

Original Article

# The Theory, Practice and Improvement in Providing “Rights – Ethical Public Goods” with PPP

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**Abstract:** *With the development of the economy and society, the rights and interests of social members and the content of social ethics continue to evolve, and the scope of public services also expands, forming a spectrum of public goods consisting of “pure public goods”, “quasi-public goods” and “rights-ethical public goods”. In order to solve the contradiction between the supply and demand of public goods, the PPP model in which the government and social capital cooperate to provide public goods came into being. PPP has a variety of specific models. In theory, government procured projects and services, franchising, and equity cooperation are respectively applicable to “pure public goods”, “quasi-public goods” and “rights-ethical public goods”. Among them, “rights-ethical public goods” refer to public goods that have intuitive private product attributes according to the definition of traditional economic concepts, and should be provided by the government as determined by the common social value orientation and collective political choice. However, due to its existence or inability to completely exclude competition and exclusivity in its actual form, the traditional government supply method is not efficient, and it is the best choice to let market entities participate in its supply. To supply “rights-ethical public goods” through PPP, social capital parties with both construction ability and operation resources should be selected and allowed to participate in the whole process of public goods supply, such as investment, construction, management and operation, so as to form and give play to the quality and efficiency advantages of the construction and operation aggregates. In this process, it is necessary not only to ensure that social capital parties obtain reasonable investment returns to encourage their active participation, but also to form a constraint and incentive mechanism for social capital parties’ construction and operation behaviors through effective supervision and performance evaluation, so as to achieve efficient and high-quality supply of public goods. However, due to the imperfect system, unclear understanding of participants and low quality of relevant personnel, there are problems in the practice of “rights-ethical PPP projects”, such as the separation between construction and operation, and unclear asset ownership. More concretely, social capital usually has the construction qualification, but lacks operation experience, and transfers the project operation to public institutions or other operating entities after the completion of project construction. Although the problem of project construction financing has been solved, the high-quality supply of public goods has been neglected, and the resource integration effect of the PPP model has not been brought into full play, and the asset ownership problem of the project has not been effectively solved at the rule of the law level. Social capital parties worry that neither the inherent property rights nor the long-term operating income will be obtained, so they pay more attention to short-term returns such as construction profits, which is not conducive to long-term mutual trust and cooperation between the government and social capital parties. Therefore, it is necessary to speed up the construction of the rule of law in the operation of PPP projects. While promoting the standardized (rule of law, specialization and sunshine) development of all PPP projects, the “construction-operation integration” mechanism of “rights-ethical PPP projects” should be strengthened and optimized. At the legislative level, it is necessary to form a clear ownership structure and distribution structure of rights and responsibilities for the PPP model, and to establish and improve a comprehensive performance evaluation mechanism based on the whole life cycle of the project and the supervision mechanism with multi-subject participation. In addition, it is necessary to change the concept, to correctly understand the “rights-ethical public goods”, be determined to innovate, to improve the quality of relevant personnel, and to promote the improvement and high-quality development of “rights-ethical PPP projects”.*

**Keywords:** *rights-ethical public goods, PPP model, public goods supply mode, social capital, integration of construction and operation.*

## I. INTRODUCTION

The report of the 19th National Congress of the Communist Party of China pointed out that socialism with Chinese characteristics has entered a new era, and the major social contradictions in China have been transformed into contradictions between the people’s growing needs for a better life and unbalanced and inadequate development. The people’s expectations and aspirations for a better life include, but are not limited to, a sound legal system, adequate social security, and sound public services at the national and social level. With the continuous development of economy, society, science and technology, the

