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The Paradigm of Water Justice in Water Resources Law and the Role of Family in the Sustainable Development Goals Framework: A Study in Malang Raya

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Abstract

The paradigm of water justice in water resource law has become a crucial issue in realizing equitable and sustainable access for society. This study highlights the problems of unequal water distribution caused by privatization and the implementation of policies that do not fully support vulnerable communities. The study focused on the legal regulation of water resources in Indonesia, particularly Law No. 17 of 2019, as well as the contribution of families in supporting the principle of water justice within the framework of the Sustainable Development Goals (SDGs). This study sought to answer the following inquiries: how existing regulations govern the distribution and accessibility of water resources, the extent to which these regulations are effectively implemented in the Greater Malang area, and the role that families play in promoting sustainable water management. The study employed an empirical juridical approach, integrating socio-legal perspectives and empirical legal methods. Data were collected by means of legal document analysis, interviews with key stakeholders, and direct observation of water usage and management practices within local communities. The findings of the study reveal that although national regulations recognize water as a public right, their implementation still faces significant challenges, including imbalanced access between urban and rural areas, industrial dominance in water resource utilization, and weak community participation in policy-making processes. Further, families also play a strategic role in educating household members about water conservation and advocating for more inclusive local policies. This study thus recommends strengthening the role of families in water management policies through communitybased education and environmental awareness programs, as well as reinforcing regulations to ensure more equitable water distribution. It is expected that the implementation of the water justice principle in water resource law can be more effective in supporting the achievement of SDG 6.

Keywords: water justice, water resource law, privatization, family, SDGs, water conservation, environmental policy

Abstrak

Paradigma keadilan air dalam hukum sumber daya air telah menjadi isu krusial dalam mewujudkan akses yang adil dan berkelanjutan bagi masyarakat. Studi ini menyoroti masalah distribusi air yang tidak merata yang disebabkan oleh privatisasi dan implementasi kebijakan yang tidak sepenuhnya mendukung masyarakat rentan. Studi ini berfokus pada pengaturan hukum sumber daya air di Indonesia, khususnya Undang-Undang No. 17 Tahun 2019, serta kontribusi keluarga dalam mendukung prinsip keadilan air dalam kerangka Tujuan Pembangunan Berkelanjutan (TPB). Studi ini berusaha menjawab pertanyaan-pertanyaan berikut: bagaimana peraturan vang ada mengatur distribusi dan aksesibilitas sumber daya air, sejauh mana peraturan ini diterapkan secara efektif di wilayah Malang Raya, dan peran keluarga dalam mempromosikan pengelolaan air yang berkelanjutan. Studi ini menggunakan pendekatan vuridis empiris, vang mengintegrasikan perspektif sosio-hukum dan metode hukum empiris. Data dikumpulkan melalui analisis dokumen hukum, wawancara dengan para pemangku kepentingan utama, dan pengamatan langsung terhadap praktik penggunaan dan pengelolaan air dalam masyarakat setempat. Temuan studi ini mengungkapkan bahwa meskipun peraturan nasional mengakui air sebagai hak publik, implementasinya masih menghadapi tantangan signifikan, termasuk akses yang tidak seimbang antara wilayah perkotaan dan pedesaan, dominasi industri dalam pemanfaatan sumber daya air, dan lemahnya partisipasi masyarakat dalam proses pembuatan kebijakan. Lebih lanjut, keluarga juga memainkan peran strategis dalam mengedukasi anggota rumah tangga tentang konservasi air dan mengadvokasi kebijakan lokal vang lebih inklusif. Oleh karena itu, studi ini merekomendasikan penguatan peran keluarga dalam kebijakan pengelolaan air melalui program pendidikan berbasis masyarakat dan kesadaran lingkungan, serta penguatan regulasi untuk memastikan distribusi air yang lebih merata. Penerapan prinsip keadilan air dalam hukum sumber daya air diharapkan dapat lebih efektif dalam mendukung pencapaian SDG 6.

Kata Kunci: keadilan air, hukum sumber daya air, privatisasi, keluarga, SDGs, konservasi air, kebijakan lingkungan

Introduction

Water, a vital resource for human life and ecological systems, has been affected by unequal distribution and increasing privatization, which contribute to today's social inequalities. In Indonesia, Law No. 17 of 2019 replaced Law No. 7 of 2004 as a corrective response to privatization policies that were considered harmful to public interests. In the framework of the Sustainable Development Goals

¹ Song Song et al., "The Spatial-Temporal Matching Characteristics of Water Resources and Socio-Economic Development Factors: A Case Study of Guangdong Province," *Water* 16, no. 2 (January 2024), p. 362.

(SDGs), especially SDG 6, ensuring justice in water resource management is highly necessary to achieve equitable access for all.²

The availability of and access to safe, clean water is a key determinant of public health, economic development, and social well-being. However, in many regions of the world, unequal water distribution has given rise to conflicts and deepened existing social inequalities.³ In Indonesia, water management has grown increasingly complex due to rising demands from domestic, industrial, and agricultural sectors—pressures that are not always met with equitable and sustainable regulatory frameworks. Justice in water management has then emerged as a critical concern within water resource law in terms of human rights, environmental sustainability, and the state's responsibility to guarantee public access to water.⁴ Water resource law in Indonesia has also experienced significant shifts, such as the annulment of Law No. 7 of 2004 on Water Resources by the Constitutional Court, which was later replaced by Law No. 17 of 2019. This shift in regulation implies the ongoing debate over the right to water and its management.

The SDGs, especially SDG 6, which aims for universal access to clean water and sanitation, put emphasis on the significance of policies that support sustainable and equitable water management in a global context.⁵ As the core unit of society, the family plays an integral role in determining patterns of water consumption and conservation within this framework, which helps to significantly advance the SDGs.⁶

With an emphasis on its application in the Greater Malang area, this study explored the water justice paradigm within Indonesia's water resource law and the role that families have played to promote water justice. This region was selected given its complex water management issues that were driven by its rapidly increasing population and conflicting demands from the residential and industrial sectors. Moreover, the analysis of the study accentuated the critical role of the family, 7 as the

²Seleshi Yalew et al., "Integrating Equity and Justice Principles in Water Resources Modeling and Management," *Environmental Research Letters* 19, no. 11 (2024), 111001.

³ José Antonio Peña-Ramos, Philipp Bagus, and Daria Fursova, "Water Conflicts in Central Asia: Some Recommendations on the Non-Conflictual Use of Water," *Sustainability* 13, no. 6 (January 2021), p. 3479.

