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Fuzzy Set Qualitative Comparative Analysis of the Factors Affecting Satisfaction with the Policy of Ecological Forest Rangers

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Abstract: The policy of ecological forest rangers (EFRs) is one of the important policy tools to consolidate the achievements of poverty alleviation in China. An in-depth analysis of the factors affecting the satisfaction of EFRs, and targeted improvement of related issues are conducive to the promotion of the policy implementation effect, which is of great significance to further consolidate the achievements of ecological poverty alleviation, promoting rural revitalization. Based on the field survey data of 412 ecological forest rangers in Qianshan City, Anhui Province, China, this paper uses the multivariable interaction fuzzy set qualitative comparative analysis method to explore the level of ecological forest rangers' policy satisfaction and the associated influencing factors. The results showed that (1) the overall evaluation of the ecological ranger groups' satisfaction with EFRs was between "general" and "satisfied"; (2) the lack of policy identity and information mastery are the necessary conditions for low and high satisfaction of EFRs, respectively; (3) perception of implementation played a core role in high policy satisfaction, while a lack of information mastery and perception of implementation were the core variables that caused low policy satisfaction. Through comprehensive comparison, it was found that the conditional variables of policy cognition had an important impact on both high and low policy satisfaction. Enhancing the information grasp degree of ecological forest rangers and improving the perception level of policy implementation was the best strategy to effectively improve the satisfaction levels of ecological forest rangers with the policy. By exploring the influencing factors of the satisfaction with the current ecological forest ranger policy and analyzing the comprehensive effect of the configuration of each factor, this paper provides a reference for further improving the ecological forest ranger policy and consolidating the ecological poverty alleviation results in the future.

Keywords: ecological forest ranger; policy satisfaction; fuzzy set; qualitative comparative analysis; influencing factors



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1. Introduction

Poverty is a serious challenge and a major problem that needs to be solved for all humankind [1], and the 2030 Agenda for Sustainable Development set by the United Nations has made "the eradication of poverty in all its forms worldwide" the primary goal of human sustainable development [2]. In the journey of poverty eradication, countries around the world have made many explorations in financial poverty alleviation, industrial poverty alleviation, ecological poverty alleviation, and scientific and technological poverty alleviation [3,4]. Ecological poverty alleviation, which works by changing the ecological environment of poor areas to escape from poverty [5], combines both ecological conservation and poverty reduction [6] and has received much attention in the international community. The ecological poverty alleviation paths are multiple and varied, mainly including the construction of major ecological projects, implementation of ecological compensation policies, development of ecological characteristic industries, introduction of ecological

public welfare jobs, and implementation of relocation to alleviate poverty [7,8]. The policy of ecological forest rangers is an exploration of ecological poverty alleviation through setting ecological public welfare positions in China, which started in 2016. This refers to the policy of selecting and hiring people involved in forest resource management services by arranging subsidized funds from the central government or provincial governments to purchase labor services within the scope of the documented poor population [9]. This is a product of combining ecological compensation policies with precise poverty alleviation policies in China [10].

As an ecological poverty alleviation realization mechanism, the implementation process of the policy of ecological forest rangers involves the selection of one person from an eligible poor family (mostly poor households with established cards) by the local government to serve as an ecological ranger and engage in the management of forest resources, and he or she can earn 1000 to 10,000 CNY of wage income per year, helping to drive poor families out of poverty [11]. The implementation of the policy of ecological forest rangers in the vast ecologically vulnerable areas has not only driven the local poor out of poverty and increased the livelihood capital stock of poor households [12], but also has improved the local ecological environment and achieved a balance between economic, ecological, and social benefits. However, after the implementation of the ecological forest ranger policy, the protection of local ecological resources has increased, and measures such as logging and hunting bans have caused some poor households to lose their original sources of livelihood. The salary income of ecological forest rangers cannot fully compensate for the losses caused by logging and hunting bans. Therefore, there may be a phenomenon of low satisfaction during the implementation of policies, which directly affects the effectiveness of policy implementation [13].

Satisfaction is a crucial aspect of people's perception and judgment of pro-poor policies, which reflects their subjective evaluation of policy formulation and implementation [14]. Understanding satisfaction with poverty alleviation policies is important as it can serve as an indicator of the performance level of pro-poor policies [15]. Recent research has focused on evaluating satisfaction with poverty alleviation policies and identifying the factors that influence this satisfaction. A quantitative evaluation of satisfaction with poverty alleviation policies involves constructing an evaluation index system, and exploring the factors that affect satisfaction with policies. These factors are found to be complex and diverse, including individual characteristics such as gender, age, and income of the study subjects. For instance, older poor people tend to have limited fixed income, and poverty alleviation policies may bring greater marginal income, leading to higher satisfaction with policies [16]. The research subjects' cognition of the policy is also an essential factor affecting satisfaction with a poverty alleviation policy. The wider the channels for research subjects to obtain information and the clearer their understanding of poverty alleviation policies, the higher their satisfaction with the policies [17]. External factors such as the timeliness of poverty alleviation funds and the democratic atmosphere of the collective where the research subjects belong also have an important impact on satisfaction with poverty alleviation policies [18]. In summary, the existing studies on satisfaction with poverty alleviation policies indicate that the livelihood situation, individual characteristics, knowledge of policies, policy cognition, and information availability of poor people are significant factors affecting policy satisfaction [19,20].

Fuzzy set qualitative comparative analysis (fsQCA) is a method that can analyze complex causality and interactions among multiple factors by identifying causal configurations that lead to a specific outcome [21,22]. It is based on the principles of fuzzy logic and Boolean algebra, and it allows for the consideration of multiple combinations of variables that may contribute to a specific outcome [23]. By applying this method, researchers can identify necessary and sufficient conditions that lead to satisfaction with the ecological forest rangers policy, as well as the different combinations of factors that may lead to this outcome. Using a histological perspective means that the analysis will take into account the historical context and the different factors that have shaped the policy of ecological

forest rangers over time. This approach can provide a more nuanced understanding of the factors that influence policy satisfaction and can help to identify potential areas for policy improvement. Overall, fsQCA provides a useful alternative to traditional regression analysis by allowing for a more comprehensive and nuanced analysis of complex causal relationships among multiple factors [24].

The research presents a novel approach to analyzing the influencing factors of policy satisfaction of ecological forest rangers using the qualitative comparative analysis method of fuzzy sets. The marginal contribution of the paper is two-fold. Firstly, it explores the influencing factors and interaction relationships of ecological forest rangers' policy satisfaction from a configuration perspective, which enriches the existing research methods of ecological poverty alleviation policy satisfaction. Secondly, the study evaluates the implementation effect of ecological forest ranger policies from a subjective evaluation perspective, which is relatively novel in the current research on ecological poverty alleviation policies.

Research in this area is particularly relevant given that China has recently eliminated absolute poverty, and preventing the return of absolute poverty has become a critical focus of the country's ecological poverty alleviation policies. The findings of the study can provide valuable insights into the optimization of ecological forest ranger policies, thereby contributing to poverty reduction and governance efforts. This investigation makes a significant contribution to the research on ecological poverty alleviation policies, and offers important practical implications for policymakers and stakeholders involved in poverty reduction efforts.

2. Research Framework

Based on the analysis of ecological poverty alleviation policy satisfaction studies, and considering the representativeness of indicators, the research framework (Figure 1) was constructed from the perspective of ecological forest rangers. Independent variables included "livelihood capital", "livelihood outcome", "policy cognition", "policy identity", "information mastery", and "implementation perception". The satisfaction of ecological forest rangers with the policy was an dependent variable. Group matching was used from an analysis perspective in order to analyze factors influencing ecological forest rangers' policy satisfaction.

