The Policy of Ecological Forest Rangers (EFRs) for the Poor: Goal Positioning and Realistic Choices—Evidence from the Re-Employment Behavior of EFRs in Sichuan, China

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Abstract: Ecological or environmental compensation policies are usually designed with multiple policy objectives such as protecting the ecological environment and promoting farmers’ livelihoods, but in the enforcement process, there are often inconsistencies between realistic choices and policy objectives. Based on pooled cross-section data from the 2017–2019 public announcement of the selection of ecological forest rangers (EFRs, who mainly refer to manage and protect forests, grasslands, deserts and rivers, and report or prevent the situation or behavior of the forest area disasters, animal and plant resources, and infrastructure damage in time) among the poor in Sichuan Province in China, we used the Probit model to analyze the influencing factors of the re-employment behavior of EFRs among the poor, with the aim of assessing the differences between central government goal positioning and local government enforcement options. We find that (1) EFRs from poor households who have not yet escaped poverty and have a high per capita income level are given priority to be re-employed. This finding shows that the policy of ecological forest rangers for the poor (PEFRP, it mainly refers to an environmental protection policy that only hires the poor) pays close attention to poverty reduction goals, but it does not consider the poorest people because the EFRs with a higher income obtain higher re-employment opportunities. (2) Age, health, and education, which represent the human capital level, have no significant impact on renewal. This finding shows that the local government has not jointly achieved the goal of “poverty reduction and environmental protection” in the enforcement of the PEFRP and has deviated from the initial goal positioning of the central government. Therefore, in order to achieve the multiple policy objectives such as poverty reduction and environmental protection together, future policy enforcement needs to be adjusted in terms of local administrative assessment and the selection and recruitment of EFRs.

Keywords: payments for environmental services; ecological forest rangers; goal positioning; realistic choice; re-employment; poverty reduction; environmental protection; Sichuan province

1. Introduction

As the world’s most populous and largest developing country, China has played an important role in global poverty reduction, making tremendous contributions in this regard. According to the 2019 White Paper on “China’s Food Security” by the Information Office of the State Council, according to the World Bank’s international poverty standard of $1.90 USD/person/day, China’s rate of contribution...
to global poverty reduction exceeds 70%. China is the first country globally to achieve the poverty reduction goal of the UN Millennium Development Goals. Since China has a strict urban and rural household registration management system, it has adopted an unbalanced public service policy. Urban residents have more comprehensive social security services than rural residents. Therefore, according to the current poverty standards in China, all poor people live in rural areas. According to the poverty standard of $327.72 USD/person/year (constant prices in 2010), the rural population in poverty at the end of 2019 was 5.15 million (distribution: 3.23 million in western China, 1.81 million in central China, and 470,000 in eastern China). Compared to the end of the previous year, there was a decrease of 11.09 million people, and the incidence of poverty was 0.6% (see Appendix A 1.1); compared with 770 million people at the end of 1978 (see Appendix A 1.2), this decrease constitutes a cumulative reduction of nearly 765 million people.

China’s large-scale poverty reduction is inseparable from the material basis provided by economic growth [1]. It is also inseparable from the enforcement of poverty reduction policies based on local and individual conditions. The policy of EFRs for the poor (hereafter referred to as the policy of ecological forest rangers for the poor (PEFRP)) is a concrete manifestation of the poverty reduction policy of “tailor measures to local conditions and people.” In China, ecologically fragile areas, ecological function areas, forestry resource-gathering areas, ethnic minority settlements, and areas where the poor population are distributed have a high degree of geographical overlap (see Appendix A 1.3) [2–4]. Therefore, the use of ecological compensation policies to conduct poverty reduction activities has become a concrete manifestation of the realization of “tailor measures to local conditions and people,” and this measure is conducive not only to its versatility in environmental protection and poverty reduction but also to its sustainability. The PEFRP is an important part of the practice of ecological poverty reduction policies (EPRP). It is also a forest protection system designed to combine regional resource endowments and population resource endowments. The PEFRP means that after the central and provincial governments have issued project funds and allocation indicators, the county and township governments and village cadres are responsible for organizing the enforcement, and one or two ecological forest rangers from poor households in poor villages are hired in order to manage and protect local forests, wetlands, desertified land, and other resources. During this period, the township forestry department directly or entrusts village cadres to evaluate the performance of EFRs of poor households and pay no more than $1424.87 USD per person each year according to their performance. It can be seen that the policy has clearly defined multiple objectives during the system design: 1) through the government’s purchase of labor services to achieve its goal of protecting the ecological environment, and 2) through Employ the poor to achieve their poverty reduction goals.

However, it faces many constraints in policy enforcement, such as (1) the hierarchical relationship between principal and agent in the process of policy enforcement may lead to deviations in the positioning of policy objectives and the actual implementation of policies. The “PEFRP” are formulated by the central government and enforced by local governments at all levels; village cadres play an important role in the selection, recruitment, and supervision of EFRs. Generally speaking, the interests and policy goals of the central government and local governments, local officials, and village cadres are not always consistent. For example, the central government formulated this policy to achieve a win-win situation of “ecological protection and poverty reduction,” but local governments may place more emphasis on economic and social objectives than on environmental objectives in order to achieve political promotion. Besides, for local officials, the enforcement of policies may be motivated by the need for political promotion to meet the performance evaluation goals set by the higher-level government. For example, during the poverty alleviation period, the evaluation of many officials is more focused on the effectiveness of poverty alleviation. However, for village cadres, there is no need for political promotion, so in the enforcement of the PEFRP, they may tend to choose poor people who can assist in their own work or have a close social relationship with them. Even if the objectives of different levels of government are consistent with the policy objectives, multiple policy objectives can be prioritized at a certain period. For example, according to the “China Rural Poverty
At the same time, the central government also regards “environmental protection” as a basic state policy and enforces environmental inspections from time to time to assess the effectiveness of local governments at all levels in fulfilling environmental responsibilities and controlling environmental pollution. Since the local governments are faced with multiple goals, and higher-level governments have not clarified the priority of poverty reduction and environmental protection at a certain period, such policy misunderstanding may lead to inconsistency between the policy target positioning and the actual enforcement of the policy in PEFRP. Based on the behavioral transmission mechanism of “realistic background—targeting—local choice,” this paper takes the actual practice of re-employment ecological forest rangers for poor households in Sichuan Province as an example to investigate (1) whether the policy enforcement of local governments deviates from the central government’s initial goal positioning in the process of selecting and re-employment ecological forest rangers. (2) If there is a deviation, how does that deviation manifest itself? (3) What are the practical considerations and theoretical explanations behind this kind of inconsistency between the central government’s initial goal positioning and local government’s policy enforcement?

The existing literature mainly focuses mainly on the payments for environmental services (PES) project system design [5–13], target positioning [14–28], implementation effect evaluation [21, 24,29–42], the consistency of the target and behavior [26,39,42–44], and the factors that affect target deviation [22,26,39,45–47]. Researchers have not yet evaluated differences between the goal positioning of different policies at the beginning of the design, the actual choices of central governments and those of local governments or enforcing agents from the perspective of the “re-employment” behavior of participating subjects, and the verification conditions have not been studied. As a result of this neglect, a logical understanding of the enforcement of ecological compensation policies is lacking. In addition, some studies have proposed the influence of administrative power or political and social background on the enforcement behavior and the effect of ecological compensation policies [22,27,45–49], but these studies failed to propose a good analytical framework, and they did not select the characteristics of the goal audience based on “re-employment” behavior to verify policy goal positioning and the differences with regard to realistic choices.

Sichuan Province represents a typical province for the PEFRP. It is an important ecological barrier in the middle and upper reaches of the Yangtze River, a key area where ecological function areas, ethnic minorities, and poverty areas overlap. It is also a core area for poverty alleviation and development. It was one of the first provinces in China to start a pilot project for public welfare posts for EFRs. The policy has been enforced in Sichuan for five years (since 2016). At the end of 2018, the province had hired 47,000 poor people who had archival profile cards as EFRs, accounting for approximately 5% of China (there are 34 provincial administrative regions in China) and steadily driving more than 70,000 poor people out of poverty. Therefore, we built on the “realistic background-goal positioning-local choice” theoretical analysis framework using cross-sectional data of 9063 sample EFSs, focusing on the impact of poverty factors and human capital factors on the re-employment of EFRs to evaluate the implementation of PEFRP whether the consistency between the target positioning of central government and the actual behavior of local governments has been achieved in the enforcement process. We aimed to explain the reason for deviation through a theoretical analysis and practice investigation.

The remainder of the paper is structured as follows. In Section 2, we provide a brief literature review. In Section 3, we describe our theoretical analysis framework and then introduce the system design (including enforcement) on the PEFRP, and empirical conjecture (including verification ideas). In Section 4, we present our empirical strategies and the main results. In Section 5, we discuss various explanations and we conclude.
2. Literature Review

Ecological compensation projects are widely referred to internationally as PESs, and they have attracted the attention of many researchers. PESs can be traced back to Costa Rica in 1997, and the specific policy content and system design have been widely introduced and now cover water, biodiversity, carbon dioxide, soil, and other ecosystems [5–13].

From the perspective of the project’s goal positioning, according to the definition of PESs, PESs emphasize the versatility of the goal [14], but in terms of the main goal and multi-objective collaboration, the cognition of different researchers has shown great differences. Some researchers believe that the fundamental goal of PESs is to protect the environment, but because the project enforcement area is highly correlated with the area in which the poor population is distributed, poverty reduction has become a collateral effect and is a secondary goal [15–19, 26–28]. Other researchers have shown through some successful PES program experiences that poverty alleviation and environmental protection constitute a win–win situation and are synergistic [10, 20, 23, 24, 44]. Regarding the poverty population ecological forestry policy (PPEFP), some researchers interpret this policy as “a temporary employment assistance policy” (improve livelihood) whose main goal is to reduce poverty [25]. PESs can achieve the consistency of multiple goals due to the intersection of regional characteristics, but there are also some PESs designs that do not conform to regional geographic and human characteristics [50], imperfect supervision or system implementation deviations under asymmetric information [22], and the multi-level principal-agent problem [45] bring conflicts between goals and practices. This discussion shows that the enforcement of PESs in different times and spaces has multiple goals, and differences may arise based on the historical background of the policies.