⁴ Seigi Karasaki et al., "Environmental Justice and Drinking Water: A Critical Review of Primary Data Studies," *WIREs Water* 10, no. 5 (2023).

⁵ Shahana Bilalova et al., "Pathways to Water Sustainability? A Global Study Assessing the Benefits of Integrated Water Resources Management," *Journal of Environmental Management* 343 (October 1, 2023), p. 118-179.

⁶ Pomi Shahbaz et al., "Food, Energy, and Water Nexus at Household Level: Do Sustainable Household Consumption Practices Promote Cleaner Environment?," *International Journal of Environmental Research and Public Health* 19, no. 19 (January 2022), p. 12945.

⁷ Nur Khasanah, "Hermeneutics of The Qur'an: A Study of Muhammad Sharur's Thoughts on The Men and Women Equality," *NURANI*, 2020, p. 25–34.

smallest social unit, in shaping water consumption behaviors and promoting sustainable practices.⁸

A number of policies have been introduced to help improving access to clean water; yet, significant differences between urban and rural areas still exist. Access to sufficient water sources, both in terms of quantity and quality, remains a problem for many communities in remote areas. In This circumstance points out an issue in the way policies are applied in order to achieve water justice.

Fair water distribution is also seriously threatened by the growing privatization of water resources. Privatization increases water costs, which place a financial burden on low-income communities. 11 Yet, under the principles of water resource law, the state has an obligation to ensure that water remains a public right accessible to all segments of society without discrimination. 12

The availability of water in different regions is significantly impacted by climate change.¹³ The complexity of managing water resources is exacerbated by unpredictable rainfall patterns, rising global temperatures, and natural disasters like floods and droughts.¹⁴ Therefore, the legal framework must be capable of responding to these environmental dynamics through flexible and adaptive policies.¹⁵

Law No. 17 of 2019 on Water Resources, in particular, is one of the regulations that govern water justice in Indonesia's water resource law. This law reaffirms that water is a natural resource under state control for the greatest benefit of the people. The right to water has been acknowledged on a global scale by a number of legal documents, including UN Resolution No. 64/292 of 2010, which states that access to clean water and sanitation as a human right. Principles of justice

⁸ Ahmad Rajafi, Naili Adilah Hamhij, Suyatno Ladiqi, "The Meaning of Happiness and Religiosity for Pre-Prosperous Family: Study in Manado, Bandar Lampung, and Yogyakarta", *Al-Ihkam: Jurnal Hukum dan Pranata Sosial* 15, No. 1 (2020), p. 50-66.

⁹ Henny Herawati et al., "Strategy for Realizing Regional Rural Water Security on Tropical Peatland," *Water* 13, no. 18 (January 2021), 2455.

¹⁰ Nina L. Hall et al., "Five Enablers to Deliver Safe Water and Effective Sewage Treatment to Remote Indigenous Communities in Australia," *Rural and Remote Health* 21, no. 3 (2021).

¹¹ Chon-Kit Ao, "Privatization of Water Supply and Human Capital Accumulation," SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, (2021).

¹² Katherine B. Starzyk et al., "'Is Water a Human Right?': Priming Water as a Human Right Increases Support for Government Action," *The International Indigenous Policy Journal* 12, no. 3 (September 23, 2021), p. 1–28.

¹³ Christopher E. Ndehedehe et al., "Understanding Global Groundwater-Climate Interactions," *Science of The Total Environment* 904 (2023), p. 166571.

¹⁴ Jiali Qiu et al., "Synergistic Effect of Drought and Rainfall Events of Different Patterns on Watershed Systems," *Scientific Reports* 11, no. 1 (2021), p. 18957.

¹⁵ Hamzah, Irfan Amir, Sultan Hasanuddin, Tarmizi, Muhammad Fazlurrahman Syarif, "Sustainable Development of Mangrove Ecosystem Policy in South Sulawesi from the Perspectives of Siyāsah and Fiqh al-Bi'ah", *Juris* 22, No. 2 (2023).

in international environmental law also stress the significance of equitable resource distribution and the protection against excessive water exploitation.¹⁶

The above discussion signifies that there are various challenges in realizing water justice within Indonesia's water resource law, which range from regulatory issues and implementation gaps to limited community participation, e.g., the underrecognized role of families in water management. Existing regulations have yet to fully guarantee equitable water distribution and access for all segments of society, ¹⁷ particularly vulnerable groups. ¹⁸ Moreover, the privatization of water resources becomes another issue that requires further examination to truly comprehend its implications for the human right to water.

In practice, numerous challenges hinder the implementation of justice principles, especially regarding access for vulnerable communities and the impacts of water resource privatization by industrial sectors. This study focuses on examining how the principle of justice is manifested in the distribution and access to water in the city of Malang, as well as the legal frameworks that regulate and support the role of families in promoting sustainable water management in alignment with the SDGs.

The study sought to investigate, in line with the SDGs, the role of families in sustainable water management in Malang as well as the fairness of water distribution patterns. This study also attempted to identify legal challenges related to water privatization in Malang and analyzed its implications for the rights of underprivileged communities. By understanding these issues, the study is expected to provide policy recommendations that promote a more just and sustainable approach to water resource management.

This study employed an empirical legal method using a socio-legal (juridical-sociological) approach. This approach was utilized to examine how normative provisions, such as those contained in the 1945 Constitution, Law No. 17 of 2019, and other relevant regulations, were implemented in the management of water resources in the Greater Malang area. Furthermore, the study examined the role of families in promoting sustainable water management in alignment with the SDGs, while also addressing the legal challenges associated with water privatization.

The study gathered data by means of in-depth interviews with various stakeholders, including academics, legal practitioners, local government representatives, and members of the community affected by water management policies in Malang. The interviews were intended to explore issues such as justice in

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¹⁶ Louis J Kotzé and Caiphas B Soyapi, "African Courts and Principles of International Environmental Law: A Kenyan and South African Case Study," *Journal of Environmental Law* 33, no. 2 (2021), p. 257–82.

¹⁷ Nita Triana, Luqman Rico Khashogi, Ade Tuti Turistiati, Lincoln James Faikar Monk, "Application of the Precautionary Principle in Judge's Legal Considerations for Pollution Cases in Islamic Law Perspectives", *Al-'Adalah* 20, No. 1 (2023), p. 61-90.

¹⁸ Herawati et al., "Strategy for Realizing Regional Rural Water Security on Tropical Peatland."; Marco Casazza et al., "Simulations of Scenarios for Urban Household Water and Energy Consumption," *PLOS ONE* 16, no. 4 (2021), p. e0249781.

water distribution and access, the effectiveness of regulations in promoting family involvement in water governance, and the impact of privatization on the rights of marginalized communities. Supporting data were obtained through a literature review of laws and regulations, court decisions, government reports, and relevant scholarly literature.