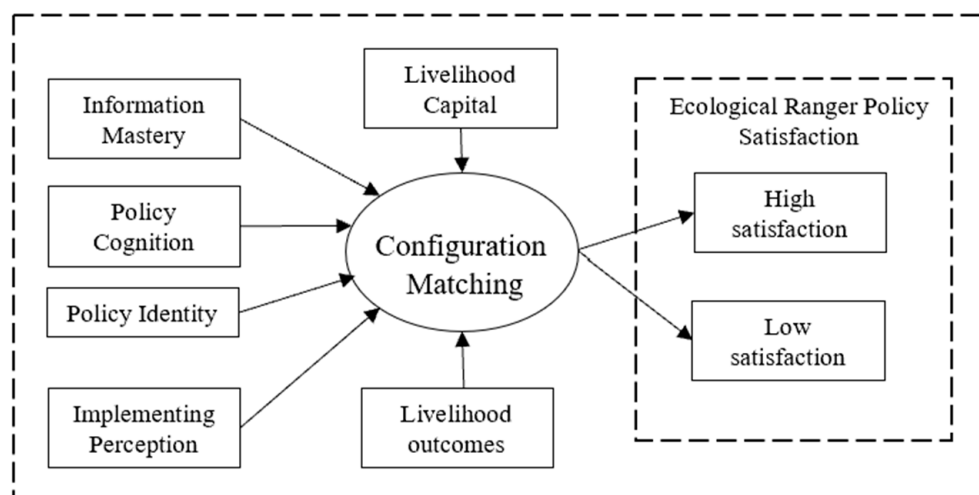


Figure 1. Research framework for qualitative comparative analysis of factors influencing the policy of ecological forest rangers.

(1) Livelihood capital. Using the sustainable livelihoods analysis framework developed by the UK's Department for International Development (DFID), the human capital (H), natural capital (N), social capital (S), physical capital (P), and financial capital (F) possessed by ecological forest rangers were assessed to explore their impact on the satisfaction with the policy of ecological forest rangers. Among them, natural capital is characterized by the area of forest land owned by ecological forest rangers, the area of farmland, and the quality of farmland, and natural capital endowment has a significant effect on the satisfaction with the forest land subsidy policy, farmland subsidy policy, and land transfer policy [25]; therefore, it is inferred that natural capital also has an effect on the satisfaction with the ecological ranger policy. Financial capital is characterized by the share of forestry subsidy income, the share of agricultural income, and the amount of annual income. Xie and Cai [26], in 2021, argued that physical and financial capital positively influenced farmers' satisfaction with the implementation of farmland protection compensation policies, and therefore inferred that physical and financial capital also have important effects on ecological forest rangers' policy satisfaction. Human capital was characterized by the number of years of education and the proportion of labor force of the users. Social capital is characterized by the number of governmental institution personnel owned by the ecological ranger's household, the number of friends and relatives of long-term urban residents, and whether the neighborhood is cordial. Social resources have a significant positive effect on farmers' income, while human capital has an income enhancing effect [27], and ecological forest rangers' satisfaction with the policy is closely related to their income level. So, human capital and social capital are considered as important factors affecting ecological forest rangers' policy satisfaction. Combining the studies of existing scholars, this paper uses livelihood capital as a comprehensive indicator to analyze its impact on the satisfaction with the policy of ecological forest rangers.

(2) Livelihood outcomes. Livelihood outcomes are the standard of living achieved by ecological forest rangers, using different livelihood strategies to integrate and utilize the livelihood capital they possess [28]. Determining whether the living standard of ecological forest rangers has improved is an important criterion to test the effectiveness of the implementation of the ecological ranger policy. After the implementation of the ecological ranger policy, eligible poor households received an important source of income and their living standards were improved. In addition to this, each forestry station (a subordinate unit of the Forestry Bureau) provides additional training to ecological forest rangers in planting techniques and farming techniques to enhance their ability to withstand livelihood risks. However, in the interviews with ecological forest rangers, it was also found that since the implementation of the ecological ranger policy, the workload of ecological forest rangers has been relatively heavy, especially during the forest fire prevention period. During this period, forest management work takes up almost a whole day of their time, and there are situations where the ecological forest rangers' own work conflicts with other family business activities, making it necessary for them to give up other sources of income for a short time. Thus, the ecological ranger policy as a new livelihood strategy leads to changes in livelihood outcomes, and different livelihood outcomes will inevitably have an impact on the satisfaction with the policy of ecological forest rangers.

(3) Policy cognition. This variable is interpreted as the ecological forest rangers' perceptions of ecological ranger policies, including their perceptions and evaluations of the effects of policy formulation, implementation, and enforcement [29]. The satisfaction of ecological forest rangers with policies depends on the deviation between policy expectations and actual implementation effects. There is a positive bias and higher satisfaction when the effect of policy implementation is higher than the effect of policy expectation [30]. Therefore, policy cognition is also one of the factors that influences ecological forest rangers' policy satisfaction.

(4) Policy identity. Policy implementation theory suggests that the target group's identification with the policy is the basis for policy implementation [31] and also influences the effectiveness of policy implementation. In this paper, policy identity refers to the degree of ecological forest rangers' support for EFRs implementation. Analyzing the degree of ecological forest rangers' identification with policy implementation is an important step in evaluating EFRs' satisfaction [32].

(5) Information Mastery. Information mastery is explained as the degree of an ecological ranger's understanding of the EFRs, and the degree of an ecological ranger's mastery of the policy reflects the effectiveness of policy promotion. The more the ecological forest rangers understand the policy, and the deeper their knowledge of the ecological poverty alleviation policy, the more beneficial it is for them to actually work harder and enhance their work identity [33], and, accordingly, their policy satisfaction increases.

(6) Implementation Perception. Implementation perception is the degree to which ecological forest rangers perceive the effect of EFRs implementation, including willingness to participate, demand perception, process perception, service perception, and policy demands and trust [34], and the results can be divided into five grades: "very insignificant, less insignificant, average, more insignificant, and very insignificant". The better the ecological forest rangers' perceptions of policy implementation are, the more willing they will be to participate in public policies, which in turn enhances the effectiveness of policy implementation.

In summary, livelihood capital and livelihood outcomes are important outcome manifestations of ecological forest ranger policies; policy cognition and policy identity are the ecological forest rangers' awareness and evaluation of the relevant policies and the degree of support they provide; information mastery reflects the degree of openness and transparency of the EFRs implementation process; implementation perception is an important reflection of the effectiveness of EFRs implementation. In the group perspective, livelihood capital, livelihood outcomes, policy cognition, policy identity, information mastery, and implementation perception are not independent; the six variables work synergistically through a linkage matching approach to jointly influence satisfaction with ecological ranger policies (Supplementary Materials).

3. Materials and Methods

3.1. Research Area

The research site is Qianshan City, Anhui Province (Figure 2), located in the southwestern part of Anhui Province, on the north bank of the lower reaches of the Yangtze River and the southeastern foothills of the Dabie Mountains, with a complex topography dominated by mountains and hills. Qianshan City was once a focus area of China's national poverty alleviation and development scheme. It is rich in forest resources. The economic activities in mountainous areas are dominated by forestry production. Forestry plays an important role in its economic development. The implementation effect of the local ecological forest ranger policy is relatively significant. Based on the principles of representativeness and convenience, ecological forest rangers in the town of Qianshan City were selected for this study.

