

A SYSTEMATIC LITERATURE REVIEW OF COMMUNITY RESILIENCE AND ADAPTATION TOWARDS SUSTAINABLE WATER SECURITY

Chandrika Sovunthara Raju¹, Safiah @ Yusmah Muhammad Yusoff.^{1*},
Azizan Abu Samah^{1,2}

¹ Department of Geography, Faculty of Arts and Social Sciences, Universiti Malaya,
50603 Kuala Lumpur, Malaysia

²Institute of Ocean and Earth Sciences (IOES), Universiti Malaya,
50603 Kuala Lumpur, Malaysia

Email: dr.safiah@um.edu.my

ABSTRACT

This systematic review examines the key factors driving community resilience and adaptation within the framework of sustainable water security, with a specific focus on both urban and rural environments. Utilizing the PRISMA guidelines, a thorough search of multiple databases identified 15 relevant studies published between 2011 and 2021, a period selected to capture recent trends while maintaining analytical depth. The analysis revealed six critical themes: awareness, water conservation, education, pricing mechanisms, social movements, and the value of water. The study uniquely contributes by emphasizing the necessity of integrating indigenous knowledge and advancing tailored solutions to enhance water security. The findings suggest significant implications for future research, particularly in developing long-term strategies and assessing the efficacy of current approaches.

Keywords: *PRISMA, Systematic Review, Community Resilience, Water Security, Sustainable Adaptation, Water Conservation, Social Movements, Indigenous Perspectives, Pricing Mechanisms*

INTRODUCTION

Water security, crucial for human well-being and sustainable development, faces formidable global challenges amidst escalating water scarcity and rapid population growth. This concern remains urgent, as recent assessments emphasize how climate variability, urbanization, and socio-political inequality continue to exacerbate community-level vulnerabilities (Heidari et al., 2021; Dopico et al., 2022). According to the United Nations, an alarming 2.2 billion people worldwide lack access to safe drinking water (United Nations, 2019), highlighting the urgency of addressing this pressing issue. Sustainable water security necessitates the long-term resilience of water systems to meet current needs while safeguarding resources for future generations. This entails the efficient utilization, conservation, and equitable distribution of water resources.