Most previous studies focus on the direct effects of the PESs, and comparing the differences by different policy enforcement methods, no researchers have yet to evaluate the consistency of PESs positioning goals and realistic choices by the perspective of policy re-participation. Some researchers have pointed out that the effect of the PES project is hugely controversial [39]. Some scholars have found that the enforcement of ecological compensation policies can significantly improve the quality of the ecological environment [29–31, 38], but some scholars have pointed out that the enforcement of ecological compensation policies may not provide environmental benefits and ecological protection effects. For example, Hu et al. (2019) found that the enforcement of the Forage–Livestock Balance Policy, which is one kind of the PESs, could not greatly influence the reduction in the number of cattle, since the herders make livestock production decisions in response to livestock market prices [21]. Many scholars have found that PESs can effectively reduce poverty [31, 32, 34–38, 42, 51], but there are differences in enforcement. For example, some researchers have found that rich farmers get more benefit from PES projects [32–35]; however, some researchers have also shown that such projects play a significantly positive impact on increasing the livelihoods of low-income farmers who occupy less land [35]. In addition, the national programs have a greater income effect than local programs, but local projects are more effective on individuals with a low income [31]. Besides, different PES programs might have different impact on poverty alleviation. Some researchers argues that the PES programs with direct cash payment can significantly reduce the incidence of poverty and narrow the poverty gap and the internal gap among the poor population, but it is insufficient to drive the endogenous development of poor individuals [39], while compensation for public welfare posts can effectively drive the endogenous development of poor individuals to a certain extent [34–37]. Many researchers agree that PES has emerged as an important policy instrument for ecosystem protection and poverty alleviation [24, 52, 53]. However, Wu and Jin (2020) argue that the PESs does not necessarily contribute to poverty reduction unless the eco-compensation scheme is purposely designed for it [54]. Therefore, the enforcement of PES programs in poor areas trends to fall into the poverty trap or falls into the development trajectory of the environmental Kuznets curve, which is not conducive to the development of poor areas or to ecological protection [3].

There are certain differences in current research conclusions as to whether the enforcement effect of PESs achieves the established goals. Some studies have pointed out that PESs have reached the established
“poverty reduction and environmental protection” goals through precise system design and effective supervision and enforcement [25,42,44]. Effective supervision and excitation are the key to ensuring that PES programs achieve a win-win situation of “poverty reduction and environmental protection” [42]. On the contrary, some studies have pointed out that PESs did not meet the established goals and failed to achieve the synergy of “poverty reduction and environmental protection” goals [25,39,43]. The main influencing factors for the failure of PESs to achieve the established goals or the conflict between goals and practice include unreasonable policy and system design, poor property rights [25,49], insufficient multi-level agency supervision [25,45], government system or law enforcement is not strict [22,46], and local government or community participation is insufficient [25,45–47].

The above literature review shows the research content of current studies on PES projects. This provides a useful reference for our research in target combing, variable design and policy effect evaluation, and also provides a basis for our study to be compared with other studies. Given the limited literature and inconsistent results. Based on the reality of PEFRP, from the perspective of EFRs’ renewal, we use the probit binary selection model to evaluate the influencing factors of EFRs’ renewal behavior, and based on the poverty characteristics and human capital characteristics of renewed EFRs, we evaluate the consistency between target positioning of central government and the actual behavior of local governments in the PEFRP. In addition to estimating the impact of poverty factors and human capital factors on the renewal of EFRs, we also controlled the impact of other personal characteristics, family characteristics, and policy enforcement characteristics on the renewal of EFRs.

3. Theoretical Analysis Framework, Policy Design, and Verification

3.1. Theoretical Analysis Framework

3.1.1. Influence of the Realistic Background on the Choice of Policy Goal Positioning

The policy itself aims to realize the interests and will of the people, who are represented by state organizations, political party organizations and other social and political groups, and to standardize, in an authoritative form, the goals of struggle and the actions to be followed within a certain historical period in terms of principles, the clear tasks to be completed, the working methods to be enforced, the general steps to be taken and specific measures (see Appendix A 1.10). Its essence is the authoritative distribution of social public resources [55] to maximize social welfare, with standardized behavior, value positioning, role development, and normativity independent of the law [56]. Policies, in reality, are often linked to the behavior of the government or political parties. The public choice school represented by Jan M. Buchanan and Gordon Tulloch extended the “economic man” hypothesis from an economic market behavioral analysis to a political market behavioral analysis. According to the analysis, it is believed that the purpose of politicians engaged in political activities in the political market is also to maximize their own interests [57,58]. In practice, the goal of a policy is often related to the realistic background at the time, and this realistic background is derived mainly from the political, economic, and social aspects of the specific historical problems and constraints that policymakers need to address. The realistic background of the PEFRP is as follows. 1) Regarding the political background, the policy is based on the goal of the Communist Party of China to complete the “first hundred years,” that is, to build a well-off society in an all-round way. Construction, poverty reduction, and ecological construction are included in the goal range. 2) The economic background is China’s current need to promote the economic development of ethnic groups in western China, remote mountainous areas, and poor rural areas to narrow the economic development gap between eastern and western China. Additionally, economic development is under environmental pressure. Impacts on the environment are increasing, and there is an urgent need to coordinate the relationship between the economy and the environment. 3) Regarding the social background, the policy aims to promote social equity, alleviate the gap between rich and poor people and achieve poverty alleviation for the entire society.
3.1.2. Realization Form of Policy Goal Positioning

Political scholars in China often use “administrative subcontracting systems” and “pressure-type systems” to describe grassroots political processes. In an administrative subcontracting system, the higher-level government issues a policy to a grassroots-level government in the form of “outsourcing.” The system stipulates only the general principles and guidelines and gives the grassroots-level government considerable autonomy. Finally, the grassroots-level government is evaluated with respect to the enforcement of the policy. A “pressure system” or “command control system” refers to the pressure on the lower levels of government brought by the higher levels of government as the driving force for the operation of the administrative system, and ultimately, the pressure from different specialized departments are concentrated on the lowest level of government [59,60]. The higher-level government can achieve the original goal of a policy by evaluating the lower-level government, and the final enforcement behavior or effect is reflected by the realistic choice of the lowest level of government.

3.1.3. Realistic Choices for Policy Enforcers

The central government’s strategic planning determines the basic pattern of social development and shapes the basic institutional framework for social development; local governments make choices based on multiple factors, e.g., their own autonomy, the strategic framework of the central government, and pressure-based assessment incentives and strategies for interaction between various subjects in the social field [61]. Clearly, as a policy enforcer, the local government has contact not only with the central government but also with other subjects at lower levels. According to a previous analysis, the local government is also constrained by the maximization of the interests of the “economic man” and considers the functional relationship between the costs and benefits of policy enforcement. Therefore, in addition to being constrained by the evaluation pressure brought by higher-level departments, the realistic choice of policy objectives will also be subject to opportunistic behaviors arising from the multi-level “principal–agent” relationship caused by information asymmetry generated by distance [62]. Finally, policy executors will also face the influence of “rent-seeking” or “human relations” (academic term: social capital). The “social capital” theory, which generally was used and valued only after the 1990s, refers mainly to a social network that can coordinate and cooperate for the benefit of the community. It is one of the necessary capitals for social development [63]. China’s rural areas represent a typical “relationship society,” and social capital has strong intervention in information sharing and resource allocation. Some studies have shown that poor households with high levels of social capital will gain advantages in poverty reduction policies. This shows that the renewal of EFRs may be affected by social capital [56,64,65].

Based on the above analysis, an analysis framework of “realistic background–goal positioning–realistic choice” was established, and the logical relationship is shown in Figure 1.

3.2. Policy Design

3.2.1. Policy Goals

The PEFRP is an important part of China’s “five-batch” poverty reduction plan (see Appendix A 1.4). It was born in the context of China’s current dual strategy of winning the “precision poverty alleviation battle” and “pollution prevention battle.” It aims to establish poor people in managing and protecting forests, grasslands, sand, and other ecosystems where they are located to achieve the dual goals of poverty reduction and environmental protection. Regarding the former, the aim is to achieve the first 100-year goal of the Chinese nation (building a moderately prosperous society in all respects by 2020), while regarding the latter, the aim is to address the huge environmental pressure faced by China in the current process of rapid development. The policy originated from the 2011 “Outline of China’s Rural Poverty Alleviation and Development (2011–2020),” which states the following: “We must vigorously enforce ecological construction and continue to enforce key ecological restoration such as the return of farmland to forests and grasslands and natural forest protection in poor areas. By establishing an ecological compensation mechanism and focusing
on poverty-stricken areas, the project will achieve the goal of protecting the biodiversity of poverty-stricken areas and reducing poverty.” The “Decision of the Central Committee of the Communist Party of China on Winning the Poverty Alleviation,” promulgated on 29 November 2015, clearly stated that it is important to “combine ecological protection to achieve poverty alleviation and use ecological compensation and ecological protection project funds to turn some local poor people with labor into forest EFRs or ecological forest EFRs.”