3.2. Data Sources

From June to August 2021, the research team went to Qianshan City, Anhui Province, to conduct field research, following the principle of randomness and adopting a multi-stage sampling method to conduct the survey. A simple random sampling method was used to randomly select 10 towns, including Huangbai Town, Doumu Town, and Shuihou Town, among 16 townships in Qianshan City. A total of 512 ecological forest rangers were selected as a sample for the questionnaire survey, according to the amount of ecological forest rangers in each town in proportion to their total number (Table 1). After eliminating the questionnaires containing missing values and outliers, 412 valid questionnaires were obtained, with a valid return rate of 80.6%. In addition to the questionnaire survey, the

research team also conducted in-depth interviews with 2 to 4 ecological forest rangers randomly selected from each township to understand the implementation of the ecological forest ranger policy.

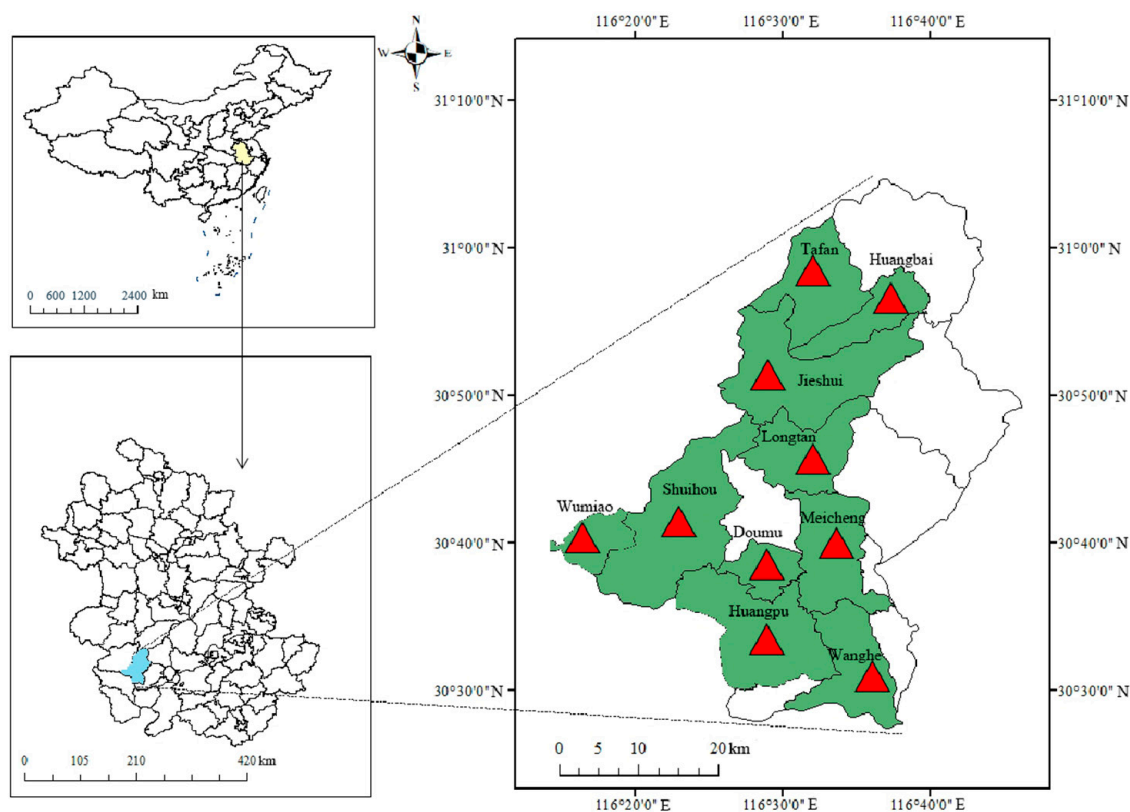


Figure 2. Location of the studied towns in Qianshan City, Anhui Province, China.

Table 1. Township distribution of the sample of ecological forest rangers.

Sample Area	Sample Size (Person)	Sample Share (%)
Huangbai	50	12.14
Doumu	33	8.01
Shuihou	51	12.38
Wumiao	44	10.68
Chashui	72	17.48
Tufan	30	7.28
Wanghe	11	2.67
Huangpu	52	12.62
Longtan	39	9.46
Meicheng	30	7.28
Total	412	100.00

From the returned questionnaires, the age of the respondents was concentrated in the age range of 46–66. The number of years of education was generally low, concentrated in the range of 6 years and below. The overall health status of the respondents was concentrated in “average” and “better” categories. The basic characteristics of the survey respondents are shown in Table 2.

Table 2. Basic characteristics of the sample.

Variables	Variable Properties	Quantity/Person	Percentage/%
Age (years)	≤35	8	1.94
	36~45	37	8.98
	46~55	225	54.61
	≥56	142	34.47
Years of education (years)	≤6	238	57.77
	7~9	155	37.62
	10~12	16	3.88
	≥13	3	0.73
Self-assessment of health status	Very poor	10	2.43
	Poor	42	10.19
	Fair	185	44.90
	Better	116	28.16
	Very good	59	14.32

3.3. Research Methods

Qualitative comparative analysis (QCA) is a research method that combines qualitative and quantitative approaches to analyze complex problems with multiple causal factors [35]. QCA includes three types: clear sets (cs), fuzzy sets (fs), and multi-valued sets (mv). Fuzzy set QCA is based on fuzzy sets and uses data elements to explore multiple combinations of conditions that lead to outcomes, using fuzzy scores to represent conditional variables and outcomes between 0 and 1 [36]. This helps to avoid data transformation losses and effectively describes the interactions between different variables [37]. Fuzzy set QCA is particularly useful for exploring factors that affect satisfaction, as it can handle issues related to degree variation and partial membership. Compared to cs QCA and mv QCA, which are only suitable for categorical issues, fuzzy set QCA has the advantage of dealing with more complex and nuanced issues [38].

This paper uses the qualitative comparative analysis method of fuzzy sets to analyze the influencing factors of policy satisfaction of ecological forest rangers, mainly including the following three steps. Firstly, the original data of various factors and results that affected the satisfaction of ecological forest rangers were calibrated to the corresponding fuzzy set membership scores, and the number of cases and membership scores corresponding to all possible combinations of conditions were listed. Secondly, the corresponding judging criteria and thresholds were determined, the combinations of conditions relevant to the results were screened, and the case distributions of the various combinations of conditions were evaluated. Finally, the consistency and coverage of the fuzzy subsets of condition combinations constituting the results were evaluated to analyze the stability of the paths of influence of condition combinations on the results, which were mainly measured by two indicators, consistency and coverage, calculated as follows.

$$\text{Consistency } (x_i \leq y_i) = \sum [\min (x_i, y_i)] / \sum x_i \quad (1)$$

Consistency reflects the degree of consistency of the influence of the condition variables, or the path of the combination of condition variables on the outcome. x_i is the affiliation score in the combination of conditions and y_i is the affiliation score in the outcome, and the consistency takes values between 0 and 1. The larger the value, the stronger and more convincing the significance of the condition variables' influence on the outcome variables. When the consistency reaches 0.9, it means that the condition is necessary to form the result, where coverage is the assessment of the degree of explanation of the conditional variables for the results after the consistency operation. x_i and y_i have the same meaning

as Equation (1), and coverage takes values between 0 and 1. The higher the coverage, the stronger the explanatory power of the cause and effect.

$$\text{Coverage } (x_i \leq y_i) = \sum [\min (x_i, y_i)] / \sum y_i \quad (2)$$

3.4. Data Calibration

In fuzzy set qualitative comparative analysis, each condition variable and outcome variable are an ensemble, respectively. Prior to data analysis, the condition and outcome variables are calibrated to a fuzzy number between 0 and 1, which represents the degree to which different cases belong to a certain set. A threshold value closer to 1 indicates a higher affiliation; when the threshold value is zero, it means no affiliation at all; when the threshold value is between 0 and 0.5, it means weak affiliation to the set; when the threshold value is between 0.5 and 1, it means strong affiliation. The direct calibration method and the indirect calibration method are used to assign values to the data according to the differences in the data types of each variable. The livelihood capital evaluation index system is established and weighted, and the continuous variable livelihood capital is calibrated using the direct calibration method. Livelihood outcomes, policy cognition, policy identity, information mastery, implementation perception, and ecological forest rangers' policy satisfaction are five-scale variables that are calibrated using an indirect calibration method for fuzzy set affiliation scores.

