

A Research on Problems of Use of Social Capital in the Field of Natural Resources Based on Public Policies

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ABSTRACT

Public-Private Partnership (PPP) is one of the important models for attracting social capital. The joint investment in public products and services by the government and social capital is conducive to reducing the burden of government debt and preventing and resolving financial risks. The central and local governments have issued relevant policies to guide the use of social capital in the field of natural resources. However, the participation of social capital is still in a state of fragmentation and discontinuity. It is necessary to strengthen policy and theoretical guidance and combing to regulate the way social capital participates in the field of natural resources. In order to encourage and guide social capital to participate in the field of natural resources. Based on the obtained nine central and local government policies related to social capital participation in the field of natural resources, the content analysis method is used to analyze them. The study found that due to the public nature of the service in the natural resources field and the physical signs of social capital retrieving benefits in the field of natural resources, my country's use of social capital in the field of natural resources currently has an incomplete legal system, imperfect establishment of related mechanisms, large reliance on government subsidies, and externality, lack of professional talents and other issues.

Keywords: social capital, natural resources, private investment, Public-Private Partnership

1. INTRODUCTION

Since the 18th National Congress of the Communist Party of China, the construction of ecological civilisation has been vigorously promoted and sustainable development has been elevated to the height of green development. In the report of the 19th National Congress, Chinese President Xi Jinping pointed out the need to speed up the reform of the ecological civilization system and build a beautiful China. The Ministry of Natural Resources of the People's Republic of China actively promotes the construction of market-based mechanisms for ecological protection and restoration of land space, and guides and supports the participation of social capital in the implementation of ecological restoration projects. Social capital participation in the natural resources sector can reduce the financial pressure on the government, revitalise social capital, increase the motivation of social capital to participate in projects such as land remediation and mine rehabilitation, and use the invisible hand of the market to find a balance before pursuing economic development and environmental protection. Under the existing system, the government has always been in a leading position in the development of the natural resources sector, but relying on government departments alone to carry out work such as

mine rehabilitation and comprehensive land remediation can result in excessive financial pressure on the government and create negative externalities in the process of rehabilitation.

The government and social capital cooperation (PPP) model is one of the important models for attracting social capital. Domestic research on the participation of social capital in public services started later compared to that of foreign countries, and the research has focused on areas such as infrastructure. At present, the number of studies on the development of social capital participation in the natural resources sector is small, and focus on case studies of land remediation and mine rehabilitation, without paying attention to the relevant provisions of the overall policy system on social capital participation in the natural resources sector. This study compares and analyses the policy documents on social capital participation in natural resources issued by the central government and local governments at all levels in recent years, reveals their characteristics, summarises the problems encountered by social capital participation in natural resources in China at present, and gives reference to social capital participation in natural resources.

2. RESEARCH METHODS AND PROCESS

2.1. Policy collection and sample selection

This study takes the policy texts issued by the central and local governments at all levels related to social capital participation in the field of natural resources as the object of study. Firstly, the official website of the Ministry of Natural Resources (<http://www.mnr.gov.cn/>) was used as the main source of policy texts. Since the Ministry of Natural Resources only started to publish policy documents on social capital participation from 2019, the policies and regulations in the PPP column of the National Development and Reform Commission of the People's Republic of China (<https://www.ndrc.gov.cn/xwdt/ztzl/pppzl/zcfg/>) and the policy and regulation topic on government and social capital cooperation of the Ministry of Finance of the People's Republic of China

(<http://jrs.mof.gov.cn/zhuanti2019/ppp/zcfbpps/>) were used for supplementation.

The Ministry of Natural Resources actively promotes the construction of market-based mechanisms for ecological protection and restoration of land space, and guides and supports the participation of social capital in the implementation of ecological restoration projects.

2.2. Policy text analysis

The content analysis method is a social science research method that classifies the acquired textual material into manageable units of data to make valid inferences^[1]. This study focuses on exploring the regulations related to the way social capital is involved in the field of natural resources in China, using the content analysis method to analyse the nine collected policy texts.

