



From “Undertaking” to “Management” Analysis of Government’s Role in PPP Cooperation Model of China’s Environment Welfare Management

Yefan Shao^(✉)

Advertising Institute, Communication University of China, Beijing, China
shaoyefan@cuc.edu.cn

Abstract. The PPP (Public-Private Partnership) model integrates the resources of the government and the private sector to achieve social goals. As the dominant player in the PPP model, the role and behavioral choices of government entities often play a key role in the development of PPP projects. For example, in Zhejiang Province, China, under the “Five Waters” policy planning, the government actively promotes the PPP model for new public welfare or quasi-public welfare projects with long-term stable income guarantee, and establishes a strict water quality performance evaluation system while fully trusting the market. Through the mechanism of innovation to resolve the project debt, to achieve a virtuous cycle, its experience is of reference significance. Based on this, this paper will take the PPP project of water pollution management of Moon Lake in Haishu District of Ningbo City as an example in the context of “Five Waters”, and interpret the role of the government in the PPP model through case studies, and compare it with the role of the government in the non-PPP cooperation model of public-private partnership, so as to explain the role of the government as In this way, we explain the necessity and sustainable significance of the government as the “referee” and “supervisor” in the PPP model.

Keywords: PPP model · government role · public management · Environment Welfare · five-water management

1 Introduction

1.1 Background of the Study: “Five Waters” and the Need for Government Role Change

The “Five waters” policy, refers to the sewage, flood, waterlogging, water supply and water saving, is a systematic project initiated by Zhejiang Province to solve the water environment and water resources problems. Due to the vast area of water in Zhejiang Province, the water environment problems are complex, and it is difficult to play a good effect of water management only by the government body. In this context, Zhejiang

government issued on the “five waters” policy to promote water welfare management, which calls on the government-led and social-participated water management model.

The PPP (Public-Private-Partnership) financing model has been applied in the “Five Waters” initiative in Zhejiang Province, where the resources of the government and the private sector are integrated to achieve social goals. Compared with other cooperation models, the PPP cooperation model reduces the transaction costs of social capital participation in infrastructure investment with a longer return cycle, better protects the interests of all parties, and mobilizes private organizations to invest; for the government, PPP projects increase the efficiency of capital use and improve environmental quality while expanding the scale of government financing.

However, there are still precedents of governments calling off PPP projects around the world. In the PPP cooperation model, the government, as the initiator and supervisor, has a decisive influence on the operation of PPP projects. Based on the above theoretical and social background, this paper will explore the role of the government in the PPP cooperation model and its influence on the progress of the project by analyzing the first lake management PPP project in Zhejiang Province, the Moon Lake Water Ecology Management PPP Project in Haishu District, Ningbo City.

2 The Case Study of the PPP Project—Moon Lake Water Ecological Management

In order to improve the water quality of Moon Lake, Ningbo Haishu District recently launched the Moon Lake Water Ecology Comprehensive Improvement Project, which is also the first lake management PPP project in Zhejiang Province. The project aims to maintain a healthy living environment and protect environmental health, while allowing cultural tourism operations after completion, in line with the interests of both public and private partnership fit. After public bidding, Ningbo Tianhe Water Ecology Technology Co., Ltd. intends to invest 77.32 million yuan to implement the comprehensive management of the water ecological environment of Moon Lake. Through the remediation, the water quality of Moon Lake will be gradually improved from the current poor V to III.

2.1 Preliminary Stage: Negotiating Party of Competitive Consultation

At the beginning of the Moon Lake project, Ningbo Haishu District Government played the role of negotiator and invited public bids for the project. During the competitive negotiation process, the government clearly defined the rights and obligations of both parties through the contract, and planned to determine the long-term development goal of the Moon Lake PPP project of “ten years contract period and one year remediation period”. In this stage, the government adopts a competitive approach to select the social capital with investment and operation management capabilities, and the two parties conclude the contract according to the principle of equal negotiation. Since the government and the private capital are in an equal negotiating position, the open and transparent negotiation method can better protect the interests of both public and private parties. For example, the government side in the Moon Lake project has strictly delineated the protection zone, precautionary zone and construction control zone, and made it clear that

Table 1. Basic Framework for Risk Allocation for Moon Lake Ecological Management PPP Project

Project Period	Risk Category	Risk Takers
Project decision phase	Pre-approval risk	Government
Integrated water quality management period	Project design risk	Social Capital Parties
	Project Financing Risks	Social Capital Parties
	Project remediation and upgrading risks	Social Capital Parties
	Legal and policy risks	Government
	Force majeure	Social Capital Parties
Water quality enhancement, conservation period	Operation and maintenance risk	Social Capital Parties
	Legal and policy risks	Government
	Force majeure	Government, social capital parties
	Paid Risk	Social Capital Parties
Handover period	Transfer Risk	Social Capital Parties

Table Note: In the bidding stage of PPP projects, the government signs contract agreements with social capital parties in the role of negotiator to clarify the target of risk bearing at each stage and realize risk sharing.

Party B must complete the gradual upgrading of the current inferior V to III standard within the contract period; and while the social capital provides public services, the government will also pay consideration to the social capital based on the public service performance evaluation results. At the same time, the competitive bidding gives full play to the role of market winners and losers, so as to optimize the allocation of resources (Table 1).