3.4.1. Result Variables

The research focus of this paper is to analyze the satisfaction of ecological forest rangers with the policy of ecological forest rangers. The result variable is satisfaction. The indirect calibration method is used to calibrate the membership score of fuzzy sets. According to the differences in the ecological forest rangers' satisfaction with the policy, the policy satisfaction was divided into five levels from low to high: "very dissatisfied", "relatively dissatisfied", "basically satisfied", "relatively satisfied", and "very satisfied", and the values were 0, 0.25, 0.5, 0.75, and 1, respectively.

3.4.2. Condition Variables

The livelihood capital composite results of ecological forest rangers were obtained based on the livelihood capital evaluation index system, and the variables were calibrated using the direct calibration method with the 95% (fully affiliated), 50% (qualitative intersection), and 5% (fully unaffiliated) quartiles of the sample data taken as calibration points. A livelihood capital evaluation index system was established to comprehensively evaluate livelihood capital. In order to avoid the influence of human factors on the evaluation results, and the problems of information crossover and superposition among the composite indicators in the indicator system, the entropy weighting method was used to determine the weights of each indicator [39]. Each measurement indicator, the meaning of the indicator, and the weight are shown in Table 3.

Table 3. Establishment of livelihood capital evaluation index system and weight setting.

Indicator Name	Measurement Standard	Indicator Meaning	Specific Gravity
Natural capital (N)	Cultivated area (N1)	Having arable land area (mu)	0.092
	Quality of cultivated land (N2)	The quality of cultivated land, "very poor", "worse", "general", "better", "very good", respectively. 1, 2, 3, 4, 5	0.011
	Forest area (N3)	Having forest land area (mu)	0.078

Table 3. Cont.

Indicator Name	Measurement Standard	Indicator Meaning	Specific Gravity
Material capital (P)	House material (P1)	Material of the owned house. Four dummy variables set for “civil house”, “brick house”, “masonry house”, “concrete house”.	0.007
	The value of durable goods and other agricultural production equipment (P2)	Paid value of durable goods and other agricultural production equipment	0.010
	Number of houses (P3)	The number of houses (rooms) that ecological forest guards have	0.045
Human capital (H)	Householder education period (H1)	The year of the householder receiving education (year)	0.017
	Proportion of labor (H2)	Number of family members undergoing labor for family Labor/number of families (%)	0.026
Financial capital (F)	Forestry subsidy income proportion (F1)	Forestry subsidy income/total family income (%)	0.036
	Agricultural income ratio (F2)	Agricultural operating income/total household income (%)	0.131
	Annual savings (F3)	The value of the annual savings amount	0.138
Social capital (S)	Whether the neighborhood relationship is harmonious (S1)	0 = No; 1 = Yes	0.003
	Number of staff members of government institutions (S2)	Number of people involved employed in government institutions (people)	0.206
	The number of relatives and friends of the long-term residents of the town (S3)	Number of long-term urban residents’ relatives and friends (people)	0.200

After obtaining the composite evaluation score of ecological forest rangers’ livelihood capital, the data were calibrated using the direct calibration method, using the 95% quantile value of the composite score (4.437) as the full affiliation threshold, the 50% quantile value (1.362) as the crossover point, and the 5% quantile value (0.446) as the full non-affiliation threshold. For livelihood outcomes, policy cognition, policy identity, information mastery, and implementation perception, the indirect calibration method was used, and the data results are shown in Table 4.

Table 4. Conditional variable data calibration.

Variable Name	Indicator Meaning	Calibration Result
Livelihood capital	Life Capital Comprehensive Score	Fully belong to (4.437); intersection (1.362); not affiliated at all (0.446)
Livelihood outcomes	“How does your family living level change after the implementation of ecological forest protection policies?”	“Reduce a lot” (0); “Lower some” (0.25); “Unchanged” (0.5); “Improve some” (0.75); “Improve a lot” (1)
Policy cognition	“Your support for the continuation of ecological forest guard policies”	“Very unsuitable” (0); “less supportive” (0.25); “Indifferent” (0.5); “More supportive” (0.75); “Very supportive” (1)
Policy identity	“Do you think the degree of implementation of ecological forest protection policies?”	“Very unnecessary” (0); “more unnecessary” (0.25); “Indifferent” (0.5); “necessary” (0.75); “very necessary” (1)

Table 4. Cont.

Variable Name	Indicator Meaning	Calibration Result
Information mastery	“Do you understand the policy of ecological forest guard?”	“don’t understand” (0); “don’t know more about” (0.25); “General understanding” (0.5); “More understanding” (0.75); “Know well” (1)
Implement perception	“Your perception of the implementation of ecological forest guard policies”	“Very unknown” (0); “Not obvious” (0.25); “Generally obvious” (0.5); “More obvious” (0.75); “very obvious” (1)

4. Results

4.1. Descriptive Analysis

According to the statistical analysis, the average satisfaction degree of ecological forest rangers with policies is 3.597. This satisfaction score is between “average” and “satisfied”, indicating that most ecological forest rangers have a positive attitude towards policies. It is believed that the policy of ecological forest rangers has a positive effect on their livelihood improvement.

4.2. Necessary Conditions Analysis

The necessity of each condition variable was analyzed separately using fsQCA 3.0 software and the results are shown in Table 5. In the analysis of the necessity of low satisfaction, the consistency test for the absence of policy identity was 0.900 and the test results for the remaining conditional variables were below 0.900, indicating that the absence of policy identity may be a necessary condition for low satisfaction. In the analysis of the necessity of high satisfaction, the consistency test for information mastery was 0.912, and the consistency of the remaining conditional variables was below 0.900, suggesting that information mastery may be a necessary condition for high satisfaction with the policy of ecological forest rangers. The degree of policy satisfaction of ecological forest rangers is the result of the comprehensive effect of each group. Therefore, in the subsequent analysis of the comprehensive effect of each group, the two conditional variables of policy identification and information mastery are eliminated.

Table 5. Test of necessity for conditional variables.

Condition Variable	Low Satisfaction		High Satisfaction	
	Consistency	Coverage	Consistency	Coverage
Livelihood capital	0.715	0.502	0.676	0.745
~Livelihood capital	0.636	0.556	0.548	0.751
Livelihood outcome	0.664	0.504	0.713	0.849
~Livelihood outcome	0.801	0.640	0.583	0.731
Policy cognition	0.583	0.493	0.658	0.872
~Policy cognition	0.849	0.613	0.617	0.699
Policy identity	0.491	0.489	0.577	0.901
~Policy identity	0.900	0.576	0.673	0.674
Information mastery	0.665	0.414	0.912	0.889
~Information mastery	0.821	0.856	0.399	0.651
Implementation perception	0.578	0.456	0.688	0.850
~Implementation perception	0.810	0.624	0.560	0.675

Note: “~” means that the condition is missing.

