MDPI

Article

How Did the Comprehensive Commercial Logging Ban Policy Affect the Life Satisfaction of Residents in National Forest Areas? A Case Study in Northeast China and Inner Mongolia

Yapei Liu, Rong Zhao and Shaozhi Chen *

Research Institute of Forestry Policy and Information, Chinese Academy of Forestry, Beijing 100091, China
* Correspondence: szchen@caf.ac.cn; Tel.: +86-1360-122-3163

Abstract: To protect the forest ecological environment, China implemented the Comprehensive Commercial Logging Ban Policy (CCLBP), yet it has a major impact on forest residents. Therefore, this study aimed to evaluate the CCLBP from the perspective of the satisfaction of residents. In this study, we used 242 questionnaires from residents in national forest areas in Northeast China and Inner Mongolia to evaluate satisfaction and its influencing factors by factor analysis combined with the entropy method and multiple linear regression, respectively. The results show that: (1) the overall policy satisfaction of residents in national forest areas is 60.9, which is lower than the theoretical neutral value of policy satisfaction. Increasing employment opportunities, transferring surplus employees and developing forest economy are important to improve the satisfaction of residents. (2) Life satisfaction was higher in the high-income group than in the low-income group. Increasing wage income can improve the satisfaction of residents in national forest areas. (3) The satisfaction of the worker group was significantly higher than that of the forest farmer group. Improving job stability and policy equity are important to promote life satisfaction of residents in national forest areas. (4) The satisfaction of the Yichun Forest Industry Group was significantly higher than the Inner Mongolia Forest Group. Natural resource endowment and adaptability to the CCLBP are the main factors affecting the satisfaction of different forest industry groups. At the same time, focusing on the institutional supply of external support policies in order to provide them access to information, employment advice and other services is very significant. This research provides a new approach to studying the CCLBP, which is of great practical significance for raising the wellbeing index of national forest areas.

Keywords: satisfaction evaluation; factor analysis; multiple linear regression; Natural Forest Protection Program (NFPP)

1. Introduction

Climate change causes rising temperatures and extreme drought to become a serious challenge for mankind [1,2]. Forests play a significant role in releasing oxygen, maintaining the ecological environment and protecting biodiversity [3], which have been viewed as a key solution to environmental degradation in the context of tireless efforts to combat climate change [4]. Natural forests are the main body of forest resources. Therefore, protecting natural forest resources is of special significance. Since the promulgation of the Convention on Biological Diversity in 1992, the international community has paid attention to the protection of natural forests [5]. Developed forestry countries have taken different measures to protect natural forests according to their own forest resources. For example, Germany develops close-to-nature management [6,7]. Australia and New Zealand implement classified management [8]. The United States and Canada establish national parks and nature reserves [9]. Russia adopts the three-level management system [10]. In a word, the protection policies of these developed countries focus on the combination of natural forest protection and management and utilization so as to promote the simultaneous

improvement in ecological and economic benefits of natural forests. Similarly, China has introduced corresponding policies on the protection of natural forests. However, unlike those countries, China implemented the Comprehensive Commercial Logging Ban Policy (CCLBP) to prohibit commercial logging of natural forests so as to comprehensively and strictly protect natural forests.

The CCLBP is the further protection work of the Natural Forest Protection Program (NFPP). In the process of natural forest protection, China has experienced the first phase of the NFPP to the second phase of the NFPP and then the CCLBP. In different periods, due to the different status of China's forest resources, its natural forest protection measures are different. Before the first phase of the NFPP, China's high-speed economic growth intensified the demand for wood, and China's forestry policy focused on expanding wood production, which led to excessive consumption of forest resources. Generally, most natural forests have been severely cut down and degraded [11], resulting in serious environmental problems, such as floods, soil erosion, loss of wildlife habitat, etc. From the strategic perspective of social and economic sustainable development in China, the Chinese government made a major decision to implement the NFPP [12]. The first phase of the NFPP was started in 2000. Through the government's mandatory promotion of the NFPP, the excessive consumption of forest resources was effectively curbed in a short time [13]. However, because of the lagging development of alternative industries, the limited absorption capacity of surplus workers belonged to the forest industry, and the insufficient support from local governments caused issues for the economic development in the region of the NFPP [14]. When the first phase of the NFPP ended, the above problems still existed. Therefore, the Chinese government decided to continue to organize and implement the second phase of the NFPP. The second phase of the NFPP was started in 2011, which generally revolved around the national policy of "resource protection and economic construction". With the development of Xi Jinping's ideology of ecological civilization, the government attached importance to the ecological function of natural forests. During this stage, the government introduced the CCLBP and greatly increased various insurance subsidy standards of national forest areas, which aimed to speed up the improvement in natural forest resources and people's livelihood [15]. In 2014, in order to further restore forest resources, build a complete forest ecosystem and ensure the ecological security of the country, General Secretary Xi Jinping provided an important instruction to "study the expansion of the scope of the natural forest protection project to the whole country, and strive to protect all natural forests" [16,17]. In April 2014, the government proposed a three-step strategy to completely stop commercial logging in natural forests. The first step is to expand pilot programs to stop commercial logging of natural forests in Northeast China and Inner Mongolia in the same month in 2014, which includes four provinces: Heilongjiang, Liaoning, Jilin and Inner Mongolia. Second, on the basis of experience gained from the pilot programs, stop commercial logging of natural forests in Northeast China and Inner Mongolia and other national forest areas from April 2015. The third step is to completely stop commercial logging in all natural forests from 2016 [18]. Specifically, from the first phase of the NFPP to the present, commercial logging was completely banned in the upper and middle reaches of the Yellow River and the upper reaches of the Yangtze River. Similarly, at the beginning of the first phase of the NFPP, timber production in Northeast China and Inner Mongolia was dramatically reduced, and commercial logging was completely banned until 2014. In 2017, the CCLBP was achieved nationwide, which aims to control the progress of human exploitation and claim on forest resources [19,20]. In 2019, the Central Committee of the Communist Party of China translated the decision on the comprehensive protection of natural forests into a legal system, providing a strict legal guarantee for the establishment of a long-term mechanism for the protection and restoration of natural forests. In a word, the implementation of the CCLBP also marked a new stage in the development of national forest areas from exploitation to comprehensive protection. Meanwhile, the development of national forest areas faced a series of new challenges [21,22]. The CCLBP had a negative impact on timber enterprises and forestry farmers in the short term. The basic production and livelihood of

national forest areas were affected by the negative externalities of increasing the cost of social reform [23]. There is no denying that the natural forests have been fully protected by the CCLBP, in fact, which still had some problems, such as low quantity and poor quality [24].

Thus far, the CCLBP has been carried out for more than eight years in Northeast China and Inner Mongolia and effects have gradually appeared. Life satisfaction of residents in national forest areas is one of the important indicators reflecting the effects of the CCLBP [25]. Since forest residents rely on natural forest resources for their livelihood, the CCLBP of natural forests can protect and restore the ecological environment in national forest areas while inevitably having a serious impact on the livelihood of forest residents. Then, what is the life satisfaction status of residents in national forest areas with the background of the CCLBP? Few studies have evaluated the effects of the CCLBP from the perspective of life satisfaction of residents in national forest areas. The existing studies focused on the impact of the CCLBP on the forest industry groups, the wood processing enterprises, the livelihood of national forest areas, and the life satisfaction of rural farmers. In terms of the impact on the forest industry groups, the CCLBP caused the forest industry group to face a lack of sources and other problems as a result of the lack of funds [26,27]. The production operation of forestry enterprises would be directly impacted. Meanwhile, the main business income would be significantly less, and fixed assets would face a significant amount of idleness [28]. Then, in terms of the wood processing enterprises, the implementation of the CCLBP would cause forest processing enterprises to face development difficulties due to the lack of raw material sources [29–31]. Forest industry groups should rely on existing resources to solve the employment and livelihood protection of workers, such as agroforestry management and tourism industry. For the study of the impact on the livelihood of national forest areas, most scholars [32–35] believed that the CCLBP had a negative influence on forest zone workers. The CCLBP would have an impact on the fundamental productivity and livelihood in national forest areas within a certain period of time, mostly through job losses and an increase in excess labor. If surplus labor is not relocated quickly and safely, it would lead to issues such as population emigration and difficulty in one's fundamental means of subsistence [36]. Additionally, the life satisfaction of rural older adults and landless farmers in the process of urbanization was a major concern in the research of farmers' life satisfaction [37–41]. At present, these studies have provided important ideas for this paper. In light of the CCLBP, the goal of this paper is to examine how residents' life satisfaction is affected by elements in national forest areas, which has a significant role in grasping the real situation of life satisfaction of residents and focusing on the subjective quality of residents. On the one hand, it is conducive to strengthening the natural forest protection, improving the ecological environment and realizing the sustainable development goal of natural forest. On the other hand, it is conducive to the construction of ecological civilization, the harmonious coexistence of humans and nature and the maintenance of social stability in the forest areas.