Through this approach, the study hopes to provide a comprehensive overview of the implementation of the principle of justice in water resource law in Malang, assess the extent to which existing regulations have encouraged family participation in sustainable water management, and identify the legal challenges in addressing water privatization and its implications for the rights of vulnerable populations.

Research has discussed water resource law through the perspective of justice, but few have examined the direct connection between legal frameworks and the role of families in supporting the SDGs. This gap indicates the need for further investigation into how legal instruments can more effectively integrate the role of families into sustainable water management policies.

Further, most research on water justice has concentrated on macro-level issues such as state regulations and corporate involvement, with much less attention paid to micro-level issues such as the implementation of the water justice paradigm in households and small communities. However, creating more inclusive and successful policies requires an understanding of how water justice is applied in people's daily lives. Therefore, there is a need for more comprehensive research that not only examines regulatory and policy aspects but also explores how water justice can be applied within the social and cultural contexts of families and communities.

The Paradigm of Justice in Water Resource Management

Being a key aspect of environmental law, justice in water resource management attempts to ascertain equitable access and maintaing the sustainability of aquatic ecosystems. This concept of justice can be understood through three primary perspectives: distributive justice, procedural justice, and ecological justice. Distributive justice puts emphasis on the fair distribution of water resources to all segments of society, particularly to those vulnerable to water scarcity. ¹⁹ This principle reinforces that water, as a fundamental human need, must be available equitably and without discrimination, either for rural or urban populations. In actuality, however, water distribution is often unequal due to the dominance of industrial sectors and privatization, which limit access for underprivileded populations. Procedural justice, in contrast, focuses on how communities can partake in decision-making processes related to water resource management policies. ²⁰ Fair

¹⁹ Davide Di Fonzo, Alessandra Fabri, and Roberto Pasetto, "Distributive Justice in Environmental Health Hazards from Industrial Contamination: A Systematic Review of National and near-National Assessments of Social Inequalities," *Social Science & Medicine* 297 (2022), p. 114834.

²⁰ Tara Grillos, Alan Zarychta, and Jami Nelson Nuñez, "Water Scarcity & Procedural Justice in Honduras: Community-Based Management Meets Market-Based Policy," *World Development* 142 (2021), p. 105451.

legal procedures require transparency, openness, and accessibility in all policies concerning water resources. Active public participation in policy formulation is essential to ensure that community interests are not neglected in the regulatory process.

In addition to distributive and procedural aspects, ecological justice is a critical factor in the paradigm of sustainable water resource management. Ecological justice emphasizes that water is not only a human right but also an integral part of the ecosystem that must be managed with consideration for environmental balance.²¹ Overuse of water without consideration for the ecosystem's carrying capacity can result in environmental degradation, e.g., decreasing water quality, loss of natural habitats, and increased water crises due to climate change.²² Hence, the ecological justice paradigm advocates policies that are both human-centered and also preserve water resources for future generations. Regulations promoting the wise use of water and the implementation of effective conservation mechanisms are essential components in achieving ecological justice.

In connection with environmental law, theories of justice have an essential role in forming regulations that benefit the environment and society at large. John Rawls' theory of social justice, one of the most pertinent theories, reiterates that laws should be developed for the good of the least advantaged members of society. ²³ This theory proposes that in the context of managing water resources, priority should be given to those who have the most difficulty in finding clean water, e.g., underprivileged communities in remote and arid regions. ²⁴ Nancy Fraser's theory of justice as recognition is also highly relevant to environmental law. ²⁵ Justice, in the opinion of Fraser, is not only about the fair distribution of resources, but also about the recognition of the rights of underprivileged groups in decision-making processes. ²⁶ In terms of water management, this theory demands respect for the rights of Indigenous peoples and local communities who have traditionally maintained close relationships with water resources.

²¹ Jacqueline D. Lau, Georgina G. Gurney, and Joshua Cinner, "Environmental Justice in Coastal Systems: Perspectives from Communities Confronting Change," *Global Environmental Change* 66 (2021), p. 102208.

²² Houda Besser et al., "Ecologic and Economic Perspectives for Sustainable Irrigated Agriculture under Arid Climate Conditions: An Analysis Based on Environmental Indicators for Southern Tunisia," *Journal of African Earth Sciences* 177 (2021), p. 104134.

²³ Dianne Chambers and C. and Forlin, "An Historical Ethnography of the Enactment of Rawl's Theory of Justice as Applied to the Education of Learners with Disability in Western Australia," *International Journal of Inclusive Education* 28, no. 5 (2024), p. 543–60.

²⁴ Binaya Kumar Mishra et al., "Water Security in a Changing Environment: Concept, Challenges and Solutions," *Water* 13, no. 4 (2021), p. 490.

²⁵ Marianna Strzelecka et al., "Environmental Justice in Natura 2000 Conservation Conflicts: The Case for Resident Empowerment," *Land Use Policy* 107 (2021), p. 105494.

²⁶ Subini Ancy Annamma and Tamara Handy, "Sharpening Justice Through DisCrit: A Contrapuntal Analysis of Education," *Educational Researcher* 50, no. 1 (2021), p. 41–50.

The theory of justice in environmental law also includes intergenerational justice,²⁷ which signifies the legal responsibility to guarantee that water resources are accessible and sustainable for future generations.²⁸ This notion proposes that water management should not be exploitative; instead, it should take into account its long-term effects on ecosystems.²⁹ Accordingly, implementing justice in the management of water resources needs a holistic approach, which involves distributive, procedural, and ecological justice, based on environmental legal theory that perceives humans and nature as interdependent entities.³⁰

The Concept of Water Resource Law

Water resource law plays a crucial role in regulating how water, as a vital resource, is managed, distributed, and protected for the public interest and environmental sustainability. Water is frequently categorized in legal systems as commons property, which implies that it must be managed for the well-being of the community rather than being monopolized by individuals or particular entities. The main principles of water resource law consist of the principle of state sovereignty over water, the principle of universal access to water, and the principle of sustainability and protection of aquatic ecosystems. The principle of state sovereignty reaffirms that the management of water resources falls under government control to ensure justice and equitable use. However, this must be accompanied by a guarantee of universal access to water, which asserts that every individual has the right to clean water as a part of fundamental human rights. Further, the sustainability aspect of water law stresses the importance of regulations that protect aquatic ecosystems so that they can continue to function optimally over the long term.