4.3. Condition Group Results

4.3.1. Group Analysis of High Satisfaction Conditions

As can be seen from Table 6, the consistency of the solution is 0.969, and the consistency of each group is higher than 0.9. This indicates that 96.9% of the cases meet the high satisfaction level among all the research subjects who meet these six condition groups. The coverage of the solution was 0.568, indicating that these six groupings were able to explain 56.8% of the highly satisfied cases.

Table 6. High satisfaction group analysis.

Variables	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Livelihood capital	⊗	⊗	⊗		•	•
Livelihood outcome	•	•		•	⊗	⊗
Policy cognition		•	•	•	•	⊗
Policy identity	⊗	•	•	•	⊗	•
Implementation perception	•		•	•	•	•
Consistency	0.974	0.988	0.991	0.999	0.982	0.990
Coverage	0.301	0.254	0.240	0.322	0.279	0.226
Unique coverage	0.073	0.036	0.009	0.050	0.037	0.023
Consistency of solution	0.969					
Coverage of solution	0.568					

Note: “⊗” means the condition is missing; “•” means the condition exists; the big circle is the core condition; the small circle is the auxiliary condition.

In group 1, the absence of livelihood outcomes and implementation perceptions and livelihood capital played a central role, with the absence of policy identity as an auxiliary condition. The coverage of group 1 was 0.301, indicating that group 1 can account for 30.1% of the high-satisfaction cases; the unique coverage was 0.073, indicating that 7.3% of the high-satisfaction cases can be accounted for by group 1 only. In group 2, the absence of livelihood capital and livelihood outcomes, policy cognitions, and policy identity were all core conditions. The coverage of group 2 was 0.254, indicating that group 2 can account for 25.4% of the high-satisfaction cases; the unique coverage was 0.036, indicating that 3.6% of the high-satisfaction cases can be accounted for by group 2 only. In group 3, the absence of livelihood capital, policy identity, and implementation perceptions played a central role, with policy cognitions playing an auxiliary role. The coverage of group 3 was 0.240, indicating that 24.0% of the high-satisfaction cases could be accounted for by group 3; the unique coverage was 0.009, indicating that 0.9% of the high-satisfaction cases could be accounted for by group 3 only. In group 4, livelihood outcome, policy cognition, policy identity, and implementation perception were all core condition variables, and the coverage of group 4 was 0.322, indicating that group 4 can account for 32.2% of the high satisfaction cases; the unique coverage was 0.050, indicating that 5% of the high satisfaction cases were uniquely accounted for by group 4. In group 5, livelihood capital, the lack of livelihood outcomes, policy cognition, and implementation perception were the core conditions, and the lack of policy identity played an auxiliary role. The coverage of group 5 was 0.279, indicating that group 5 could account for 27.9% of the high satisfaction cases; the unique coverage was 0.037, indicating that 3.7% of the high satisfaction cases could be accounted for by group 5 only. In group 6, livelihood capital, lack of livelihood outcome, policy identity, and implementation perception played a central role, and a lack of policy cognition played a supporting role. The coverage of group 6 was 0.226, indicating that 22.6% of high satisfaction cases could be accounted for by group 6; the unique coverage was 0.023, indicating that 2.3% of high satisfaction cases could be uniquely accounted for by group 6.

4.3.2. Group Analysis of Low Satisfaction Conditions

In the low satisfaction condition group analysis, the combination of each condition variable is divided into group 1 and group 2. As can be seen from Table 7, the consistency and overall agreement of the groups is above the minimum standard of 0.8. Among them,

the consistency of the solution is 0.960, indicating that 96.0% of the research respondents who meet the two conditions have low satisfaction with the policy of ecological forest rangers. The coverage of the solution is 0.638, indicating that group 1 and group 2 can account for 63.8% of the low satisfaction cases.

Table 7. Low satisfaction group analysis.

Variables	Group 1	Group 2
Livelihood capital		●
Livelihood outcome		⊗
Policy cognition	⊗	
Information mastery	⊗	⊗
Implementation perception	⊗	⊗
Consistency	0.965	0.968
Coverage	0.598	0.439
Unique coverage	0.199	0.040
Consistency of solution	0.960	
Coverage of the solution	0.638	

Note: “⊗” means the condition is missing; “●” means the condition exists; the big circle is the core condition; the small circle is the auxiliary condition.

In group 1, the lack of information mastery and the lack of implementation perception played a central role, and the lack of policy cognition played an auxiliary role. The coverage of group 1 was 0.598, indicating that group 1 can explain 59.8% of the low satisfaction cases. The unique coverage of 0.199 indicated that 19.9% of the low satisfaction cases can be explained only by group 1. In group 2, the absence of information mastery and the absence of implementation perception also played a central role, with the absence of livelihood capital and livelihood outcome as auxiliary condition variables. The coverage of group 2 was 0.439, indicating that group 2 can account for 43.9% of the low satisfaction cases. The unique coverage of 0.040 indicates that 4.0% of the low satisfaction cases can be accounted for only by group 2.

4.4. Analysis of the Combined Effects of Groups

In the high satisfaction group analysis, the implementation of the perceived condition variable played a central role in all five groups. This can be explained by the fact that the more pronounced the ecological ranger’s perception of the implementation of the relevant policy, the higher the satisfaction with the ecological ranger’s policy, given the differences in other condition variables. Namely, implementation perception is a key factor for high satisfaction with the ecological forest ranger policy. In general, the more obvious the ecological ranger’s perception of the implementation effect of the policy, the more he or she enjoys the “benefits” yielded by the policy; specifically, the ecological ranger feels the improvement in income and living standard due to the policy. The work of ecological forest rangers also improves the local ecological environment and promotes the development of environmental protection in ecologically fragile areas. The improved living conditions and the effectiveness of the ecological forest rangers’ work bring them a great sense of “work identity”, and they also “feel that their work is very valuable, and they can make their own contribution to the country while enjoying the national preferential policies”, and the pride brought on by their work also leads to higher policy satisfaction.

In the high satisfaction condition grouping, the absence of livelihood capital was the core condition variable for group 1, group 2, and group 3, which had an impact on high satisfaction with the policy of ecological forest rangers. The coverage of group 4 was the highest among the six groups, indicating that livelihood outcomes, policy cognition, policy identity, and implementation perception, which were core condition variables, all had a positive effect on high policy satisfaction. In the comparative analysis of group 5 and group 6, ignoring the effect of missing auxiliary conditions, both policy cognition and policy

identity had a positive effect on high policy satisfaction, but in terms of the difference in coverage between the two (27.9% for group 5 and 22.6% for group 6), the effect of policy cognition on high policy satisfaction was more significant. As an important ecological poverty alleviation measure, the policy of ecological forest rangers greatly improved the livelihoods of ecological forest rangers. According to the field interviews with ecological forest rangers, more than 90% of the groups had a high degree of agreement with the policy. "They thought that the implementation of the policy of ecological forest rangers was very necessary". Therefore, the policy identification condition variables had no significant impact on the differences in the satisfaction with the ecological forest rangers policy. In terms of policy cognition, through interviews, it was found that the ecological forest rangers' understandings of the formulation, implementation, and implementation effects of relevant policies varied greatly. Due to the differences in the basic situations of the ecological forest rangers themselves, their expectations of the implementation effect of the policy were also different. Generally, the group of ecological forest rangers who had a better understanding of the policy had a higher awareness of the policy, and the greater the degree of support for the continuation of the policy of ecological forest rangers, the higher the degree of policy satisfaction.