![Theoretical analysis framework](image-url)

**Figure 1.** Theoretical analysis framework.

This policy is derived from the need for poverty reduction, but the services that it provides require effective environmental protection, that is, both poverty reduction and ecological protection. On the one hand, both China’s 2018 and 2019 Central Document No. 1 (see Appendix A 1.5) require the policy to achieve a “win–win” result of meeting the dual goals of poverty reduction and environmental protection. On the other hand, in the “Administrative Measures for the Establishment of Archival Profile Cards for EFRs,” jointly issued by the Poverty Alleviation and Development Office of the State Council and the State Forestry and Grassland Bureau in 2018, the coordination of the goals of poverty alleviation and environmental protection is also emphasized in the selection of candidates and duties. In short, the goal of the policy at the level of the central government is to achieve synergy between poverty reduction and environmental protection.

### 3.2.2. Policy System Framework

In China, forestland resources are divided mainly into two types of property rights—state-owned forestland (owned by the state or the people as a whole) and collective forestland (owned by rural village collective economic organizations). State-owned forest areas have public finances that employ professional EFRs to manage and protect them. However, collective forest areas face the “tragedy of the commons” due to forestland fragmentation, the lack of financial support, low household forestry income effects, and incomplete property rights, resulting in a governance dilemma [66], especially in wildlife protection, public infrastructure maintenance, fire management and pest control (see Appendix A 1.6). To this end, the policy mainly involves using central and local government special poverty alleviation funds to hire poor local people in collective forest areas to manage and protect collective forest areas and grassland ecosystems to compensate for the gaps in collective forest area management and protection. In 2018, the Poverty Alleviation and Development Office of the State Council and the State Forestry and Grassland Bureau jointly issued “archival profile cards” in accordance with the “Forest Law of the People’s Republic of China,” the “Prairie Law of the People’s Republic of China,” and the “Decision of the Central Committee of the Communist Party of China on
Winning Out of Poverty: Administrative Measures for Ecological Forest Guards of Poor People.” At this point, a national EFR system framework has essentially been established.

Table 1 introduces, in detail, the specific contents of the policy in the following eight aspects: goal selection, service content, source of subsidy funds, fund use, selection conditions, selection procedures, ranger duties, and renewal system.

3.2.3. Policy Enforcement

Table 2 reports the functions of government departments at all levels and participating entities in the enforcement of PEFRP. The policy is enforced mainly in concentrated and contiguous special poverty-stricken areas, national key poverty alleviation and development counties, and key ecological function area transfer payment counties. At the beginning of 2019, 1 million poor people in poverty-stricken areas had been recruited to serve as EFRs. The cumulative supporting funds of the central and local governments amounted to $1.995 billion USD and $0.385 billion USD (see Appendix A 1.7), respectively.

The enforcement of the policy bypassed the municipal government and went directly from province to county. Such a system enforcement arrangement markedly reduced the cost of policy enforcement. In addition, although the village collective organization is not within the official administrative sequence of China, as is the grassroots autonomous organization, it plays the role of the central grassroots enforcement body of the central policy.

3.2.4. The Potential Inconsistency between the Policy Goal Positioning and the Actual Implementation

Based on the analysis of the previous theory and policy implementation rules, there may be inconsistencies in the policy goal positioning and implementation behavior between central and local governments, and between government officials and village cadres in the implementation of the PERFP. Table 3 summarizes the inconsistencies in the goals and behaviors of the relevant economic agents.
Table 1. Key content of the policy of ecological forest rangers for the poor (PEFRP) system.

| System                        | Item                                      | Content Rules                                                                 | Remarks                                                                                           |
|-------------------------------|-------------------------------------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Forest ranger system          | Candidates                                | Poor who filed cards                                                          | ——                                                                                                 |
|                               | Service Content                           | Manage and protect forests, wetlands, desertified land, and other resources   |                                                                                                   |
|                               | Sources of funds                          | The special funds for supporting form central government and provincial governments | $1424.87 USD/person/year                                                                          |
|                               | Funds use                                 | It mainly used for remuneration expenditures for forest workers' management and maintenance services | Allow some funds to be used for equipment, insurance, and other expenses                           |
|                               | Selection conditions                      | Poor people, strong sense of responsibility, good health, competent for field patrol work |                                                                                                   |
|                               | Recruitment procedures                    | The first step: the village committee issued an announcement; the second step: the voluntary application of the poor; the third step: the election of the village group; the fourth step: the declaration to the forestry station, the forestry station approval and evaluation; the fifth step: the village committee announcement; the sixth step: examination and approval by the relevant departments at the county level; the seventh step: sign the management and protection agreement | If EFRs violate the agreement during the job, fail the assessment, and take the initiative to quit, you will be dismissed |
|                               | Responsibility                            | The responsibility of EFRs are promote forestry protection policies for the management and protection area, and report or prevent the situation or behavior of the forest area disasters, animal and plant resources, and infrastructure damage in time | ——                                                                                                 |
|                               | Renewal                                   | Those who have not yet gotten out of poverty or have been get out of poverty but still continue to enjoy relevant poverty alleviation policies according to regulations, earnestly perform forest protection duties, and meet the above conditions, and those who pass the annual assessment may be reappointed | One year/period                                                                                   |

Note: the content is compiled according to the “Measures for the Management of EFRs of the Poor People Who Set up Files.”
Table 2. Division of responsibilities of administrative departments at all levels.

| Project  | Functional Department | Enforcement Content |
|----------|-----------------------|---------------------|
| Central  | The State Forest and Grass Bureau is responsible for fund allocation advice, guidance and supervision for the management of EFRs; the Ministry of Finance is responsible for the annual fund budget management, supervision and performance evaluation; | |
| Provincial| Provincial forestry proposes county-level fund allocation plan, management, data and information submission; provincial finance department is responsible for fund release and use supervision; provincial poverty alleviation department is responsible for identity verification | |
| County   | Formulate county-level management systems and enforcement plans, and guide townships to carry out selection and management; county finance departments are responsible for fund management; county poverty alleviation departments are responsible for identity verification | |
| Township | The township forestry station cooperates with the township government to be responsible for recruitment (renewal), training, supervision, and assessment, establish management files, and update changes in a timely manner | |
| Village  | Undertake specific selection, assessment, management, and task assignment | |
| EFRs     | Responsible for daily management tasks | |

Note: The classification of the enforcement process of the policy comes from the delineation of the functions of government departments at all levels in the “Administrative Measures for the Establishment of Archives and Cards for the Poor Population of Ecological Forest Guards.”

Table 3. (a) The potential inconsistency between the central government and local governments. (b) The potential inconsistency between local officials and village cadres.

(a) The Potential Inconsistency between the Central Government and Local Governments.

| Policy Objectives | Behavioral Choices |
|-------------------|--------------------|
| Jointly achieve the goal of “poverty reduction and environmental protection” | It is required that the recruited person not only meets certain poverty characteristics, but also requires them to have environmental management capabilities (high human capital) |
| Local governments 1. Tend to achieve poverty reduction goals 2. Tend to achieve environmental protection goals | Selection of forest rangers is based solely on household income and whether or not they are out of poverty Considering human capital as the most importance factors for the selection of forest rangers |

(b) The Potential Inconsistency between Local Officials and Village Cadres.

| Agent           | Policy Objectives | Behavioral Choices |
|-----------------|-------------------|--------------------|
| Local officials | 1. Achieving political promotion and meeting the poverty reduction performance appraisal of higher levels of government 2. Achieving political promotion and meeting the environmental protection performance required by the higher levels of government | Selection of forest rangers is based solely on household income and whether or not they are out of poverty Considering human capital as the most importance factors for the selection of forest rangers |
| Village cadres  | 1. Realize self-interest and reduce the cost of working 2. Realizing self-interest, increasing social capital | Selection of rangers with reference to human capital, social relations and other factors Selection of rangers with reference to strong social ties |
3.3. Conjecture and Verification

3.3.1. Empirical Conjectures

At the level of the central government, the goal of the PEFRP is to achieve synergy between poverty reduction and environmental protection, while local governments face realistic choices under constraints. Therefore, there are three tendencies regarding the choices of local governments. (1) The first is to fully enforce the policy based on the intention of the central government to achieve coordination between poverty reduction and environmental protection. (2) The second is to focus only on poverty reduction goals and ignore environmental protection goals. (3) The third is to focus only on environmental protection goals and ignore poverty reduction goals. Thus, how can the policy preference for poverty reduction or environmental protection be quantified? Clearly, if poverty reduction is to be achieved, the poverty level of the goal of policy enforcement will become a key consideration, and if environmental goals are to be achieved, the environmental protection capabilities of the goal will become a key consideration. Regarding the poverty level, at present, the poverty line is generally defined internationally by the income level, and an individual’s income level roughly represents the individual’s poverty situation. In addition, eliminating poverty (see Appendix A 1.11) is an important indicator in the assessment of lower-level departments by higher-level departments in the current process of poverty alleviation in China. Schultz’s human capital theory states that the level of human capital represents the level of efficiency of an individual’s output, which indicates that the higher the level of human capital is, the higher the efficiency of the individual’s work, and the most critical manifestations of human capital are age, health and education [67].

To this end, our study proposes the following hypotheses to be verified:

**Hypothesis 1 (H1).** If the policy achieves coordination between poverty reduction and environmental protection, poverty indexes and human capital indexes will be significant, but poverty indexes and human capital indexes are often negatively related because the policy first clarifies that poor people are eligible for recruitment. Therefore, for re-employment, the hiring of poor people with high levels of human capital will be prioritized.

**Hypothesis 2 (H2).** If the policy focuses on poverty reduction, the poverty indexes will be significant, and the human capital indexes will not be significant or negatively affected. That is, for re-employment, those with low income levels and not yet out of poverty will be prioritized.

**Hypothesis 3 (H3).** If the policy focuses on environmental protection goals, the human capital indexes will be significant, but the poverty indexes will not be significant. That is, people with high levels of human capital will be preferentially recruited for re-employment, and poverty will not be a precondition.

