

# **A Literature Review of the Research on Outsourcing Audit of Natural Resources Assets in China**

Shaofu Gao, Xiaoyuan Jin

Ji Mei University, Xiamen City, Fujian, China

**Keywords:** Natural Resource Assets; Outgoing Audits; Leading Cadres

**Abstract:** In 2013, the "Decision of the Central Committee of the Communist Party of China on Several Major Issues of Comprehensively Deepening Reform" adopted by the Third Plenary Session of the Eighteenth Central Committee of the Communist Party of China put forward for the first time the "Resignation Audit of Natural Resources Assets". Once this new proposition was put forward, it immediately became a research hotspot in China's auditing field, and many scholars published different views and opinions on it. The article sorts out the research literature of natural resource asset outsourcing audit, summarizes the existing research results of natural resource asset outsourcing audit, and puts forward future research and application suggestions.

## **I. Introduction**

With the rapid development of social economy, China's ecological and environmental problems have become increasingly prominent, and people have increasingly realized that economic growth at the expense of the environment is undesirable. The Party Central Committee attaches great importance to the protection of natural resources. In the "Decision of the Central Committee of the Communist Party of China on Major Issues of Comprehensively Deepening Reform" adopted by the Third Plenary Session of the Eighteenth Central Committee of the Party (hereinafter referred to as the "Decision"), it was proposed that "exploration of the preparation of natural resources assets and liabilities". In the table, the implementation of natural resource assets audits for leading cadres "is a major institutional innovation by the party on the road to ecological civilization construction and an important advancement in the construction of a socialist audit system with Chinese characteristics. In order to fully understand the research status of China's natural resource asset outsourcing audit and grasp the research dynamics in this field, we intend to sort out the relevant literature on China's natural resource asset outsourcing audit to improve the efficiency of the use of literature in this field.

## **II. Theoretical research on the audit of departure of natural resource assets**

### **1. Definition and motivation**

Leading cadre natural resource asset outgoing audit was proposed at the Third Plenary Session of the Eighteenth Central Committee of the Party on November 12, 2013. Unlike previous economic responsibility audits and environmental audits, natural resource asset outgoing audits have institutional innovations with Chinese characteristics. Has become an important new business in the daily work of audit institutions at all levels. Leading cadre natural resource asset outsourcing audit refers to the audit by the auditing organ in accordance with laws and regulations on the performance of natural resource asset management and ecological environmental protection responsibilities of the main leading cadres during their tenure (Audit Scientific Research Institute of the National Audit Office). The integration and expansion of responsibility audit (Cai Chun et al., 2014) [1] is also an extension of performance audit (Qian Shuixiang, 2016) [2]. The reason for this emerging product is firstly based on the fiduciary duty theory, the audit of natural resource asset outsourcing is the product of the separation of property rights and management rights of natural resource assets (Cai Chun et al., 2014); secondly, the functions of some leading cadres are dislocated, etc. The

behavior makes it imperative to implement the audit of the departure of resource assets (Chen Bo et al., 2014 [3]), which is an inevitable result of the development of democratic politics in China (Tao Yuxia et al., 2014 [4]).

## **2. Audit objectives and subjects**

The audit objectives of outsourcing of natural resource assets mainly include the following views: One is the "responsibility view" (Cai Chun et al., 2014). Scholars who hold the view of responsibility believe that leading cadres have the responsibility to manage and protect natural resource assets, and the outsourcing audit of natural resource assets is to ensure that this responsibility is better performed; the second is the "state governance concept" (Wang Pingbo et al., 2016). They believe that the ultimate goal is to serve the governance of the country's environmental resources; the third is the "resource management concept" (Chen Xiandong, 2014, Huang Rongbing, 2015). These scholars materialized the audit objectives on natural resource assets, and believe that natural resource assets are The most important task of the audit is to audit the compliance, lawfulness and effectiveness of the management and use of natural resource assets; the fourth is the "immune system view" to identify and pay attention to possible resource and environmental problems, reduce adverse impacts, and perform audits. "Immune" effect (Li Yuedong, 2015 [5]). Fifth is the "mechanism perfection concept" (Lin Zhonghua, 2014, Anhui Audit Office Task Force, 2014). At present, the management mechanism of natural resource assets in China is imperfect, especially the lifelong accountability system for environmental damage has not been effectively implemented, so improving and ensuring the implementation of relevant systems is the overall goal of auditing.