In the low satisfaction group analysis, both the lack of information mastery and the lack of implementation perception played a central role, which corresponded to the high-satisfaction group analysis in the previous section, where more "implementation perception" corresponded to higher policy satisfaction. The lack of information mastery as one of the core conditions leading to low satisfaction was shown by the fact that incomplete information mastery of the policy reduced the satisfaction of ecological forest rangers with the policy even if they had high livelihood capital. Since the implementation of the policy of ecological forest rangers, all regions have been selecting qualified ecological forest rangers in strict accordance with the selection procedure. Generally, the education level of the ecological forest rangers on duty was concentrated in primary school level and below. Due to the limitation of cultural knowledge level, there were obstacles to the understanding and interpretation of relevant policies of ecological forest rangers; this made it easy to reduce recognition of work and difficult to obtain "work happiness". Therefore, the satisfaction with the policy was low.

The lack of policy cognition also became a supporting condition for low satisfaction in group 1. Group 2 showed that even if ecological forest rangers had a high amount of livelihood capital, the lack of information mastery, the lack of implementation perceptions, and the lack of supporting livelihood outcomes all contributed to the low policy satisfaction of ecological forest rangers. Through the comparison between group 1 and group 2, it was found that under the premise that group 2 had a higher amount of livelihood capital, the coverage of configuration 1 was 15.9% higher than that of configuration 2 due to the lack of policy awareness and the lack of auxiliary conditions for livelihood results. This showed that although the lack of policy cognition and the lack of livelihood results had a certain impact on the low satisfaction with the policy, the impact of the lack of policy cognition was significantly higher than the impact of the lack of livelihood results. This also corresponded with the previous research results of high satisfaction configuration analysis.

5. Discussion

Qianshan City of Anhui Province is located in the southeast foot of Dabie Mountain Area, one of the 14 contiguous poverty-stricken areas in China, with backward economic development and poor ecological environment. Qianshan City once developed its economy at the expense of the ecological environment, making environmental problems increasingly prominent, which affected the poverty reduction of the poor population, severely restricted the economic development of Qianshan City, and plunged the local area into a vicious cycle of ecological poverty. With the organic unity of ecological environmental protection and economic and social development as the starting point, the ecological forest ranger policy plays an important role in helping Qianshan City to get rid of the vicious circle of ecological

poverty. Additionally, it plays a role in eliminating absolute poverty by constructing a long-term poverty relief mechanism, taking a sustainable ecological poverty alleviation path [40]. With the gradual promotion of the ecological forest ranger policy, the problem of absolute poverty has been solved, and now we have entered the “post-poverty alleviation era” [41], which focuses on consolidating the results of poverty eradication and preventing the return to poverty. It is particularly important to further consolidate and optimize the ecological forest ranger policy for the implementation of the ecological poverty alleviation mechanism. Therefore, it is of great significance to analyze the factors influencing the satisfaction with the implementation of the ecological forest ranger policy, and further improve the sustainable livelihood ability of the ecological forest ranger group in China.

The degree of information mastery is an important factor affecting ecological forest rangers’ policy satisfaction, and information asymmetry theory suggests that the degree of information mastery reflects differences in the ability of different economic individuals to obtain information [42] and has an important impact on individual decision making. The degree of information mastery refers, first of all, to the ecological ranger’s understanding and cognition of the ecological forest ranger policy. The deeper their cognition of the policy, the better the understanding of the essence of the policy, which helps them to evaluate the services of the relevant departments more rationally, leading to higher policy satisfaction accordingly. For ecological forest rangers, their main income is not only wage income but also income from agricultural production and operation. Agriculture, as a weak industry, has greater natural and market risks [43]. The higher the information mastery of ecological forest rangers, the better it is for them to avoid market and other risks, obtain more agricultural income, and improve their living standards, thus positively influencing policy satisfaction.

Another important factor affecting ecological forest rangers’ policy satisfaction is the perception of policy implementation. The degree of ecological forest rangers’ perception of policy implementation is closely related to their own needs, expectations, and social comparisons [44], which mainly include perceived needs, perceived processes, and perceived services. Ecological forest rangers, with their single livelihood strategy and generally low standard of living, have a high degree of demand for ecological compensation income. According to marginal utility theory, when the compensation standard has not yet reached its extreme value, the marginal utility of ecological forest rangers increases as the compensation standard increases [45], and policy satisfaction increases accordingly. In addition, if the policy of ecological forest rangers takes into account the actual needs of different types of ecological forest rangers and adopts corresponding strategies, the policy satisfaction will also be improved. Process perception affects the degree of familiarity of the ecological forest rangers with policy-related information, and whether they can participate in the whole process of the implementation of the ecological forest ranger policies has a great impact on the satisfaction with the policies. The more open and transparent the implementation process of ecological forest rangers is, the fairer and more objective the government is perceived to be [46]. Ecological forest rangers can also play a supervisory role and improve policy satisfaction. The perception of service is mainly reflected in the timeliness and convenience of the salary payment of ecological forest rangers, that is, the cash situation of funds. The cashing of funds affects the ecological forest rangers’ trust in the policy, and the timely release of compensation funds is conducive to improving policy satisfaction.

In summary, according to the varied importance of the influences of various conditions on policy satisfaction, enhancing the information grasp degree of ecological forest rangers and improving the perception level of policy implementation is the best strategy to effectively improve the policy satisfaction of ecological forest rangers. On the one hand, it is necessary to strengthen the publicity of the ecological forest ranger policy, popularize the knowledge related to the ecological forest ranger policy, and improve the ecological protection awareness and information mastering ability of ecological forest rangers. This will further promote the degree of support for the continuation of the ecological forest ranger policy, and increase ecological forest rangers’ enthusiasm regarding participation

in the national ecological poverty alleviation cause. On the other hand, relevant national departments should establish and improve the monitoring mechanism of ecological forest rangers' livelihood [47], effectively understand the degree of ecological forest rangers' perception of policy implementation, and establish a sound dynamic adjustment mechanism. Through regular monitoring of people's livelihood, timely feedback of ecological forest rangers on relevant policies should be obtained, and targeted improvements should be made to effectively solve related problems that lead to low satisfaction with ecological forest ranger policies, and the implementation efficiency of ecological forest rangers policies should also be improved.

6. Conclusions

Based on research data from Qianshan City, Anhui Province, we used the fuzzy set qualitative comparative analysis method to investigate the complex relationships between "livelihood capital", "livelihood outcomes", "policy perceptions", and "implementation perceptions" from a histological perspective. In addition, we investigated "policy identity", "information acquisition", and "implementation perception", and analyzed the complex relationship between the six variables and policy satisfaction in the discussion section. The findings are as follows.

In general, the implementation effect of the ecological ranger policy is recognized by most audiences, but there is still much room for improvement. The necessity test analysis showed that ecological rangers with low policy satisfaction usually lacked a sense of identification with the policy. Ecological rangers with high policy satisfaction had a better ability to grasp information.

