

Study on the Evaluation of Forest Resources Assets

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Abstract

With the gradual development of the asset evaluation industry, the industries involved in the asset evaluation are becoming more and more extensive. China has launched the pilot reform of the forest resources management system in the key state-owned forest regions of Northeast China and Inner Mongolia, and the reform of the forestry property right system has been deepened. the asset value of forest resources has been significantly improved, and the forest resources asset evaluation industry has developed rapidly. However, at present, there are some problems in forest resources asset evaluation and industry management in China, which have seriously affected the healthy development of forest resources asset evaluation industry. For this reason, we should establish and improve various rules and regulations on forest resource asset appraisal, accelerate the innovation of the forest resource asset appraisal system, establish a self-regulatory system for the forest resource asset appraisal industry, solve the current problems that practically exist in forest resource asset appraisal, and find corresponding countermeasures.

Keywords

Forest Resources; Asset Valuation; Problems; Countermeasures.

1. Introduction

In the classification of the form of assets, forest resources assets belong to a special form of assets, which is different from the common fixed assets. In the Encyclopedia of China, the definition of forest is "vegetation type with trees as the main body". However, this only refers to the definition of forest in a narrow sense. Now the forest resources generally refer to the concept of "forest resources" in a broad sense, and the broad definition of forest is "forest, bamboo and all plants and animals in the forest area, as well as woodland real estate resources." In a broad sense, forest resources refer to the biological communities that take all perennial woody plants as the main body and include animals, plants and microorganisms in the forest area with the forest region as the living environment[1]. They have the biological structure and area types required by the complete ecological environment of a forest region.

According to the statistics of the United Nations, the global forest cover accounts for about 30 per cent of the world's land area, accounting for 4 billion hectares, and the world forest resources accumulation is estimated to be about 430 billion cubic meters. However, as far as the overall situation of forest resources in China is concerned, China is lack of forest resources, and its forest coverage is far lower than the average level of the world [2]. The per capita forest area of our country is less than 1 of the world's per capita level, not to mention that the per capita forest storage is only 1 per capita of the world's per capita level, with a smaller number and a larger gap. The serious deficiency, low quality and uneven distribution of forest resources are still the great challenges faced by the protection of forest resources assets in China in recent years. The reasons for the large-scale loss of forest resources are analyzed. It is urgent to establish perfect resources maintenance measures.

Under the tide of socialist market economy and forestry system reform, the forest resources assets evaluation industry in China has developed steadily and continuously with the help of the driving force of the reform of forestry system [3]. After that, the theoretical system of forest resources assets evaluation gradually began to improve and applied to social practice. Since 1983, the study of forest comprehensive benefit evaluation has been carried out step by step, and the evaluation of forest comprehensive benefits in the early stage of our country has been continuously improved. In the 1990s, Chinese experts and scholars began to explore and study the evaluation of forest resource assets in a deeper and more standardized way, and carried out theoretical and practical research and discussion from the perspectives of the definition, category, method, application, particularity and evaluation management of forest resource assets evaluation.

2. Problems in Forest Resource Assets Assessment

2.1. High Professional Requirements for Forest Resource Asset Assessment

Because of the complex division of forest species in forest resources, and the same species of forest trees show different forms of trees in the same area due to different planting times and different ages. The composition of a forest ecosystem is not a single type of tree, so the combination of trees in a forest area can take many forms, resulting in various combinations of values. Therefore, when valuing forest resources, comprehensive valuation asset appraisers are not able to fully distinguish between the species, age, tree mix, and other elements of forest asset descriptions, and the extent to which these factors affect the valuation value of the forest resource assets for the selected valuation purpose. Due to the slight lack of expertise in forestry among asset appraisers, professional forestry experts are required to assist in the appraisal of forest resource assets, and in the case of more complex forest areas, multiple experts are also required, which leads to a waste of manpower [4]. Moreover, when two different systems of personnel work together it can lead to incoordination and problems can be shirked by each other.