scope and ethical content of the citizens' rights and interests have been enriched, which is shown as "high welfare" at the national level. However, the gradual expansion of the relevant government institutions and functional boundaries has also increased the financial funds required for maintaining the operation of the government. Thus, the increasing government debts also hindered the further improvement of the quality of public services. In order to solve the contradiction between supply and demand of public goods, the western countries first broke the limitation that public goods can only be supplied by the government, and introduced the market players into the field of public goods supply. Thus, the PPP (Public-Private-Partnership) model of providing public goods by the government and social capital came into being. In the 1980s, China launched the first PPP project with Hong Kong capital - Shenzhen Shatoujiao B Power Plant, and then tried to provide public goods by social capital - foreign-invested enterprises in the form of franchising operation. In May 2004, the Administrative Measures for Franchising of Municipal Public Utilities was released. Some cities carried out a number of representative PPP projects in the fields of power supply, water supply, sewage treatment and other municipal public utilities. Beijing Metro Line 4 became a typical benchmark in this period. Since 2014, the decision makers have particularly emphasized that the government and social capital cooperation model (PPP) should become a major focus in innovative development. The various departments and ministries, mainly the National Development and Reform Commission and the Ministry of Finance, have successively issued a number of supporting policies, which made PPP model evolve from exploratory institutional innovation to extensive implementation practices in a relatively short time. This has alleviated the financial pressure on the supply side of infrastructure and public services in various regions to a certain extent, and has played the positive effects in many aspects, such as expanding domestic demand, optimizing the structure, improving people's livelihood, improving government performance, and strengthening the development momentum. Meanwhile, it has also exposed some shortcomings, problems and distortions in the operation of PPP, which need us to understand deeply, to promoting the advantages and to eliminating the disadvantages. The wide application of PPP model in the world benefits from the promotion of new public administration wave. The advantages and effectiveness of PPP model are obvious.[1-2] From the perspective of finance, PPP aims to ease the short-term pressure of financial funds, and can use the participation of social capital to optimize the medium and long-term budget performance. From the perspective of overall economy, PPP plays a positive role in stabilizing the overall economy, optimizing the medium and long-term rule by law, and promoting reform of the mixed ownership. From the perspective of the practices in various regions, driven by the goal of stabilizing the economic growth, the local government takes PPP as an effective channel to attract investment, and uses PPP to simulate economic growth, to promote full employment, to improve people's livelihood and to promote the economic and social development. However, from a global perspective, PPP projects generally have the characteristics of long cooperation cycle, many participants and large investment scale, and they are mainly concentrated in municipal utilities and public works, making relatively insufficient contributions to education, health care, social pension, housing security and other fields. The main reason for this is that on one hand, the investment volume of the latter is relatively small, producing relatively weak pulling effect on the economic growth, and the effect of improving public service quality is relatively lagging, which is difficult to be shown in a short term; and on the other hand, the understanding on the latter by the government and market subjects is relatively ambiguous. It is still a difficult problem for reasonably dividing the boundary between government and market both in theory and in practice. Since the reform and opening up, although private capital have tried to participate in education, medical care and other fields covered by traditional government functions, they still have confusion, repetition and challenges. In fact, in the PPP model, the long-term partnership between the government and social capital is more reflected in the "business link", while the supply of education, health care, housing security, etc. has the attributes of business services more intuitively, which is required to effectively connect the PPP as an innovative way of providing public goods. However, the basic education, basic medical and health security, and basic housing security, etc. are different from "pure public goods" in traditional sense. The unclear understanding on them hinders the application and improvement of PPP model to a certain extent. This paper thinks that this kind of public goods should be treated as "rights-ethical public goods". In the innovative development of China oriented by modernization, using PPP model for the supply of "rights-ethical public goods" is a typical case combining theoretical innovation with practical innovation. Based on this, the following makes a detailed explanation from the theoretical and practical levels.

## **II. Theoretical Innovation: "Rights-Ethical Public Goods" and the Selection of PPP Model**

### **A. The Expansion of the Scope of Public Services and the Proposal of "Rights-Ethical Public Goods"**

The theory of public goods is of great significance for understanding the public functions of the country (government), and understanding and building a modern national governance system and financial system. [3-4] The discussion on the connotation and extension of public goods has evolved for many years in the academic circle. People tend to connect the common cognition in life experience, and take the work of the government and the scope of public sector services as the contents of public goods. However, from the perspective of theory, a well functioning public service system in the real world does not appear naturally. Its continuous optimization and improvement need to be based on a scientific and effective theoretical system of national governance, and also need to be supported by the theory of public goods that is closely linked with the reality and keeps pace with the times. China is in a critical period of economic transformation and high-quality