3.3.2. Verification

Two key aspects of system design make it possible to verify the goal selection of the policy at this stage through the study of re-employment behavior. First, the policy stipulates a one-year term for each ranger; second, the assessment is passed if the village group chooses to allow the EFRs in the previous period to be re-selected. There are three main factors that determine whether to continue the employment of EFRs: (1) unavoidable factors or accidental factors that mainly include accidents or accidental deaths caused by diseases; (2) individual self-selection factors, that is, the poor population based on their own endowment conditions, as well as factors such as job preferences, opportunity costs, and quitting; and (3) factors for village group assessment selection; after the end of the employment period, the village group decides whether to continue employment according to a number of indicators, the individual’s previous work performance, etc. In the verification process, unavoidable and self-selection factors
are not considered, and the focus falls on the selection behavior of the two village committees. The verification process is shown in Figure 2.

![Figure 2. Verification idea.](image)

### 4. Empirical Strategies and Main Results

#### 4.1. Background on Sichuan Province and Its Enforcement of the PEFRP

The case we chose is Sichuan Province in China. It was one of the first provinces in the country to start a pilot project for public welfare posts for EFRs. It is located in the hinterland of southwestern China and is the gateway to Western China. Its economic aggregate ranks eighth in China and first in Western China. Sichuan is an important ecological barrier in the middle and upper reaches of the Yangtze River, a key area where ecological function areas, ethnic minorities and poverty areas overlap. It is also a core area for poverty alleviation and development. The total area of forestland in the province is 22,148,900 km², accounting for 45.56% of the total area of the province, and the forest coverage rate is 39.06% (see Appendix A 1.8). There are 88 poverty-stricken counties, of which 45 are deeply impoverished. At the end of 2018, it had hired 47,000 poor people who had archival profile cards as ecological forest protectors, accounting for 45.56% of the total area of the province, and the forest coverage rate is 39.06% (see Appendix A 1.8). Therefore, we chose Sichuan Province on the following basis: first, Sichuan Province is typical in its enforcement of the PEFRP; and second, most of the researchers involved in this study are from Sichuan Province, and we have a full understanding of the early-stage enforcement of the province’s PEFRP. This helps us have a more intuitive understanding of the enforcement of the policy.

#### 4.2. Methods

##### 4.2.1. Model design

We estimated the following probit equation to analyze the influencing factors of the re-employment behavior of EFRs. The specific model design is shown in Formula (1).

\[
P_r(y_i = 1|X) = P_r(\lambda + \delta + Hcapital_i + \theta \cdot Poverty_i + \sum_{k=1}^{n} \beta_k \cdot Control_k^i + \epsilon_i > 0)
\]  

(1)

Here, \(P_r\) represents probability; \(y_i\) is a dummy variable that equals one when ecological forest ranger \(i\) is renewed in the next period; otherwise, \(y_i\) equals zero. The vector \(Hcapital\) includes proxy
variables on the human capital of ecological forest ranger $i$, including age, health status, and educational level; $Poverty_i$ is a dummy variable that equals one if ecological forest ranger $i$ comes from a qualified registered poor household. The vector Control represents other control variables including household size, the logarithm of the average income of a farmer after deducting forestry subsidies, the level of forestry income, the standard of forestry management and protection subsidies, area under the responsibility of ecological forest ranger $i$, the dummy variable of buying insurance for ecological forest ranger $i$, and the dummy variable of sources of forestry management and protection subsidies. We also control the year dummies and the county dummies to control both year-specific effects and county-specific effects. $\epsilon$ represents the error term. What we are interested in are the parameters $\gamma$ and $\theta$. In addition to using econometric models to estimate the results, we also explain the empirical results combined with theoretical and practical investigations.

4.2.2. Variable Design

According to a previous analysis, in the regression analysis model of this study, the explained variable is the employment state, and the core explanatory variables are the poverty level (including whether to eliminate poverty and family per income) and human capital level (including age, health status, and education). Regarding the control variables, we control mainly for gender, ethnicity, family size, per income from forestry, subsidy standard, pre-job training, business insurance, the source of the subsidy fund and the management area. To avoid differences caused by years and regions, these factors are controlled via dummy variables. Table 4 reports the definition and design of each variable.

4.3. Data

The data that we used comes from the National Ecological Ranger Statistics and Management System constructed by the State Forestry and Grassland Administration. The System completely collects the data of ecological forest rangers in all 31 provinces in China from 2016 to 2020. The dataset related to ecological forest rangers is first published by the township forestry station in the village and then entered into the system, and then reviewed by the county-level forestry bureau and reported to the Provincial Forestry and Grass Bureau, and finally submitted to the State Forestry and Grassland Administration for management. We selected the data of forest rangers in Sichuan Province for empirical analysis. The dataset includes information such as the area, personal characteristics, family economic characteristics, poverty characteristics, and policy implementation of the sample rangers. The empirical dataset provided 33,681 subjects covering 61 poor counties, accounting for 69.3% of all countries in poverty in Sichuan Province. This study deleted the subjects hired before 2016 and after 2019 (because it is impossible to determine whether they were renewed) and adopted the most rigorous treatment method to remove accidents or disease-related deaths; only the subjects showing “initial employment” were used, and 9063 subjects remained, accounting for 19.28% of the overall sample. The selected subjects were all located within the area of concentrated and contiguous special poverty-stricken areas, national key poverty alleviation and development work counties and key ecological function area transfer payment subsidy counties (cities, districts, and flags; hereinafter referred to as “subsidy counties”). The subject distribution is shown in Table 5 and Figure 3.
Table 4. Variable meaning.

| Variable Type                  | Variable Name                  | Variable Definitions                                                                 |
|--------------------------------|--------------------------------|--------------------------------------------------------------------------------------|
| Explained Variable             | Employment status (y)          | Dismiss = 0; Renew = 1                                                               |
| Core Explanatory Variable      | Poverty Level                  | Poverty                                                                               |
|                                | Per_income                     | Not out of poverty = 1; Out of poverty = 0                                           |
|                                | Per_income                     | Total income/total population ($), after deducting income from forest subsidies, return to logarithm |
|                                | Age                            | Actual statistical age (years)                                                       |
|                                | Health_Status                  | 0 = unhealthy; 1 = healthy                                                            |
|                                | Education                      | Illiteracy = 0; elementary school = 1; junior high school = 2; high school = 3; college or above = 4 |
| Control Variable               | Minority                       | 1 = Yes; 0 = No                                                                       |
|                                | Households_Size                | Actual family demographics                                                            |
|                                | Operation_Forestry_Income      | Economic forest income + under forest economic income/total household income (%)       |
|                                | Standard_Subsidies             | Specific subsidy amount ($)                                                            |
|                                | Insurance                      | 0 = No; 1 = Yes                                                                       |
|                                | Policy_Centry                  | 0 = local (provincial) financial support; 1 = central finance                         |
|                                | Forest Protection Area         | The actual management and protection area shall prevail (hm²)                         |
|                                | Train                          | 0 = No; 1 = Yes                                                                       |
|                                | Policy_Centry                  | Source of funds (1 = central government; 0 = local government)                         |
|                                | Area_Management                | The actual area managed and protected by EFRs (hm²)                                   |
Table 5. Sample screening changes.

| City/State | Aba | Bazhong | Dazhou | Ganzi | Guangnan | Guangyang | Leshan | Liangshan | Luzhou | Mianyang | Nanchong | Yibin | Total |
|------------|-----|---------|--------|-------|----------|-----------|--------|-----------|--------|----------|----------|-------|-------|
| Before deletion | 5093 | 3203 | 2856 | 7074 | 138 | 2644 | 1114 | 7287 | 991 | 835 | 1979 | 467 | 33,681 |
| After deletion | 1428 | 1044 | 562 | 1434 | 46 | 1064 | 553 | 1039 | 329 | 364 | 1061 | 139 | 9916 |
| Proportion (%) | 28.03 | 32.59 | 19.81 | 20.27 | 33.33 | 40.24 | 49.64 | 14.26 | 33.20 | 42.57 | 53.61 | 29.76 | 26.90 |

Figure 3. Distribution of data samples in Sichuan province.

4.4. Results

4.4.1. Descriptive Statistical Analysis

Table 6 reports the descriptive statistical results of the main variables. The average value of renewal behavior was 0.83, which shows that the EFRs obtained high opportunities for employment renewal. The extreme value of the EFRs' age (the minimum was only 15 years old, while the maximum was 85 years old) and t distribution of the EFRs' age groups (in terms of age distribution, EFRs younger than 18 years old accounted for 21% of the total sample, while those older than 70 years old accounted for 0.63% of the total sample) can be seen. Some EFRs who exceeded the age of the normal labor force were re-employed. This finding shows that in the policy enforcement process, some regions may show the characteristics of salvaging inclusiveness without fully considering the match between the employed person's management capabilities and needs. The per income was $463.08 USD (the standard for poverty alleviation in 2019 was $512.95 USD in China), which shows that the overall income level of EFRs is low. The average salary from forestry labor service was $778.68 USD/person/year, the minimum was $213.73 USD/person/year, and the maximum was $1424.87/person/year (the maximum subsidy standard was no more than $1424.87 USD). Sichuan Province requires the salary to not be lower than the poverty standard line for the year. However, in the statistical analysis, there was a phenomenon in which the salary was lower than the poverty alleviation standard. Based on the differences in subsidy standards, it can be seen that during the specific enforcement of the policy, although the single supporting funds were the same, the amount and indicators of subsidies were adjusted according to the actual situation of each place.
Table 6. Descriptive statistics of main variables.