Generally speaking, the audit objectives can determine the audit subject and audit object. Because scholars have different views on audit objectives, they have no unified conclusions about audit subjects. At present, there are mainly several views such as monism, pluralism, and monism-based pluralism. Yiyuanguan believes that the audit subject can only be a state agency (Anhui Provincial Audit Office Task Force, 2014 [6]). This is a conclusion based on the natural and social attributes and property rights of natural resources, national laws and regulations, and audit independence. Other scholars believe that audit subjects need to be diversified. National audit, internal audit, social audit, and the public can all become audit subjects in different ways (Chen Xiandong, 2014). Because from the perspective of "responsibility concept", the responsibility for the protection of natural resource assets is not just the government, (Chen Wen, 2019), which can solve technical constraints and legal obstacles. Li Zhaodong (2019) [7] also pointed out that it is possible to protect the issue that multiple subjects influence audit independence by giving auditors the right to review audit evidence. Finally, there is a neutral view of "one-money, multiple participation" (Tao Yuxia et al., 2014).

## **3. Audit objects and contents**

In the academic circle, there are audits of "people" (targeting local party and government leading cadres) on the issue of "who to audit"; auditing of "things" (targeting the implementation of relevant responsibilities) and auditing of "things" (to Natural resources are the object) three views. In November 2015, the "Pilot Program for Leading Cadres Outgoing Audit of Natural Resources" (hereinafter referred to as the "Pilot Program") proposed that the audit target during the pilot period should be mainly local party committees and major government leaders. In June 2017, the "Regulations on the Audit of Outgoing Natural Resources Assets of Leading Cadres (Trial)" (hereinafter referred to as "Regulations (Trial)") expanded the audit objects to include development and reform at the State Council and local levels, land and resources, environmental protection, water The main leading cadres of agriculture, forestry, energy, marine and other departments (units) responsible for natural resource asset management and ecological environmental protection. This adjustment is mainly to solve the problem of difficulty in defining natural resources supervision responsibility found in the pilot. However, Li Zhaodong (2019) [7] pointed out that the inclusion of leading officials of functional departments in audit objects is prone to problems such as misalignment of audit accountability.

As far as the audit content is concerned, the five major aspects of the "Pilot Program" are policy, policy and decision-making deployment, compliance with laws and regulations, major decision-making, goal completion and responsibility supervision, and project construction and fund management. The key areas covered by the audit include land, water, forest, mine ecological environment, and air pollution. The "Regulations (Trial)" has refined the content on this basis, but there has been no substantial change. The audit contents of the local government programs and regulations are basically the same. However, there are divergent views on the audit content in academia. The main question is whether to include ecological environment issues in the scope of audit content to form two views: "Natural Resources View" and "Resource Environment View." Scholars who hold the "Natural Resources View" believe that the current Under the conditions, the procedures and methods for auditing the ecological environment are not yet mature, and the focus of the audit should be more reasonable on natural resources. Scholars with a "resource and environment view" consider that the audit content should include the ecological environment from the perspective of the general expected user (citizen) of the audit report Problem, because the "natural resource concept" ignores the needs of users (Liu Minghui, 2016 [8]). In addition, based on the consideration of the sustainable development of natural resource assets, Geng Jianxin (2019) suggested that the analysis of resource and environmental carrying capacity should be included in the audit content. Taking into account the impact of local economic policies on local resource mining and environmental protection, Li Zhaodong (2019) proposed to include the implementation of economic policies that have an impact on resources and the environment into the audit content.

#### **4. Audit mode and audit method**

There are three recognized audit models for natural resource outsourcing audits: One is the natural resource balance sheet model. This audit model is consistent with the traditional audit's thinking from the accounting statements. The relevant departments first prepare the natural resource balance sheet Then, the audit department will audit the reliability and authenticity of the report information; the other is the development model of economic responsibility audit. Most scholars believe that the audit of natural resource assets and other professional audits such as economic responsibility audit overlap and extend. The audit objectives, audit objects, and audit content of the two are coincident, so natural resource asset audit can grasp the main line, form an overall work pattern combined with responsible audit, etc., and build a three-dimensional and targeted leadership Cadre leaving audit mode (Lin Zhonghua, 2014, Lin Liduan, 2017). In addition, the Anhui Provincial Audit Department's research group (2014), Chen Chaobao and others (2016) proposed that based on realistic choices, natural resource asset outsourcing audits should be combined with economic responsibility audits. Cui Zhenlong (2015) also believes that the balance sheet audit model is not conducive to the timely detection and correction of violations; the third is the combination of the above two models, Hua Wenying (2018) put forward the innovative audit of "economic responsibility + natural resources balance sheet" The model is to first clarify the responsibilities of leading cadres through accountability audits, and then assess the performance of responsibilities through the changes in statements.