development. The improvement of the economic and social development requires the upgrading and development of the national governance system oriented by “modernization”, while the construction and optimization of the modern national governance system need to further sort out and understand the government functions, and to clarify the connotation and boundaries of public goods, so as to improve the theoretical basis and goal orientation of the modernization of the national governance system. Tracing back from the theoretical level, David Hume first talked about the free riding behavior in the supply of public goods in his book *A Treatise of Human Nature*, and believed that public goods refer to things that are beneficial to every member of society and should be completed through collective action. Subsequently, Adam Smith also mentioned the supply of public goods in his book *An Inquiry into the Nature and Causes of the Wealth of Nations*, and believed that public security and justice should be provided by the government, while other public infrastructure, such as public infrastructure, can be provided in different ways at different times and in different regions. Since then, the Swedish economist Wicksell pointed out that the scale and scope of public goods supply mainly depend on the consultation of various stakeholders, while the demand and willingness of individuals for public goods are difficult to be valued. Therefore, there must be political procedures involved in the selection of public goods, so that each individual can participate in the decision-making of public goods supply fairly, that is, public goods should have “political ethics”. On this basis, Swedish economist Lindahl introduced the marginal idea and proposed that the supply scale of public goods should ensure that everyone can obtain the corresponding products at their own price. Lindahl equilibrium essentially continues the “fairness” contained in the political ethics emphasized by Wicksell. The most influential definition of public goods comes from American economist Paul Samuelson. He induced and summarized the consumption process of public goods, and proposed that public goods should have the characteristics of “non exclusivity” and “non rivalness”, which once became the universal cognitive basis for the people to define public goods. Later, American economist James Buchanan and others found that in real life, there are still no public goods that are “non exclusive” and “non rival” at the same time, which are called “quasi public goods” (which can be subdivided into “public pond products” and “club products”). They revised and improved the theory of public goods. However, in real life, whether at home or abroad, basic education (“compulsory education”), basic medical and health security, and basic housing security, etc. are also generally included in the public goods supply category of “equalization of basic public services” that the citizens should enjoy, but they do not conform to the strict definition of classic public goods (“pure public goods”) and “quasi public goods”. They are both rival in consumption, and exclusive in income, that is, showing the same attribute characteristics as “pure private products”. In view of this, Chinese scholars Feng Qiaobin and Jia Kang creatively defined the above public products with intuitive characteristics of private products as “rights-ethical public goods” in 2010 [5] [1]. This theoretical innovation provides a basic theoretical basis and a constructive solution to clarify the responsibility of the government and the market in the supply of public goods in the fields of education, health care, housing, and so on. Objectively speaking, with the development of economy and society and the progress of science and technology, the rights and interests of social members and the contents of social ethics in the form of human civilization are constantly evolving, and the connotation and extension of public goods are also changing. It is necessary to understand and analyze the connotation of public goods from a more essential level and a broader perspective with the times. The concept of “rights-ethical public goods” put forward by Chinese scholars fully reflects the progress of theoretical innovation in serving social practice with the subjective efforts of the researchers to “closely link theory with practice”. The so-called “rights and interests” refer to the basic rights that every citizen should enjoy, which is determined by the common value orientation of social members, and should be regarded as the kindness and humane care that a civilized society should have. The so-called “ethics” refers to the political ethics of citizens’ basic rights obtained through the political process of collective voting after they have obtained the general consensus of social values, that is, they should be consumed equally by all members of society and distributed according to political principles. Based on the theoretical innovation of Chinese scholars, the complete system of public goods should include three categories: “pure public goods”, “quasi public goods” and “rights-ethical public goods”. The boundary of public goods in a broad sense is dynamically adjusted with the changes in the market, technology, system, social development stage, and other conditions. The birth of public goods in early days originated from ensuring the citizen’s daily life needs, maintaining economic and social order, guaranteeing the operation of public power, etc., such as national defense, diplomacy, public security, justice, public transportation, and so on. With the continuous development and progress of the economy and society, the demand for higher levels of life, such as fresh air, clean water, environmental protection, infectious disease prevention, sports and entertainment public facilities, has become the universal appeal of social members, and the scope for the supplied public goods has also been expanded. With further development, more comprehensive public goods supply systems, such as “children have care, the learning has education, the ill has medical care, the elderly has pension care, and the people has housing” have become the pursuit of a high welfare society. “Pure public goods” stand for the basic conditions for the existence and development of social members, while the supplements for the public goods that are generally recognized by the social members’ demand for rights and political ethics are more and more clearly manifested in the extended scope of “rights-ethical public goods”, such as compulsory education, basic medical care, basic housing security, and so on. China is currently moving towards a modern socialist power. In order to meet the needs of economic and social development and the basic security of people’s lives, basic education, basic medical care and social security, etc. have already been included in the category of basic public services, and

become an indispensable “rights-ethical public goods”. The proposal and interpretation of “rights-ethical public goods” expands the extension of public goods, lays a theoretical foundation for the cooperation between public sector and private sectors to expand the scope and improve the quality of such public goods by means of market mechanism, and provides theoretical guidance for the practice of relevant PPP projects. The theoretical innovation has become mature since its proposal, has been closely combined with China’s public goods supply practice, and has become one of the theoretical cornerstones to promote the equalization and high-quality development of public services.