3. THE OVERALL SITUATION OF CHINA'S SOCIAL CAPITAL PARTICIPATION IN THE NATURAL RESOURCES SECTOR

3.1. Policy Release Time

As shown in Figure 1, the Chinese government's policy on public capital participation in the natural resources sector began in 2012 when the Ministry of Land and Resources and the Trade and Industry Bureau issued "Opinions of the Ministry of Land and Resources and the All-China Federation of Industry and Commerce on Further Encouraging and Guiding Private Capital Investment in the Land and Resources Sector", Subsequently, in 2013 and 2014, the central government did not issue any relevant policies. The development of PPP in China has spurred since 2014, and the National Development and Reform Commission and the Ministry of Finance have now jointly issued opinions on the

implementation of the PPP model in relevant fields with the Ministry of Housing and Construction, the Ministry of Agriculture, the Ministry of Environmental Protection, the Ministry of Transport, the State Forestry Administration, the Ministry of Culture and Tourism, the Ministry of Civil Affairs and the Ministry of Human Resources and Social Security respectively. So the number of social investment policies in the natural resources sector increased in 2015 and 2016 and was spread across forestry and energy in the natural resources sector, but then the number of new policy releases reverted to zero in 2017 and 2018. Since the 18th national Congress, the construction of ecological civilisation has been vigorously promoted and sustainable development has been elevated to the height of green development. The Ministry of Natural Resources has actively promoted the construction of a market-based mechanism for ecological protection and restoration of national land space, and guided and supported the participation of social capital in the implementation of ecological restoration projects. 2019 saw the issuance of three relevant policies by the Ministry of Natural Resources.

3.2. Policy Issuing Agency

A comprehensive analysis of Tables 1, 2 and 3 shows that of the nine directly related policies, one document was issued by the Ministry of Finance in conjunction with the Ministry of Environmental Protection, four related policies were issued jointly by the Ministry of Natural Resources (Land and Resources Bureau) and other departments, two related policies were issued jointly by the National Development and Reform Commission and other departments, and two related policies were issued by the National Energy Administration.

3.3. Distribution of policy types

The type of document used for policy issuance varies and the effect of the policy it produces varies. Of the 9 points collected, 3 types of official documents were used to issue policies, namely notices, opinions and plans. The proportion of policies issued in the form of "Opinions" was 55.6%, followed by 33.3% in the form of "Notices". Both "notices" and "opinions" are upward and downward documents that have the function of laying out work to lower levels, with clearer and more specific requirements to guide lower-level departments to encourage and attract social capital to participate in the natural resources sector.^[2]

4. PROBLEMS WITH SOCIAL CAPITAL PARTICIPATION IN THE NATURAL RESOURCES SECTOR

4.1. Inadequate legal system

When developing the PPP model in the field of

natural resources, the government needs to take up the responsibility of improving relevant laws and regulations. At present, the Ministry of Natural Resources' specific areas of participation in PPP projects mainly include the revitalization and utilization of state-owned construction land, mineral exploration and exploitation, oil and gas resources exploration and exploitation, land remediation and geological environment restoration and management of mines, while the documents that the government has promulgated on PPP projects are not basic laws, but regulations and statutes, with a low level of legislation and no laws for the four specific areas where the PPP model is currently applied^[3]. The specific requirements of the PPP model lead to a reliance on documents of lower legal rank that do not provide sufficient guarantees to stabilise capital investment intentions, and the absence of laws in specific areas is not conducive to the development of the PPP model in the natural resources sector.

The application of the PPP model in the field of natural resources in China has already achieved some results, but the localisation of PPP projects and the legislation in this field are not yet perfect. Only laws and regulations that are in line with the characteristics of the PPP model can serve as a theoretical basis and institutional guarantee for the application of the PPP model in the field of natural resources.

4.2. Poorly established mechanisms

The operation of the PPP model is a game between the government and social capital, requiring the establishment of sound mechanisms to check and balance both sides. Starting from 2010 when the State Council issued the new 36 articles to promote the development of private capital, the state ministries issued 42 rules to promote the development of the PPP model in different areas, and two years later the Ministry of Finance and the Development and Reform Commission issued a series of policies to regulate the development of the PPP model implying that the top-level design of the PPP model in China has been launched. The use of PPP projects in the natural resources sector has not yet developed a sound mechanism in terms of the division of powers and responsibilities, project bidding, risk sharing, distribution of benefits, and supervision of different entities.