Indonesia has enacted a number of water resource management laws at the national level, and these laws have changed significantly over time. The main legislative framework for water management in Indonesia is Law No. 17 of 2019 on Water Resources, which supersedes Law No. 7 of 2004, which was annulled by the Constitutional Court on the grounds that it opened the door to excessive water

²⁷ Yevhen Leheza, Olena Sinkevych, Zorina Kravtsova, Olena Kudriavtseva, Ievgeniia Cherniak, "The Human Right to an Environment Safe for Life and Health: Legal Regulation, Contemporary Challenges and Comparative Perspectives", *Syariah: Jurnal Hukum dan Pemikiran* 23, No. 2 (2023), p. 138-150.

Raja R. Timilsina et al., "Intragenerational Deliberation and Intergenerational Sustainability Dilemma," *European Journal of Political Economy* 73 (June 1, 2022), p. 102131.

²⁹ Vellayati Hajad, Sri Wahyu Handayani, Ikhsan Ikhsan, Deni Setiawan, Zuhrizal Fadhly, Herizal, "Land Politics and Food Security: A New Perspective on Land Degradation in Indonesia", *Jurnal Ilmiah Peuradeun* 13, No. 2 (2025), p. 813-846.

³⁰Atun Wardatun, "Knitting Reciprocity and Communality: Countering the Privatization of Family in Bimanese Muslim Local Marriage of Eastern Indonesia", *Journal of Islamic Law* 5, No. 2 (2024), p. 197-221.

³¹ Anja Nygren, "Water and Power, Water's Power: State-Making and Socionature Shaping Volatile Rivers and Riverine People in Mexico," *World Development* 146 (2021), p. 105615.

privatization. Law No. 17 of 2019 affirms that water is a fundamental human right that must be managed by the state with a priority on the public interest. This law also places restrictions on private sector involvement in water management to ensure that water remains a public good accessible to all members of society.³² In addition, related regulations, such as Government Regulation No. 121 of 2015 on the Exploitation of Water Resources, provide clearer limits on the exploitation of water resources by industrial and private sectors.

Apart from national regulations, water resource law is governed by a number of international legal instruments that underline the significance of equitable and sustainable water management. One of the key instruments is United Nations Resolution No. 64/292 of 2010, which recognizes access to clean water and sanitation as a human right. This resolution obliges every country to ensure that its population has adequate access to water without discrimination. Furthermore, the 1992 Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes serves as a legal foundation for countries in managing water resources that cross their national borders. The convention emphasizes the principle of cooperation between countries in the fair and sustainable use of shared water resources.

On a broader scale, the SDGs, particularly SDG 6, highlight the importance of policies that guarantee universal access to clean water and the sustainable management of water resources.³³ This requires each country to formulate regulations that not only accommodate economic and social interests but also ensure the sustainability of aquatic ecosystems.³⁴ As a result, national and international water resource laws are constantly evolving in response to new issues such as population growth, climate change, and industrial water exploitation. To ensure the equitable and sustainable management of water resources, a combination of robust legal principles and flexible regulations is necessary.

The Family as a Social Institution in the SDGs

The family, the smallest social unit, is essential to attaining sustainability, which includes managing water resources. In various social and legal theories, the family is acknowledged as an institution that shapes norms, ³⁵ behaviors, and habits

³² Tri Sulistyaningsih et al., "Public Policy Analysis on Watershed Governance in Indonesia," *Sustainability* 13, no. 12 (2021), p. 6615.

³³ UNICEF, "SDG Goal 6: Clean Water and Sanitation," UNICEF DATA, accessed March 20, 2025, https://data.unicef.org/sdgs/goal-6-clean-water-sanitation/; Bilalova et al., "Pathways to Water Sustainability?"

³⁴ A. Murgatroyd and J. W. Hall, "Regulation of Freshwater Use to Restore Ecosystems Resilience," *Climate Risk Management* 32 (2021), p. 100303.

³⁵ Arifki Budia Warman, Elimartati, Dodon Alfiander, Ashabul Fadhli, & Wardatun Nabilah, "From Communal to Individual: Shifting Authorities of Family Dispute Resolution in Minangkabau Society", *Ijtihad : Jurnal Wacana Hukum Islam Dan Kemanusiaan* 23, No. 2 (2023), p. 161–183.

that support sustainable development.³⁶ Sustainability itself not only concerns with environmental protection, but also with social and economic aspects that can be passed down to future generations.³⁷

The family has two roles to play in the context of water resources: as a consumer who needs clean water and as an agent of change who can instill water conservation values in daily life.³⁸ Therefore, it is essential that policies encourage the active role of families in water management in order to achieve a balance between meeting basic needs and preserving the environment.

In the view of the SDGs, the role of the family in sustainability is closely tied to a number of global development goals, including SDG 6, which is all about access to clean water and sanitation.³⁹ From water conservation measures at home to involvement in community attempts to preserve water resources, families play an instrumental part in establishing responsible water use habits. In many cases, household water consumption patterns are influenced by the level of awareness regarding the importance of sustainable water management.⁴⁰ Hence, education and awareness-raising efforts about water conservation and the protection of water quality should be instilled early within the family environment. Additionally, families also have a role in encouraging governments and local communities to provide fair and sustainable water infrastructure.⁴¹

Access to clean water is acknowledged as a fundamental right in water resource law on a national and international level. The United Nations Resolution No. 64/292 of 2010 reiterates that every individual, including within the context of the family, is entitled to clean water as part of their human rights.⁴² In reality,

³⁶ Filantra, "Penguatan Ketahanan Keluarga Dan Pencapaian SDGS," *Filantra* (blog), May 13, 2024, https://www.filantra.org/id/penguatan-ketahanan-keluarga-dan-pencapaian-sdgs/; Rob Raven et al., "Households in Sustainability Transitions: A Systematic Review and New Research Avenues," *Environmental Innovation and Societal Transitions* 40 (September 1, 2021), 87–107.

³⁷ Nur Faizah, "The Spiritualization of Domestic Violence in the Digital Era: Examining the Cathartic Role of Religious Institutions in Empowering Victims," *De Jure: Jurnal Hukum Dan Syar'iah* 15, no. 2 (2023), p. 252–267.

³⁸ Carole Debora Nounkeu and Jigna Morarji and Dharod, "Water Fetching Burden: A Qualitative Study to Examine How It Differs by Gender among Rural Households in the West Region of Cameroon," *Health Care for Women International* 43, no. 9 (2022), p. 1023–41.

