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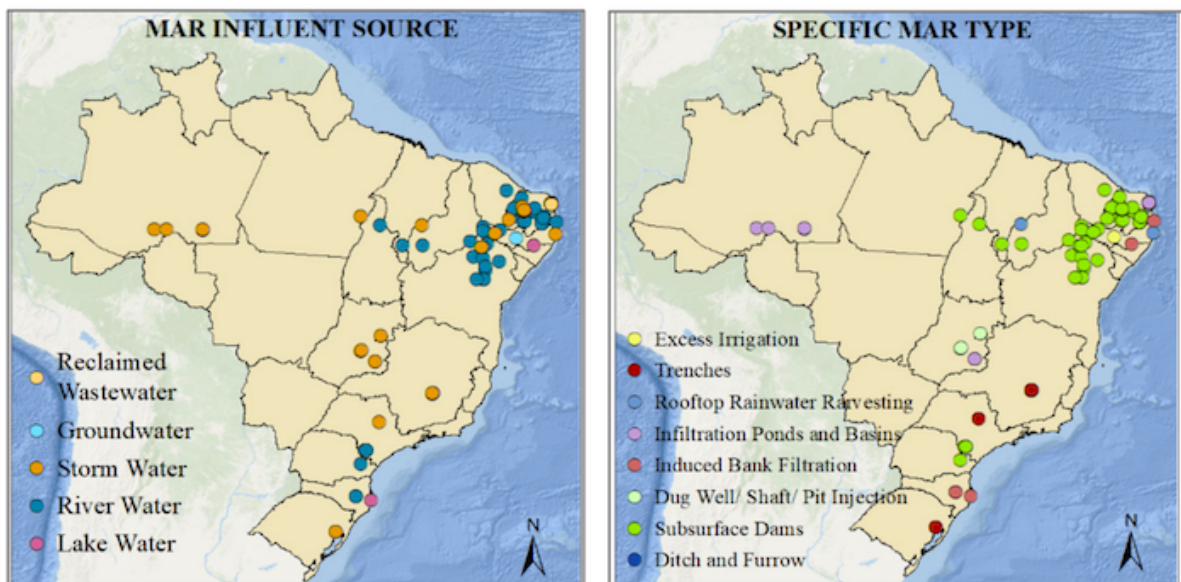
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Publication of lessons learned and recommendations

An overview on managed aquifer recharge in Brazil

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Summary

Groundwater has a significant relevance in Brazil as almost 90% of all rivers rely on baseflow from aquifers who feed them during the dry season. Under climate changing conditions and increasing demand, managed aquifer recharge (MAR) represents an important adaptation measure to sustain the hydrological cycle.

To assess these experiences in the country and their potential for strengthening the sustainable management of water resources, the Brazilian project partners published in April 2020 an overview on MAR practices in Brazil. The article is based on a systematic literature review that aims to provide the understanding of the state of the art concerning technological, scientific, and legal challenges and opportunities around MAR in Brazil and the respective challenges for the adoption of this approach at a national level.

The paper concludes that, despite pilot initiatives and academic studies, Brazil is still at an early stage in MAR initiatives and needs to overcome technical, legal, and socio-cultural challenges to adopt MAR approaches. Nevertheless, the country has also plenty of potential and opportunities for further development of full-scale MAR schemes in order to help facing water security challenges in future climate change scenarios.



The screenshot shows the title page of the article. At the top left is the 'water' logo, and at the top right is the MDPI logo. Below the logos, the text reads 'Perspective' and 'An Overview of Managed Aquifer Recharge in Brazil'. The authors are listed as Tatsuo Shubo^{1,*}, Lucila Fernandes², and Suzana Cício Montenegro². Their affiliations are provided: ¹ Departamento de Sanamento e Saúde Ambiental, Escola Nacional de Saúde Pública, Fundação Oswaldo Cruz, 21040-361 Rio de Janeiro, Brazil; ² Centro de Tecnologia e Geociências, Universidade Federal de Pernambuco, 50670-901 Recife, Brazil; lucila.araujo@gmail.com (L.F.); suzanna.alpe@gmail.com (S.C.M.). Correspondence: tatsuo.shubo@ensp.fiocruz.br; Tel.: +55-21-2598-2469. Received: 1 December 2019; Accepted: 7 April 2020; Published: 9 April 2020. The abstract follows, discussing the challenges of MAR in Brazil and the need for technological, scientific, and legal advances. Keywords include water security, urban water management, semi-arid, Social Technology, Managed Aquifer Recharge, and developing countries. The article is divided into sections, with '1. Introduction' and '1.1. Historical Background' visible. The background section discusses the water availability in Brazil and the historical challenges of droughts in the northeastern semi-arid region.

The open-access article can be downloaded free of charge from the website of the MDPI Water journal:

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