

# Research on the Construction of the Governance Mode of Mineral Resources Development with Public

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**Key words:** Land management; Legislation; Mine surveying; Professional practice; Remote sensing; Young surveyor; "mineral resources", "public participation", "polycentric governance theory", "governance mode"

## SUMMARY

Mineral resources, as non renewable resources, play an important role in the economic development of China and even the world. However, in the process of mineral resources development, due to the lack of public participation, problems such as unreasonable exploitation of resources, negative externalities and illegal exploitation are increasingly prominent. The purpose of this paper is to explore and improve the development mode of mineral resources, mainly from the perspective of system supply and governance mechanism to optimize the path of public participation and put forward the corresponding design ideas and programs. At the same time, the multi temporal remote sensing image dynamic analysis technology is used to provide guarantee for the public to supervise the development of mineral resources, further optimize the mining mode of mineral resources, and reduce the negative externalities brought by resource mining. And the possibility of illegal mining. This paper mainly uses the theory of multi center governance to analyze the internal logic of mineral resources governance and solve the problem of public participation. Integrate multi-time series and high-resolution satellite image analysis technology, construct multi-scale fusion remote sensing data, extract dynamic analysis of multi-temporal remote sensing image by backtracking method, and carry out supervision research on ecological damage of mineral resources by means of human-computer interaction. The following paths should be constructed: ensuring the public participation in the system supply process to ensure the high degree of publicity of the system; establishing a multi center governance mechanism to ensure the public participation to promote the effective operation of the system for ensure the public interest; enhancing transparency in the whole process of mineral resources development to ensure that the public fully supervises the development of resources; establishing a dynamic remote sensing monitoring system to ensure that mineral resources are not illegal mining or predatory mining, and supervise the miners for ecological restoration. At the same time, the unique air to ground observation mode of remote sensing technology can greatly improve the supervision efficiency of ecological damage in Alpine mining

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areas, support in-depth ecological security analysis of mining areas, and provide scientific decision support for mineral resource development planning, so as to realize the closed-loop of public participation in the whole process of mineral resource exploitation. In the process of mineral resources development, it can effectively make up for the power dissimulation and low efficiency caused by the government's top-down command and control model, meanwhile, it can avoid the disordered utilization of resources caused by market failure, so as to protect the public interest and promote the sustainable development of mineral resources.

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