### **B. Three Categories of Public Goods and Selection of PPP Model**

The scientific and reasonable definition of the connotation and extension of the public goods, and more rich theories on the classification of public goods provides theoretical premise for the effective exploration on the supply method of public goods in practice. PPP model is the model innovation in the supply of public goods or public services through partnership between the public sector and private sector in accordance with the principle of sharing risks and benefits.[6-8] After including the category of “rights-ethical public goods”, the complete system of public goods should include “pure public goods”, “quasi public goods” and “rights-ethical public goods”, which correspond with three kinds of PPP model, government procured engineering and services, franchising, and equity cooperation. First, “pure public goods” are the goods that have both “non-exclusive” and “non-rival” in the definition of classical public goods, which are equally shared by all social members, cannot be effectively supplied by the market and thus must be solely supplied by the state with its power. The supply of “pure public goods” is necessarily included into the responsibilities of the government, and must be managed by the government directly. However, it does not exclude that related engineering construction, the specific goods and supporting services can be supplied by the government in the form of government procurement, such as the procurement of some national defense projects, arms and weapons, and some regulatory services. The government should develop detailed and clear guidance directory to standardize the government procurement of “pure public goods”, and then introduce the professional technology, experience and achievements of the market to improve the efficiency and quality of public service supply through procurement transactions. Second, “quasi public goods” refer to the goods that have either “non-exclusiveness” or “non-rivalness” in the definition of traditional public goods. In the fields of infrastructure and public utilities, such as energy and water conservancy, transportation, environmental protection and municipal engineering, etc., social capital can selectively enter through exclusive technology in the process of supplying “quasi public goods”, make the market supply sustainable by means of “user payment system”, and avoid the phenomenon of “free rider” to improve the use efficiency of public funds. For example, the expressway guarantee the stable investment returns of the supplying subject through setting toll stations (“club” type exclusive technology), which can encourage the market entities to participate in the supply of such “quasi public goods”. By granting the right of franchising, the government introduces the competition mechanism under the premise of defining the boundaries of the rights and responsibilities between the government departments and market entities, and permits the social capital to invest and construct this type of infrastructure or public utilities within specified period and scope, which can ease the financial pressure of the government, lower the burden of general taxpayers and improve the construction and operation performance of the projects. Third, “rights-ethical public goods” refer to the public goods that have intuitive attributes of private products defined in the concept of traditional economics, but are supplied by the government due to the orientation of social common value and the collective political choice. In real life, “rights-ethical public goods” exist extensively, such as, the supplies in the fields of basic medical care, compulsory education, affordable housing projects, etc., which cannot meet the demands of others while meeting the demands of some people at the same time, and have the features of both exclusiveness and rivalness. Such public goods are the essential conditions that are determined by the regulations as the equalized basic public services and social policy guarantee for all social members. In such fields, due to the existence or inability to completely exclude the exclusiveness or rivalness in the actual form, there are often problems in the traditional government supply, such as “rent-seeking” distortion, disordered management, low efficiency, false costs, and so on. In order to overcome the disadvantages in the supply of such fields, it is the best choice to allow the market entities to participate in the supply of “rights-ethical public goods” so that the government and the enterprise have complementary advantages through the cooperation. It also naturally corresponds to the innovation in PPP mechanism in the innovative development of China in recent years, such as the “retrofit – operation - transfer” (ROT) mode for public hospital and public school, the construction of affordable houses, and so on. The ideal PPP supply method for “rights-ethical public goods” is that the social capital participates in the whole process of the supply of public goods or services, including the investment, construction, management and operation. The best social capital should be the mature institutions with abundant experience, good reputation and considerable qualifications in the industry, such as hospital, school, elderly care institutions, affordable housing development enterprises, and so on. The government and social capital agree on the goal of output in the contract. The scope for cooperation should extend from the construction of infrastructure to the supply of core services. Within the cooperation scope, the project still retains its public nature or has the support of public funds. The social capital receives performance payment according to the corresponding performance evaluation standard in the operation stage. For example, the school sets the evaluation standard according to the number of students, enrollment rate, and the teaching quality. In addition, the public nature of PPP projects for the supply of “rights-