| Variable Name            | Sample Size | Mean   | Standard Deviation | Minimum | Maximum |
|--------------------------|-------------|--------|--------------------|---------|---------|
| y                        | 9063        | 0.83   | 0.38               | 0       | 1       |
| age                      | 9063        | 44.12  | 9.93               | 15      | 85      |
| male                     | 9063        | 0.86   | 0.35               | 0       | 1       |
| health_status            | 9063        | 0.93   | 0.25               | 0       | 1       |
| education                | 9063        | 1.26   | 0.78               | 0       | 4       |
| minority                 | 9063        | 0.39   | 0.49               | 0       | 1       |
| households_size          | 8909        | 4.07   | 1.70               | 1       | 20      |
| per_income               | 7563        | 477.7  | 250.76             | 69.8    | 1219.11 |
| poverty                  | 9063        | 0.25   | 0.43               | 0       | 1       |
| operation_forestry_income| 8004        | 0.04   | 0.76               | 0       | 63      |
| standard_subsidies       | 8626        | 778.68 | 196.86             | 213.7   | 1424.87 |
| train                    | 9063        | 0.96   | 0.20               | 0       | 1       |
| insurance                | 9063        | 0.86   | 0.34               | 0       | 1       |
| policy_centry            | 9063        | 0.98   | 0.15               | 0       | 1       |
| area_management          | 7704        | 124.11 | 116.45             | 8.87    | 544.67  |

Table 7 reports the mean difference in individual characteristics and family characteristics between renewed and dismissed individuals. The results of the mean t test show that the dismissed EFRs were superior to the renewed EFRs in the three human capital indicators: age, health, and education. Regarding age, the dismissed EFRs were, on average, 0.88 years younger than the renewed EFRs. Regarding health, forest EFRs who were dismissed had a health value that was 0.03 higher than that of renewed forest EFRs. Regarding the educational level, dismissed forest EFRs had an educational level value that was 0.05 higher than that of renewed forest EFRs. This result indicates that EFRs with lower human capital are more likely to be offered renewal opportunities. In terms of per income, the dismissed EFRs had a lower per income than re-employed EFRs, specifically, $43.48 USD lower. Concerning poverty alleviation, the level of dismissed EFRs out of poverty was 0.04 higher than that of renewed EFRs. This result shows that poor forest EFRs who have high per income levels but are not yet out of poverty have high opportunities for employment renewal. The mean differences in the variables all passed the significance test at the 1% and 5% levels.

Table 7. Differences between the characteristics of dismissed and renewed: meant t test.

| Varname                        | The Dismissed EFRs | The Denewed EFRs | Mean-Diff |
|--------------------------------|--------------------|------------------|-----------|
|                                | obs    | Mean  | obs    | Mean    |          |
| age                            | 1403   | 43.46 | 6160   | 44.34   | −0.88 ***|
| male                           | 1403   | 0.87  | 6160   | 0.87    | 0.00     |
| health_status                  | 1403   | 0.96  | 6160   | 0.93    | 0.03 ***  |
| edu                            | 1403   | 1.33  | 6160   | 1.28    | 0.05 **   |
| minority                       | 1403   | 0.40  | 6160   | 0.35    | 0.05 ***  |
| households_size                | 1403   | 4.34  | 6160   | 4.17    | 0.16 ***  |
| per_income                     | 1403   | 442.29| 6160   | 485.77  | −43.48 ***|
| poverty                        | 1403   | 0.22  | 6160   | 0.26    | −0.04 *** |
| operation_forestry_income      | 1403   | 0.01  | 6160   | 0.03    | −0.02 *** |

Note: *** and ** mean that the difference in the mean is significant at the 1% and 5% significance levels.

Table 8 reports the differences in characteristics between the subjects who had not been alleviated from poverty and those who had been alleviated. The statistical analysis showed that the characteristics of the subjects who had not yet been alleviated from poverty were older, likely female, educated, of a non-minority race and had a small family size, high income, and few forestry operations.
Table 8. Differences in characteristics between households without out of poverty and out of poverty: mean t test.

| Varname       | Households without Out of Poverty | Households Out of Poverty | Mean-Diff |
|---------------|----------------------------------|---------------------------|-----------|
|               | obs | Mean       | obs | Mean        |           |
| age           | 5472 | 44.61      | 1786 | 42.43      | 2.18 ***  |
| male          | 5472 | 0.86       | 1786 | 0.89       | −0.03 **  |
| health_status | 5472 | 0.94       | 1786 | 0.93       | 0.01      |
| edu           | 5472 | 1.35       | 1786 | 1.13       | 0.22 ***  |
| minority      | 5472 | 0.32       | 1786 | 0.51       | −0.19 ***  |
| households_size | 5472 | 4.19       | 1786 | 4.59       | −0.40 ***  |
| per_income    | 5472 | 3768.09    | 1786 | 2461.86    | 1306.22 ***|
| forestry_income | 5472 | 0.39       | 1786 | 0.50       | −0.11 ***  |
| operation_forestry_income | 5472 | 0.02       | 1786 | 0.03       | −0.01 **  |

Note: "***" and "**" mean that the difference in the mean is significant at the 1% and 5% significance levels.

4.4.2. Empirical Results

To investigate the relationship between the initial selection and the time of poverty alleviation, a statistical analysis of the whole sample was conducted. The results showed that 57.8% of all forest EFRs were recruited before poverty alleviation, while the remaining subjects were selected after poverty alleviation. A total of 74.05% of the subjects selected before poverty alleviation were under their initial appointment, while 21% were under renewal. After poverty alleviation, 71.68% of the subjects were first-time recruits, while 23.68% were renewed EFRs. These results show that the policy helps not only to alleviate poverty but also to consolidate the effectiveness of poverty reduction.

(1) Basic Regression Analysis

Table 9 reports the empirical results of the probit model (1). Column (1) shows the empirical results of the core explanatory variables without other control variables; Column (2) shows the empirical results when we added the EFR system’s characteristics, including the standard of subsidies, the area under the responsibility of the EFR, the dummy variable of buying insurance for the ranger, and the sources of subsidies; and Column (3) further shows the empirical results when we examined both the EFR system’s characteristics and the county/year dummy variables. The regression results in Column (3) have the strongest explanatory power, with a pseudo R-squared value equal to 0.313. The marginal effect from the probit regressions listed in Column (3) shows that the human capital of EFRs has a nonsignificant effect on the re-employment process of EFRs in poor households. For example, the marginal effect of age, health status, and educational level on the probability of the EFR being successfully renewed in the next period was positive (0.00), negative (−0.007), and positive (0.000), respectively; however, all of the factors were not significant. These results show that in the re-employment process of EFRs, poor people with high human capital are not prioritized for re-employment. In addition, males and minorities had coefficients with opposite signs, and both were statistically significant. This finding suggests that the probability of a poor individual being successfully renewed is increased in males and minorities.

The marginal effect of log per income was 0.065 and statistically significant at the 1% level. This shows that increasing the average income of a farmer would increase the probability of re-employment by 6.5%. In terms of poverty alleviation, the marginal effect of poverty was 0.034, and there was a 3.4% higher probability that EFRs who were not in poverty were re-employed. These results show

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1 The incidence of poverty, especially the incidence of poverty in villages and county-level units, is one of the main indicators assessed by higher authorities and one of the necessary indicators for poor villages and poor counties to withdraw. The number of subsidies for forest guards is sufficient to enjoy the policy and drive personnel out of poverty. Therefore, it can be
that poor EFRs with high income levels are likely to be re-employed, and these results are significant at the 1% and 5% levels. Family forestry income levels and subsidy standards showed a significant positive impact. These results show that the re-employment of EFRs relies heavily on forestry income. In regions with high subsidy standards, EFRs are likely to be re-employed, which indicates that when the subsidy standard is high, EFRs are motivated to perform their duties seriously, and the probability of applying for re-employment again is high. Other control variables, such as management and protection, the purchase of insurance, and the source of subsidy funds, all passed the significance test, which shows that these factors have little effect on the re-employment of EFRs. The above conclusions show that the realistic goal selection of this policy is consistent with Hypothesis 2; that is, “dual goal” coordination is not achieved during the enforcement process, but poverty reduction is the mainstay. Those who have not been lifted out of poverty are selected as the renewal goal.

Why do local governments pay close attention to poverty reduction goals during the enforcement of this policy and to the re-employment of those who have not escaped poverty? The explanation given in this study is that under the current social background, local governments are facing greater pressure to evaluate poverty alleviation tasks than environmental protection tasks. There are three pieces of evidence to consider. First, most poor people live in hilly and mountainous areas. The overall ecological quality of these areas is higher than the overall ecological quality of urban areas. Local governments face less pressure on the environmental protection assessment. Second, China needs to build a comprehensive well-off society by 2020. The goal is to impose hard requirements on local governments. At the end of 2020, all poor counties and all poor villages must cease to be poor. The poverty incidence rate must be less than 2%. Third, remuneration for labor services can be achieved by “being employed to get rid of poverty.” The matching fund of $1424.87 USD for a single EFR was dismantled by the local government to achieve the employment of more people.

Local governments are more inclined to focus on poverty reduction goals, but empirical evidence shows that EFRs with higher income levels are more likely to be re-employed. Why? The explanation given in this study is that in the context of multi-level agency enforcement, there is a “principal-agent” wind direction. The two village committees are the most basic enforcement organizations for the enforcement of this policy, and village cadres who are responsible for selection and management responsibilities often continue to hire people who are more beneficial for their personal relationships and work. In China, village cadres are often agents of higher-level governments (performing the most basic policy enforcement), but at the same time, because village cadres are also agents of local residents (expressing local villagers’ opinions and coordinating public affairs within the village group), there is collusion. Those at lower levels will collude with those at higher levels, and vice versa [56]. The strength of farmers’ social capital is one of the key factors for obtaining policy patronage from village cadres because Chinese human relations play an important role in the distribution of markets and social resources, and those who master policy resources will allocate policy resources to those with strong social capital. Some people not only provide better returns to resource allocators but are also more willing to support their work in the process of policy enforcement. For example, some studies indicate that people who have served as village cadres are more likely to be selected as forest EFRs [25]. This fact also confirms the views of some researchers that in PES projects, the embedding of power pairs may lead to an uneven distribution of wealth [50,68].