2.2. Complex Process of Field Survey of Forest Resources

Any asset valuation process requires a basis for calculation, and so does the valuation of forest resources assets. After accepting a project for forest resource valuation, professional appraisers need to enter the forest land and conduct a site survey of the assets on the forest trees and related information of the forest area, in order to ensure the authenticity and comprehensiveness of the assets as much as possible. For example, the forest phase map of the forest area assets under appraisal provided by the unit with forest asset ownership is used as the overall sampling, and a sampling-type field survey is conducted in the forest area, requiring an overall accumulation sampling accuracy of 90% or more, and checking whether its boundary lines are correct. Then for the larger forest areas, the forest phase map can be used directly to calculate the area of various types of land and forest types in the forest area using tool measurements, while for smaller forest areas, field mapping can be carried out using tools such as GPS, or professional land surveyors can be asked to carry out mapping and provide corresponding supporting documents, although this is more costly in terms of manpower. However, sampling of major land types is still required to achieve an accuracy of 95% or more.

2.3. Late Technology of Forest Resources Assets Assessment

In 2009, CRA organized the drafting of the "Asset Appraisal Guideline - Forest Resource Assets", which has been released and has been implemented since July 1st, 2013. Although the guidelines have briefly elaborated on the selection of valuation methods, calculation of the valuation process, and updating of data on influencing factors, the problems of resource

valuation techniques in China cannot be profoundly solved by simple elaboration, and we still need continuous in-depth research and analysis.

2.4. Irregular Management of the Forest Resources Asset Appraisal Industry

With the rise of forest resource asset appraisal in China and the rapid development of science and technology in China, problems such as unsound legal system and imperfect management mechanism are gradually exposed [5]. Different appraisal objects are under the charge of different departments, such as forest resource asset appraisal work is managed and supervised by the Ministry of Finance and the competent forestry departments according to their respective responsibilities, however, mutual communication and articulation are not sufficient, and it tends to cause issues such as unclear division of responsibilities. Industry-related management laws have not been fully developed, and there are no unified management norms for individual asset appraisal firms or unified fee standards, which leads to conflicts among firms and the possibility of improper inter-industry competition [6]. All related problems affect the healthy development of the forest resources asset appraisal industry.

3. Countermeasures to Solve the Overall Problems of the Appraisal Industry

3.1. The Establishment of a Sound Database and Model of Forest Resources

Forest asset appraisal involves a wide range of issues and weak groundwork, with many of them not encountered or studied in the past, such as land rent of forest land, quantification of geographical differences, forest price, determination of forestry interest rate, theoretical and operational specifications of asset appraisal, etc. Scientific and standardized operable protocols and regulations should be studied to promote the healthy development of asset appraisal.

Establishing a statistical database of forest resource data information as well as a data model is a relatively fast and effective method that can facilitate the use of data by forest resource asset appraisers. When carrying out the approval of the physical volume of forest resources assets and the determination of monetary volume, the one-dimensional and binary timber volume tables of fir, horsetail pine, wetland pine and broadleaf trees, and the volume of timber out of forest species are needed [7]. In order to improve the accuracy of use, it is necessary to prepare partitioned, especially the one-dollar timber volume table, preferably with a smaller geographical scope. For the purpose of determining the composition of asset prices, we suggest to build a data base of relevant factors (market prices, unit prices of harvesting and transportation costs, unit prices of labor, cost of forest roads and boardwalks, etc.) and to build a prediction model.