In the conditional grouping analysis of high policy satisfaction, implementation perception is the core conditional variable, which plays a key role in high policy satisfaction. In the comparative analysis of other important core condition variables, policy perception and policy agreement, it was found that policy perception had a more significant effect on high policy satisfaction. There are two conditional groups that lead to low policy satisfaction among ecological rangers: policy perception*information mastery*implementation perception and livelihood capital*livelihood outcome*information mastery*implementation perception, among which the lack of information mastery and implementation perception play a central role, further validating the importance of implementation perception for policy satisfaction. The absence of policy perceptions and the absence of livelihood outcomes, on the other hand, were the auxiliary condition variables, and the comparative analysis revealed that the effect of the absence of policy perceptions was significantly higher than the effect of the absence of livelihood outcomes in the low satisfaction group analysis, corresponding to the findings in the high satisfaction group analysis.

Undeniably, there are still many shortcomings in the article. The subjective satisfaction of ecological rangers with relevant policies can lead to different perceived outcomes due to individual differences, and the article uses fuzzy set qualitative comparative analysis for the analysis of satisfaction influencing factors, which makes it difficult to ensure the complete objectivity of the evaluations made. In a subsequent study, the macro-level livelihood monitoring data should be combined to corroborate and supplement the results of the implementation of the ecological ranger policy, so as to improve the satisfaction and policy adaptability of ecological rangers in a targeted manner.

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References

- Li, K.; Lloyd, B.; Liang, X.-J.; Wei, Y.-M. Energy poor or fuel poor: What are the differences? *Energy Policy* **2014**, *68*, 476–481. [CrossRef]
- Pradhan, P.; Costa, L.; Rybski, D.; Lucht, W.; Kropp, J. A systematic study of sustainable development goal (SDG) interactions. *Earth’s Future* **2017**, *5*, 1169–1179. [CrossRef]
- Duan, M.; Zhang, C.; Xiao, H.; Liu, J.; Li, Z.; Li, W. Practice and thinking of poverty alleviation mode of ecological fishery poverty reduction work in Enshi city, Hubei province and Liupanshui city, Guizhou province, China. *Bull. Chin. Acad. Sci.* **2019**, *34*, 114–120. Available online: <https://www.webofscience.com/wos/alldb/summary/b8402be5-c565-41bb-9bd1-45ae31bc4c34-69ea7df3/relevance/1> (accessed on 11 April 2023).
- Srivastava, S.K. Making a technological choice for disaster management and poverty alleviation in India. *Disasters* **2009**, *33*, 58–81. [CrossRef] [PubMed]
- Qin, B.; Yu, Y.; Ge, L.; Yang, L.; Guo, Y. Does eco-compensation alleviate rural poverty? New evidence from national key ecological function areas in China. *Int. J. Environ. Res. Public Health* **2022**, *19*, 10899. [CrossRef] [PubMed]
- Zhang, K.; Dearing, J.A.; Dawson, T.P.; Dong, X.; Yang, X.; Zhang, W. Poverty alleviation strategies in Eastern China lead to critical ecological dynamics. *Sci. Total Environ.* **2015**, *506*, 164–181. [CrossRef]
- Bulte, E.H.; Lipper, L.; Stringer, R.; Zilberman, D. Payments for ecosystem services and poverty reduction: Concepts, issues, and empirical perspectives. *Environ. Dev. Econ.* **2008**, *13*, 245–254. [CrossRef]
- Li, D.; Xu, D.; Wang, Z.; Ding, X.; Song, A. Ecological compensation for desertification control: A review. *J. Geogr. Sci.* **2018**, *28*, 367–384. [CrossRef]
- Yan, Z.; Wei, F.; Deng, X.; Li, C.; He, Q.; Qi, Y. Does the policy of ecological forest rangers (EFRs) for the impoverished populations reduce forest disasters?—Empirical evidence from China. *Forests* **2022**, *13*, 80. [CrossRef]
- Liu, C.-L.; Xu, M.; Zhou, K.-Y.; Zeng, F.-C.; Liu, Z.-M. Coupling development mechanism and typical ways of targeted poverty alleviation and eco-compensation in China: Case analysis based on forestry. *J. Nat. Resour.* **2019**, *34*, 989–1002. Available online: <https://www.webofscience.com/wos/alldb/summary/99e66f02-ce7f-4627-90c7-b16d7034b150-69eaa3d1/relevance/1> (accessed on 18 March 2023).
- Wang, Y.; Wang, D.; Zhao, R. The effectiveness of the ecological forest rangers policy in southwest China. *Forests* **2021**, *12*, 746. [CrossRef]
- Wang, W.; Lan, Y.; Wang, X. Impact of livelihood capital endowment on poverty alleviation of households under rural land consolidation. *Land Use Policy* **2021**, *109*, 105608. [CrossRef]
- Qiu, S.; Jin, L. Forest ecological benefit compensation, income level and policy satisfaction: Empirical analysis based on the survey data of farmers in ecological protection red line area. *Resour. Environ. Yangtze Basin* **2022**, *31*, 234–243. Available online: <https://www.webofscience.com/wos/alldb/summary/4fa7657e-eea8-4df4-b8be-59ce2196b7ff-69eaadad/relevance/1> (accessed on 25 March 2023).
- Shir, N.; Nikolaev, B.N.; Wincent, J. Entrepreneurship and well-being: The role of psychological autonomy, competence, and relatedness. *J. Bus. Ventur.* **2019**, *34*, 105875. [CrossRef]
- Ziaei, H.; Katibeh, M.; Eskandari, A.; Mirzadeh, M.; Rabbanikhah, Z.; Javadi, M.A. Determinants of patient satisfaction with ophthalmic services. *BMC Res. Notes* **2011**, *4*, 7. [CrossRef]
- Li, J.; Wang, Z.; Cheng, X.; Shuai, J.; Shuai, C.; Liu, J. Has solar PV achieved the national poverty alleviation goals? Empirical evidence from the performances of 52 villages in rural China. *Energy* **2020**, *201*, 117631. [CrossRef]