Some studies have shown that social capital has a significant positive effect on individuals’ income levels, especially with regard to non-agricultural income [51,69,70]. For this reason, if the per capita income level is used as an alternative indicator of an individual’s social capital level, in a policy enforcement area where monitoring is difficult and information is asymmetric, as an income subsidy ecological ranger policy, it is likely to lead to rent-seeking or human considerations, which are a
problem. Therefore, EFRs with higher income levels have a greater chance of renewed employment. For example, through a practical survey in Sichuan Province, it was found that in the Wolong Special Zone, where the indicators are high, enforcement of the policy involves the choice of groups with high levels of poverty (because there is a mountain patrol ranger policy as a replacement for management and protection); however, regarding ecological forest protection in Pingwu and Qingchuan, where the number of employees is insufficient, the two village committees are more inclined to choose people who can work for the village collective or listen to the arrangements and assist the two village committees. Such people generally have strong social ties to the two village committees. Perhaps the enforcement of the PEFRP will face a problem of effective supervision.

Table 9. The influencing factors of the re-employment behavior of ecological forest rangers (EFRs).

| Variables               | (1)     | (2)     | (3)     |
|-------------------------|---------|---------|---------|
| age                     | 0.001   | 0.001 * | 0.000   |
|                         | (0.000) | (0.001) | (0.001) |
| health_status           | −0.053 ***| −0.073 ***| −0.007 |
|                         | (0.016) | (0.017) | (0.027) |
| education               | −0.023 ***| −0.004 | 0.000   |
|                         | (0.006) | (0.007) | (0.010) |
| male                    | −0.006 | −0.001 | 0.037 * |
|                         | (0.013) | (0.014) | (0.020) |
| minority                | −0.035 ***| −0.006 | 0.062 **|
|                         | (0.011) | (0.013) | (0.030) |
| households_size         | −0.007 **| −0.012 ***| −0.004 |
|                         | (0.003) | (0.003) | (0.004) |
| log_per_income          | 0.025 ***| 0.031 ***| 0.065 ***|
|                         | (0.006) | (0.008) | (0.013) |
| poverty                 | 0.045 ***| 0.031 ***| 0.034 **|
|                         | (0.010) | (0.011) | (0.016) |
| forestry_income_rate    | 0.019 * | 0.012 | 0.041 **|
|                         | (0.011) | (0.012) | (0.018) |
| standard_subsidies      | 0.000 ***| 0.000 ***| 0.000 ***|
|                         | (0.000) | (0.000) | (0.000) |
| train                   | 0.011 | −0.099 ***| 0.032 |
|                         | (0.027) | (0.032) | (0.032) |
| insurance               | 0.060 ***| 0.044 | 0.030   |
|                         | (0.019) | (0.019) | (0.030) |
| policy_centry           | −0.048 | 0.027 | 0.052   |
|                         | (0.033) | (0.033) | (0.052) |
| area_management         | 0.000 ***| −0.000 *| (0.000) |
|                         | (0.000) | (0.000) | (0.000) |
| County dummies          | No      | No      | Yes     |
| year dummies            | No      | No      | Yes     |
| Observations            | 7515    | 6208    | 5014    |
| Pseudo R-squared        | 0.010   | 0.064   | 0.313   |

Notes: Robust standard errors are reported in the parentheses. Columns 1–3 report the marginal effect from the probit regressions. * Significant at the 10 percent level, ** Significant at the 5 percent level, *** Significant at the 1 percent level.

In addition, to test the robustness of per income, we used the average income of other EFRs from the same town as an IV for the per income of forest EFRs. The regression analysis showed that the significance of per income was not different from that of the original variable.

(2) Heterogeneity Analysis

In further analysis, for poor people who have not yet escaped poverty, will the policy favor lower-income groups, that is, groups with deeper poverty levels? After decentralizing the core explanatory variables, the interaction terms per income level, education level, age, family size and
poverty were established. The specific regression results are shown in Table 10. The results showed that EFRs (not out of poverty) with higher levels of human capital (i.e., younger, healthier, and more educated) were not able to obtain renewed employment opportunities with a higher probability. Although the income of EFRs who have not yet escaped poverty had a negative impact on renewal, it did not pass the significance test. The above results further illustrate that although the policy is inclined to reduce poverty, especially to meet the needs of poverty alleviation, it is not inclined to favour the poorest population with the lowest income level. In addition, EFRs with higher levels of human capital did not obtain renewal opportunities with a higher probability. The ranger policy stipulates EFRs' responsibilities with respect to managing natural resources, but in reality, village cadres will also arrange other public affairs in the village for EFRs based on the needs of their work, such as cleaning, insurance promotion, public security, and information collection. This phenomenon shows that the village cadres who choose to renew the employment of EFRs will also choose poor people who can assist them in their work. EFRs need to meet only the prerequisite conditions of establishing files and registering poor households. The design of the existing system provides flexible execution space for the employment of ecological forest EFRs.
Table 10. The influencing factors of the re-employment behavior of EFRs (heterogeneity analysis).

| Variables                        | (1)       | (2)       | (3)       | (4)       | (5)       |
|----------------------------------|-----------|-----------|-----------|-----------|-----------|
| Per capita income * poverty      | −0.006    |           |           |           |           |
|                                  | (0.027)   |           |           |           |           |
| Edu * poverty                    |           | −0.003    |           |           |           |
|                                  |           | (0.021)   |           |           |           |
| Health status * poverty          |           |           | 0.012     |           |           |
|                                  |           |           | (0.062)   |           |           |
| Age * poverty                    |           |           |           | −0.001    |           |
|                                  |           |           |           | (0.002)   |           |
| households_size * poverty        |           |           |           |           | −0.009    |
|                                  |           |           |           |           | (0.009)   |
| age                              | 0.000     | 0.000     | 0.000     | 0.000     | 0.000     |
|                                  | (0.001)   | (0.001)   | (0.001)   | (0.001)   | (0.001)   |
| male                             | 0.037 *   | 0.037 *   | 0.037 *   | 0.037 *   | 0.037 *   |
|                                  | (0.020)   | (0.020)   | (0.020)   | (0.020)   | (0.020)   |
| health_status                    | −0.007    | −0.007    | −0.009    | −0.007    | −0.007    |
|                                  | (0.027)   | (0.027)   | (0.031)   | (0.027)   | (0.027)   |
| edu                              | 0.000     | 0.001     | 0.000     | 0.000     | 0.001     |
|                                  | (0.010)   | (0.010)   | (0.010)   | (0.010)   | (0.010)   |
| minority                         | 0.061 **  | 0.061 **  | 0.062 **  | 0.061 **  | 0.063 **  |
|                                  | (0.030)   | (0.030)   | (0.030)   | (0.030)   | (0.030)   |
| households_size                  | −0.004    | −0.004    | −0.004    | −0.004    | −0.002    |
|                                  | (0.004)   | (0.004)   | (0.004)   | (0.004)   | (0.005)   |
| log_per_income                   | 0.067 *** | 0.065 *** | 0.065 *** | 0.065 *** | 0.065 *** |
|                                  | (0.015)   | (0.013)   | (0.013)   | (0.013)   | (0.013)   |
| poverty                          | 0.077     | 0.038     | 0.023     | 0.055     | 0.070 *   |
|                                  | (0.177)   | (0.031)   | (0.059)   | (0.068)   | (0.038)   |
| forestry_income                  | 0.041 **  | 0.041 **  | 0.041 **  | 0.041 **  | 0.042 **  |
|                                  | (0.018)   | (0.018)   | (0.018)   | (0.018)   | (0.018)   |
| standard_subsidies               | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** |
|                                  | (0.000)   | (0.000)   | (0.000)   | (0.000)   | (0.000)   |
| train                            | −0.098 ***| −0.100 ***| −0.100 ***| −0.099 ***| −0.102 ***|
|                                  | (0.033)   | (0.032)   | (0.032)   | (0.032)   | (0.032)   |
| insurance                        | 0.044     | 0.044     | 0.044     | 0.045     | 0.043     |
|                                  | (0.030)   | (0.030)   | (0.030)   | (0.030)   | (0.030)   |
Table 10. Cont.

| Variables          | (1)     | (2)     | (3)     | (4)     | (5)     |
|--------------------|---------|---------|---------|---------|---------|
| policy_centry      | 0.027   | 0.027   | 0.027   | 0.026   | 0.027   |
|                    | (0.052) | (0.052) | (0.052) | (0.052) | (0.052) |
| area_management    | −0.000 *| −0.000 *| −0.000 *| −0.000 *| −0.000 *|
|                    | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| County dummies     | Yes     | Yes     | Yes     | Yes     | Yes     |
| Year dummies       | Yes     | Yes     | Yes     | Yes     | Yes     |
| Observations       | 5014    | 5014    | 5014    | 5014    | 5014    |
| Pseudo R-squared   | 0.313   | 0.313   | 0.313   | 0.313   | 0.313   |

Notes: Robust standard errors are reported in the parentheses. Columns 1–5 report the marginal effect from the probit regressions. * Significant at the 10 percent level, ** Significant at the 5 percent level, *** Significant at the 1 percent level.
5. Discussion and Conclusions

We found that wealthy or higher-income groups benefit more from the PEFRP than lower-income groups, consistent with previous studies [32–35]. However, previous studies did not deduct the endogenous nature of subsidized income. This study further strengthened the robustness of the results by deducting subsidized income. Through theoretical combing and a practical investigation, an explanation of the role of social capital is proposed. A practical inspection of the enforcement of the EFR policies in the Wolong Special Zone and Pingwu and Qingchuan in Wenchuan County revealed that the choice behavior of the village group seems to indirectly prove the existence of the social capital hypothesis, but the inspection was limited by the content structure of the public data. This study failed to fully verify the mechanism of the social capital hypothesis. Our study also found that the PEFRP pays close attention to poverty targets by selecting the human capital characteristics of the renewed objects, which is contrary to the results of other PES project effect evaluation studies [24,29–31,52,53]. This also shows that there is a certain deviation between the central government’s policy objective positioning and the enforcement of local government, which also verifies the conclusions of some researchers that local government or community participation and strengthening the supervision of policy enforcers have an important impact on the effect of policy enforcement [46,50]. Although our selection of human capital to match environmental protection goals is convincing, there are some shortcomings. The specific deficiencies are as follows. First, the verification of environmental protection goals focused only on the broad human capital characteristics of the re-employment goals and failed to determine the human capital characteristics that match the efficiency of ecological management. Second, we failed to effectively use panel data to evaluate the improvement in local ecology before and after implementing the policy.

