吕 星 何 俊/主编 Lu Xing He Jun

Payment for Environment Services:

China's Experiences of Rewarding Upland Poor

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中国贫困山区生态补偿体制研究

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吕星何俊主编

组稿编辑:赵红梅

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Preference

This book is a product of collaboration among researchers from the Regional Development Research Center of Yunnan University and other organizations. The World Agro-Forestry Research Center Kunming Office provides valuable financial support as well as technical support. The book consists of three sections. The first section includes two papers that review the policy of payment for environment services and synthesize case studies. The second section includes all case studies selected. The third section selects one watershed and studies various issues related to payment for environment services.

The thanks must be given to all authors in this book for their collaboration and contribution, especially to Dr. Horst Weyerhaeuser, former representative of The World Agro-Forestry Research Center Kunming Office for his support and assistance. We also own it to the staff of Yunnan University Press.

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A Policy Review on Compensation for the Forest Eco-services in China

Wang Yuehua

(Economic Development Research Center, National Forestry Administration)

Forests can be classified by dominant functions as either public forests or commercial forests. Protected and special-use forests, according to the Forest Law of the People's Republic of China, are public forests. In 2004, based on a three-year project, the central financial department officially established a system of compensation for the Forest Eco-services (FES), which is mainly to offer certain special subsidies for afforesting and fostering, the protection and management costs incurred by the protectors of public forests.

I. Backgrounds

 Sharp Emergence of Ecology and Functions of Forests in the National Economy

The forests supply mankind with both obvious physical products and service products that have an indirect benefit mankind are difficult to value. Physical products, represented by timber, can bring direct economic returns to the producers and operators. In addition, forests also supply less obvious social and ecological services. To be specific, they provide such social services as national defense, scientific research and the conservation of biodiversity. They also provide ecological services, such as beautifying the environment, providing wind shelter, stabilizing soils and conserving headwaters. Global understanding and utilization of forests have experienced a dramatic change from simply going after physical products to combining both physical products with less tangible products. This has been reflected in the manner that development occurs, which also changed from simply developing and utilizing to balancing development and conservation. This was brought about by an increase in the understanding of the value of forests.

The process of forestry development in China also experienced this change. From 1949 when the PRC was established to the 1990s, forestry development basically followed a simple operational mentality that centered on the production of timber, which stressed the timber productivity of forests but neglected the conservation and utilization of the ecological and environmental benefits of forests. Since the 1990s

the serious ecological deterioration has resulted in dreadful environmental consequences. Areas of soil erosion and desertification quickly expanded, the grasslands were seriously degraded and natural disasters, such as flooding, occurred more frequently. Each year, the direct economic losses caused by natural disasters could be as high as over 200 billion RMB. The deteriorating ecological environment has become one of the key bottlenecks for Chinese economic and social developments. People have realized that such deterioration of ecological forests is closely related to deforestation and started to attach greater importance to the conservation and construction of ecological environments with forest. The ecological functions of forest emerged sharply in the national economy.

The Natural Forest Conservation Project (NFCP), piloted since 1998, marked the change in Chinese forestry development from being focused on timber production to being focused on ecological conservation. It also marked that Chinese forestry has changed from simply pursuing economic benefits of forests to stressing and strengthening the ecological and social benefits of forests.

2. Forest Producers and Operators are Landed in an Awkward Predicament of Incomes Falling Short of Expenditures

The forests provide society with such intangible products as biodiversity and beautification of the environment free of charge and nobody pays for the blue sky and beautiful views. Forest producers and operators have long been paying a tremendous amount of money for people to enjoy the ecological services of the forests, but they have not received compensation for this. As there has been only limited financial support from the state, the more forests are fostered and protected in a

region, the poorer the forest earers are regions that are conserving the forests have become. In the late 1980s, most of the Chinese forestry enterprises were stuck with "two kinds of crisis" (an economic crisis and a resources crisis), the incentives of the producers and operators engaged in fostering and protection of forests decreased, which led to a deterioration in the ecological environment.

The development and conservation of forest resources by forest producers and operators were restricted by their incomes falling short of expenditures, which is preventing Chinese forests operators from producing ecological and environmental benefits. The best solution to this problem is to compensate the forest producers and operators.