Traditional audit methods have been unable to adapt to the new requirements of natural resource asset outsourcing audits, so we must explore the innovative audit method of "multiple audits in one" (Li Sineng, 2016). The current research on audit methods focuses on two aspects, one is the acquisition and analysis of evidence, and the other is the evaluation system. The acquisition and analysis of audit evidence is mainly to study the application of "3S" technology in quantifying natural resource assets. Du Jizhong (2014) analyzed the ideas and advantages of GIS technology in the management of natural resources out-of-resource audit; Dong Ziheng (2017) [summarized the application of GIS technology in audit and made corresponding suggestions; Wei Xiaoru (2017) based on Arcgis has developed a set of GIS natural resource asset auditing systems, and uses land resources and water resources special audits as examples to illustrate its role; Zhou Songshan (2018) uses basic farmland protection audits as an example to illustrate the geographical and national conditions monitoring service of natural resource assets. The content, ideas and methods of any

audit.

Regarding the evaluation system method, Li Boying et al. (2016) proposed the “fuzzy comprehensive evaluation method” to quantitatively evaluate the responsibilities of leading cadres; Ruan Jiajia (2017) set out from the overall audit objectives and used AHP to establish a set of relevant assessment indicators including environmental audits. The evaluation index system of the hierarchical structure of indicators; Lin Liduan (2017) combines AHP and Klee method, so that the evaluation results can not only take advantage of the psychological scaling method, but also have objectivity; Zhejiang Information Center in 2018 In 2015, he applied for a patented invention named "A Natural Resources Asset Outgoing Audit Evaluation Method", which realized the in-depth application of geographic information technology from evidence collection to result evaluation; Zheng Peng (2019) [9] proposed PSR (stress-state -Response) model, design the marine resource audit evaluation index system, analyze in depth from three dimensions, and clarify the key to the problem.

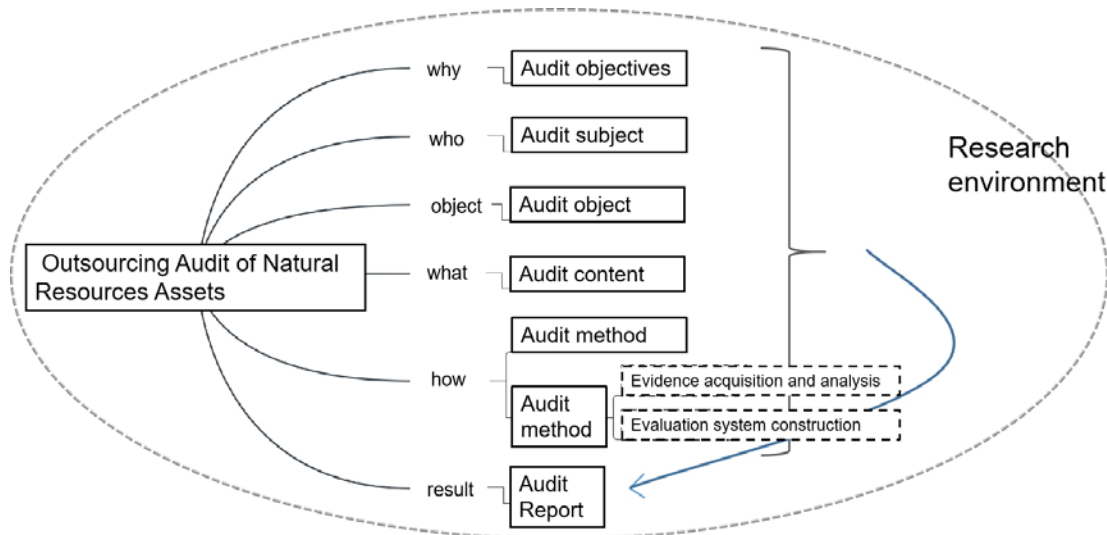
## **5. Audit report**

The audit report is the final result of the audit work and an important basis for the assessment of the performance of the cadres' responsibilities in the protection of natural resources and assets. Dong Yanan (2015) believes that natural resource asset auditing should use a combination of single report (detailed report) and comprehensive (all natural resource assets) report (short form report) to issue reports. From the perspective of audit results, Chen Chaobao (2016) [15] believes that it is possible to form a separate audit report on natural resource assets, or to incorporate the main results of natural resource asset audit into the economic responsibility audit report. Liu Minghui (2016) also pointed out that the audit recommendation part of the report should include the accountability and audit handling opinions, work improvement and system improvement suggestions, and if necessary, transfer the audit report to the relevant departments in accordance with the regulations.