Due to the multiple constraints of management system, ecological status and economic development in national forest areas, safeguards and social equity affected the changes in life satisfaction of residents after implementing the CCLBP. However, existing studies focused on the measurement of material factors and neglected the measurement of non-material factors (equity and freedom) [42]. In view of this, based on the survey data of life satisfaction of residents in national forest areas, this paper constructs a theoretical model with the framework of capability approach and carries out an empirical analysis. By studying the heterogeneity of the CCLBP on life satisfaction and evaluating its impact on life satisfaction of residents, this paper deepens the research on the effects of the CCLBP. It is of reference and guiding significance to the improvement in life satisfaction of other forest residents and even the life satisfaction of other public residents. At the same time, it is beneficial to coordinate the dual goals of ecological protection and economic development and promote the sustainable management of natural forest resources.

2. Materials and Methods

2.1. Study Area

The national forest areas in Northeast China and Inner Mongolia are a unique geographical location (Figure 1) [43], which have an extremely important strategic position in the overall layout of China's ecological construction and forest resources cultivation [44]. National forest areas have completely stopped commercial forest harvesting since 1 April 2015. By the end of 2015, national forest areas had stopped at 3.902 million cubic meters of wood [45].
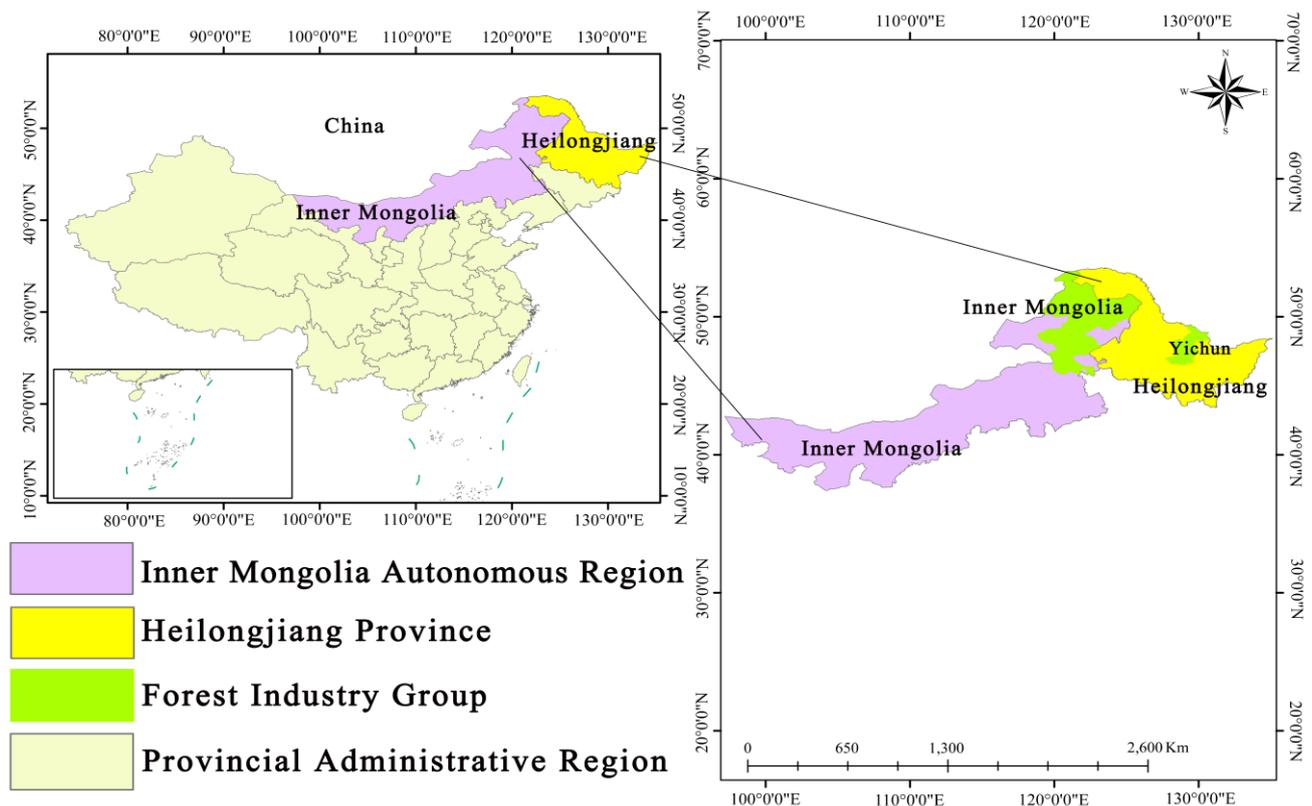

Figure 1. Location of the study area.

The research site was chosen using a method that combines typical sampling and random sampling. Eventually, the Inner Mongolia Forest Industry Group and the Yichun Forest Industry Group were chosen through typical sampling from national forest areas in Northeast China and Inner Mongolia, which are entrusted by the National Forestry and Grassland Administration to undertake the management and protection of forest resources in national forest areas.

The Inner Mongolia Forest Industry Group covers a total area of 106,700 square kilometers, which is the largest centralized contiguous national forest area in China. It plays an irreplaceable role in safeguarding national ecological security and timber security. Since the industry group stopped commercial logging, the actual consumption of forest volume was 1.394 million cubic meters. By the end of 2021, the group reduced the consumption of forest volume by a total of 12.739 million cubic meters, making a great contribution to the ecological construction of forest areas.

The Yichun Forest Industry Group is situated in the Lesser Khingan Mountains forest area. It has 3,068,700 hectares of forested land, 336 million cubic meters of living trees and an 87.61% forest coverage rate. In 2011, the industry group reduced timber production by 1 million cubic meters. It took the lead in implementing the CCLBP in 2013, which was 2 years earlier than the country. Therefore, forest resources were effectively protected.

2.2. Data Sources

The data came from the field research in the Inner Mongolia Forest Industry Group and Yichun Forest Industry Group in September 2022, mainly by questionnaire survey method to collect information. With the assistance of Yichun Forest Industry and Inner Mongolia Forest Industry, and with the permission of the interviewees, we conducted one-on-one and face-to-face interviews. Three forest bureaus were randomly chosen from two organizations representing the forest industry group. Then, three forest farms were chosen from the three forest bureaus. Finally, 15 forestry residents were selected as samples by random sampling, obtaining a total of 270 samples. After the missing data were collected using the manual filling method and the regression filling method, data entry was completed on the recovered questionnaires. On the whole, 242 valid questionnaires were ultimately obtained—121 for both the Inner Mongolia Forest Group and Yichun Forest Group. The contents of the survey covered marital status, age, occupation type and education level, etc. The basic characteristics of sample data are shown in Table 1.

Table 1. Basic characteristics of data.