³⁹ Marta Baltruszewicz et al., "Household Final Energy Footprints in Nepal, Vietnam and Zambia: Composition, Inequality and Links to Well-Being," *Environmental Research Letters* 16, no. 2 (2021), p. 025011.

⁴⁰ Marian García-Valiñas, Fernando Arbués, and Roberto Balado-Naves, "Assessing Environmental Profiles: An Analysis of Water Consumption and Waste Recycling Habits," *Journal of Environmental Management* 348 (2023), p. 119247.

⁴¹ Zainul Mun'im, Abdussamet Kaya, "An Empirical Approach in Culinary Fiqh of Coastal Communities: Critical Study of 'Aysh al-Baḥr", *Al-Ahkam* 33, No. 1 (2023), p. 23-44. https://doi.org/10.21580/ahkam.2023.33.1.14523.

⁴² J. Anggriani dan I. Harlina, "Dynamics of Family Law in Indonesia: Bibliometric Analysis of Past and Future Trends," *Samarah* 8, no. 1 (2024), p. 518.

however, many families still struggle to get clean water because of the economic, geographic, or policy-related issues that do not benefit vulnerable populations.

Hence, Law No. 17 of 2019 on Water Resources, which outlines Indonesia's water resource law, points out that the state is responsible for ensuring that water is available for all citizens, including for household needs. The implementation of this policy must involve families as key subjects in ensuring that the right to water can be effectively realized in everyday life.

In addition to being users, families also play a role in supporting collective water management through active participation in community-based programs. ⁴³ Some programs, e.g., infiltration well construction, community-based water management, and family-run basic irrigation systems in rural areas, are tangible examples of how families can help achieve SDG 6. The Community-Led Total Sanitation (CLTS) program, which stresses family involvement in enhancing access to clean water and adequate sanitation, is one example of how family-based approaches to water management have been incorporated into development policies on a global scale. ⁴⁴ In so doing, the family is not merely a beneficiary of water resource policies, but also a key actor in driving change toward greater sustainability.

Legal Analysis: The Paradigm of Water Justice in Water Resource Law Justice in Indonesia's Water Resource Law

The welfare state, wherein the state controls natural resources, e.g., water, for the greatest benefit of its citizens, is the foundation of Indonesian water resource law's conception of justice. Article 33, Paragraph (3) of the 1945 Constitution (UUD 1945) firmly establishes this idea and forms the basis for a number of water management regulations. One of the main regulations on water resources in Indonesia is Law No. 17 of 2019 on Water Resources, which superseded Law No. 7 of 2004 after being annulled by the Constitutional Court. Law No. 17/2019 affirms that water must not be freely commercialized and that its management must prioritize the public interest. The law additionally states that water use must ensure equitable access for all members of society and take ecosystem balance into consideration. This illustrates a justice-based approach to water management, which is consistent with the state's duty to safeguard and manage water resources for the benefit of all people, the sustainability of the environment, and intergenerational equity.

A number of regulations have set forth the principle of justice in water management and distribution; however, there are still a number of obstacles to overcome in their implementation, one of which is the disparity between urban and rural communities' access to clean water. The Central Statistics Agency (BPS)

⁴³ Sarah Nelson et al., "How Community Participation in Water and Sanitation Interventions Impacts Human Health, WASH Infrastructure and Service Longevity in Low-Income and Middle-Income Countries: A Realist Review," December 1, 2021.

⁴⁴ Luke Whaley, Frances Cleaver, and Evance Mwathunga, "Flesh and Bones: Working with the Grain to Improve Community Management of Water," *World Development* 138 (February 1, 2021), p. 105286.

reports that there is a significant discrepancy in the availability of clean water, with urban areas enjoying much higher access levels compared to rural counterparts. This implies that equitable distribution has not been completely guaranteed by current regulations. Local communities' rights to access water resources also frequently clash with issues pertaining to the industrial sector's water use rights. Nearby communities still struggle to get enough access to clean water whereas many businesses are given permits to utilize vast amounts of water. 46

In addition to unequal access, another major issue in Indonesia's water resource policy is the weak enforcement of laws against excessive water exploitation. Several cases have shown that many companies granted water management rights engage in exploitation practices that harm both local communities and the environment. For instance, the supply of water for locals has decreased in a number of areas on Java Island as a result of the extraction of significant amounts of groundwater by bottled water companies. Even though regulations place restrictions on the private sector's use of water, there is still little oversight of these practices. A major issue that worsens the inequality in water access is the lack of coordination between central and local governments in supervising water management. 48

From a policy perspective, the concept of water justice in national regulations still faces challenges in terms of synchronization between central and local government policies. Some regions have implemented local regulations to tighten water management although they are against national-level policies. For instance, in order to protect public access, some local governments ban the privatization of water, but they still have to deal with national investment policies that allow private enterprises to operate in the water resource sector. This demonstrates that even though water justice principles have been incorporated into national regulations, different political and economic interests continue to impede their implementation.

Another point to consider is that justice in water resource law is also related to the environmental impacts of adopted policies. Ecological justice in the context of water management is often overlooked when the state prioritizes economic

⁴⁵ Rosetyati R. Utami et al., "Mapping Domestic Water Use to Quantify Water-Demand and Water-Related Contaminant Exposure in a Peri-Urban Community, Indonesia," *International Journal of Environmental Health Research* 34, no. 1 (January 2, 2024), p. 625–38, https://doi.org/10.1080/09603123.2022.2163986; Awoke Keleb et al., "Rural-Urban Disparities in Basic Sanitation Access among Households: A Multivariable Decomposition Analysis of Ethiopian Demographic and Health Survey 2019," *Frontiers in Public Health* 12 (November 1, 2024).

⁴⁶ J. Jódar et al., "The Catastrophic Effects of Groundwater Intensive Exploitation and Megadrought on Aquifers in Central Chile: Global Change Impact Projections in Water Resources Based on Groundwater Balance Modeling," *Science of The Total Environment* 914 (2024), p. 169651.

⁴⁷ Juhua Luo et al., "Rapid Expansion of Coastal Aquaculture Ponds in Southeast Asia: Patterns, Drivers and Impacts," *Journal of Environmental Management* 315 (August 1, 2022), 115100; Hung Van Tran et al., "Asymmetric Effects of Foreign Direct Investment and Globalization on Ecological Footprint in Indonesia," *PLOS ONE* 19, no. 1 (2024), p. e0297046.