The main research conclusions are as follows. First, the enforcement of a continuous PEFRP is not only conducive to poverty reduction but also promotes the continuation of poverty reduction. The prerequisite is that the policy can be continuously enforced. Second, the following characteristics were associated with the re-employment behavior of EFRs (i.e., likely to obtain renewal opportunities): male sex, Han nationality, a small amount of training, a high per income level, no poverty alleviation, and high subsidies. Age, health, and education, which represent the human capital level, have no significant impact on renewal. Third, further analysis of heterogeneity showed that EFRs who have not yet escaped poverty and are impoverished are not given priority to renew their employment. Fourth, the PEFRP pays close attention to poverty reduction goals in the enforcement process. Although it pays attention to poverty reduction goals, it does not give priority to the poorest of poor. Fifth, the imminent pressure of the administrative assessment of the “poverty relief task” is the main reason why local governments choose to focus on the goal of poverty reduction. Additionally, the opportunistic behaviors generated by multi-level agents, especially in regard to the needs of village cadres who need to find work to assist people and in regard to human relations, effectively explain why those in the deepest level of poverty do not benefit.

Based on the above results, we can obtain the following revelations. First, for researchers, it is necessary to use panel data or more detailed micro-survey data and change the poverty level and better reflect the indicators of environmental protection to better assess the effects of policies. In addition, it is necessary to further build a complete social capital indicator system to verify the effect mechanism of social capital on the enforcement of PES projects. Second, for policy makers, clear policy goals are a prerequisite (developing countries may pay more attention to poverty reduction, while developed countries may pay more attention to environmental protection), and the system design of poverty reduction or environmental protection policies needs to consider the actual needs and adjust the system design of the policy according to the changes in actual political, economic, environmental and other constraints, namely, construct a dynamic adjustment mechanism for policies. In addition, to ensure the effective enforcement of policy objectives, it is necessary to strengthen the effective supervision of the direct enforcers of the policy.
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Conflicts of Interest: All authors declare no conflict of interest.

Appendix A

Table A1. Notes and information reference source.

| Numbering | Reference Source |
|-----------|-----------------|
| 1.1       | http://www.stats.gov.cn/tjssj/zxfb/202002/20200228_1728913.html |
| 1.2       | Poverty Alleviation Office of the State Council http://xinwen.shangdu.com/guonei/2019/0618/061814261.html |
| 1.3       | “Outline of National Ecologically Vulnerable Areas Protection Planning” |
| 1.4       | “Decision of the Central Committee of the Communist Party of China on Winning the Poverty Alleviation” |
| 1.5       | “The Guiding Opinions of the Central Committee of the Communist Party of China and the State Council on the Three-Year Action to Win the Poverty Alleviation Campaign, issued in August “and “Several Opinions of the CPC Central Committee and the State Council on Adhering to the Priority of Agricultural and Rural Development and Doing a Good Job in the Work of Agriculture, Countryside and Farmers” |
| 1.6       | “Measures for the Administration of Central Government Forestry Subsidy Funds” |
| 1.7       | http://www.gov.cn/xinwen/2019-10/02/content_5435923.htm |
| 1.8       | Statistical Bulletin of Sichuan Province’s National Economic and Social Development in 2019 |
| 1.9       | Xinhua News Agency http://finance.jrj.com.cn/2018/11/01104325292120.shtml |
| 1.10      | https://baike.so.com/doc/5414341-5652483.html |
| 1.11      | “enforcement Plan for the Exit of Poor Households in Poor Villages in Poor County of Sichuan Province” |

References

1. Wang, S.G.; Guo, Z.H. On China’s Precision Poverty Alleviation. Guizhou Soc. Sci. 2015, 5, 147–150.
2. Pan, J.G.; Feng, Y.Y. Spatial scanning of deep poverty in rural China and geographic detection of poverty differentiation mechanism in 2020. J. Geogr. 2020, 75, 769–788.
3. Yao, X.X.; Zhang, G.F. Research on the “tunnel effect” of ecological poverty reduction. J. Eco-Environ. 2018, 27, 389–396.
4. Zhou, K.; Wang, C.S. A study on the spatial and temporal pattern of poverty-stricken areas in China and the differentiated poverty alleviation policies. J. Chin. Acad. Sci. 2016, 31, 101–111.
5. Vaissière, A.; Calvet, F.Q.; Levrel, H.; Wunder, S. Biodiversity offsets and payments for environmental services: Clarifying the family ties. Ecol. Econ. 2020, 169. [CrossRef]
6. Vatn, A. An institutional analysis of payments for environmental services. *Ecol. Econ.* 2009, 69, 1245–1252. [CrossRef]
7. Aguilar-Gómez, C.R.; Franco-Maass, S.; Arteaga-Reyes, T.T. Differentiated payments for environmental services schemes: A methodology proposal. *J. Mt. Sci.* 2018, 15, 1693–1710. [CrossRef]
8. Castro, R.; Tattenbach, F.; Olson, N.; Gamez, L. The Costa Rican experience with market instruments to mitigate climate change and conserve biodiversity. In Proceedings of the Global Conference on Knowledge for Development in the Information Age, Toronto, ON, Canada, 22–25 June 1997.
9. Chomitz, K.M.; Brenes, E.; Constantino, L. Financing environmental services: the Costa Rican experience and its implications. *Sci. Total Environ.* 1999, 240, 157–169. [CrossRef]
10. Gauvin, C.; Uchida, E.; Rozelle, S.; Xu, J.; Zhan, J. Cost-Effectiveness of Payments for Ecosystem Services with Dual Goals of Environment and Poverty Alleviation. *Environ. Manag.* 2010, 45, 488–501. [CrossRef]
11. Ezzine-de-Blas, D.; Corbera, E.; Lapeyre, R. Payments for Environmental Services and Motivation Crowding: Towards a Conceptual Framework. *Ecol. Econ.* 2019, 156, 434–443. [CrossRef]
12. Ranjan, R. Deriving double dividends through linking payments for ecosystem services to entrepreneurial activities: The case of the invasive weed Lantana camara. *Ecol. Econ.* 2019, 164. [CrossRef]
13. Muradian, R.; Corbera, E.; Pascual, U.; Kosoy, N.; May, P.H. Reconciling theory and practice: An alternative conceptual framework for understanding payments for environmental services. *Ecol. Econ.* 2010, 69. [CrossRef]
14. Du, H.Y.; Wu, J. Analysis of the impact of ecological compensation projects on poverty alleviation—Based on the perspective of farmer heterogeneity. *Beijing Soc. Sci.* 2016, 1, 121–128.
15. Bétrisey, F.; Mager, C.; Rist, S. Local views and structural determinants of poverty alleviation through payments for environmental services: Bolivian insights. *World Dev. Perspect.* 2017, 1, 6–11. [CrossRef]
16. Fondo Nacional de Financiamiento Forestal (FONAFIFO). FONAFIFO: Más de una Década de Acción; FONAFIFO: San José, CA, USA, 2005. (In Spanish)
17. Fondo Nacional de Financiamiento Forestal (FONAFIFO). El Desarrollo del Sistema de Pago de Servicios Ambientales en Costa Rica; FONAFIFO: San José, CA, USA, 2000. (In Spanish)
18. Blundo-Canto, G.; Bax, V.; Quintero, M.; Gisella; Cruz-Garcia, S.; Rolf, A.; Groeneveld, R.A.; Perez-Marulanda, L. The Different Dimensions of Livelihood Impacts of Payments for Environmental Services (PES) Schemes: A Systematic Review. *Ecol. Econ.* 2018, 149, 160–183. [CrossRef]
19. Gouyon, A. Rewarding the Upland Poor for Environmental Services: A Review of Initiatives from Developed Countries; World Agroforestry Centre (ICRAF): Bogor, Indonesia, 2003.
20. Hardin, G. The Tragedy of the Commons. *Science* 1968, 162, 1243–1248.
21. Hu, Y.L.; Jikun Huang, J.K.; Hou, L.L. Impacts of the Grassland Ecological Compensation Policy on Household Livestock Production in China: An Empirical Study in Inner Mongolia. *Ecol. Econ.* 2019, 161, 248–256. [CrossRef]
22. Alcañiz, I.; Gutierrez, R.A. Between the Global Commodity Boom and Subnational State Capacities: Payment for Environmental Services to Fight Deforestation in Argentina. *Glob. Environ. Politics* 2020, 20, 38–59. [CrossRef]
23. Rodriguez-de-Francisco, J.C.; Budds, J. Payments for environmental services and control over conservation of natural resources: The role of public and private sectors in the conservation of the Nima watershed, Colombia. *Ecol. Econ.* 2015, 117, 295–304. [CrossRef]
24. Haas, J.C.; Loft, L.; Pham, T.T. How fair can incentive-based conservation get? The interdependence of distributional and contextual equity in Vietnam’s payments for Forest Environmental Services Program. *Ecol. Econ.* 2019, 160, 205–214. [CrossRef]
25. Brownson, K.; Anderson, E.P.; Ferreira, S.; Wenger, S.; Fowler, L.; German, L. Governance of Payments for Ecosystem Services influences social and environmental outcomes in Costa Rica. *Ecol. Econ.* 2020, 174. [CrossRef]
26. Pagiola, S.; Arcenas, A.; Platais, G. Can Payments for Environmental Services Help Reduce Poverty? An Exploration of the Issues and the Evidence to Date from Latin America. *World Dev.* 2004, 33, 237–253. [CrossRef]
27. Pagiola, S. Payments for environmental services in Costa Rica. *Ecol. Econ.* 2007, 65. [CrossRef]
28. Wunder, S. Revisiting the concept of payments for environmental services. *Ecol. Econ.* 2015, 117, 234–243. [CrossRef]
29. Li, X.Y. Governance Issues in the enforcement of my country’s Rural Poverty Alleviation Strategy. *Guizhou Soc. Sci.* 2013, 7, 101–106.