Index	Classification	Frequency	Percent (%)	Index	Classification	Frequency	Percent (%)
Distribute	Yichun	121	50	sex	Male	202	83.47
	Inner Mongolia	121	50		Female	40	16.53
Marriage	Unmarried	61	25.21	Type of occupation	worker	171	70.66
	Married	181	74.79		farmer	71	29.34
age	≤35	48	19.83	Education	Primary school	3	1.23
					Junior school	83	34.30
	36–55	114	47.11		High school	89	36.78
	≥56	80	33.06		College	67	27.69

2.3. Variable Setting

The dependent variable was life satisfaction, which was measured by a subjective index [46–48]. Studies have shown that subjective index can reflect the respondents' real preferences, and the answers of different respondents are comparable [49]. The capability approach proposed by Nobel-Prize-winning economist Amartya Sen is an important basic theory of satisfaction research. Amartya Sen proposed five types of instrumental freedom: political freedom, economic conditions, transparency guarantees, protective guarantees and social opportunities [50]. Although the framework of the capability approach has laid a good foundation for the study of life satisfaction, it did not point out which dimensions should be quantified. In actual research, most scholars usually select indexes according to the research purpose and sample characteristics. The CCLBP is a "top-down" significant ecological system layout for the national forest areas. The workers in national forest areas are both the micro-welfare losers and the direct beneficiaries of the CCLBP. On one hand, workers of national forest areas enjoy the benefits of a better ecological environment [51]. On the other hand, the livelihoods of residents would be impacted by the implementation of the CCLBP, which is why they want higher incomes and a fairer employment environment. Therefore, this paper divides the influencing variables of life satisfaction of the CCLBP in national forest areas into personal qualities, economic situations, ecological environment and social equality. It does so based on the results of the existing research and capability methodologies [52,53].

As listed in Table 2, in terms of personal characteristics factors, individual ability is influenced by personal characteristics, such as age, education level, marriage and occupation [54]. In terms of economic condition factors, the willingness and behavior of rational economic people are often based on certain choices and resource constraints [44], which are usually reflected in two dimensions of personal income and expenditure. In terms of protective guarantee factors, basic livelihood protection is an important content to test the merits of policy implementation. Since the implementation of the CCLBP, the

forestry farmers in forest areas have engaged in picking forest fruits, planting industrial crop and other works to maintain their basic livelihood. In contrast to farmers, the workers in national forest areas rely on the forest bureau's salary as their primary source of income. In terms of ecological environment factors, with the basic satisfaction of family housing of residents, the surrounding ecological environment gradually became an indicator to measure the satisfaction level of forest residents [55]. In a word, the change in ecological service function affects the satisfaction level and has an important impact on the daily life of residents in national forest areas [56–59]. In terms of social equity factors, social equity is a relative concept, which is an individual subjective judgment on the degree of welfare in a certain aspect. Moreover, it focuses on whether they can obtain the same opportunity for future development. The feasible ability of the workers is derived from the subject itself as well as the degree of external policy fairness, which constitutes an important consideration for the satisfaction of residents in national forest areas following the CCLBP. Under the favorable policy, workers in national forest areas adhere to the inhabitants' employment support policy in order to increase their income [60].

Table 2. Variable definitions and descriptive statistics.

Variable	Variable Name	Variable Definition	Mean	Standard Deviation
Life satisfaction	Life satisfaction	Continuous Variables	3.83	0.593
	Sex	female = 0, Male = 1	0.83	0.372
	Age	≤35 = 1; 36–55 = 2; >56 = 3	2.13	0.715
Personal Features	Education	Primary school = 1, junior school = 2, high school and polytechnic school = 3, college = 4	1.92	0.793
	Marriage	Unmarried and other = 0, married = 1	0.75	0.435
	occupation	Worker = 1 Farmer = 2	1.29	0.456
	Area	Yichun = 1; Inner Mongolia = 2	1.52	0.5
Economic condition	Personal income	"<CNY 46400 annual = 0"; "≥CNY 46400 annual = 1"	1.5	0.501
	Personal expenditure	Actual expenditure	42,437.29	31,981.187
Ecological condition	Change in ecology	Very dissatisfied = 1, less satisfied = 2, middle = 3, relatively satisfied = 4, very satisfied = 5	4.52	0.639
	Ecological services	Very dissatisfied = 1, less satisfied = 2, middle = 3, relatively satisfied = 4, very satisfied = 5	3.56	1.201
Protective protection	Support policy	Very dissatisfied = 1, less satisfied = 2, middle = 3, relatively satisfied = 4, very satisfied = 5	3.87	1.173
	Security of life	Very dissatisfied = 1, less satisfied = 2, middle = 3, relatively satisfied = 4, very satisfied = 5	3.30	1.154
Social equity	Policy fairness	Very unfair = 1, less unfair = 2, middle = 3, fairer = 4, very fair = 5	3.60	1.305
	Employment	Very dissatisfied = 1, less satisfied = 2, middle = 3, relatively satisfied = 4, very satisfied = 5	2.69	1.191

2.4. Research Methodology

The main purpose of this paper is to measure the influencing factors of residents' satisfaction in national forest areas. Multiple linear regression and group regression were used to measure the influencing factors of life satisfaction of different types of people. The CCLBP affects life satisfaction, and life satisfaction is also a reflection of the CCLBP. On the basis of the framework of the capability from Amartya Sen, the policy satisfaction is also selected to directly reflect the policy implementation. This paper uses factor analysis and the entropy method to measure the policy satisfaction score. On this basis, a new variable policy implementation situation is generated, and the influence on the dependent variable life satisfaction is observed together with other potential influencing factors.

2.4.1. Effect Evaluation of the CCLBP

Factor Analysis

The policy satisfaction model for residents is a true reflection of the effect of the CCLBP in sample areas. It is of great significance in further proposing improvement plans for the CCLBP. As the audience of the CCLBP, residents' intuitive feelings and evaluation are the most direct way to measure the feasibility and effectiveness of the CCLBP. In this paper, factor analysis was selected to analyze several variables that reflect the satisfaction of residents with different aspects of the CCLBP, assuming that the satisfaction of residents with the policy is X, $X = (X_1, X_2, \ldots \ldots, X_p)$. The measured variable X_p is represented by the public factor of satisfaction, which is modeled as:

$$X_i = \alpha_{ij}F_1 + \alpha_{i2}F_2 + \ldots + \alpha_{im}F_m + \varepsilon_i \tag{1}$$

In Formula (1), X_i represents the original variable ($i = 1, 2, \ldots, p$). F_1 represents the common factor ($j = 1, 2, \ldots, m$). α_{ij} represents the correlation coefficient between the ith variable X_i and the jth common factor F_j, i.e., the factor loadings in the model. ε_i is the special factor corresponding to the original variable X_i. The factor analysis model is reflected in the matrix as $X = AF + E$, where $F = (F_1, F_2, \ldots, F_m)$ is the common factor of p observations and $m \leq p$, and A represents the factor loading matrix.

Entropy Method

Entropy method is an objective weighting method that can avoid the interference of human factors and make the evaluation results more realistic [61]. The steps of using entropy method to evaluate the policy satisfaction of the CCLBP are as follows. The first step is to standardize the satisfaction index of the CCLBP by using the min–max standardization method. The calculation formula is as follows:

$$y_{ij} = \frac{x_{ij} - x_{jmin}}{x_{jmax} - x_{jmin}} \tag{2}$$

In Formula (2), y_{ij} represents the standardized value of the jth index of ith evaluation objects, x_{ij} represents the original value of the jth index of ith evaluation objects, x_{jmin} represents the minimum value of the jth index and x_{jmax} represents the maximum value of the jth index.

The second step is to calculate the entropy e_j of each index with the following formula:

$$e_j = -\frac{1}{\ln(m)} \sum_{i=1}^{m} p_{ij}\ln(p_{ij}) \tag{3}$$

In Formula (3), p_{ij} is the characteristic proportion of the jth index of the ith evaluation object. $p_{ij} = \frac{y_{ij}}{\sum_{i=1}^{m} y_{ij}}, 0 \leq p_{ij} \leq 1$.