⁴⁸ Yun Ding et al., "The Coupling Coordination Measurement, Spatio-Temporal Differentiation and Driving Mechanism of Urban and Rural Water Poverty in Northwest China," *International Journal of Environmental Research and Public Health* 20, no. 3 (2023), p. 2043.

considerations over environmental sustainability.⁴⁹ For instance, the construction of reclamation projects or dam infrastructure frequently results in the deterioration of river and coastal ecosystems, which eventually has an impact on the local communities that rely on these resources for their livelihoods.⁵⁰ In these situations, water management policies have not adequately represented justice for everyone, especially for fishing and indigenous communities that lose access to water resources as a consequence of unattended exploitation.

To guarantee water justice in Indonesia in light of these persistent issues, a more progressive legal reform is required. Policies that are more sensitive to the needs of underserved communities and the environment are needed to reinforce current regulations. One of the important steps is to clarify monitoring mechanisms and impose stricter sanctions on those who engage in excessive water exploitation. It is also necessary that public participation is increased in water resource management decision-making processes, so that the policies produced can better reflect social and ecological justice. Hence, Indonesian water resource law can be a more powerful tool for guaranteeing justice for all, across social, economic, and environmental dimensions, with a more thorough approach.

International Case Study: Comparative Models of Water Justice

The implementation of water justice varies among countries, depending on their own legal systems, economic capacity, and geographical and ecological circumstances. Water management systems in developed nations like Germany are generally more structured and subject to rigorous rules based on the principles of environmental sustainability and distributive justice. On the other hand, many developing countries, such as India and South Africa, face significant challenges in applying water justice due to limited infrastructure, conflicts of interest between the private and public sectors, and weak law enforcement. These differences illustrate how political and economic factors play an important role in determining equitable access to water.

Germany is an example of a nation with an effective water management system, where water access is controlled by strict oversight procedures and high standards. In Germany, municipal businesses that prioritize public service over profit

⁴⁹ Daniel Crespo et al., "Integrating Ecosystem Benefits for Sustainable Water Allocation in Hydroeconomic Modeling," *PLOS ONE* 17, no. 5 (2022), p. e0267439.

⁵⁰ Kai Wan Yuen et al., "A Comprehensive Database of Indonesian Dams and Its Spatial Distribution," *Remote Sensing* 15, no. 4 (2023), p. 925.

⁵¹ Christian Marx et al., "Disentangling the Effects of 66 Years of Water Management and Hydroclimatic Change on the Urban Hydrology and Water Quality of the Panke Catchment, Berlin, Germany," SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, March 24, 2023); Derya Y. Koseoglu-Imer et al., "Current Challenges and Future Perspectives for the Full Circular Economy of Water in European Countries," *Journal of Environmental Management* 345 (November 1, 2023), p. 118627.

are in charge of managing water services.⁵² Water tariffs are determined openly, accounting for investments in environmentally friendly infrastructure as well as operating expenses. In addition, German policy puts forward the idea of "polluter pays," wherein industries that pollute water sources are required to cover the costs of environmental restoration. This system not only ensures equitable access to clean water, but it also promotes the long-term sustainability of water resources.

Unlike Germany, as a developing nation, India encounters a difficulity in providing water justice for their citizens. One of India's major problems is the unequal distribution of water between urban and rural areas. Millions of people in rural areas still rely on natural water sources, which are frequently contaminated and unreliable all year round, while major cities like Delhi and Mumbai have comparatively better water distribution networks. Moreover, India prioritizes the agricultural sector, which takes most of groundwater reserves, over the domestic needs of poor communities. Access problems have also been made worse by the privatization of water services in a number of significant Indian cities, as high costs make it more difficult for low-income households to get enough clean water.

In South Africa, the government has made water justice a top priority since apartheid ended. The South African Constitution explicitly recognizes access to water as a human right, and the government is obligated to provide clean water to all citizens. One of the major policies put into place is the "free basic water" initiative, which grants each household 6,000 liters of water per month at no cost. Nevertheless, despite its intentions to advance equity, this policy's implementation is plagued with difficulties. Due to inadequate infrastructure and significant water loss from pipeline leaks, many areas continue to face water shortages. Furthermore, attempts to guarantee equitable distribution are frequently thwarted by corruption in the water management sector, making it challenging to fully reap the policy's intended benefits.

Australia provides another example of water resource management, especially in response to the challenges posed by climate change.⁵⁵ Australia has implemented a water trading system, where water use rights can be bought and sold as commodities within a tightly regulated framework. This system elevates the efficiency of water use by enabling farmers and industries to purchase or sell water rights in accordance with their needs. Still, the system has also faced criticism for

⁵² Daniel Johnson and Sylvie Geisendorf, "Valuing Ecosystem Services of Sustainable Urban Drainage Systems: A Discrete Choice Experiment to Elicit Preferences and Willingness to Pay," *Journal of Environmental Management* 307 (April 1, 2022), p. 114508.

⁵³ Safa Fanaian and Farnoosh Fanaian, "A Tug of War between Centralization and Decentralization: The Co-Evolution of Urban Governance and Water Risks in Guwahati, India," *Environmental Research Communications* 5, no. 6 (June 2023), p. 065012.

⁵⁴ Jennifer Hove et al., "Lessons from Community Participation in Primary Health Care and Water Resource Governance in South Africa: A Narrative Review," *Global Health Action* 15, no. 1 (December 31, 2022), p. 2004730.

⁵⁵ Pankaj R. Kaushik et al., "Identifying Potential Hotspots of Groundwater-Climate Interaction in the Great Artesian Basin, Australia," *Ecological Informatics* 78 (2023), p. 102354.

potentially creating access inequalities, where those with greater purchasing power can secure more water supply, while smaller communities and low-income individuals who rely on water for their basic needs may be left with limited access.

These international case studies illustrate that there is no single model that can truly guarantee water justice for all. Most developed countries tend to be more successful in ensuring distributive justice due to strong regulations and transparent pricing systems, whereas developing countries still face major challenges in building infrastructure and addressing access inequalities. The most important lesson for Indonesia is the need for a well-rounded strategy that includes investments in sustainable infrastructure, socially just legislation, and strict private sector regulation to protect vulnerable populations. Indonesia can thus create more equitable and sustainable water resource policies that preserve environmental integrity and equity by learning from global best practices.

Challenges and Opportunities in Realizing Water Justice

Water justice is a complex issue as it covers a variety of aspects, including human rights, economic interests, and environmental sustainability.⁵⁷ One of primary obstacles to achieving water justice is the conflict between privatization and the public right to water. On the one hand, privatization which entails private sector investment in infrastructure and distribution systems is frequently viewed as a way to increase the effectiveness of water services. However, privatization runs the risk of compromising people's basic right to access clean water, particularly for those from low-income backgrounds who are unable to pay the high rates set by private enterprises.⁵⁸ Cases from various countries have shown that water privatization frequently leads to price hikes, reduced subsidies for the poor, and the overexploitation of water resources without adequate consideration for environmental sustainability.

