

Game Theory and Dealing with Water Conflicts

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Abstract

In the last century, water conflicts have increased in many parts of the world for reasons such as a strong desire for rapid development and poor governance. The impact of these conflicts on various sectors of society such as economic, political and legal subsystems has led researchers to focus on providing solutions and practical methods to deal with water conflicts. Game theory is one of the most common methods used by researchers to manage water conflicts and water allocation in shared and transboundary river basins. Despite the special place of game theory in reductionist sciences, the application of this theory to dealing with conflicts in complex water systems faces challenges. Whereas, the critique of the effectiveness of the game theory method in water conflict management has been neglected. Accordingly, the purpose of this study is to investigate and analyze the capacity to apply the game theory to deal with water conflicts. In order to achieve this purpose, while using library resources, the basics of game theory and the capacity to apply it in the management of water conflicts are analyzed. The results reveal that following the theory of rational choice and rationalism in the game theory method has led to ignore many dimensions and factors affecting the water conflict formation and the way to deal with complex water conflicts.

Keywords: Water Conflicts, Game Theory, Peacebuilding, Shared and Transboundary River Basins