The third step is to calculate the difference coefficient d_j of the index. According to the concept of entropy, the greater the difference between the jth index values of all evaluated objects, the greater the information reflected by the index and the smaller the corresponding entropy value. Therefore, the difference coefficient d_j of the jth index is defined as:

$$d_j = 1 - e_j \tag{4}$$

The fourth step is to determine the entropy weight w_j of the index. The entropy weight w_j of the jth index is calculated by the following formula:

$$w_j = \frac{d_j}{\sum_{i=1}^{m} d_k} \tag{5}$$

The final step is to calculate the comprehensive evaluation value. According to the weight coefficient of each index obtained above, the comprehensive evaluation value of the policy satisfaction of the CCLBP is calculated by using the standardized value of the original index data:

$$s_i = \sum_{j=1}^{n} y_{ij} w_j \tag{6}$$

With reference to relevant satisfaction theoretical models, this paper uses five dimensions to measure the satisfaction level of residents in national forest areas, namely the five criteria of very satisfied, satisfied, average, relatively dissatisfied and very dissatisfied to reflect the satisfaction level of the CCLBP. After repeated screening and extraction of common factors, a total of six indicators in three categories were selected to measure and evaluate the satisfaction of residents. The six indicators are satisfaction with the channels of policy dissemination, the effectiveness of policy dissemination, the distribution of subsidies, economic income, life and the surrounding ecological environment. This paper begins with a factor analysis of several satisfaction indicators and clustering of variables on satisfaction indicators using a loading matrix. Assuming that the common factors for satisfaction are F_1, F_2, ... , F_m, variables with larger factor loading data on F_i can be aggregated into the same class of variables. Second, the final six tertiary indicators determined by the factor analysis were measured using the entropy method to determine their weights in each group. Because the six item indicators were under three dimensions, the entropy method analysis was repeated three times. Then, the scores of the secondary and primary indicators were extrapolated according to the weights and scores of the tertiary indicators. In this way, each dimension and final satisfaction score could be calculated.

2.4.2. Analysis of Factors Influencing Satisfaction

The dependent variable selected for this paper is life satisfaction of residents, and the previously calculated satisfaction scores of forest residents with the CCLBP are selected as the new independent variables as well as a series of continuous and dummy variables, which affect the satisfaction of residents. Therefore, this paper is finally based on a regression model to estimate the factors influencing the life satisfaction of residents in Inner Mongolia and the Yichun Forest Industry Group.

$$Y_i = \beta_0 + \beta_1 \times X_1 + \beta_2 \times X_2 + \cdots \beta_j \times X_n + \mu_i \tag{7}$$

In Formula (7), Y_i is the life satisfaction of residents with the CCLBP and is a continuous variable. k_i are the explanatory variables affecting farmers' satisfaction with the policy and β_j is the regression coefficient. In order to better analyze the heterogeneity of the impact of life satisfaction, this paper combines existing literature studies and field survey results and carries out group regressions in different income levels, different occupational types and different forest industry groups of residents under the CCLBP.

3. Results

3.1. Effect of Evaluation Results of the CCLBP

In the process of establishing the evaluation model of the CCLBP in natural forests satisfaction, KMO analysis was first conducted on the policy satisfaction variables using spss26.0 software. Then, suitable factors were selected for the factor analysis of the satisfaction model. The results are shown in Table 3. The value of KMO obtained after the analysis was 0.802, which is greater than 0.6. The Bartlett test shows that the value of Sig. is 0. Generally, the overall significance of the model is high, indicating that the indicators selected to measure satisfaction with the CCLBP are suitable for factor analysis.

Table 3. Chi-square test satisfaction factor.

KMO Analysis	0.802
approximate chi-square	569.75
df	15
Sig.	0.000

Based on the model analysis, the selected policy satisfaction descriptors were further standardized and then subjected to factor analysis as shown in Table 4.

Table 4. Satisfaction common factor variance of the CCLBP.

Variables	Beginning	Extraction
Personal income satisfaction	1.000	0.760
Life changes satisfaction	1.000	0.703
Environmental facilities satisfaction	1.000	0.769
The amount of subsidy satisfaction	1.000	0.978
The effectiveness of publicity satisfaction	1.000	0.855
Publicity methods satisfaction	1.000	0.875
Extraction method: Principal component analysis		

According to Table 4, the common variance values of the satisfaction variables are all greater than 0.7, which means that the six satisfaction indicators are a good reflection of the policy satisfaction of residents.

The six satisfaction variables with significant eigenvalues were subjected to principal component analysis, which were obtained as shown in Table 5. The table shows that the first three factors have eigenvalues greater than 1 or closer to 1 [62]. Then, the variance contribution of the first three factors is 54.75%, 15.63% and 11.30%, respectively, and their cumulative variance contribution is 81.68%. It is generally accepted that a cumulative variance contribution of 60% or more could indicate the extracted principal components [63]. These data show that the extracted three factors can explain most of the policy satisfaction of residents. Therefore, the three common factors of policy implementation effect, policy publicity effect and policy implementation situation are selected as indicators to evaluate the policy satisfaction of residents in this study.

Table 5. The total variance explained.

Ingredients	Initial Eigenvalue			Extraction of Sum of Squares of Loads			Sum of Squared Rotating Loads		
	Total	Variance %	Accumulation %	Total	Variance %	Accumulation %	Total	Variance %	Accumulation %
1	3.285	54.753	54.753	3.285	54.75	54.753	1.949	32.49	32.49
2	0.938	15.627	70.38	0.938	15.63	70.38	1.863	31.05	63.54
3	0.678	11.297	81.677	0.678	11.30	81.677	1.088	18.14	81.68
4	0.493	8.213	89.89						
5	0.359	5.987	95.877						
6	0.247	4.123	100						

The maximum positive rotation of variance method was used to derive the factor rotation loadings array. Then, the 0.5 principle was used; i.e., indicators with factor rotation loadings greater than 0.5 were selected as secondary indicators for the common factor [64] (Table 6). Based on the results of the above model analysis, a model for measuring the policy satisfaction of residents can be developed as follows:

$$Y = \frac{\delta_1 F_1 + \delta_2 F_2 + \delta_3 F_3}{\sum_{i=1}^{3} \delta_i} \tag{8}$$

Table 6. Rotation load factor array.

Indicators		1	2	3
Effectiveness of policy implementation	Personal income satisfaction	0.869		
	Life change satisfaction	0.789		
	Environmental facilities satisfaction	0.664		
Effectiveness of policy promotion	The effectiveness of publicity satisfaction		0.901	
	Publicity methods satisfaction		0.854	
Policy implementation situation	The amount of subsidy satisfaction			0.950

In Formula (8), F_1 refers to common factor 1, i.e., the effect of the CCLBP implementation. F_2 refers to the effect of CCLBP promotion and F_3 refers to the CCLBP implementation situation. δ_1 is the variance of the effect of factor 1 policy implementation, δ_2 denotes the variance of the effect of factor 2 policy promotion and δ_3 denotes the variance of factor 3 policy implementation situation. From Table 5, it can be concluded that $\delta_1 = 54.75$, $\delta_2 = 15.63$, $\delta_3 = 11.30$, $\sum_{i=1}^{3} \delta_i$ denotes a cumulative variance value of 81.68. Bringing the values of the factors into Formula (8) yields the model for measuring the policy satisfaction of forest dwellers:

$$Y = 0.398F_1 + 0.380F_2 + 0.222F_3 \tag{9}$$

The entropy method was used to calculate the weights of satisfaction with policy publicity effect and satisfaction with policy publicity method and the weights were 0.360 and 0.640, respectively. The weights of each item were relatively even, all around 0.500. Moreover, the entropy method was used to calculate the weights for personal income satisfaction, life change satisfaction and environmental facilities satisfaction, which were 0.418, 0.306 and 0.277, respectively. The weighting of the items was relatively even, all around 0.333. The specific scores and weights are shown in Table 7.

Table 7. The CCLBP of natural forests satisfaction overall rating.

First-Level	Score	Secondary Indicators	Score	Weight	Tertiary Indicators	Score	Weight
Total satisfaction	60.9	Effectiveness of implementation	61.8	0.398	Environmental facilities satisfaction	93.8	0.277
					Personal income satisfaction	39.2	0.418
					Life changes satisfaction	60.4	0.306
		Publicity effectiveness	62.2	0.38	Publicity methods satisfaction	60.3	0.640
					The effectiveness of publicity satisfaction	63.2	0.360
		Implementation	57.1	0.222	The amount of subsidy satisfaction	57.1	1

Using Formula (9), the comprehensive score of residents' policy satisfaction can be obtained after percentaging the weights (Table 7), from which it can be found that the index of residents' satisfaction with the CCLBP is 60.9. However, the theoretical neutral value of policy satisfaction is 66.6 [65]. It can be found that residents are not very satisfied with the policy. In particular, the implementation of the CCLBP was rated lower than both the effectiveness of implementation and the effectiveness of promotion. Residents have a low satisfaction rating with the implementation of the CCLBP. The relatively low subsidy for the CCLBP and the lack of a mechanism for the subsidy have led to a low satisfaction rating on the effectiveness of the implementation situation.