30. Li, X.Y.; Yuan, J.J.; Yu, L.R. On rural poverty reduction strategies and policies after 2020: The transition from “poverty alleviation” to “anti-poverty”. *Agric. Econ. Issues J.* 2020, 1, 15–22.

31. Nan, L. *Social Resources and Instrumental Action, Social Structure and Network Analysis*; Sage Publications: Los Angeles, CA, USA, 1982; pp. 131–145.

32. Liu, H.J.; Li, D. Current status and suggestions of the management of public welfare posts of ecological EFRs in Li County, Aba Prefecture. *Green Technol.* 2019, 3, 138–140.

33. Liu, J.X. Research on the competition of China’s political championships. *J. Public Adm.* 2008, 3, 24–29.

34. García-Amado, L.R.; Pérez, M.R.; Escutia, F.R.; García, S.B.; Mejía, E.C. Efficiency of Payments for Environmental Services: Equity and additionality in a case study from a Biosphere Reserve in Chiapas, Mexico. *Ecol. Econ.* 2011, 70, 2361–2368. [CrossRef]

35. Wood, M.A.; Sheridan, R.; Feagin, R.A.; Castro, J.P.; Lacher, T.E., Jr. Comparison of land use change in payments for environmental services and National Biocorridor Programs. *Land Use Policy* 2017, 63, 440–449. [CrossRef]

36. Ministry of Environmental Protection. *Outline of Protection Planning for Ecologically Vulnerable Areas in China [Z.]*; Ministry of Environmental Protection: Belgrade, Serbia, 2008.

37. Miranda, M.; Porras, I.T.; Moreno, M.L. *The Social Impacts of Payments for Environmental Services in Costa Rica: A Quantitative Field Survey and Analysis of the Virilla Watershed*; Markets for Environmental Services Paper No.1; IIED: London, UK, 2003.

38. Muñoz, R. Efectos del Programas de Pagos por Servicios Ambientales en las Condiciones Devidade los Campesinos de la Península de Osa. Unpublished. Master’s Thesis, Universidad de Costa Rica, San José, CA, USA, 2004. (In Spanish).

39. Dang Do, T.; NaRanong, A. Livelihood and Environmental Impacts of Payments for Forest Environmental Services: A Case Study in Vietnam. *Sustainability* 2019, 11, 4165. [CrossRef]

40. Wang, C.C.; Zhou, X.B. Can social capital affect the income of migrant workers?—Estimation and test based on the ordered response income model. *Manag. World* 2013, 9, 55–68.

41. Wu, L.; Zhu, K.N.; Jin, L.S. International Experience and Reference of Environmental Service Payment for Poverty Reduction. *Arid Area Resour. Environ.* 2019, 33, 34–41.

42. Zhang, G.J.; Tong, M.H.; Li, H.; Chen, P. The economic growth effect and policy effectiveness evaluation of the poverty alleviation reform pilot area. *China Ind. Econ.* 2019, 8, 136–154.

43. Zhang, L.; Tu, Q.; Mol, A.P. Payment for Environmental Services: The Sloping Land Conversion Program in Ningxia Autonomous Region of China. *China World Econ.* 2008, 16, 66–81. [CrossRef]

44. Ola, O.; Menapace, L.; Benjamin, E.; Lang, H. Determinants of the environmental conservation and poverty alleviation objectives of Payments for Ecosystem Services (PES) programs. *Ecosyst. Serv.* 2019, 35, 52–66. [CrossRef]

45. Pates, N.J.; Hendricks, N.P. Additionality from Payments for Environmental Services with Technology Diffusion. *Am. J. Agric. Econ.* 2020, 102, 281–288. [CrossRef]

46. Niu, Y.Q.; Wang, S.L. Coupling relationship between fragile ecological environment and poverty in Gansu Province. *Acta Ecol. Sin.* 2017, 37, 6431–6439.

47. Ortiz Malavasi, R.; Sage Mora, L.F.; Borge Carvajal, C. *Impacto del Programa de Pago por Servicios Ambientales en Costa Rica Como Medio de Reducción de Pobreza en los Medios Rurales*; RUTA: San José, CA, USA, 2002. (In Spanish)

48. Peng, Z.L. Analysis of the legal norms of policy concepts—Interpretation based on the current valid legal text from 1979 to 2016. *J. Anhui Univ. (Philos. Soc. Sci. Ed.)* 2016, 40, 113–122.

49. Clot, S.; Stanton, C.Y. Present bias predicts participation in payments for environmental services: Evidence from a behavioral experiment in Uganda. *Ecol. Econ.* 2014, 108, 162–170. [CrossRef]

50. Pagiola, S. *Paying for water services in Central America: Learning from Costa Rica. Selling Forest Environmental Services: Market-Based Mechanisms for Conservation*; Pagiola, S., Bishop, J., Landell-Mills, N., Eds.; Earthscan: London, UK, 2002; pp. 37–61.

51. Wu, L.; Kong, D.S.; Jin, L.S. Ecological compensation beneficial to poverty reduction? An empirical analysis of three counties in Guizhou province based on the propensity score matching method. *Rural Econ.* 2017, 9, 48–55.
52. Li, J.; Li, S.Z.; Gretchen, C.D. *Research on Farmers' Livelihoods and Environmental Sustainable Development*; Social Science Literature Press: Beijing, China, 2017; pp. 6–9.
53. Li, W.L.; Lin, H.Y.; Jin, Z. A study on the availability of social capital and its influencing factors: The empirical findings from farmers and herdsmen in Inner Mongolia. *J. Econ. Res.* 2019, 54, 134–149.
54. Wu, L.; Jin, L.S. Research on the Impact of Ecological Compensation in Poverty-stricken Areas on Farmers’ Livelihoods—Based on the Empirical Analysis of Three Counties in Guizhou Province. *Arid Area Resour. Environ.* 2018, 32, 1–7.
55. Niu, J.S.; Ma, R.B. Analysis of influencing factors of public policy—Based on the perspective of policy process. *J. Inn. Mong. Univ. Technol. (Soc. Sci. Ed.)* 2016, 25, 1–5.
56. Qu, T.W.; Luo, B.L. “Good” agent or “bad” colluder: How does clan influence farmland adjustment? *Manag. World* 2019, 35, 97–109.
57. Bao, J.L. Analysis of government functions in the reform of municipal infrastructure marketization in my country. *Bus. Times* 2010, 9, 9–11.
58. Cao, L.C. On the rational economic man’s regression based on the hypothesis of the new economic man. *Search J.* 2008, 3, 31–33.
59. Zhou, L. Administrative contracting system. *Soc. J.* 2014, 34, 1–38.
60. Zhou, X.G.; Lian, H. The governance model of the Chinese government: A theory of “control power”. *Social Res.* 2012, 27, 69–93.
61. Wang, J.J. The formation mechanism of benign interaction between government and society: The evolutionary logic of interaction between central government, local government and social autonomy. *J. Zhejiang Univ. (Humantit. Soc. Sci.)* 2017, 47, 45–57.
62. Alchiani, A.; Demsetz, H. Production, Information Costs and Economic. *Organ. Am. Econ. Rev.* 1972, 62, 777–795.
63. Ye, Q.L. Social Capital and Policy enforcement Network. *J. Yunnan Adm. Inst.* 2006, 5, 93–96.
64. Deng, L.L.; Xia, Y.L. Human capital, social capital and the difference in the effectiveness of rural poverty reduction: An empirical study based on CGSS micro-survey data. *J. Huaiabei Norm. Univ. (Philos. Soc. Sci. Ed.)* 2019, 40, 48–54.
65. Sun, B.C.; Cao, J.L. The heterogeneity of social capital and the difference in the effectiveness of poverty reduction in rural areas: An analysis based on the dual perspective of income growth and gap reduction. *Bus Res.* 2020, 1, 35–44.
66. Cai, J.J. “Dividing Mountain to Household” and “Shared Property Rights”—Weighing Two Imperfect Choices in Forest Resource Governance. *J. Univ. Electron. Sci. Technol. China (Soc. Sci. Ed.)* 2011, 13, 17–21.
67. Schultz, T.W. *Human Capital Investment*; Commercial Press: Beijing, China, 1990.
68. Porras, I.; Asquith, N. *Ecosystems, Poverty Alleviation and Conditional Transfers: Guidance for Practitioners*; International Institute for Environment and Development: London, UK, 2018; pp. 2–5.
69. World Bank. *Costa Rica Ecomarkets Project: Project Appraisal Document*; Report No.20434-CR.; World Bank: Washington, DC, USA, 2000.
70. Wu, L.; Jin, L.S. Research on the Influencing Factors of Farmers’ Livelihood Capital under the Background of Ecological Compensation and Poverty Alleviation. *J. Huazhong Agric. Univ. (Soc. Sci. Ed.)* 2018, 6, 55–61.