From the perspective of the establishment of the authority and responsibility mechanism, the functions and roles of the government under PPP model have changed compared to the previous model. In the traditional investment model, the government is the direct provider of public goods and services, while in the PPP model, the government becomes the financier and supervisor. With this change in role, it is necessary to establish a perfect mechanism of authority and responsibility, so that each body can use its own power and take corresponding responsibility to maximise the

efficiency of PPP projects^[4].

From the perspective of risk sharing mechanism, there is a need for shared risk between the government and social capital parties in the PPP model. Only a sound risk-sharing mechanism can allocate project risks and minimise the overall project risks^[5]

From the point of view of the benefit distribution mechanism, it means the distribution mechanism of the profit brought by the shared project between the government and the social capital. Investment in basic social and public services is for the public interest, but the aim of the social capital side is to gain profits. Therefore, a scientific and reasonable interest adjustment mechanism should be established, which can encourage and attract social capital investment as well as realise the sharing of interests between various entities.

In terms of supervision mechanisms, the relevant PPP model specifications issued by the Ministry of Finance and the Development and Reform Commission provide for the supervision roles of various departments and different subjects. Although there are certain regulations and constraints, they have not yet regulated the specific powers and obligations of each subject when it comes to supervision, taking into account the characteristics of the natural resources sector.

4.3. Heavy reliance on government subsidies

PPP projects have three important characteristics, namely partnership, benefit sharing and risk sharing^[6]. Partnerships are not only about sharing benefits but also about sharing risks. In the PPP management model, more emphasis is placed on the best response and sharing between the two parties in order to minimise the risks for both parties. Generally, the public sector takes as much risk as possible in areas where it has an advantage, while the other party takes as little risk as possible.

In PPP projects in the natural resources sector, the government bears a larger share of the risk, which can speed up policy approval and project advancement to a certain extent, improve project efficiency, effectively address the limitations of the PPP model applied to natural resources projects, and play a positive role in promoting the development of the PPP model in the natural resources sector. Although the relevant departments have taken certain measures expecting to increase the project revenue. For example, in the "Opinions of the Ministry of Natural Resources on Exploring the Use of Market-based Approaches to Promote Ecological Restoration of Mines (Natural Resources Regulation [2019] No. 6)", it is mentioned that abandoned mine rocks can be used rationally and those that are indeed surplus can be sold to the public, with all proceeds going to ecological restoration in the region, an initiative that can both increase revenue and increase investment in ecological restoration. However, PPP

projects in the natural resources sector currently have low returns of their own and rely on government subsidies, so channels to increase project returns should be actively sought.

4.4. Externality

The PPP model is mainly focused on the pure public sector and quasi-public sector. The special nature of social capital investment in public services comes from the special nature of public goods. Public goods are the symmetry of private goods, which usually do not have exclusivity and competition and have positive or negative externalities. Similarly, there are positive and negative externalities for the use of the PPP model in the natural sector.

The difficulty of measuring externalities poses a variety of problems for the externalities of environmental governance in the natural resource sector. Social capital parties and government departments fund land remediation and geological rehabilitation of mines to improve the natural environment and increase its efficiency of use, but the resulting revenue is profited by developers and other operators, and the government does not receive the corresponding benefit. The government bears the cost of environmental management for the enterprises in the process of environmental management, but the enterprises or individuals who pollute the environment are not punished, leading to the emergence of externalities.

4.5. Shortage of expertise

The PPP model operates by using project concessions to finance projects and requires complex legal, financial and fiscal knowledge. As the PPP model was applied relatively late in China, many conditions are not mature, especially in some second and third-tier cities, and many governments and enterprises do not have sufficient knowledge of the PPP model and lack professional institutions and talents to help them implement PPP projects effectively. This requires policy makers to

develop standardised and regulated processes for PPP, provide technical guidance and policy support for project implementation, and be guided by professional financial institutions. There are fewer professionals and institutions in the PPP model in the natural resources sector, and there is an urgent need to train a group of professionals who understand both the characteristics of the natural resources sector and the PPP model to promote the scientific development and efficiency of the PPP model in the natural resources sector.