3.2. Regression Results of Factors Influencing Satisfaction

The CCLBP can affect the life satisfaction of residents in national forest areas directly. Further, it also affects income and employment by the external macro environment in an indirect way. In order to better analyze the heterogeneity of the impact, this chapter introduces the main factors affecting the life satisfaction of residents from different income levels, different occupational types and different forest industry groups.

3.2.1. Regression Results for Different Income Levels

In the regression process of influencing factors of life satisfaction after the CCLBP, the income level is divided into low-income group and high-income group according to the median of actual annual income level of CNY 46,400. According to the results of the survey, the relatively satisfied and very satisfied people in the high-income group accounted for 33.06% and 39.67%, respectively, resulting in a total of 72.73%. The relatively satisfied and very satisfied people in the low-income group accounted for 27.27% and 36.36%, respectively, resulting in a total of 63.64%. Overall, life satisfaction was higher in the high-income group than in the low-income group. We used stata15.0 software to empirically test the theoretical model of factors influencing forest residents' life satisfaction. The regression results of the model are shown in Table 8. In the income group regression, the coefficient of the CCLBP's effect on the life satisfaction in the high-income group was 0.103, which is significant at the 1% level, while the coefficient of the CCLBP's effect on the life satisfaction in the low-income group was 0.031, which was not significant. Additionally, gender has a negative influence on life satisfaction in the low-income group, which indicates that male residents' life satisfaction is lower. Occupation also has a negative influence on life satisfaction in the low-income group, which indicates that farmers' life satisfaction is lower. Ecological service functions, livelihood security, employment and policy fairness were positively correlated with satisfaction in both the high-income and low-income groups.

Table 8. Regression results of life satisfaction in different income groups.

Variables	Low-Income Groups		High-Income Groups	
	β	st.	β	st.
CCLBP	0.031	0.044	0.103 ***	0.023
Sex	0.111 **	0.043	0.052	0.043
Age	−0.059	0.033	−0.017	0.015
Education	−0.014	0.041	−0.031	0.043
Marriage	−0.013	0.038	0.066	0.055
occupation	−0.091 *	0.033	0.051	0.067
Area	0.039	0.037	−0.029	0.052
Personal expenditure	−0.002	0.001	0.001	0.012
Change in ecology	−0.036	0.030	−0.019	0.024
Ecological services	0.168 ***	0.019	0.143 ***	0.025
Support policy	0.051	0.033	0.040	0.026
Security of life	0.144 ***	0.036	0.067 **	0.023
Policy fairness	0.091 ***	0.019	0.177 **	0.019
Employment	0.110 **	0.023	0.103 **	0.014
Model effect	Prob > F = 0.000 R-squared = 0.881		Prob > F = 0 R-squared = 0.924	

Note: ***, ** and * are significant at 1%, 5% and 10%, respectively.

3.2.2. Regression Results by Occupation Type

According to different types of occupation, the residents of national forest areas are divided into worker and forest farmer groups. The relatively satisfied and very satisfied people in the forest farmer group accounted for 39.44%, while the relatively satisfied and very satisfied people in the worker group accounted for 80.12%. On the whole, the satisfaction of the worker group was significantly higher than the forest farmer group. The regression results for the occupational group are shown in Table 9. The coefficient of the CCLBP's effect on the life satisfaction of residents in the worker group is 0.042, which is significant at the 10% level, while the coefficient of the CCLBP's effect on the life satisfaction in the forest farmer group is 0.039, which was not significant. This indicates that the CCLBP has a significant impact on the life satisfaction of workers, while it does not have a significant impact on the life satisfaction of forest farmers. In addition, marriage and age have negative influence on life satisfaction in the forest farmer group, which indicates that the life satisfaction of married people and older people in the forest farmer group are

lower. Further, supportive policies have a significant positive effect on the life satisfaction of workers in national forest areas. Similarly, the life satisfaction of workers and farmers is also influenced by the function of ecological services, employment, the degree of livelihood security and policy equity.

Table 9. Regression results of life satisfaction in different occupational types.

Variables	Worker		Farmer	
	β	st.	β	st.
CCLBP	0.042 *	0.022	0.039	0.037
Sex	−0.039	0.045	−0.033	0.066
Age	−0.033	0.029	−0.071 ***	0.042
Education	0.015	0.026	−0.044	0.040
Marriage	0.058	0.046	−0.112 **	0.047
Area	0.020	0.041	0.027	0.069
Personal income	−0.041	0.039	0.078	0.043
Personal expenditure	0.004	0.002	−0.003	0.002
Change in ecology	−0.033	0.034	−0.042	0.045
Ecological services	0.155 ***	0.022	0.189 ***	0.027
Support policy	0.047 *	0.026	0.048	0.046
Security of life	0.121 ***	0.032	0.092 **	0.034
Policy fairness	0.128 **	0.026	0.101 **	0.014
Employment	0.156 **	0.028	0.073 **	0.229
Model effect	Prob > F = 0.000 R-squared = 0.904		Prob > F = 0 R-squared = 0.952	

Note: ***, ** and * are significant at 1%, 5% and 10%, respectively.

3.2.3. Regression Results for Different Forest Industry Groups

The relatively satisfied and very satisfied people in the Inner Mongolia Forest Industry Group accounted for 62.44%, while the relatively satisfied and very satisfied people in the Yichun Forest Industry Group accounted for 70.12%. On the whole, the satisfaction of the Yichun Forest Industry Group was significantly higher than the Inner Mongolia Forest Group. The regression results for the forest industry group are shown in Table 10. The coefficient of the CCLBP's effect on the life satisfaction of residents in the Yichun Forest Industry Group is 0.688, which is significant at the 10% level, while the coefficient of the CCLBP's effect on the life satisfaction in the Inner Mongolia Forest Industry Group is −0.051, which was not significant, indicating that the CCLBP has a significant positive impact on residents in the Yichun Forest Industry Group. Age has a negative influence on life satisfaction in both forest industry groups, which indicates that old residents' life satisfaction is lower. Additionally, the degree of livelihood security, changes in the ecological environment, ecological services, the corresponding support policies and policy fairness are the main factors that affect the life satisfaction in the Yichun Forest Industry Group, while the factors affecting the life satisfaction of residents in the Inner Mongolia Forest Industry Group are employment, the degree of livelihood security, changes in the ecological environment, ecological services, the corresponding support policies and policy fairness.

Table 10. Regression results of life satisfaction in different forest groups.

Variables	Yichun		Inner Mongolia	
	β	st.	β	st.
CCLBP	0.688 *	0.031	−0.051	0.054
Sex	−0.065	0.061	0.064	0.047
Age	−0.045 **	0.025	−0.029 **	0.026
Education	−0.065	0.054	−0.039	0.051

Table 10. *Cont.*

Variables	Yichun		Inner Mongolia	
	β	st.	β	st.
Marriage	−0.055	0.034	−0.034	0.028
occupation	0.037	0.031	−0.065 **	0.033
Personal income	0.011	0.003	−0.005	0.004
Personal expenditure	−0.037	0.053	−0.012	0.032
Change in ecology	0.155 **	0.063	0.146 **	0.026
Ecological services	0.086 **	0.031	0.019 **	0.031
Support policy	0.118 ***	0.013	0.114 ***	0.023
Security of life	−0.015	0.016	0.085	0.028
Policy fairness	0.056 **	0.029	0.054 *	0.046
Employment	0.213 ***	0.015	0.105 ***	0.009
Model effect	Prob > F = 0.000 R-squared = 0.912		Prob > F = 0 R-squared = 0.941	

Note: ***, ** and * are significant at 1%, 5% and 10%, respectively.

4. Discussion

4.1. Determinants of Life Satisfaction of Residents in National Forest Areas of the CCLBP

(1) The overall satisfaction of residents in national forest areas is not high, which is lower than the theoretical neutral value of policy satisfaction.

