poverty (Zhang, 2013).

3.1.7. Policy Recommendations

In this paper, through field investigations and visits, we know that the poverty-causing factors of women in Northeast China are basically the same as the empirical test. On the basis of determining the influencing factors of women's poverty in Northeast China, we put forward some policy suggestions. We hope to contribute to the country's process of poverty alleviation and provide some help for poor women. The specific suggestions are as follows:

3.1.8. Increase the Employment Opportunities of Poor Rural Women

Poverty alleviation must first support the will of people to escape poverty. Only by encouraging poor women to depend on and develop themselves can we fundamentally solve the problem of poverty. We should provide employment opportunities for women from poor rural families and this requires the local government to implement preferential policies to attract investment, which will increase employment opportunities. At the same time, local leading enterprises should be mobilized to provide certain employment opportunities for poor women, so that regional economic development can be coordinated and sustainable. At the same time, we need to provide some financial support for poor women who have business ideas and are willing to put in the effort and hard work. According to the investigation and survey, preferential policies for women's micro loans have been cancelled in some places, which is extremely unfavorable for poor women who want to escape poverty and earn a living. The local government should not only reinstate women's micro loans, but also expand the scope of these loans. Of course, in order to avoid the problem of bad debts, we can strengthen the supervision of fund issuance.

3.1.9. Strengthening Industrial Poverty Alleviation

The main method of poverty alleviation in the Inner Mongolia Autonomous Region is to provide financial subsidies for poor families to buy livestock. According to the investigation and survey, the industrial poverty alleviation policies of different impoverished counties in Inner Mongolia are slightly different. One of the two poverty-stricken counties surveyed has a better poverty alleviation policy. The county subsidizes a poor woman's family at a standard rate of RMB 10000 yuan per person to buy cows, sheep or donkeys. Poor women's families can choose which kind of livestock they want to rear and the purchased livestock can only be used for breeding and cannot be sold. By selling newborn calves, sheep or donkeys every year, poor households can increase their income, escape poverty and earn a living. The other county's industrial poverty alleviation efforts are significantly inferior. The conclusion of the model is that raising one more animal will increase a family's annual income by RMB 1387.58 yuan and raising one more sheep will increase a family's annual income by RMB 266.62 yuan. The effect of increasing income is remarkable, so China should strengthen industrial poverty alleviation efforts in poverty-stricken areas that are suitable for animal husbandry. We should take the first county's industrial poverty alleviation efforts as an example and encourage poor local women's families to raise cattle and sheep. Only in this way can we effectively help poor women's families to increase their income and finally bring them out of poverty completely.

3.1.10. Increase Cash Transfer Subsidies

For the mothers of single parent families and families with a large population, the government should give certain financial subsidies to these two types of families to ensure a minimum living standard. The cash transfer subsidy program in South America is very effective and is worth learning from. The main poverty alleviation policy of South American countries is the conditional cash transfer (CCT). The most typical of these is in Brazil where the cash transfer plan emphasizes the role of women who are the direct beneficiaries of the plan or have the role of family supervisor. The cash transfer plan requires housewives not only to fulfill their own obligations, but also to supervise and urge their children to complete the corresponding tasks. Our country should actively learn from the conditional cash transfer policy of Brazil and other countries and give the most direct financial assistance to the mothers of single parent families and families with a large population.

3.1.11. Increase Education to Help the Poor

For poor families, the cost of training a college student is still very high. Although the state gives certain subsidies to the children of poor women's families at different stages, the poverty alleviation efforts are insufficient

under the current economic conditions. According to the expenditure model, even under the premise of receiving the national education subsidy, the average annual expenditure of a poor woman's family for a child in school is RMB 5154.22 yuan. The state should increase education to help the poor to reduce the educational burden of poor women's families, and consequently, the incidence of poverty caused by sending children to school will be reduced.