5. CONCLUSION

With the reform and opening up, China's social productivity and comprehensive national strength are rising and the power of private investment is growing stronger. The government expects that it can further encourage and guide private investment, give full play to the role of the market in resource allocation, promote stable and rapid economic development, expand social employment, increase residents' income, and promote social harmony and stability. The essence of cooperation between the public and private sectors is to share a common goal: to deliver as many products or services as possible with fewer resources on a specific project. The private sector pursues this goal to realise its own interests, while the public sector pursues the common good and the public interest. Since 2012, the Ministry of Natural Resources has again issued a document in 2019 to encourage and attract the participation of social capital, and issued model cases. However, as the use of social capital in the natural resources sector is relatively short, most of the current studies focus on PPP studies in infrastructure and other fields, and the number of both special regulations and studies on the development of the PPP model in the natural resources sector is relatively small, with problems such as an inadequate legal system, imperfect establishment of relevant mechanisms, heavy reliance on government subsidies, problems of externalities and insufficient professional talents, which require further attention.

FIGURES AND TABLES

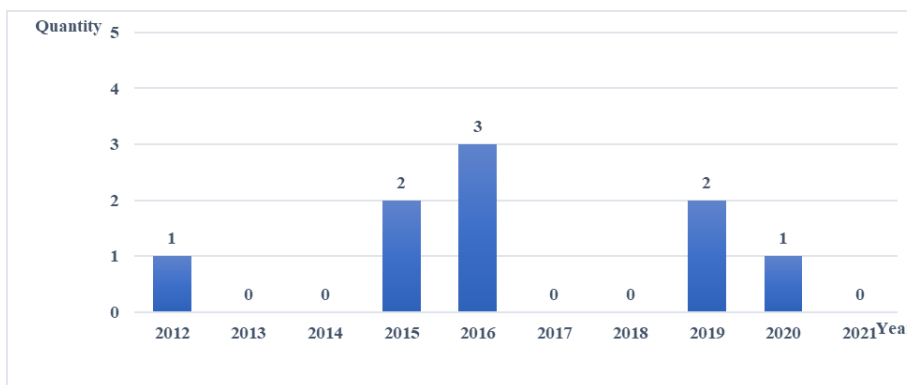


Figure 1 Time for China to release policies related to the participation of social capital in the field of natural resources

Table 1. Ministry of Natural Resources and joint release of policy on social capital participation in investment

Serial number	Policy	Publishing Agency	Policy release time
1	"Opinions of the Ministry of Land and Resources and the All-China Federation of Industry and Commerce on Further Encouraging and Guiding Private Capital to Invest in the Field of Land and Resources"	Ministry of Natural Resources State Administration for Industry and Commerce of the People's Republic of China	2012/6/15
2	"Opinion of the Ministry of Natural Resources on Exploring the Use of Market-based Approach to Promote Ecological Restoration of Mines"	Ministry of Natural Resources	2019/12/17
3	"Notice of the Ministry of Natural Resources on comprehensive land management pilot work across the region "	Ministry of Natural Resources	2019/12/10
4	"Special Action Plan for Mangrove Conservation and Restoration (2020-2025) "	Ministry of Natural Resources State Forestry and Grassland Administration of the People's Republic of China	2020/8/14

Table 2. Ministry of Finance of the People's Republic of China and jointly issued policies on social capital participation in investment

Serial number	Policy	Publishing Agency	Policy release time
1	" Implementation Opinions on Promoting Government and Social Capital Cooperation in Water Pollution Prevention and Control "	Ministry of Finance Ministry of Environmental Protection	2015/4/9

Table 3. National Development and Reform Commission website on social capital participation in investment policy

Serial number	Policy	Publishing Agency	Policy release time
1	" Notice of the National Development and Reform Commission National Energy Administration on the Standardization of the Pilot Reform of Incremental Distribution Business "	NDRC National Energy Administration	2016/11/26
2	" Guidance of the National Development and Reform Commission State Forestry Administration on the Use of Government and Social Capital Cooperation Model to Promote Forestry Construction "	NDRC The state forestry administration	2016/11/21
3	" Notice of the National Energy Administration on the Active Promotion of the Government and Social Capital Cooperation Model in the Energy Sector"	National Energy Administration	2016/3/31
4	" Guidance from the National Energy Administration on encouraging social capital investment in hydropower stations"	National Energy Administration	2015/1/12

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