II. Theoretical and Practical Basis

1. Modern Forestry Theories are the Theoretical Basis for Practicing FES Compensation Mechanism in China

Since a German forestry scientist proposed the pro-nature forest operation and management theory at the end of 19th century, forestry started to change from merely going after economic efficiency of forests to attaching importance to ecological efficiency of forests. After World War II, in Germany, there successively emerged "Forestry Policy Efficiency Theory", "Ship Track Government", "Harmony Theory", "Forestry Services the Nation and the Society", "Multi-functions of Forest Theory", after which American forestry scientists proposed "Forestry Division of Labor Theory" and "New Forestry". The emergence of these theories was the result of continuous advancements in science and technology and the constant deepening of mankind's

knowledge about forest functions. An obvious feature was that people began to think increasingly of ecological efficiency and social efficiency of the forests. The major characteristics of forestry theories is that they are guided by the theory of sustainable development, which fully take advantage of up-to-date science and technology. The entire society extensively participates in conservation and nurturing of forest resources and the multiple functions and values of forests are realized. To guide forestry development with modern forestry ideas, it is necessary to break with the conventional mentality of either "great timber ism", "mere resources protectionism," or "mere ecologicalism". It is necessary to start from the perspective of being good to better satisfy ecological, economic and social needs according to different functional features and social demands of forests, classify forests by functions and operational purposes, and implement categorized operation. This is also an important achievement due to development of modern forestry theories.

2. Division of the Five Forest Categories and Implementation of Operation by Categories are the Practical Foundation for Implementation of FES Compensation Mechanism in China

As early as 1979, China introduced the "Forest Law of the People's Republic of China" (Interim), which stipulated that Chinese forests were divided into five categories of timber stands: forests, protection forests, economic forests, firewood forests, forests for special uses. Even though such theoretical division failed to create an operational mode for different categories in practice. Each of them has its own merits, and the thought of implementing a categorized operation of forestry had started to take shape. In 1995, as was approved by the

State Council, the former National Structural Reform Commission and the former Ministry of Forestry jointly issued the "Scheme for Economic Structure Reform in Forestry", which officially proposed the categorized operation of forestry. Starting from the ecological and economic needs of forests by society and according to different dominant uses, forests were classified as public forests or commodity forests, from the need to conserving the ecological environment, forests that mainly provide ecological and environmental services were classified as public forests. Based on the principle of division, the financial departments at different levels and social forces were responsible for classifying the forests. Institutional arrangement and scientific studies are conducted to maximize the ecological, environmental and social benefits. Other forests that are mainly used for economic purposes were classified as commodity forests, which were managed by enterprises, and operated intensively, to ensure maximum economic benefits.

The characteristics of public forests dictated that their value could not be realized by market behavior. Under the market economy, if the value of the products provided by operators of public forests forest ecoservices, could not be effectively realized, it will affect the reproduction of the public forests. Therefore, it is necessary to initiate the FES compensation mechanism to solve the problem of maintaining public forests. The FES compensation mechanism needs to be conducted as the principle of equivalent exchange. Compensation is actually a kind of special purchase relationship, in which the government and ecological beneficiaries pay to buy ecological services, while the forest owners and operators sell the ecological services.

After the proposal to categorize forest operations, all areas in China successively implemented this work. Article 8 of the "Forest Law of the People's Republic of China" amended in 1998 stipulated that "It is to establish the forest fund system. The State shall establish the forest ecological services compensation fund, which shall be used for the building, cultivation and management of protection forests with ecological services and the forest resources and trees with special uses. The forestry ecological services compensation fund shall be used exclusively for its designated purpose and shall not be used for any other purposes. The specific methods shall be formulated by the State Council." This indicated that China, for the first time, enlisted forestry ecological services compensation fund in law and clearly pointed out that the major source of forestry ecological services compensation fund is the state treasury.

III. History

It is a gradual process of establishing and implementing a forest ecological services compensation policy in China was gradual. The processs involved further understanding, repeated consultation and finally reached agreement about how to carry out the compensation. From being proposed in the late 1980s and early 1990s, to November 23, 2001, when forest ecological services compensation fund was officially incorporated in the state public financial budget expenditure system, this period lasted over a decade. To be specific, this process can be divided into the following stages:

1. Initial Stage

The development of the forestry ecological efficiency compensation policy originated from the practice of charging a forest protection fee implemented at Mt. Qingcheng, Sichuan Province. Mt. Qingcheng, a famous holy place in China, is located in 60 kilometers east of Chengdu, the capital city of Sichuan Province. In the 1970s, as forest rangers did not earn so much money they did not protect the forest effectively so unlawful cutting of forest became very serious to the point that the scenic area was in the danger of being destroyed. This drew great concern from wider society. Under the pressure of public opinion, Chengdu municipal Government called a meeting and decided to reserve 30% of the revenue from selling admission tickets and use it to protect the forests. With the extra revenue from the forest protection fees, the forests in Mt. Qingcheng improved quickly. Later, the relevant department of Mt. Oingcheng carved the minutes of the meeting on a tablet and erected it in front of the main gate. In October 1989, the former Ministry of Forestry sent some researchers to investigate and they found the special tablet. They then convened a seminar on forestry ecological efficiency compensation in Leshan City, Sichuan Province, which started the historical process of establishing the forestry ecological efficiency compensation system in China.

