



Water Justice Amid Climate Crisis: Implementing Risk-Based Water Allocation and Strengthening Farmer Association Institutional Capacity

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Abstract. Historically, water resource management in Indonesia has faced significant complexities, often dominated by commercialization and investment-oriented policies that threaten the fundamental rights of farmers. The Constitutional Court's decision to annul the previous Water Resources Law marks a crucial turning point, demanding a comprehensive policy reformulation. This entails a shift from a market-based paradigm to one grounded in human rights and social welfare, reaffirming state sovereignty over water for the prosperity of the people. The urgency of this reformulation is compounded by the imminent threat of climate change, which introduces high uncertainty into the hydrological cycle—manifesting as extreme droughts and floods—thereby directly impacting the agricultural sector. This research aims to formulate a climate-adaptive water resource management policy that secures the priority rights of farmers. Employing a Normative Legal Research Method with Statutory and Conceptual Approaches, the findings present a new, holistic legal and institutional framework. This framework centers on two pillars: first, the firm assertion and absolute legal protection of irrigation water allocation for farmers, even during periods of scarcity; and second, the adoption of a Climate-Adaptive Governance Model. This governance model integrates a unified climate monitoring system, resilient water infrastructure, and the empowerment of Water User Associations (P3A) at the grassroots level to independently respond to shifting climate patterns. This reformulation is essential for achieving water management that is just, sustainable, and effective in maintaining national food security

Keywords: Climate-Adaptive Governance; Constitutional Court Decision; Farmer Priority Rights; Governance; Institutional

1. INTRODUCTION

The background of this research is premised on the complexities of water resource management in Indonesia, which has historically been influenced by policies oriented toward commercialization and large-scale investment. Consequently, this has threatened the basic rights of communities, particularly farmers, who rely heavily on water for irrigation and the sustainability of their livelihoods. In this context, the dual nature of water—as both a human right and an economic commodity—has perpetually been a source of tension, specifically regarding allocation and utilization between upstream and downstream sectors, as well as between domestic/agricultural needs and industrial demands.

The culmination of this issue was the Constitutional Court decision annulling the previous Water Resources Law, reaffirming that the state's control over water must be implemented for the greatest prosperity of the people, with the principle of water sovereignty remaining firmly in the hands of the state.

This Court decision serves as a critical turning point, demanding a comprehensive reformulation of water resource management (PSA) policies. There must be a paradigm shift from a market-based approach to a rights-based and social approach. This background is

further complicated by the tangible threat of climate change, which generates high uncertainty in the hydrological cycle, causing extreme droughts on one hand and flooding on the other—both of which directly devastate the agricultural sector. Therefore, policy reformulation must not only adopt the spirit of the Constitutional Court's decision to assert farmers' priority rights in water usage but must also integrate a climate-adaptive governance model. This forms the basis of the research's urgency: to guarantee water availability that is sustainable, just, and climate-resilient, particularly for farmers who constitute the pillars of national food security.

2. PROBLEM STATEMENT

How should water resource management policies be reformulated post-Constitutional Court decision to affirm and guarantee priority rights for water usage for farmers?

What model of climate-adaptive water resource governance is most effective for implementation to ensure the sustainability of the agricultural sector amidst the threat of climate change?

3. PROPOSED METHOD

This study employs Normative Legal Research, emphasizing the analysis of legal norms, statutory regulations, and court decisions. The primary focus of this method is to examine the Constitutional Court Decision regarding the Water Resources Law as a primary legal source, alongside Laws, Government Regulations, and regional regulations related to water management.

The approaches utilized are the Statutory Approach and the Conceptual Approach. The Statutory Approach is used to identify gaps, conflicts, and inconsistencies in existing legal norms within water resource management regulations following the Court's ruling, particularly concerning water allocation and priority rights. Meanwhile, the Conceptual Approach is employed to analyze and construct a theoretical framework regarding "farmers' priority rights" and "climate-adaptive governance" within the context of water law.

The data analyzed is secondary data, consisting of primary legal materials (Constitutional Court Decisions and Statutes), secondary legal materials (books, journals, and research findings), and tertiary legal materials (legal dictionaries). Data analysis is conducted using a qualitative-descriptive method, utilizing legal interpretation and logical argumentation to formulate recommended policy models.

4. RESULTS AND DISCUSSION

The core discussion of this article centers on two main pillars: the affirmation of farmers' priority rights and the formulation of a climate-adaptive water governance model. Both must serve as the foundation for the reformulation of water resource management policies following the Constitutional Court Decision.

First, the Affirmation of Farmers' Priority Rights. The Constitutional Court mandates that the state must guarantee the top priority of water resource usage for daily basic needs and smallholder agriculture. The discussion delves into how formal and informal legal mechanisms (such as local wisdom in irrigation) can be consolidated into new regulations to ensure that water allocation is not superseded by commercial, investment, or industrial interests, especially during times of scarcity. This involves discussing the legalization of water rights for farmers and farming institutions (such as Water User Associations/P3A). Policy reformulation must create robust instruments, such as water licenses based on historical rights and minimum irrigation requirements, which are constitutionally and operationally protected. Consequently, every regional water allocation plan must position irrigation needs as an inviolable top priority.

Second, the Climate-Adaptive Governance Model. The threat of climate change necessitates a shift from static water governance based on short-term weather predictions to governance that is flexible and responsive to climate uncertainty. The discussion formulates an adaptive model that includes the integration of real-time hydro-climatological data, the development of sustainable "grey and green infrastructure," and the application of precision irrigation technology. This adaptive governance also demands the decentralization of decision-making, where P3A and local communities are granted a greater role and capacity in micro-level water management, enabling them to make rapid adjustments to changing seasonal patterns. Another crucial aspect is the implementation of a differentiated water pricing policy that does not burden farmers but encourages efficiency, alongside a risk-sharing mechanism involving the government to mitigate the risk of harvest failure due to climate anomalies. Overall, this discussion presents a new, holistic legal and institutional framework capable of translating constitutional mandates and climate adaptation demands into actionable water policies that deliver tangible benefits for food security and farmer welfare.

5. CONCLUSION

The conclusion of this research asserts that the reformulation of water resource management policy is an imperative that must be grounded in two main pillars mandated by the Constitutional Court Decision and the challenges of climate change.

First, the new policy must explicitly and operationally guarantee farmers' priority rights to water usage. This affirmation must be manifested in regulations that provide absolute legal protection for irrigation water allocation, even in situations of scarcity.

Second, the implementation of water resource management must adopt a Climate-Adaptive Governance Model that integrates ecological sustainability, social justice, and system resilience. This model must be supported by a unified climate monitoring system, flexible water infrastructure, and the empowerment of farmer institutions at the grassroots level to independently respond to changes in rainfall patterns and drought. By combining the affirmation of farmers' priority rights with climate-adaptive governance, Indonesia can achieve water resource management that is just, sustainable, and effective in maintaining state water sovereignty for the greatest prosperity of the people, specifically through the strengthening of the agricultural sector.

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