## **6. Research perspective**

After the theoretical system is basically formed, scholars have conducted research on the overall environment in which the system is placed. Most of the research is the integration of big data and outsourcing audits of natural resource assets. The establishment of an audit cloud platform through big data technology has gradually formed big data for The "smart audit model" of the main and artificial supplement, resource sharing, and results linkage. He Baocheng (2019) pointed out that the era of big data will help auditors cultivate “macro audit thinking” and establish models by analyzing data to form a continuous audit supervision model. In addition, Wang Zhuo (2017) takes the innovation-driven strategy as the background to study the relationship between the two. Liu Yanchun (2019) researched and analyzed the problems existing in the outsourcing audit of natural resource assets under the current ecological civilization. Xu Chao (2019) [10] discussed the management of natural resource asset audit resources from a collaborative perspective. Zhang Jing (2019) studies from the perspective of legal modernization, and believes that the establishment of the audit system for the departure of natural resource assets must consider both ecological and economic attributes.

In summary, the research on outsourcing audit of natural resource assets has produced results, and basically formed a theoretical system composed of concepts, elements, content, methods, etc., as shown in Figure 1,



**Figure 1.** Theoretical system of outsourcing audit of natural resource assets

### III. Summary and future research directions

By combing the relevant literature on natural resource asset outsourcing audits, we found that although our country's research on natural resource asset outsourcing audits has achieved certain results, as mentioned above, people have not yet reached a consensus on some basic theoretical issues. And the research methods are mostly normative research, and the case studies and empirical studies of audit pilots in practice account for a relatively small amount. Since 2014, China has started the pilot work of natural resource assets outgoing audits, expanded the scope of the pilot year by year, and began to establish a regular audit system in 2018. As the work continued to develop, problems gradually emerged. First, the existence of natural resource assets is not easy to measure, the valuation stability is poor, the quality evaluation method is complicated, and cross-region and cross-domain associations are difficult. Secondly, there are problems in the top-level design, such as fuzzy definition of responsibility and imperfect accountability mechanism. Therefore, in future research, we should accelerate the establishment of the theory and method system of natural resource asset outsourcing auditing, and strive to form a theoretical structure and method system of natural resource asset outsourcing auditing that can guide practice in a short period of time. And will combine the empirical research of audit data and specific case studies to find problems in time, trace back the essential causes of the problems, sum up experience, and draw inferences from others, so that the natural resource asset audit will quickly enter the stage of standard application. In addition, at present, the research strength of natural resource asset outsourcing audits is mainly concentrated in universities and national audit institutions. The focus of the research is mostly on the familiar audit areas, but less on other related fields (such as ecology and environment). In the future, there is an urgent need to integrate multi-disciplinary research perspectives and research strengths, incorporate environmental laws and regulations, professional technology assessment and other factors into the scope of research, and expand the breadth and depth of natural resource asset audit research.

### Reference

- [1] Cai Chun, Bi Mingyue. Theoretical thinking about the outsourcing audit of natural resources assets [J]. Audit Research, 2014 (05): 3-9.
- [2] Qian Shuixiang. Research on the Audit of Outgoing Natural Resources Assets of Leading Cadres [J]. Zhejiang Social Sciences, 2016 (03): 151-155 + 161.
- [3] Chen Bo, Bu Fanqi. On the objectives and contents of natural resource asset outgoing audits [J]. Friends of Accounting, 2014 (36): 10-13.
- [4] Tao Yuxia, Xie Zhihua. Thoughts on issues related to the audit of outsourcing of natural resource

assets [J]. Finance and Accounting Newsletter, 2014 (34): 80-83.

[5] Li Yuedong, Zhou Yaning. Game Analysis of Leading Cadres 'Responsibility Audit of Natural Resources Assets [J]. China Internal Audit, 2015 (10): 33-35.

[6] Anhui Provincial Audit Department task team, Dai Kezhu. Several understandings of the outsourcing audit of natural resources assets [J]. Audit Research, 2014 (06): 3-9.

[7] Li Zhaodong. The current situation and countermeasures of the audit of leading cadres' natural resource assets outgoing audits [J]. Financial Supervision, 2019 (17): 62-66.

[8] Liu Minghui, Sun Jiping. Research on the key elements of the outsourcing audit of natural resources assets of leading cadres [J]. Audit and Economic Research, 2016, 31 (04): 12-20.

[9] Zheng Peng, Zhao Shijia. Research on the Index System of Marine Resources Audit Evaluation Based on PSR Model [J]. Friends of Accounting, 2019 (22): 133-140.

[10] Xu Chao, Zhang Ya. Research on the management of government audit resources from the perspective of synergy——Taking leading cadres 'natural resource assets as audit resources for example [J]. Friends of Accounting, 2019 (09): 114-118.