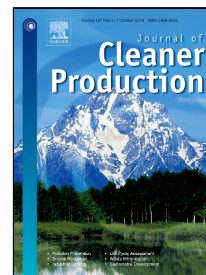


Accepted Manuscript

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PII: S0959-6526(18)32335-7
DOI: 10.1016/j.jclepro.2018.08.003
Reference: JCLP 13787
To appear in: *Journal of Cleaner Production*
Received Date: 06 February 2018
Accepted Date: 01 August 2018

Please cite this article as: Xiaowei An, Huimin Li, Lunyan Wang, Zhuofu Wang, Jiyong Ding, Yongchao Cao, Compensation Mechanism for Urban Water Environment Treatment PPP Project in China, *Journal of Cleaner Production* (2018), doi: 10.1016/j.jclepro.2018.08.003

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Compensation Mechanism for Urban Water Environment Treatment PPP Project in China

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Abstract: The urban environment is the basis for the survival of urban residents. Thus, the government must improve its governance given the unoptimistic urban water ecological environment. The progress on the urban water environment treatment project (UWETP) is slow because of government financial pressure, efficiency of governance, and other problems. New approaches are provided for urban water environment treatment with the development and application of a public-private-partnership (PPP) model. However, designing a government compensation mechanism under the water environment treatment PPP projects relates to the effect of the water environment treatment. In accordance with the characteristics of the urban water environment treatment PPP projects, two standards are established in this paper. “Basic standard” indicates the minimum social and ecological benefits that the water environment treatment project should meet, and “demonstrative standard” denotes the ideal effect that the UWETP is expected to satisfy. A governmental compensation method for urban water environment treatment PPP projects is also formed from this incentive perspective. Furthermore, the economic benefits of the urban water environment treatment are considered, and game theory is adopted to solve the incentive coefficient. Therefore, a comparatively effective governmental compensation mechanism is established to provide a reference to implementing urban water environment treatment PPP projects.

Keywords: Urban water environment, Treatment, PPP, Government compensation, Incentives

1. Introduction

In China, various environmental problems have emerged with the rapid development of the economy and continuous acceleration of the process of industrialization; the contradiction between human beings

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