3.2. Acceleration of the Reform of the Industry Management System

Since forest resource asset appraisal appears relatively late in China, the management system in China is not as perfect as that in foreign countries [8]. However, China has its own unique characteristics and advantages that are conducive to the free and orderly development of the forest resource asset appraisal industry, so we should establish a perfect asset appraisal industry management system as soon as possible to improve the regulation and development of the forest asset appraisal industry in China [9]. In this regard, we can refer to the management experience of the United States, the United Kingdom and other countries where the asset appraisal industry has emerged earlier, and at the same time, we should fully consider our own national conditions and the characteristics of our political system in order to establish a reasonable and orderly management system and management model. As an independent third-party intermediary industry, according to the experience of foreign countries where the asset appraisal industry has emerged earlier and developed more maturely, the management of the forest resources asset appraisal industry cannot be entirely under the management of

either the industry or the government, that is, it can neither rely entirely on the self-regulatory management of the industry nor be completely managed by the government. The competent authorities of the industry should be mainly responsible for strengthening the coordination mechanism and supervisory functions, while the appraisal associations are responsible for some internal self-regulatory management duties of the industry, so that they can bring the role of industry associations into full play. It should be neither dictatorial nor separate to achieve interconnection and mutual supervision [10].

3.3. Improve Relevant Laws and Regulations as Well as Charge Reasonable Fees

The asset appraisal industry in the 21st century is developing rapidly in China. Along with the gradual improvement and disclosure of the Chinese resource market, laws and regulations must be formulated in a timely manner with the development of the times that are more adaptable to contemporary development needs as well as development goals, so as to better restrain and regulate the practice behavior of appraisal industry personnel as well as institutions [11]. In addition to the updating of the legal system, the fees should be more reasonable, standardized and regulated in the fee collection process after the appraisal is completed. Low fees are not conducive to healthy competition in the industry, nor can they guarantee the interests of appraisal organizations and appraisers; repeated fees are not conducive to maintaining the health, good reputation and credibility of the industry [12]. Therefore, when setting fees, asset appraisal organizations should consider the cost and hard work of appraisers in investigating the status of forest resources assets in the early stage of appraisal work so that reasonable fees can be set under the normal maintenance of reasonable compensation to appraisers for their work in order to standardize and rectify the internal culture of the industry.

3.4. Strengthen the Training and Management of Evaluation Agencies and Evaluation Personnel

Forest resource asset appraisal is a kind of job with strong professionalism, and if the appraisers and assistants in the asset appraisal institutions cannot master the professional knowledge of forestry, then they need experts and technicians who are familiar with and master the professional knowledge of forestry [13]. However, at present, there are only a few experts in forest resource asset appraisal in China, so it is difficult to effectively assist in asset appraisal work, which is very unfavorable to the development of forest resource asset appraisal industry. Therefore, China should make more effort and deepen the training of talents. On the one hand, the competent authorities of the industry should strengthen the training of professional skills of appraisal institutions and appraisers, or train personnel who are professional in conducting forest resources asset appraisal. When the state releases new policies on forestry, training should be provided to forest resource asset appraisers in a timely manner to ensure that each forest resource asset appraisal project can be carried out under the guidance of experts to ensure the accuracy, fairness and credibility of the project [14]. On the other hand, the national government, the Ministry of Forestry and the China Asset Appraisal Association should establish and implement a hierarchical management system for appraisal agencies and appraisers, so that the supervisory authority is not dispersed or overly centralized, and a strict practice qualification assessment system should be implemented for each professional asset appraiser.

4. Conclusion

At present, the asset appraisal industry is still developing, and China is gradually attaching importance to the asset appraisal industry, and the state has formulated the asset appraisal law

to help and promote the better and more perfect development of the asset appraisal industry. Although forest resources asset appraisal started relatively late in China and there are still many problems in appraisal, overall, the development of asset appraisal industry in China is still full of hope and vigor. With the problems that exist in the appraisal work, we need to apply scientific management methods and conduct in-depth research to improve it continuously.

In terms of management of the forest resources asset appraisal industry, we should strengthen the supervision of the industry for the entire industry, standardize the code of practice of the appraisal industry, and often enrich the professional appraisers' understanding of forest resources and improve their business ability and awareness of the code and law-abiding in the asset appraisal industry. While enhancing the laws on asset appraisal and referring to foreign laws, Chinese laws should also be adapted to our own characteristics to provide a strong impetus for the vigorous development of the asset appraisal industry, so that the forest resources asset appraisal business in China can progress towards a more scientific, reasonable and standardized path.

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