Indonesia has experienced various dynamics in the privatization of water resources. One of the most controversial instances is the 1998 privatization of Jakarta's water system, which resulted in the impoverished having unequal access to water. Water tariffs increased sharply as a result of the privatization while there were no appreciable improvements in services. Law No. 7 of 2004 on Water Resources was thus declared unconstitutional by the Constitutional Court in 2015 since it was highly advantageous to corporate interests. This decision marked a critical moment in reaffirming water as a public right, emphasizing that water management policies must be oriented toward social justice rather than mere economic gain. Nevertheless,

⁵⁶ Bukhari Ali, Agustin Hanapi, Abdul Jalil Salam, Muhammad Syauqi, Nadhilah Filzah, "The Preemptive Approach of Ulama in Aceh to Eradicating Corruption", *El-Maslahah* 14, No. 2 (2024).

⁵⁷ Frank A. Ward, "Integrating Water Science, Economics, and Policy for Future Climate Adaptation," *Journal of Environmental Management* 325 (January 1, 2023), p. 116574.

⁵⁸ Kaushik et al., "Identifying Potential Hotspots of Groundwater-Climate Interaction in the Great Artesian Basin, Australia."

there are still numerous obstacles in the way of putting truly equitable policies into practice. Attempts to achieve water justice in Indonesia are still hampered by problems such as lack of transparency in water management and inadequate regulation of private enterprises that remain involved in the industry.

Apart from privatization, the weak role of the state in guaranteeing fair access for all societal segments is another significant obstacle to achieve water justice. ⁵⁹ Indonesia is one of many developing nations that is still struggling with institutional capacity and infrastructure for equitable and sustainable management of water resources. Problems such as leaking distribution networks, polluted water sources, and a lack of investment in clean water treatment systems are significant barriers to achieving water justice. In some areas, communities are forced to rely on natural water sources of poor quality because the government is unable to provide adequate access to clean water. This situation underscores the central role of the state in regulating and guaranteeing fair water distribution through appropriate policies and strict oversight of regulatory implementation.

Despite the many challenges, there are also opportunities to advance water justice, one of which lies in community involvement in water resource management. Active public participation in water conservation and local resource governance can serve as an effective strategy to ensure fairness in the distribution and use of water. Some regions of Indonesia have successful community-based initiatives that manage water resources collectively, which are based on principles of justice and sustainability. For instance, in some villages in Java and Bali, the *Subak* system is still preserved as a traditional water management method that prioritizes equity and ecological balance. Such models demonstrate that solutions to water justice do not rely solely on formal regulations but also on local wisdom and the active role of communities in protecting and sustaining water resources.

To add, technological innovation also provides significant opportunities to realize water justice. The use of desalination technologies, portable water filtration systems, and the utilization of alternative water sources such as rainwater can provide viable solutions for regions facing water crises. Further, the digitalization of water management, including sensor-based water usage monitoring and artificial intelligence, can help elevate distribution efficiency and reduce waste. Governments can develop more adaptive, data-driven policies to manage water resources equitably by leveraging the right technologies.

⁵⁹ Pius Babuna et al., "Modeling Water Inequality and Water Security: The Role of Water Governance," *Journal of Environmental Management* 326 (2023), p. 116815.

⁶⁰ Edith Dominguez-Rendón, Mariana Villada-Canela, and Dalia Marcela Muñoz-Pizza, "Community Strengthening through Citizen Monitoring of Water Quality: A Systematic Review," *PLOS ONE* 19, no. 7 (2024), p. e0305723.

⁶¹ Stefania Anna Palermo et al., "Smart Technologies for Water Resource Management: An Overview," *Sensors* 22, no. 16 (2022), p. 6225.

⁶² Dewi Anggraini, Asrinaldi, Aidinil Zetra, Tengku Rika Valentina, "Model of Policy Innovation in Waste Management in Padang City", *Al-Risalah* 25, No. 1 (2025), p. 15-171.

To achieve proper water justice, there must be synergy between state policy, community engagement, and the use of sustainable technology. The government should make sure that current laws truly serve the public interest and do not allow for profit-driven corporations to exploit water resources.⁶³ Communities also have an obligation to support policies that are focused on sustainability and to take part in water conservation. Fair and equal access to water can move beyond from an ideal to a practical reality with a comprehensive strategy based on the values of justice.

The Role of the Family in Sustainable Water Management and the SDGs

A person's awareness of the environment, including water management, is influenced by the family, as the first social institution. As a result, early environmental education at home should start with fundamental ideas like the value of water, the scarcity of water resources, and its effects on life. There are some practical ways that parents can teach their children on environment, such as reusing laundry water for watering plants or using a bucket instead of a hose when washing vehicles. Some educational media, e.g., books, videos, and interactive games, can also help reinforce children's understanding of responsible water consumption patterns. By fostering these habits at the family level, households can become agents of change that contribute to the achievement of SDGs, especially SDG 6: Clean Water and Sanitation for All.

A hands-on, practical approach in everyday life is frequently more successful than merely imparting theoretical knowledge. For instance, by planning routine inspections for pipe leaks or asking them to figure out how much water is used each day, parents can engage their children in water management activities around the house. These easy steps support the development of water-saving behaviors that benefit the family as well as the larger sustainability of the environment. Families are essential in encouraging long-term stewardship of water resources by incorporating water-conscious practices into daily routines.

Water Consumption Patterns and Household Policies

⁶³ Andi Salman Maggalatung, "Modern Technology Urgency in the Development of Islamic Law", *Ahkam: Jurnal Ilmu Syariah* 19, No. 1 (2019), p. 163-176.

⁶⁴ Sohaib Mustafa et al., "Does Public Awareness Matter to Achieve the UN's Sustainable Development Goal 6: Clean Water for Everyone?," *Journal of Environmental and Public Health* 2022, no. 1 (2022), p. 8445890.

⁶⁵ Mohamad Sar'an, Yusuf Hidayatulloh, Sofia Gussevi, Riski Indrawan, Nur Alam Ullumuddin Zuhri, "Implementation of Harmonious Family in the Concept of Proportionality of Obligations and Rights of Husband and Wife Relations: A Perspective on the Compilation of Islamic Law", *El-Usrah: Jurnal hukum Keluarga* 7, No. 2 (2024), p. 695-712.

