



Performance Evaluation and Analysis of Rural Drinking Water Safety Project—A Case Study in Jiangsu, China

Xiaorong Du (1,2)

(1) Business School, Hohai University, Nanjing, China (duxiaorong68@163.com), (2) Jiangsu Provincial Collaborative Innovation Center of World Water Valley and Water Ecological Civilization, Nanjing, China (duxiaorong68@163.com)

Abstract: Water is the basic condition for human survival and development. As China is the most populous country, rural drinking water safety problems are most conspicuous. Therefore, the Chinese government keeps increasing investment and has built a large number of rural drinking water safety projects. Scientific evaluation of project performance is of great significance to promote the sustainable operation of the project and the sustainable development of rural economy. Previous studies mainly focus on the economic benefits of the project, while ignoring the fact that the rural drinking water safety project is quasi-public goods, which has economic, social and ecological benefits. This paper establishes a comprehensive evaluation model for rural drinking water safety performance, which adapts the rules of "5E" (economy, efficiency, effectiveness, equity and environment) as the value orientation, and selects a rural drinking water safety project as object in case study at K District, which is in the north of Jiangsu Province, China. The results shows: 1) the comprehensive performance of K project is in good condition; 2) The performance of every part shows that the scores of criteria "efficiency", "environment" and "effect" are higher than the mean performance, while the "economy" is slightly lower than the mean and the "equity" is the lowest. 3) The performance of indicator layer shows that: the planned completion rate of project, the reduction rate of project cost and the penetration rate of water-use population are significantly lower than other indicators. Based on the achievements of previous studies and the characteristics of rural drinking water safety project, this study integrates the evaluation dimensions of equity and environment, which can contribute to a more comprehensive and systematic assessment of project performance and provide empirical data for performance evaluation and management of rural drinking water safety project.

Key Words: Rural drinking water safety project; Performance evaluation; 5E rules; Comprehensive evaluation model