ethical public goods” (hereafter referred to as “rights-ethical PPP projects”) originates from the project contents included into the scope of public services, the service quality of which should be supervised by corresponding government departments. The economy of the project is reflected in the investment returns. The project design for the returns on investment should be completed in the project procurement stage. The operation stage should be tracked and supervised by the government department in accordance with performance evaluation. Under the established evaluation standard, the “non windfall but sustainable and long-term profits” should be kept for the social capital. The rights and responsibilities of all parties should be defined under the conditions of legal system guarantee and professional intellectual support. The political ethics mechanism for “public choice” should be formed under social sunshine supervision and NPC budget approval system. The above is the healthy and sustainable development direction for “rights-ethical PPP projects”. For different types of public goods, the differentiated PPP model should be adopted to form diversified and effective supply of public goods, which needs both innovation and experience accumulation on the standardized (mainly legal, professional and sunshine) operation so that various specific supply mechanisms gradually become mature. Currently, the main adaptive PPP models for “rights-ethical public goods” include “building – operation - transfer” (BOT) and ROT. The former is mainly for the newly-built projects of school, hospital, affordable housing, etc., while the latter is mainly for the optimization and upgrading projects of the existing school, hospital, affordable housing, etc. that have been in operation. For the supply projects of “rights-ethical public goods” that increasingly reflect the increment of social demand, the proper PPP model will produce a performance multiplier effect of “1+1+1>3” due to the cooperation between the government, enterprise and professional institutions with their comparative advantages. It is not only a valuable innovation in financing mode, but also a valuable innovation in management mode. It substantially contributes to the modernization of national governance system and governance capacity driven by the innovation.

### **III. Practical Investigation: Main Problems in the Operation of “Rights-Ethical PPP Projects”**

Since 2014, the Chinese government has vigorously promoted PPP model in the fields of infrastructure and public services. The State Council, the Ministry of Finance and the National Development and Reform Commission, etc. have promulgated more than 100 policies and regulations related to PPP model, and the innovative development of PPP has reached an unprecedented height. As of June 2022, there are 13,972 projects in the management database of PPP comprehensive information platform of the Ministry of Finance, with a total investment of more than 20 trillion Yuan, including 2,698 PPP projects of “rights-ethical public goods”, accounting for 11% of the total investment (data source: Wind database). Due to incomplete regulations and systems and immature institutional systems, there are some problems in the construction and operation of “rights-ethical public goods” with PPP model, such as education, medical care, affordable housing, basic elderly care facilities, etc., which are roughly classified into two categories. First, it is the challenge of how to standardize the sustainable development as other types of PPP projects. Many PPP projects have the problems of “focusing on financing and neglecting management” by the government, and “focusing on construction and neglecting operation” by the social capital, which even makes PPP model become a simple financial behavior. It is reflected in the capital composition of “fake equity”, performance evaluation being a mere formality, solidified financial operation subsidies, inconsistency between the interest distribution and risk sharing, and so on. As a result, the potential advantages and the function of improving quality and efficiency of the PPP model have not been brought into full play. Second, the problems caused by the unique complexity of “rights-ethical PPP projects” and their outstanding management mechanism are mainly shown in the following two aspects.

#### **A. The disconnection between the construction and operation of “rights-ethical PPP projects”**

As mentioned above, “rights-ethical PPP projects” (such as public education and medical care institutions, security-oriented elderly-care institutions, etc.) are mainly suitable for the comprehensive supply model integrating the construction and operation together. It aims to improve the production and supply performance of public goods and services through the introduction of market competition mechanism. The social capital of such PPP projects should be the comprehensive service subject with both construction capacity and operation resources. However, for some existing “rights-ethical PPP projects”, there are the problems of disconnection between the production of public goods and the supply of services. The social capital selected through the competition mechanism is usually equipped with construction qualification, but lack in operation experience. When the project is completed, the social capital transfers the operation of the project to the public institutions, or relies on local resources to establish a new operation entity. This is not conducive to the full play of the resource integration effects of PPP model. Although PPP model solves the financing problem of the project to a certain extent, the high-quality supply process of public goods and services, which is the core of PPP, has been neglected, or there may be the dilemma of “willing spirit but weak body”. The separation and disconnection between the construction and service supply of “rights-ethical PPP projects” is related with the insufficient understanding or experience on “rights-ethical public goods” by all parties, or insufficient training or quality limitations of relevant personnel. In the practice of “rights-ethical PPP projects”, the government often learns about “rights-ethical PPP projects” according to the usual thinking of “pure public goods”. The “pure public goods” are mostly constructed by engineering construction services procured by the government, and then handed over to public institutions for daily operation after construction. The funds are usually appropriated by financial funds. For example, currently, the widely used operation mode in the fields of education and medical health care is that the social capital is responsible for the