Water consumption patterns in families are frequently disregarded as a factor influencing the long-term availability of water resources. Households should try to address this issue by implementing sustainable water use policies, e.g., installing water-saving devices on faucets, choosing appliances with water-efficient technology, and developing habits like showering with low-flow systems instead of using bathtubs, which require significantly more water. Adopting these guidelines may decrease water consumption without sacrificing comfort while supporting larger initiatives for sustainability and water conservation.

Families may also establish a more organized system for managing water in their homes.⁶⁷ For instance, they can repurpose water from washing vegetables to irrigate gardens or plan when to water plants based on weather conditions. Rainwater harvesting systems have even begun to be installed in some houses for nonconsumptive purposes e.g., lawn irrigation and car washing. These steps not only help reduce pressure on clean water resources, but they also become tangible examples of how household policies can contribute to environmental sustainability. Families may also become agents of change to advance sustainable water management by embracing more responsible water consumption practices and creating well-planned household policies. If such practices are widely implemented, they will contribute to fulfill SDG 6, which aims toward guaranteeing that everyone has access to and can sustainably manage clean water.

The Link Between Family Behavior and the Achievement of SDG 6

One strategic way to assist in accomplishing SDG 6 is to practice water conservation at the household level.⁶⁸ It can start from performing simple daily habits, e.g., turning off the tap while brushing teeth, washing full loads of laundry, and reusing water for other purposes. These small actions, when practiced consistently, can significantly reduce household water consumption. In addition, innovations such as domestic wastewater treatment technologies can help families optimize water use without placing extra strain on the environment.

The importance of water conservation extends beyond direct usage—it also involves making wiser consumption choices. Selecting products that are produced using environmentally friendly methods and have a low water footprint is part of broader household water conservation efforts. For example, reducing the consumption of cotton-based clothing, which requires large amounts of water to produce, or choosing foods that demand less water in their production processes. This kind of awareness encourages families to be more selective in their everyday consumption, while actively contributing to the sustainable management of water resources.

⁶⁶ Filippo Mazzoni et al., "Investigating the Characteristics of Residential End Uses of Water: A Worldwide Review," *Water Research* 230 (2023), p. 119500.

⁶⁷ Henrique Mamede et al., "A Prototype for an Intelligent Water Management System for Household Use," *Sensors* 23, no. 9 (January 2023), p. 4493.

⁶⁸ Bilalova et al., "Pathways to Water Sustainability?"

Ecological Awareness and Community Participation

An essential factor influencing a sustainable mindset toward water management in the family is ecological awareness.⁶⁹ Families with this kind of awareness are more likely to take the initiative to look for ways to conserve water and lessen adverse environmental effects. This awareness can be increased by introducing the concept of the water footprint, i.e., the total amount of water used in daily life, both directly and indirectly.⁷⁰ Families that understand this concept can truly adopt a more environmentally friendly lifestyle and make more efficient use of water resources.

Family involvement in community-based activities on water conservation can also assist in accomplishing the SDG 6. For instance, families can partake in tree planting programs in watershed areas, join river cleanup movements, or participate in water-saving campaigns organized by governments and environmental organizations. In addition to increasing public awareness, such active engagement also reinforces social responsibility in protecting water for future generations.

People can participate in water management through community-based advocacy and education.⁷¹ Families may act as agents of change by educating those around them about the importance of water conservation and advocating for more sustainability-oriented water resource policies. In doing so, families contribute not only within their own households, but also become part of a broader movement to achieve sustainable access to clean water and sanitation.

Best Practices: Family Case Studies in Water Management

Multiple family-based community initiatives have been successful in raising awareness and improving strategies for conserving water. The "Adopt a River" initiative is a successful example wherein families from various areas collaborate to maintain and clean the rivers in their communities This program involves all family members in regular activities such as river clean-ups, water conservation education, and advocacy for better environmental policies. ⁷² Taking part in these programs promotes a sense of shared responsibility for managing water resources and strengthens family ties.

Local Wisdom in Ensuring Water Sustainability

⁶⁹ https://www.sciencedirect.com/science/article/pii/S0301479722005783.

⁷⁰ Yuanhong Gu, Shaoqing Chen, and Mo Li, "Uncovering the Dynamics of Consumption-Based Household Water Footprint in Response to Pandemic: The Hysteresis Effect of Disruption," *Earth's Future* 11, no. 5 (2023).

⁷¹ Alhelí Calderón-Villarreal et al., "Popular Education to Improve Water Quality and Hygiene in a Mexican Indigenous Community," *Global Health Promotion* 30, no. 3 (September 1, 2023), 39–48.

⁷² Endang Widuri, "Aktualisasi Hukum Islam Dalam Upaya Pelestarian Lingkungan Hidup", *Al-Manahij: Jurnal Kajian Hukum Islam* 2, No. 1 (2008), p. 77-88.

Families that manage their water resources using local wisdom are often more successful in safeguarding this vital resource. The *Subak* system, for instance, is a traditional, community-based irrigation system that guarantees equitable water distribution and has been used for many years by the indigenous communities in Bali. This model is a community-based water management best practice that has received international recognition. Families that adopt these principles can match their water usage patterns with local values that put emphasis on ecological balance and sustainability.

Likewise, other regions also employ water management techniques based on their own local wisdoms. In rural Java, for example, infiltration wells (*sumur resapan*) are used to replenish groundwater. This method has worked well to preserve the balance of aquatic ecosystems while also making sure the supply of water for subsequent generations. A tangible step to attain water sustainability may be through incorporating similar ways at the family level.

Conclusion

Water justice is instrumental in sustainable water resource management. This study focuses on the need of equitable water distribution, both legally and socially, to guarantee that all members of society have fair access to water resources. From a legal perspective, water resource regulations must take into account distributive, procedural, and ecological justice to prevent inequalities in its use. There is also a strong connection between water resource law, justice, and the SDGs, especially in relation to SDG 6, which aspires to ascertain universal access to clean water and sanitation. Regulations that uphold the principle of water justice ought to ensure that access to water is not limited to a privileged few, but is also enjoyed by all segments of society, particularly vulnerable groups. It is therefore necessary that policies governing water management prioritize the principles of justice, sustainability, and public participation. Families also play an important part in water management and should not be disregarded. Families have a strategic role in fostering water conservation awareness through education, consumption patterns, and participation in community programs. By practicing water-saving habits, using environmentally friendly technology, and actively advocating for fair water policies, families may act as agents of change in realizing water justice and achieving SDG 6.

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