17. Pang, J.; Jin, L.; Yang, Y.; Li, H.; Chu, Z.; Ding, F. Policy cognition, household income and farmers' satisfaction: Evidence from a wetland ecological compensation project in the Poyang lake area at the micro level. *Sustainability* **2022**, *14*, 955. [\[CrossRef\]](#)
18. Yang, D.; Luan, W.; Yang, J.; Xue, B.; Zhang, X.; Wang, H.; Pian, F. The contribution of data-driven poverty alleviation funds in achieving mid-21st-century multidimensional poverty alleviation planning. *Humanit. Soc. Sci. Commun.* **2022**, *9*, 179. [\[CrossRef\]](#)
19. Gakou-Kakeu, J.; di Gregorio, M.; Paavola, J.; Sonwa, D.J. REDD plus policy implementation and institutional interplay: Evidence from three pilot projects in Cameroon. *For. Policy Econ.* **2022**, *135*, 102642. [\[CrossRef\]](#)
20. Mitonga-Monga, J. Ethical climate influences on employee commitment through job satisfaction in a transport sector industry. *J. Psychol. Afr.* **2018**, *28*, 15–20. [\[CrossRef\]](#)
21. Cao, M.; Xu, D.; Xie, F.; Liu, E.; Liu, S. The influence factors analysis of households' poverty vulnerability in southwest ethnic areas of China based on the hierarchical linear model: A case study of liangshan yi autonomous prefecture. *Appl. Geogr.* **2016**, *66*, 144–152. [\[CrossRef\]](#)
22. Li, M.; Zhao, P.; Wu, L.; Chen, K. Effects of value perception, environmental regulation and their interaction on the improvement of herdsman's grassland ecological policy satisfaction. *Int. J. Environ. Res. Public Health* **2021**, *18*, 3078. [\[CrossRef\]](#) [\[PubMed\]](#)
23. Gabriel, A.S.; Campbell, J.T.; Djurdjevic, E.; Johnson, R.E.; Rosen, C.C. Fuzzy profiles: Comparing and contrasting latent profile analysis and fuzzy set qualitative comparative analysis for person-centered research. *Organ. Res. Methods* **2018**, *21*, 877–904. [\[CrossRef\]](#)
24. Fiss, P.C. Building better causal theories: A fuzzy set approach to typologies in organization research. *Acad. Manag. J.* **2011**, *54*, 393–420. [\[CrossRef\]](#)
25. Barnes, C.; Claus, R.; Driessen, P.; Dos Santos, M.J.F.; George, M.A.; van Laerhoven, F.; Dos Santos, M.F. Uniting forest and livelihood outcomes? Analyzing external actor interventions in sustainable livelihoods in a community forest management context. *Int. J. Commons* **2017**, *11*, 532–571. [\[CrossRef\]](#)
26. Xie, J.; Cai, Y. The impacts of farmer livelihood endowment on participation effectiveness in farmland conservation compensation policy: Chengdu and Suzhou as typical innovational practice areas. *Resour. Sci.* **2016**, *38*, 2082–2094. Available online: <https://www.webofscience.com/wos/alldb/summary/1f9d2d4c-041b-4d3a-b899-6ead5ae1cfcd-69eab973/relevance/1> (accessed on 4 March 2023).
27. Victora, C.G.; Adair, L.; Fall, C. Maternal, Maternal and child undernutrition: Consequences for adult health and human capital. *Lancet* **2008**, *371*, 340–357. Available online: <https://www.webofscience.com/wos/alldb/summary/88799520-f05c-4f7d-85f9-99450f7cdeb8-69eab472/relevance/1> (accessed on 4 March 2023). [\[CrossRef\]](#)
28. Schure, J.; Ingram, V.; Sakho-Jimbira, M.S.; Levang, P.; Wiersum, K.F. Formalisation of charcoal value chains and livelihood outcomes in central- and west Africa. *Energy Sustain. Dev.* **2013**, *17*, 95–105. [\[CrossRef\]](#)
29. Goldberg, A.C.; Robinson, J.G.; Cromwell, W.C.; Ross, J.L.; Ziajka, P.E. Future issues, public policy, and public awareness of familial hypercholesterolemias: Recommendations from the national lipid association expert panel on familial hypercholesterolemia. *J. Clin. Lipidol.* **2011**, *5*, S46–S51. [\[CrossRef\]](#)
30. Lee, M.J.; Hwang, S.O.; Cha, K.C.; Cho, G.C.; Yang, H.J.; Rho, T.H. Influence of nationwide policy on citizens' awareness and willingness to perform bystander cardiopulmonary resuscitation. *Resuscitation* **2013**, *84*, 889–894. [\[CrossRef\]](#)
31. Ansell, C.; Sørensen, E.; Torfing, J. Improving policy implementation through collaborative policymaking. *Policy Politics* **2017**, *45*, 467–486. [\[CrossRef\]](#)
32. Davis, S.; Murphy, S.A.; Watkins, J. Work changes and employee perceptions of co-worker flexible work policy use: A moderated mediation study. *Empl. Relat. Int. J.* **2022**, *45*, 516–534. [\[CrossRef\]](#)
33. Chen, S.; Ji, Y.-S. The effects of employees' job satisfaction on work performance in social organization: Focusing on psychological capital and organizational identity as a mediator. *Korean J. Bus. Adm.* **2021**, *34*, 1955–1978. Available online: <https://www.webofscience.com/wos/alldb/summary/3e1b6243-a7f7-4959-ab92-f0dd6db01f12-69ea6946/relevance/1> (accessed on 25 March 2023). [\[CrossRef\]](#)
34. Pradhan, N.S.; Fu, Y.; Zhang, L.; Yang, Y. Farmers' perception of effective drought policy implementation: A case study of 2009–2010 drought in yunnan province, China. *Land Use Policy* **2017**, *67*, 48–56. [\[CrossRef\]](#)
35. Llopis-Albert, C.; Merigó, J.M.; Xu, Y.; Liao, H. Application of fuzzy set/qualitative comparative analysis to public participation projects in support of the eu water framework directive. *Water Environ. Res.* **2018**, *90*, 74–83. [\[CrossRef\]](#)
36. Hug, S. Qualitative comparative analysis: How inductive use and measurement error lead to problematic inference. *Political Anal.* **2013**, *21*, 252–265. [\[CrossRef\]](#)
37. Marx, A.; Rihoux, B.; Ragin, C. The origins, development, and application of qualitative comparative analysis: The first 25 years. *Eur. Political Sci. Rev.* **2014**, *6*, 115–142. [\[CrossRef\]](#)
38. Schneider, C.Q.; Wagemann, C. Reducing complexity in qualitative comparative analysis (QCA): Remote and proximate factors and the consolidation of democracy. *Eur. J. Political Res.* **2006**, *45*, 751–786. [\[CrossRef\]](#)
39. Wu, J.; Zhang, Q. Multicriteria decision making method based on intuitionistic fuzzy weighted entropy. *Expert Syst. Appl.* **2011**, *38*, 916–922. [\[CrossRef\]](#)
40. Liu, Y.; Chen, S.; Zhao, R. Current Research and Future Prospect of Long-term Mechanism of Forestry Industry Based Poverty Alleviation. *World For. Res.* **2021**, *34*, 54–59. Available online: <https://www.webofscience.com/wos/alldb/summary/20aeb043-0616-46fd-b2d1-8f116db91dfb-75857eba/relevance/1> (accessed on 18 March 2023).

41. Luo, Y.; Shi, Z.; Guo, D.; He, P. Toward universal health coverage: Regional inequalities and potential solutions for alleviating catastrophic health expenditure in the post-poverty elimination era of China. *Int. J. Health Policy Manag.* **2023**, *12*, 1–9. [[CrossRef](#)]
42. Ebell, M.H.; Shaughnessy, A. Information mastery: Integrating continuing medical education with the information needs of clinicians. *J. Contin. Educ. Health Prof.* **2003**, *23* (Suppl. 1), S53–S62. [[CrossRef](#)] [[PubMed](#)]
43. Dunn, A.; Julien, G.; Ernst, W.; Cook, A.; Doe, K.; Jackman, P. Evaluation of buffer zone effectiveness in mitigating the risks associated with agricultural runoff in Prince Edward Island. *Sci. Total Environ.* **2011**, *409*, 868–882. [[CrossRef](#)] [[PubMed](#)]
44. Tuytens, M.; Devos, G. Teachers' perception of the new teacher evaluation policy: A validity study of the policy characteristics scale. *Teach. Teach. Educ.* **2009**, *25*, 924–930. [[CrossRef](#)]
45. Festjens, A.; Janiszewski, C. The value of time. *J. Consum. Res.* **2015**, *42*, 178–195. [[CrossRef](#)]
46. Bertot, J.C.; Jaeger, P.T.; Grimes, J.M. Using icts to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies. *Gov. Inf. Q.* **2010**, *27*, 264–271. [[CrossRef](#)]
47. Bhattarai, S.; Regmi, B.R.; Pant, B.; Uprety, D.R.; Maraseni, T. Sustaining ecosystem based adaptation: The lessons from policy and practices in Nepal. *Land Use Policy* **2021**, *104*, 105391. [[CrossRef](#)]

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