Following the CCLBP, the forestry industry chain reliant on timber output has significantly diminished, leading to a significant number of layoffs. Therefore, many workers were temporarily compelled to work outside the home. Second, national forest areas experienced economic difficulties as a result of the CCLBP since they lost their primary source of revenue based on the sale of timber. It was challenging to continue with business as usual with only national financial assistance. However, according to the research, since the implementation of the CCLBP, the government gradually increased financial subsidies and vigorously developed an under-forest economy to drive the development of the forest economy. The income of residents in national forest areas has steadily increased by a small amount every year. Thus far, the CCLBP has been implemented for eight years and most forest residents are gradually adjusting to it as the CCLBP is steadily promoted and the ecological environment has been greatly improved. Although the overall evaluation of life satisfaction of residents is not optimistic, it was higher than expected. Through the life satisfaction of residents in national forest areas, it is visible that the analysis of satisfaction only at the economic level cannot fully reflect the overall situation of micro subjects. Among these, the impact of a good as well as ecological environment on micro subjects in national forest areas is also significant. Zou Y. [45] also came to a similar conclusion in his investigation of the subjective wellbeing of national forest areas. In a word, the implementation of the CCLBP had an adverse effect on the income and employment of residents in national forest areas. However, with improvement in the ecological environment and employment situation, the overall satisfaction of residents gradually increased.

(2) Life satisfaction was higher in the high-income group than in the low-income group.

The CCLBP affects the life satisfaction of residents in national forest areas [31,66]. Life satisfaction was higher in the high-income group than in the low-income group. According to Maslow's Hierarchy of Needs theory, people always satisfy their lower-level needs before pursuing higher-level needs. For the low-income group, their lower-level needs (physiological needs, security needs) are not yet well satisfied, so they do not pay attention to higher-level needs temporarily, while, for the high-income group, the lower-level needs have been satisfied, so they could pay attention to the impact of external policy changes on their quality of life. Further, married male residents have lower life satisfaction and female residents have higher life satisfaction [67]. The main reason is that married men have to bear a heavier life burden and social costs, such as children's education, old people's support and interpersonal communication (e.g., weddings and funerals). Moreover, occupation

had a negative impact on the low-income group's life satisfaction, showing that farmers in the low-income group had lower life satisfaction. The reason is that the low-income group of farmers are mostly laid-off workers. Before the CCLBP, their salary income was very considerable. After the CCLBP, income basically relies on the state financial subsidies, so it is difficult to maintain daily expenses. For the workers in the low-income group, they were generally lower than the local average. The satisfaction of workers in the low-income group is higher than farmers in the low-income group. The main reason is that workers have a fixed source of income every month to meet the basic needs of life. For the farmers in the high-income group, according to the survey, they obtain a higher income basically through breeding or planting under the forest, so the implementation of the CCLBP has little impact on their economy. As the ecological environment improves, they are more receptive to the CCLBP. For the high-income group of workers, most of them are in management positions and are the main implementers of the CCLBP. They are familiar with the effect of the CCLBP, so they have higher satisfaction. Additionally, there is a positive correlation between changes in the ecological environment, ecological service, employment and policy fairness among various income groups, indicating that both high-income and low-income groups are satisfied with the favorable policy environment.

(3) The satisfaction of the worker group was significantly higher than the forest farmer group.

Workers are the participants in the implementation of the CCLBP; they are fully aware of the responsibility of the existing natural forest resources for ecological security and the necessity of the CCLBP. Most workers in national forest areas are engaged in forest tending, management and protection, and their jobs are stable and their salaries are higher than those of farmers. However, the implementation of the CCLBP has had a major impact on farmers' incomes. Since the majority of them were loggers, they faced unemployment or migration following the CCLBP. Therefore, the satisfaction of the worker group was significantly higher than the forest farmer group. Income and age were negatively correlated in the farmers group, mainly because most of the older farmers were laid off due to the implementation of the CCLBP, resulting in a large income gap before and after. Then, income inequality made farmers feel a strong sense of "relative exploitation", which affected the final state of their income satisfaction. However, although younger farmers have lost their jobs as a result of the CCLBP, they have more chances to work outside and generally make more money than those who work in national forests. As a result, their satisfaction levels would be higher than older farmers. In addition, when the external supportive policy environment is favorable, the income satisfaction of workers in national forest areas is higher, and, as the supportive subsidies increase, the income satisfaction of workers will be better. This paper contends that workers are primarily more aware of the advantages of the policy as a result of their employment, extensive publicity and comprehension of the CCLBP. Therefore, the government should attach importance to the institutional supply of external support policies, such as providing information access channels, employment guidelines and other services for forest residents so that they can obtain comprehensive development opportunities and equal development space.

(4) The satisfaction of the Yichun Forest Industry Group was significantly higher than the Inner Mongolia Forest Group.

Although the existing management system and regional location of national forest areas are similar, this paper found that the CCLBP on the life satisfaction of residents in different forest industry groups is discrepant, which is consistent with the conclusions of many scholars. It suggests that the Yichun Forest Industry Group has been implementing the CCLBP since the end of 2013, while the Inner Mongolia Forest Industry Group has been implementing the CCLBP since 2015. Therefore, the residents in the Yichun Forest Industry Group had a reasonable expectation of the CCLBP in their minds and actively developed the under-forest economy to gain income. Second, the low annual average temperature in the Inner Mongolia Forest Industry Group has limited the development of the forest industry. Due to the loss of the support of the original timber industry, forest residents

have not been able to fully adapt to the CCLBP. This reflects the regional variability in the impact of the CCLBP on the life satisfaction of residents. In addition, among the residents of both forest industry groups, the satisfaction of older residents was lower. As a result of the CCLBP, older residents have fewer job opportunities. Young people can obtain a stable income by going out for work, while it is difficult for older people to find a suitable job outside. Most of the older people rely on picking and part-time jobs to obtain income in national forest areas. Their income is not stable, so they have low satisfaction.

4.2. Implications

The impact of the CCLBP on the life satisfaction of residents of different occupations varies. First, in order to solve the low life satisfaction of low-income groups, the income of residents in national forest areas should be increased to improve their life quality and life satisfaction. On one hand, we can rely on the support of policy funds. On the other hand, we can rely on increasing employment opportunities to solve the problem of transferring surplus employees, seeking special funds and vigorously developing the forest economy. Second, the impact of the CCLBP on life satisfaction of residents in national forest areas has regional differences. The policy of national forest areas should not be applied uniformly throughout the entire Northeast and Inner Mongolia with the deployment of the follow-up system. Each forest industry group should be reasonably equipped with relevant forestry resources according to the resource endowment to improve people's livelihood so as to improve the satisfaction of residents. Additionally, we can even create a new social security system specifically for national forests to cater to the additional security requirements of residents under the CCLBP. As the elderly population in national forest areas increases, the government can focus on the living conditions of the elderly and provide them with living security, such as increasing subsidies for the elderly. Finally, we must focus on the institutional supply of external support policies in order to provide them access to information, employment advice and other services. In this way, they can benefit from comprehensive development opportunities and raise the wellbeing index of national forest areas.

4.3. Limitations

There are still some shortcomings in this paper. Although the existing data have academic research value, the degree of data mining still needs to be improved. Moreover, due to the long development cycle of forestry, the research on the changes in the life satisfaction of residents still requires dynamic tracking and observation. Additionally, because of lacking the production information data of residents and having the difficulty of converting relevant indexes, the index system for measuring the satisfaction of residents still requires further improvement. Therefore, analyzing the changes in life satisfaction of residents under the CCLBP is an important observation perspective, which has significant academic value regarding continuous observation.

5. Conclusions

Based on the height of ecological civilization development, the CCLBP is a significant governmental initiative designed to maintain the natural forest ecosystem. The purpose of this paper is to examine the impact of the CCLBP on the satisfaction of residents. To this end, 242 micro survey data of residents in national forest areas were used. These data were based on the life satisfaction of the resident evaluation index system. Combined with the actual situation of satisfaction analysis, multiple linear regression and heterogeneity were used to analyze the influencing factors of satisfaction. The specific conclusions drawn from the study are as follows.

(1) The satisfaction of economic income yielded the highest scores, followed by satisfaction with environmental facilities and life change. Generally, the satisfaction index of residents with the CCLBP is 60.9, which is not high.