2. The Unifying Opinions Stage (from 1989 to 1995)

Since the first seminar, at the end of 1989, the departments within the forestry system enlisted the establishment of an ecological efficiency compensation system into their working agenda. In 1992, it was pointed out in the "Circular on Key Points of Reform to Economic System in 1992", by the National Structural Reform Commission and approved by the State Council, the need "to establish a forestry pricing system and forestry ecological efficiency compensation system and

to implement paid use of forestry resources. " It was the first time that the state had proposed the establishment of forestry ecological efficiency compensation system. At the end of 1992, the former Ministry of Forestry organized cadres from ten ministries and commissions, including but not limited to the Ministry of Finance, State Planning Commission, General Taxation Administration, Ministry of Construction, and General Tourism Administration for a field investigation. It lasted over 40 days and the trip was over 10,000 kilometers. Before this it was agreed that forestry and forestry operators were becoming poorer and poorer. An unofficial meeting was conducted in Beijing on February 24. 1993 and a common ground was reached on the fact that China needed to establish forestry ecological efficiency compensation system. In addition, the State Council further requested in the "Circular on Further Reinforcing Forestation and Greening", that "It is to reform the fund investment mechanism for forestation and greening and gradually implement the system of levying ecological efficiency compensation charges."

3. Publicizing the 1st Tolling Plan (from 1995 to 1997)

After they reached an agreement, all the ministries and commissions began studying the plan for raising the compensation fund. The plan was drafted on the basis of the experiences of Mt. Qingcheng and under the principle of "whoever benefits pays". In 1996, the Ministry of Finance and the Ministry of Forestry submitted to the State Council "Interim Management Method on Levying Forestry Ecological Efficiency Compensation System". The plan called for charging about 600 million RMB from the tourist resorts, scenic spots (from their admission ticket revenues) and hydropower generation departments. However, as rele-

vant departments objected to it, the plan was aborted.

Main Contents of "Interim Management Method on Levying Forestry Ecological Efficiency Compensation System"

In this plan, forestry ecological public forests included: protection forests and forests for special uses which serve such functions as water source storage, water and soil conservation, wind protection and sand binding, regulating the climate, purifying the air, protecting biodiversity and providing mankind with good ecological environments. The forestry ecological efficiency compensation fund was raised from levying large-scale reservoirs, all kinds of travel agencies, as well as units and individuals engaged in such operations as tourism activities.

Levying criteria: (1) Large state-owned reservoirs, with more than 100 million m³ of storage capacity, will be charged for the forestry ecological efficiency compensation fund by 0.5% of their operating revenue from water supplies after deducting agricultural use water. (2) All travel agencies nationwide will be charged 1% of their taxable business revenue. (3) Work units and individuals engaged in business activities in scenic areas, forest parks, nature reserves, tourist resorts, city gardening and greening parks and hunting parks. will be charged 1% of their business revenue. (The forestry ecological efficiency compensation fund paid by the aforementioned units and individuals will be levied by the local taxation department of the location while levying business tax or value-added tax.) (4) Admission ticket rates of scenic areas, forest parks, nature reserves, tourist resorts, city gardening and greening parks will increase by 10%, for the forestry ecological efficiency compensation fund. (5) The producers and distributors of hunting guns will be charged 20% of their

ex-works prices on hunting guns, in which the producers will bear 5%, while the distributors will bear 15%. (6) Introduction of a wild animal reserve import and export administration fee and a terrestrial wild animal resources protection management fee. Except for (6), the central government and local governments will share the forestry ecological efficiency compensation fund by a 4:6 ratio, to be paid to the central treasury and local treasuries respectively. The plan pointed out that the forestry ecological efficiency compensation fund would be a special governmental fund, to be incorporated into financial budget management, special money for special use only. It would mainly be used for ecological woodland construction and protection, wild animal protection and to offset the direct economic losses incurred to agricultural production and people's livelihoods due to limitations on developing ecological public forests and hunting wild animals. By the aforementioned criteria, it was estimated that the collectible forestry ecological efficiency compensation fund per year would be about 587 million RMB. The term of levying the forestry ecological efficiency compensation fund was temporarily determined as three years.

The plan, theoretically scientific, tried to change the reality that "the majority of people benefit but minority the costs" and it gradually establish and improve the forestry ecological and environmental values compensation mechanism of "whoever benefits pays". However, the plan did have a number of problems. Firstly, the collection of the forestry ecological efficiency compensation fund by forestry departments required very extensive collaboration between departments and industries, which was hard to coordinate. Secondly, the total collectible sum was not adaquate, only 587 million RMB if fully collected, which was unable to satisfy the nationwide construction of ecological