investment, construction and operation services of non-core contents, and the government retains the core public services. The cooperation between the government and social capital is relatively shallow. The government makes a payment according to the delivery standard of the infrastructure, and then makes performance payment for the non-core services according to the performance evaluation standard within the term of cooperation. Under such cooperation framework, the engineering construction party becomes the social capital participating in the cooperation of PPP projects. In order to meet with the requirements for comprehensive service supplier of PPP project, they often form a consortium with smaller operating company, or even the newly-established shell companies. In terms of the arrangements for capital structure, in order to avoid the risks of rising leverage ratio after consolidation, the construction party, as the leader of the consortium, often holds less than 50% of the shares, while the operating company holds a larger proportion of the shares. When the projects enters the operation period, the construction party, as the leader, is still a small shareholder of the project company in form after obtaining the construction profits, but actually has been isolated from the operation risks of the project and has “retired”, while the subsequent supply of public services is the responsibility of the operating company. It can be seen that the cooperation between the government and social capital often stays at the construction of infrastructure, which does not fully play the role of improving the quality and efficiency of public services brought by in-depth cooperation in the whole life cycle of the project. The separation between construction and operation of “rights-ethical PPP projects” also brings about the accumulation and spillover of local risks. In practice, the return mechanism for “rights-ethical PPP projects” mainly adopts the method of “feasible gap subsidy”, the calculation basis for which is the audited construction costs and operation costs, with the construction costs accounting for a large proportion. As the disconnection between construction and operation of the existing PPP projects is very common, the reasonable investment benefits of the social capital cannot be guaranteed if completely following the spirit of paying according to PPP performance evaluation. According to the Notice on Standardizing the Management of Project Database of Comprehensive Information Platform for Government and Social Capital Cooperation (PPP) issued by the General Office of the Ministry of Finance in 2017 (Cai Ban Jin [2017] No. 92), 70% construction costs of PPP projects are not included into the scope of performance evaluation (less than 30% construction costs and operation service fees included into performance evaluation), which guarantee the benefits of social capital to a certain extent, and promote the implementation of the projects. But at the same time, it also confirms the disconnection between the construction and operation of PPP projects in a relatively loose threshold in policy regulations, and restricts the flexible space in the expenditure responsibilities of the government for PPP projects. The disconnection and separation between the construction and operation of projects further leads to unreasonable risk sharing during the construction and operation periods. The social capital in charge of the construction tasks naturally cannot bear the operation risks, while the operating company is often incompetent or unable to solve the problems caused by risk accumulation after assisting the construction company to win the project, leading to low efficiency or even failure in the actual operation. Finally, the government has to assume all the responsibilities and risks.

***B. The ownership of the assets of “rights-ethical PPP projects” is not clear enough.***

Since 2013, the Chinese government has vigorously promoted the application of PPP model in the fields of infrastructure and public services, making the supply of public services under PPP increasingly popular. However, due to the lagged legislation and the transition characteristics of the inner belt of China’s economic system, the government often encounters vague areas of conceptual cognition in the process of cooperation with enterprises. The government departments representing the public interest are worried about touching the so-called “political high-voltage line” of “the loss of state-owned assets”, and the equal cooperation relationship is distorted. The social capital involved in the cooperation, especially the private enterprises, often have a doubt on the concept of “property rights” related to the project and its derived concept of “income from the property rights”, which is not conducive to the mobilization of their enthusiasm. In the traditional fields of “pure public goods” and “quasi public goods”, the ownership division between government and social capital is relatively clear. The former is mainly supplied by the corresponding projects, products or services that are procured by the government, and does not involve property rights. The latter is usually supplied by social capital through the establishment of special purpose vehicle (SPV) for franchising rights. After the franchise period, the physical form of public goods is usually transferred to the government free of charge (this is a non-negotiable clause). For example, in the highway project, after the operation period, the highway will be transferred to the government free of charge. In fact, in the economic sense, the transferred is the operation right instead of the ownership. Specifically, in the “rights-ethical PPP projects”, the SPV jointly established by the government and social capital is intuitively similar to the SPV of the expressway model, which also has all-round cooperation, such as equity investment, profit sharing and risk sharing. No matter how such projects are operated, such as BOT, TOT (Transfer - Operate - Transfer), ROT, etc., after the project cooperation period, the enterprise must transfer the project to the government department free of charge. What the social capital obtains is the operation right within a period of time in the broad property right, rather than the ultimate ownership. Therefore, on one hand, the government departments invite social capital to participate in the project and introduce market competition mechanism, incentive mechanism and evaluation mechanism, aiming to improve the supply quality and efficiency of public goods. On the other hand, it clearly declares that the nature of public service projects determines that the final ownership of project assets is always in the public sector (the subsequent