(2)　The study reveals that the CCLBP has a positive effect on the life satisfaction of residents in the high-income groups, but the effect on the low-income groups was not significant. The CCLBP has a positive effect on the life satisfaction of workers. However, the effect on forestry farmers is not significant. The CCLBP has a positive effect on the life satisfaction of forest residents in the Yichun Forest Industry Group, while the life satisfaction of the Inner Mongolia Forest Industry Group is not significant.

(3)　The study analyzes other factors that affect the life satisfaction of residents in addition to the CCLBP. First, income has a significant impact on life satisfaction, while its effects vary depending on the satisfaction dimension, suggesting that other factors also contribute to the life satisfaction of residents [68]. Second, the protective measures of the CCLBP are crucial to preserving residents' overall wellbeing, and raising the level of social security in national forest areas has a significant positive impact on improving residents' satisfaction. Third, policy equity is an important factor in promoting life satisfaction of residents in national forest areas. Finally, individual characteristics (occupation, age and sex), economic conditions and support policies are important factors affecting the life satisfaction of residents in national forest areas.

References

1. Poffenberger, M. Restoring and Conserving Khasi Forests: A Community-Based REDD Strategy from Northeast India. *Forests* **2015**, *6*, 4477–4494. [CrossRef]
2. Tucker, C.; Yan, D.; Dannenberg, M.; Reed, S.C.; Smith, W. Science at the frontier: Multimethod research to evaluate ecosystem change across multiple scales. *New Phytol.* **2018**, *218*, 1318–1320. [CrossRef]
3. De Jong, W.; Galloway, G.; Katila, P.; Pacheco, P. Incentives and Constraints of Community and Smallholder Forestry. *Forests* **2016**, *7*, 209. [CrossRef]
4. Dupuits, E. Transnational self-help networks and community forestry: A theoretical framework. *For. Policy Econ.* **2015**, *58*, 5–11. [CrossRef]
5. Chen, P. Natural Forest Protection: An Overview Abroad and a Review at Home. *J. Beijing For. Univ. (Soc. Sci.)* **2004**, *3*, 50–54.
6. Wang, Y.F.; Liu, J.Y. The Experience of Close-to-nature Forest Management in Germany and Its Implication to China. *Environ. Prot.* **2022**, *18*, 63–66.
7. Zhang, H.R.; Tang, S.Z.; Wang, Y.H. The Technique System of Forest Resource Environment Monitoring in Germany and Its Reference for China. *World For. Res.* **2002**, *15*, 63–70.
8. Omer, A.M. Energy, environment and sustainable development. *Renew. Sustain. Energy Rev.* **2008**, *12*, 2265–2300. [CrossRef]
9. Zerah, M.H. Conflict between green space preservation and housing needs: The case of the Sanjay Gandhi National Park in Mumbai. *Cities* **2007**, *24*, 122–132. [CrossRef]
10. Bai, X.P. Experiences and Enlightenments of Russian Forestry Administration System Reforming. *World For. Res.* **2006**, *19*, 57–60.
11. He, F.N.; Ge, Q.S.; Dai, J.H.; Rao, Y.J. Forest change of China in recent 300 years. *J. Geogr. Sci.* **2008**, *18*, 59–72. [CrossRef]
12. Luo, M.C.; Qin, J.L.; Liu, S.H. Strategies on natural forest protection of collective forest area in minority nationality community in China. *J. For. Res.* **2000**, *11*, 132–134.
13. Mao, Z.W. *A Study on The Dynamics of Natural Forest Protection Policy Change in China Based on an Extended Multiple Streams Framework*; Xiamen University: Xiamen, China, 2019. (In Chinese)

14. Jiang, Y.; Han, Y. Research on the Impact of Financial Input of Natural Forest Protection Project on the Development Level of People's Livelihood in Forest Areas. *Issues For. Econ.* **2020**, *40*, 595–601. (In Chinese)

15. Mullan, K.; Kontoleon, A.; Swanson, T.M.; Zhang, S.Q. Evaluation of the Impact of the Natural Forest Protection Program on Rural household Livelihoods. *Environ. Manag.* **2010**, *45*, 513–525. [CrossRef] [PubMed]

16. Deng, Y. Research on the current situation, problems and countermeasures of natural forest protection in China. *Rural Econ.* **2015**, *8*, 35–37. (In Chinese)

17. Zhu, Z.; Guan, J.; Cao, Y.; Song, Q. Study on Ecological Benefit Evaluation of Natural Forest Protection Project in Ecological Incremental Dimensions. *Issues For. Econ.* **2020**, *40*, 563–571. (In Chinese)

18. Chen, Y.; Zhang, Z.; Liao, B. Study on Dynamic Changes of Forest Ecological Security of Stated-owned Forest Areas in Northeast China—Based on Ecology-Industry Symbiosis. *Resour. Dev. Mark.* **2017**, *33*, 411–416. (In Chinese)

19. Dudley, N.; Belokurov, A.; Borodin, O.; Higgins-Zogib, L. *Are Protected Areas Working? An Analysis of Forest Protected Areas by WWF*; WWF International: Gland, Switzerland, 2004.

20. Cardinale, B.J.; Srivastava, D.S.; Duffy, J.E. Effects of biodiversity on the functioning of trophic groups and ecosystems. *Nature* **2006**, *443*, 989–992. [CrossRef]

21. Balmford, A.; Bruner, A.; Cooper, P.; Costanza, R.; Farber, S.; Green, R.E.; Jenkins, M.; Jefferiss, P.; Jessamy, V.; Madden, J.; et al. Economic Reasons for Conserving Wild Nature. *Science* **2002**, *297*, 950–953. [CrossRef]

22. Kumar, P. *The Economics of Ecosystems and Biodiversity: Ecological and Economic Foundations*; Routledge: London, UK, 2012.

23. Zhu, H.; Hu, S. The Effect on Livelihood Styles Differentiation of Worker Households in Key National Forest Areas by Comprehensive "Stop Cutting" Policy. *For. Econ.* **2016**, *38*, 8–12. (In Chinese)

24. Yu, D.P.; Zhou, L.; Zhou, W.M.; Ding, H.; Wang, Q.W.; Wang, Y.; Wu, Y.W.; Dai, L.M. Forest Management in Northeast China: History, Problem, and Challenges. *Environ. Manag.* **2011**, *48*, 1122–1135. [CrossRef] [PubMed]

25. Lin, H.; Fu, Q.M.; Zhai, X.J. Evaluation on the Policy Effect of the Second Phase of Natural Forest Protection Project Based on the Life Satisfaction of Forest Residents. *Issues For. Econ.* **2020**, *6*, 587–594.

26. Wang, Y.; Xiao, Y. Discusses the Construction of Ecological Good Yichun Forest Region. In Proceedings of the Advances in Multimedia, Software Engineering and Computing, Wuhan, China, 26–27 November 2011; pp. 387–391.

27. Fang, Q. Research on Health Human Resources of the Forest Industry Region in Heilongjiang Province Based on SWOT Analysis. *Procedia Environ. Sci.* **2012**, *12*, 1034–1039.

28. Ren, Y.; Kuuluvainen, J.; Toppinen, A.; Yao, S.; Berghall, S. The Effect of China's New Circular Collective Forest Tenure Reform on Household Non-Timber Forest Product Production in Natural Forest Protection Project Regions. *Sustainability* **2018**, *10*, 1091. [CrossRef]

29. Fu, C.J.; Geng, Y. Difficulties and Reform Path of State-owned Forest—Based on the Current Situation of China Longjiang Forest Industry Group. *For. Econ.* **2015**, *5*, 16–19.

30. Zhao, M.X.; Wan, Z.F.; Guo, J. Analysis on the Influence to Timber Processing Enterprises in Heilongjiang Province under Full Stop Commercial Logging Policy. *For. Econ.* **2017**, *2*, 35–38.

31. Zhu, Z.F.; Cao Yu, k.; Chen, L.R. The Path Analysis of Reform and Development in the Key State-Owned Forest Region under the Background of Full Stop Commercial Logging Policy—Taking Suiyang Forestry Bureau for Example. *For. Econ.* **2015**, *6*, 61–65.