3.1.12. Increase Medical Poverty Alleviation

For the women who are poor due to serious illness, the average annual expenditure on medical treatment is RMB 8588.17 yuan. Women who suffer from serious diseases often lose their ability to work and in general need to be taken care of. For this reason, the state should further increase their hospitalization reimbursement rate on the basis of 90% of the original hospitalization reimbursement for poverty-stricken women who are seriously ill and provide subsidies for each hospitalization according to a certain standard per day. In addition, our country can provide a certain proportion of reimbursement for their daily medication to reduce the economic burden of poor women's medical treatment to a great extent. This, in turn, will reduce the incidence of poverty caused by serious disease. Increasing medical poverty alleviation not only reduces the incidence of poverty caused by serious diseases, but also provides a strong guarantee for the establishment of a long-term poverty alleviation mechanism.

Funding: This study received no specific financial support.
Competing Interests: The authors declare that they have no competing interests.
Acknowledgement: Both authors contributed equally to the conception and design of the study.

REFERENCES

Atteraya, M. S., Murugan, V., & Pandey, S. (2016). Intersection of caste/ethnic affiliation and poverty among married women in intimate partner violence: The Case of Nepal. *Global Social Welfare, 14*(4), 81-90.

Cai, S. (2016). Survey and reflection on rural women's poverty from the perspective of targeted poverty alleviation *Social Science Journal, 31*(2), 81-84.

Case, A., & Deaton, A. (2015). Consumption, health, gender, and poverty. *Angus Deaton, 04*, 63-68.

Casper, L. M., Mclanahan, S. S., & Garfinkel, I. (1994). The gender-poverty gap: What we can learn from other countries. *American Sociological Review, 59*(4), 594-605.

Chang, H. (2010). Gender differences in time poverty in rural China. *Journal of Shanxi University of Finance and Economics, 32*(2), 9-14.

Colom, A., & Colom, M. (2018). Poverty, local perceptions, and access to services: Understanding obstetric choices for rural and indigenous women in guatemala in the twenty-first century. *Maternal Death and Pregnancy-Related Morbidity Among Indigenous Women of Mexico and Central America, 30*(1), 617-633.

Goswami, R., & Majumdar, S. (2015). Construction of gender sensitive poverty line based on local perception: Evidence from Rural India. *Social ence Electronic Publishing. The Social ence Journal, 54*(1), 76-92.

Gulibusitan, A. (2020). An analysis of the causes of rural women's poverty and the way out of poverty -- Taking y village of S County as an example. *Shanxi Agricultural Economy, 01*, 32-33.

Hasyeti, A. (2016). The role of rural women should be brought into full play in poverty alleviation. *New Silk Road, 10*, 15-23.

Hübgen, S. (2018). Only a husband away from poverty'? Lone mothers' poverty risks in a European comparison. In Lone parenthood in the life course (pp. 167-189). Cham: Springer.

Jain, D., & Banerjee, N. (2011). Women in poverty - tyranny of the household : Investigative Essays on women's work.

Liang, W. (2018). Research on rural women's poverty alleviation path from the perspective of targeted poverty alleviation. *Reform and Strategy, 34*(5), 67-72.

Munoz Boudet, A. M., Buitrago, P., & Benedicte, L. D. L. B. (2018). Gender differences in poverty and household composition through the life-cycle: A global perspective. *Policy Research Working Paper, 15*(3), 20-29.

Nie, C., & Wang, L. (2019). Policy research on poverty alleviation of poor women in China. *Journal of Chinese Academy of Sciences*, *34*(1), 51-59.

Wang, T., Luo, R., Zhang, L., Liu, C., & Sun, W. (2018). Parenting quality of poor rural families and early childhood development. *Preschool Education Research*, *31*(07), 13-25.

Xu, Y. (2017). The key to stop the intergenerational transmission of poverty is to teach people to fish. *People's Forum*, *30*(2), 64-65.

Zhang, S. (2013). Research on poverty of rural elderly women. *Modern Communication*, *30*(2), 16-17.

Zhang, C. (2016). The key to poverty alleviation is women's poverty alleviation. *Yunnan CPPCC News*, *16*(7), 004.

Zhang, B. (2018). Empirical analysis of poverty groups from a multi-dimensional perspective -- Based on poor children and migrant women. *Economic Issues*, *30*(6), 64-69.

Zhao, Q., & Cai, Q. (2020). Targeted poverty alleviation through education blocks intergenerational transmission of poverty. *China Social Sciences Journal*, *29*(8), 30-33.