operation plan and profit space are also within the scope of government supervision and approval due to their relationship with the public interests). The market participants are worried that they will neither obtain the benefits of the inherent property rights, nor the long-term market operation benefits. So they will focus on the short-term construction profits. To solve such problems, it is necessary to establish a “standardized” PPP mechanism [9-13], which is a combination of legislation, specialization and sunshine, so as to ensure that enterprises can obtain “non windfall but acceptable profits” as long-term investment returns (covering both the construction period and the operation period). The equity in the SPV should conform to the general definition of equity in “modern enterprise system”, and the social capital should have an appropriate trading (exit) channel. In recent years, China has established some corresponding “quasi fixed income” financial product trading platform institutions, but this cannot change the validity of the original project contract provisions on the transfer to the government at the expiration of the period. Some special forms of PPP projects, such as the “Build – Own - Operate - Transfer (BOOT)” model, will enable the social capital to have the ownership within a specified period of time. This kind of ownership is not the same as the real ownership, and should not be interpreted legally according to the latter. Unfortunately, as China’s laws and regulations on PPP have not been promulgated for various reasons, the ownership of such project assets discussed here has not been expressed in authoritative laws and regulations, which is particularly detrimental to building a good relationship of mutual trust and cooperation between the government and social capital involved in “rights-ethical PPP projects”, and to the stable formation of the long-term behavior and normative behavior of the participants.

#### **IV. Suggestions for Improvement: Standardized Development and “Integration of Construction and Operation” of “Rights-Ethical PPP Projects”**

Based on the above analysis, the authors think that the basic idea for improving the mechanism of “rights-ethical PPP projects” should be to implement the guiding thought of “innovation is the first driving force for development and the strategic support for building a modern economic system”, to grasp the three basic essentials for the standardized development of PPP: legalization, professionalization and sunshine, and to take measures through building systems and rules and optimizing the policies. While promoting the standardized development of all PPP projects, we should strengthen and optimize the “construction and operation integration” mechanism of “rights-ethical PPP projects” to achieve high-quality sustainable development. To this end, the following policy recommendations are proposed.

First, accelerate the legalization of PPP project operation. At present, the policies related to PPP projects are mainly the departmental rules formulated by the competent departments of the central government, and the local government supplements the relevant implementation rules. However, due to the lack of consistency and coordination of the rules and regulations issued by various departments, the long-term and stability of the operation and management of PPP projects cannot be guaranteed. Therefore, the PPP regulations should be introduced as soon as possible, and the formulation and promulgation of the PPP law should be actively and steadily promoted. It should be emphasized that in the construction of the “rule of law” of PPP projects, it is necessary to summarize the existing international and domestic experience, to provide space for differentiated development of PPP projects of different types of public goods, and to promote the classified management and innovative development of PPP models while standardizing the operation of PPP projects.

Second, in the process of introducing PPP regulations and further upgrading them to the rule of PPP by law, it is necessary to form a clear ownership structure and a power and responsibility distribution structure of the PPP model at the legislative level, so as to form a long-term regulation on the cooperative development of government departments and market entities in the field of public infrastructure and public services. The supply of public goods depends on collective political decisions, and its demand and supply conditions are constrained by the government in many ways. Therefore, even if its ownership belongs to the market subject within a certain period of time, its “public welfare” and “public nature” will not be changed. In particular, for the “rights-ethical PPP projects”, the ownership of property rights should be clearly defined in the public sector, while recognizing that the market subject has a reasonable right to income from investment and operation. Part of the property rights of the market subject can be clearly defined at the legal level, which corresponds to the right to charge fees at a standard acceptable to the public. Thus, the project participants will have a good expectation for the future operation benefits, and establish a long-term cooperation relationship with the government in the combination of incentives and constraints, fundamentally solving a series of problems, such as the disconnection and separation of construction and operation caused by the limitation of social capital to short-term interests.

Third, under the PPP model, market players, as partners in the production and supply of public goods, should, on one hand, have a reasonable right of return based on clear property rights, and on the other hand, continue to provide efficient and high-quality public services to the society and the public. This requires reasonable performance evaluation standards and mechanisms to form endogenous institutional incentives to ensure the efficient and high-quality supply of public goods. The government shall, on the premise of clarifying the demand for public goods and scientific and reasonable planning, determine the demand boundary for public goods of each specific project and the production and operation boundaries of the supplier, and