32. Van, D.T.; Kozan, O.; Yamamoto, M. A natural forest of commercial timber species: Logging or not logging. *Small-Scale For.* **2018**, *17*, 555–568. [CrossRef]

33. Zhang, Y.; Chen, S. Wood trade responses to ecological rehabilitation program: Evidence from China's new logging ban in natural forests. *For. Policy Econ.* **2021**, *122*, 102339. [CrossRef]

34. Brandt, J.S.; Butsic, V.; Schwab, B.; Kuemmerle, T.; Radeloff, V.C. The Relative Effectiveness of Protected Areas, a Logging Ban, and Sacred Areas for Old-Growth Forest Protection in Southwest China. *Biol. Conserv.* **2015**, *181*, 1–8. [CrossRef]

35. Guan, Z.; Zhang, Y. The Impact of Changes in Log Import Price from the Logging Ban on the Market Price of Timber Products. *J. Sustain. For.* **2022**, 1–15. [CrossRef]

36. Zhang, X. The facing challenges and countermeasures of Forest Products Industry after over stopping chopping down trees. *For. Investig. Des.* **2014**, *3*, 14–15. (In Chinese)

37. Lu, Y.T.; Chang, Y.H.; Sung, T.W. The Relationship between Motivation, the Use of Mobile Devices and Satisfaction with Life for Older Farmers. *Eurasia J. Math. Sci. Technol. Educ.* **2017**, *13*, 4009–4020. [CrossRef]

38. Ma, J.; Dong, G.; Chen, Y. Does satisfactory neighbourhood environment lead to a satisfying life? An investigation of the association between neighbourhood environment and life satisfaction in Beijing. *Cities* **2018**, *74*, 229–239. [CrossRef]

39. Wang, F.; Wang, D. Geography of urban life satisfaction: An empirical study of Beijing. *Travel Behav. Soc.* **2016**, *5*, 14–22. [CrossRef]

40. Tong, W.; Zhu, L.; Lo, K. Livelihood Adaptation and Life Satisfaction among Land-Lost Farmers: Critiquing China's Urbanisation-Driven Land Appropriation. *Bull. Geogr. Socio-Econ. Ser.* **2019**, *46*, 149–161. [CrossRef]

41. Liang, Y.; Lu, W.; Wu, W. Are Social Security Policies for Chinese Landless Farmers Really Effective on Health in the Process of Chinese Rapid Urbanization? A Study on the Effect of Social Security Policies for Chinese Landless Farmers on Their Health-Related Quality of Life. *Int. J. Equity Health* **2014**, *13*, 5. [CrossRef]

42. Nie, X.; Wang, H.; Zhang, A. Study on the Determinants of Landless Peasants' Multidimensional Welfare in Urbanization Process. *China Rural Surv.* **2013**, *4*, 86–93. (In Chinese)

43. Zhang, H.; Lv, J. Analysis on Input-Output Efficiency of Supply of Forest Eco-Products: A Case Study of Key State-Owned Forest Area of Northeast. *Econ. Probl.* **2017**, *9*, 87–94. (In Chinese)
44. Hu, Q.; Zhu, H. Analysis on the Determinants of Subjective Well-being of Residents in the State-owned Forest Areas after the Implement of "Logging-Ban" Policy. *Issues For. Econ.* **2019**, *39*, 286–291. (In Chinese)
45. Zou, Y.; Li, J.; Tian, G. Empirical Analysis on Determinants of Subjective Well-Being in Stated-Owned Forest Area Based on Capability Approach: From the Perspective of Full Stop Commercial Logging. *Sci. Silvae Sin.* **2020**, *56*, 154–164. (In Chinese)
46. Crisp, R. Well-Being‖Zalta E. The Stanford Encyclopedia of Philosophy. Available online: http://plato.Stanford.Edu./archives/sum2013/entires/well-being (accessed on 19 January 2023).
47. Forgeard MJ, C.; Jayawickreme, E.; Kern, M.L. Doing the right thing: Measuring wellbeing for public policy. *Int. J. Wellbeing* **2011**, *1*, 79–106.
48. Nadeem, A.M.; Cheo, R.; Shaoan, H. Multidimensional Analysis of Water Poverty and Subjective Well-Being: A Case Study on Local Household Variation in Faisalabad, Pakistan. *Soc. Indic. Res.* **2017**, *138*, 207–224. [CrossRef]
49. Bartram, D. International migration, open borders debates and happiness. *Int. Stud. Rev.* **2010**, *12*, 339–361. [CrossRef]
50. Sen, A.K. *On Economic Inequality*; Oxford University Press: Oxford, UK, 1997.
51. Costanza, R. The value of the world's ecosystem services and natural capital. *Nature* **1997**, *385*, 253–262. [CrossRef]
52. MA. *Millennium Ecosystem Assessment: Ecosystems and Human Well-Being—Biodiversity Synthesis*; World Resources Institute: Washington, DC, USA, 2005.
53. United Nations Development Programme. *Human Development Report 2015: Work for Human Development*; UNDP: New York, NY, USA, 2015.
54. Yao, X.G.; Lai, J.; Liu, B. Theoretical analysis of migration with the whole family in the process of labor mobility—From the perspective of capabilities approach. *J. Financ. Econ.* **2009**, *35*, 28–38. (In Chinese)
55. Luis, A.; Bravo-Ureta, B.E. Natural resource management and household well-being: The case of POSAF-II in Nicaragua. *World Dev.* **2017**, *99*, 42–59.
56. Diener, E.; Suh, E. Measuring quality of life: Economic, social, and subjective indicators. *Soc. Indic. Res.* **1997**, *40*, 189–216. [CrossRef]
57. Haq, R. Measuring human wellbeing in Pakistan: Objective versus subjective indicators. *Eur. J. Soc. Sci.* **2009**, *9*, 516–532.
58. Veenhoven, R. Subjective measures of well-being. In *Human Well-Being*; Palgrave Macmillan: London, UK, 2007; pp. 214–239.
59. King, M.; Renó, V.; Novo, E. The Concept, Dimensions and Methods of Assessment of Human Well-Being within a Socioecological Context: A Literature Review. *Soc. Indic. Res. Int. Interdiscip. J. Qual.-Life Meas.* **2014**, *116*, 681–698. [CrossRef]
60. Tian, G.; Zou, Y.; Liu, C. Factors influencing forestry workers satisfaction to forestry subsidy policy. *J. Arid Land Resour. Environ.* **2018**, *32*, 26–30. (In Chinese)
61. Tian, G.; Yu, W.; Vu, T.T.H.; Ma, G.Y. Green Assessment of Imports and Exports of Wooden Forest Products Based on Forest Processing Industry: A Case Study of China. *Forests* **2021**, *12*, 166. [CrossRef]
62. You, J. How to properly apply factor analysis for comprehensive evaluation. *Stat. Educ.* **2003**, *5*, 10–11. (In Chinese)
63. Xu, C. Empirical Analysis of Factors Influencing Satisfaction with "New Rural Insurance"-Survey Data of Basic Xinjiang Farming Households. *China Circ. Econ.* **2014**, *1*, 79–81. (In Chinese)
64. Chen, X. Research on the Satisfaction Degree of Farmers to Forestry Subsidy Policy from the Perspective of Heterogeneity Based on Survey of Nanjiang County and Mianning County. Master's Thesis, Sichuan University, Chengdu, China, 2016. (In Chinese).
65. Zhang, Z.; Yu, P. Construction of a Satisfaction Evaluation Index System for Urban Construction. *Stat. Decis.* **2015**, *18*, 32–35. (In Chinese)
66. Zhu, H.; Li, H.; Shi, X. Income Characteristic and Determinants of Worker Households Living on Mountain and Living under Mountain in Key National Forest Areas. *For. Econ.* **2014**, *5*, 20–25. (In Chinese)
67. Asadullah, M.N.; Xiao, S.Z.; Yeoh, E. Subjective well-being in China, 2005–2010: The role of relative income, gender, and location. *China Econ. Rev.* **2018**, *48*, 83–101. [CrossRef]
68. Kahneman, D.; Deaton, A. High Income Improves Evaluation of Life but Not Emotional Well-being. *Proc. Natl. Acad. Sci. USA* **2010**, *107*, 16489–16493. [CrossRef]