2.2 Mid-term: Supervisor of Performance Appraisal

After the contract agreement is completed for this PPP project, the government side still needs to play the role of a key supervisor. Specifically, the government department will develop various dimensional performance assessment methods to bring the project progress, fund use, and future planning into the rules and institutionalized management track.

Taking water environment management PPP project as an example, firstly, the government department delineates the service scope and target effect of environmental service enterprises by formulating environmental scale and five levels of assessment standards for water environment. For different types of environmental management projects, such water environment performance assessment system will be appropriately adjusted according to the actual situation. In the project implementation stage, the government department is not directly involved in the production, but to project supervision and

management role, the environmental service enterprises of the whole process of project construction and monitoring of the effect. At the same time, Zhejiang Province also through the establishment of integrity file system, publicly announced to the community the governance information of third-party governance projects. Including the operation of pollution control facilities, pollutant discharge standards, etc., so as to mobilize social forces to participate in water environmental management.

2.3 Post: Referee for Closing Acceptance

At the later stage of the project, government departments need to gatekeep the acceptance of the project and order the rectification of the projects that do not meet the acceptance standards. In this link, the impartial and unbiased adjudication behavior of governmental subjects also affects the effect and output of PPP projects. Due to the public welfare attributes and weak commercial attributes of the PPP projects of water environment management and other basic engineering construction, the government side often needs to promise the enterprise side financial support in terms of funds and land resources during the project implementation period. A well-functioning PPP project requires government departments to make a strong connection between funding and output, rights and obligations, to ensure that the funds are used to their full potential.

The PPP project of Moon Lake Treatment in Haishu District, Ningbo is still in the construction period, but it has already achieved the expected effect of transforming the poor V water into III water, which lies in the cooperation and trust between the public and private partners, and also in the scientific and perfect monitoring and assessment plan and the role-playing of impartial law enforcement by government departments. As the first lake management PPP project of “Five Waters”, the experience of the Moon Lake management project has high promotion value.

3 From “Underwriting” to “Managing”: Evaluation of Government’s Role in PPP Partnerships

Under the long-term “big government” governance model, the government-underwritten social public service supply model was once the mainstream; but with economic and social development, the division of labor has been refined, and the introduction of market forces in the field of infrastructure construction has become an inevitable trend. In recent years, the World Bank, the Asian Development Bank, the United Nations, the European Union, the United States and Japan have vigorously promoted the PPP financing model in infrastructure construction; in the practice of “five waters” in Zhejiang Province, the PPP model also makes it possible to socially co-manage water environment pollution.

Based on the above case studies, it can be concluded that in the PPP model, the role of government departments has been changed from “contractor” to “manager”. Compared with the direct provision of products and services, the government takes up more management work in the public-private partnership and outsources the implementation process to the market players. This change in role allows market players to be fully stimulated, while the government endorsement also reduces the risk of private capital entering infrastructure projects, allowing more non-public capital to enter the field of

public welfare water pollution control, relieving the government’s financial difficulties in environmental management.

From the perspective of governmental innovation, since the PPP cooperation model mainly focuses on the purely public or quasi-public sector, some scholars suggest that PPP is not only a means of financing but also an institutional mechanism change. The innovative practice of PPP model provides an opportunity for the reform of administrative system and financial system of government units. In traditional environmental engineering projects, the issue of sustainability of project operation has become a major pain point. The relevant units often need long-term environmental subsidies from government departments to sustain. Under the PPP model, government units introduce market players, select partners through a merit-based approach, replace direct intervention in production with supervision, and revitalize stock assets through operating subsidies instead of initial investment, thus improving resource utilization efficiency and achieving sustainable project development.

From the perspective of social benefits, the change of the government’s role is conducive to mobilizing the enthusiasm of social agents to participate in public welfare undertakings. The PPP cooperation model transforms the government from a producer and “athlete” in public infrastructure construction to a supervisor and “judge” in overseeing the participation of market agents in the production of public goods and services. In this process, market players undertake public welfare projects through fair competition, and their results will be returned to the society, thus realizing a virtuous cycle. Therefore, the change of the government’s role from underwriting to management is equally important for the development of social economy and socialist modernization.

4 Conclusion

As mentioned above, the PPP model enables the government to change its role from “contractor” to “manager”. In the early stage of PPP projects, the government acts as a negotiator and conducts open competition bidding to achieve a reasonable allocation of resources through the market; in the middle of the project, the government supervises the implementation of the project through a strict evaluation system and subsidizes the project according to the operational efficiency. In the middle stage of the project, the government supervises the project implementation by setting up a strict evaluation system and subsidizes the project according to the operational efficiency, so as to ensure the efficiency and effectiveness of the PPP project.

Currently, the PPP model has been promoted and practiced in the environment management in Zhejiang Province, and has achieved certain results in the exploration of public-private partnership in the public welfare sector. Thus, in the context of long-term governance, the PPP model, as an effective solution to attract private capital to participate in social public infrastructure construction, will become a useful supplement to modern governance innovation at all levels of government.

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