reasonably set the producer access conditions, performance evaluation, and supervision and management standards. Generally speaking, “rights-ethical public goods” are the type of public goods most consistent with the theme of “performance payment and incentive compatibility” of PPP projects, and is applicable to the PPP model based on equity cooperation. Accordingly, in order to protect the long-term interests of market participants, it is necessary to define the mechanism for the social capital to enjoy the incomes that is linked with performance evaluation in the broad concept of property right. Changing the form of solidifying part of the financial gap subsidies at the specific policy level improves the enthusiasm of market participants in the short term and solved the problem of difficult financing, but weakens the original advantage of “improving the quality and efficiency” of the construction and operation consortium in the long term. Specifically, it should be clearly stipulated that the social capital participating in the “rights-ethical PPP projects” should, in principle, assume the integrated responsibility for the whole life cycle of the project construction and operation, and accept the comprehensive performance evaluation based on the whole life cycle, and the evaluation results should be used as the basic basis for obtaining actual benefits. The performance evaluation on the social capital involved in the cooperation should be designed with differentiation during different periods of completing the construction tasks and continuing to perform the operation tasks to form a comprehensive incentive and constraint mechanism covering the whole life cycle of the project and reasonably combining rights, responsibilities and interests.

Fourth, based on the important role of “rights-ethical public goods” in the social policy support and improvement of people’s livelihood and the professional characteristics of PPP projects in the integration of construction and operation, relevant departments should pay full attention to the professional training of personnel related to such projects. It is necessary to strengthen work experience summary, case analysis, information exchange and window guidance to meet the needs of high-quality construction and operation of the “rights-ethical PPP projects”, and to focus on improving the quality and professionalism of the staff.

Fifth, while fully paying attention to the implementation of the sunshine rules required by the whole process and all links of general PPP projects, in view of the long cycle, complexity and professionalism of “rights-ethical PPP projects”, it is proposed to effectively use various forms to strengthen and optimize relevant information disclosure, and to encourage social organizations and the public to participate in supervision, thus forming and improving the “sunshine mechanism”, providing better mechanism guarantee for high-quality project construction and operation.

Sixth, we should deeply understand the strategic thinking of “innovation is the first power to lead development and the strategic support for building a modern economic system”, actively guide local government departments, market entities and professional institutions to further emancipate their minds, change their ideas, take responsibility, dare to act, and do practical things, and promote the theoretical and practical innovation of “rights-ethical PPP projects”. We should further scientifically understand the connotation and characteristics of “rights-ethical public goods”, make bold and pragmatic reforms and innovations in the practice of “rights-ethical PPP projects” under the premise of conforming to the development plan, the overall deployment of supporting reforms and relevant laws, regulations and documents, and promote the high-quality and sustainable economic and social development through active incremental reform and stock adjustment. In a word, the “rights-ethical PPP project” that meets the people’s needs for a better life in real life is still a way to provide public goods in essence. It should mobilize the initiative of social capital and give full play to their comparative advantages, and take the improvement of public welfare as the goal and destination. At present, under the strategic orientation of promoting high-quality economic and social development and promoting common prosperity, the supply scale and quality of “rights-ethical public goods” need to be improved urgently. Therefore, we should further encourage and promote the healthy development of “rights-ethical PPP projects”. At the same time, it is necessary to reasonably define the rights and obligations boundary between government departments and market entities, to fully mobilize the enthusiasm of social capital in participating in the supply of “rights-ethical public goods” through the innovation of PPP model, and to form an operating mechanism that effectively gives play to the advantages of construction and operation consortium in improving quality and efficiency. It is necessary to make full use of the market potential and vitality of PPP model to provide more and better public goods and services for all citizens, thus promoting high-quality economic and social development and common prosperity.

## V. REFERENCES

- [1] Jia Kang. PPP: Institutional Supply Innovation and Its Positive Effects [J]. *China Strategic Emerging Industries*, 2016 (26): 26-29.
- [2] Ou Chunzhi. PPP: Where the Only Way for Good Governance [M]. Enterprise Management Publishing House, 2017
- [3] James M. Buchanan and Richard A. Masgrave. Public Finance and Public Choice: Two Contrasting Visions of the State [M]. Translated by Lei Chengyao. Beijing: China Financial and Economic Publishing House, 2000.
- [4] Wang Hongling. Evolution and Reference of Contemporary Western Theories of Government Economics [M]. Beijing: Central Compilation and Translation Press, 2003
- [5] Feng Qiabin, Jia Kang. Rights – Ethics Public Goods: Based on the Expanded Definition of Public Goods [J]. *Economic Perspectives*, 2010 (7): 34-42.
- [6] Jia Kang, Sun Jie. The Concept, Origin, Characteristics and Functions of Public-Private Partnership (PPP) [J]. *Public Finance Research*, 2009 (10): 2-10.
- [7] Jia Kang, Feng Qiabin. Rights-Ethics Public Goods: Based on the Expanded Definition of Public Goods [J]. *SSRG International Journal of Economics and Management Studies*, Volume 6 Issue 5, May 2019.