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Rethinking of methods to deal with water conflicts

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Water resources are complex natural-human systems encompass different domains, levels, scales, as well as dynamic and nonlinear feedback. The presence of numerous stakeholders and divergence in values, ideas, goals and interests in these complex systems, has exacerbated tensions and conflicts at the local, national and international levels. Water conflicts, as a very important socio-political problem affecting water systems have not been considered as much as technical and engineering problems by water experts and have been seriously neglected. While generally appearing in the form of water users' competition, can involve hidden and profound political, social, economic, environmental, and security aspects. The impact of these conflicts on different sections of society has led researchers to focus on providing practical solutions to deal with water conflicts. The "basins at risk (BAR)" is one of the internationally proposed methods that has been applied to investigate water interactions in various river basins worldwide. The importance of this method has led to address the criticisms of it and the introducing an alternative method called the "integrated basins at risk". The widespread use and importance of these methods in the analysis of water conflicts and cooperation has led to the necessity of analyzing these methods. Accordingly, the purpose of this study is to analyze the strengths and weaknesses of these well-known methods to deal with water conflicts in transboundary river basins with a serious focus on the social dimensions affecting transboundary river management. In order to analyze these methods, novel theories in the field of sociology and international relations have been used. Finally, a suggestion is presented to cover the prominent gap to deal with water conflicts in transboundary river basins. Overall, the present study seeks to answer two key questions:

- What are the strengths and weaknesses of BAR and iBAR?
- How is it possible to eliminate the criticism of the mentioned methods?

Keywords: BAR, iBAR, Hydropolitics, Social ecology, Transboundary river basin, Water conflicts