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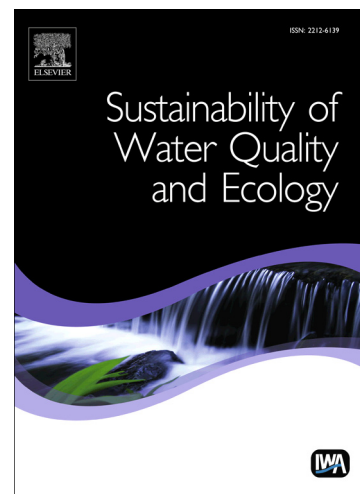
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Priorities and challenges for a sustainable management of water resources in Kazakhstan

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Abstract

The water availability in Kazakhstan is 37000 m³ per one km² and 3650 m³ per capita a year, an amount that is lower than the world average (around 6000 m³) (Knoema, 2016). It is expected that water availability falls to 2300 m³ per capita in a year by 2030 (FAO, 2016a). Water pollution is a further problem for exploiting available water resources. In fact, 50-70% of surface water resources in Kazakhstan have been rated “polluted” and “highly polluted” in terms of ecological status (ICSD, 2016). Apart from that, water use efficiency remains very low. The average efficiency of canal water delivery systems is only 15-20% compared to 70-90% in most developed countries (FAO, 2016b). A number of institutional and policy measures have been implemented to enhance the sustainability of water resource use and water security; however, the country is still facing a number of problems of water use in a sustainable manner. This study provides stakeholders’ assessment of the critical factors that affect the sustainable management of water resources in Kazakhstan. The study rests on the results from the interviews that are further examined using the SWOC approach (Strengths, Weaknesses, Opportunities, and Challenges) and the Analytic Hierarchy Process (AHP) technique. The study demonstrates and prioritizes 32 critical SWOC factors relevant to the sustainable management of water resources in Kazakhstan. The study also determines four key stakeholder groups with

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