

The Broken Bridge: Are Religious Courts Upholding the Promise of Post-Divorce Support for Women and Children in Indonesia?

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Abstract

Women and children occupy a distinct and vulnerable position within the Indonesian legal system, particularly in post-divorce situations. Although statutory provisions and Supreme Court regulations establish a normative foundation for protecting their rights, implementation remains inconsistent across judicial practices. This study examines the evolving role of the Religious Courts in ensuring the fulfillment of women's and children's rights after divorce. Using a normative juridical method with statute and conceptual approaches, the research explores the gap between legal norms and enforcement. Findings reveal that despite the limited number of divorce



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rulings explicitly addressing alimony, the Supreme Court has initiated significant reforms through *Surat Edaran Mahkamah Agung* (SEMA), strengthening judicial authority to defend vulnerable parties. Furthermore, innovative practices observed in the Religious Courts of Surabaya, Gresik, Bengkulu, and Bontang—such as salary deductions, digital monitoring systems, and inter-agency collaboration—demonstrate effective institutional interconnection in enforcing alimony. The novelty of this research lies in identifying an emergent model of cross-sectoral collaboration within the judiciary that bridges normative law and practical enforcement. Its primary contribution extends beyond the Indonesian context by offering an applicable framework for other jurisdictions facing similar challenges in the protection of women and children's post-divorce rights. This study underscores that institutional synergy and digital governance can serve as globally relevant strategies for achieving sustainable legal protection and advancing social justice.

KEYWORDS *Religious Court, women's and children's rights, alimony enforcement, judicial reform, social justice*

Introduction

The issue of post-divorce maintenance for women and children represents a critical dimension of family law, reflecting the intersection between legal responsibility, gender justice, and child welfare. Under Indonesian law, the obligation to provide maintenance (*nafkah*) rests primarily upon the biological father, who remains legally responsible for the livelihood of his former wife and children even after the termination of marriage.¹ The determination of alimony is contingent upon the father's financial capacity, assessed through judicial examination of factual evidence presented during trial proceedings.² However, persistent discrepancies between normative legal provisions and their practical application reveal that many fathers fail to discharge these obligations effectively.³ Compounding this problem is the limited awareness among women regarding their post-divorce rights, rendering them vulnerable to loss of

¹ Badruddin Hj Ibrahim, and Azizah Mohd. "The Child's Right to Maintenance: The Extend of the Family's Responsibilities in Islamic Law and according to the Family Law Provisions of Muslim Countries." *Arab Law Quarterly* 25, no. 4 (2011): 401-422.

² M Natsir Asnawi, "Implementasi Jurimetri dalam Penentuan Jumlah Nafkah Anak," *Jurnal Hukum dan Peradilan* 5, no. 3 (2016): 331-350

³ Dedi Sumanto, Titin Samsudin, and Fikri Hi. Asnawi Amirudin, "The Existence of the Religious Court in Handling Divorce Cases on the Reason of Domestic Violence," *Jambura Law Review* 3, no. 2 (2021): 214-230

legal protection and access to justice.⁴ These conditions underscore the urgent need to evaluate the effectiveness of existing legal mechanisms and the role of the Religious Courts in ensuring the realization of women's and children's rights after divorce.⁵

Although certain court rulings explicitly mandate the payment of child maintenance, in practice many fathers or former husbands continue to disregard this legal obligation.⁶ Data from the Religious Courts Agency of the Supreme Court of the Republic of Indonesia (*Badan Peradilan Agama Mahkamah Agung RI, Badilag*) show that in 2024, the Religious Courts received 616,831 total cases, of which 417,750—or approximately 67.7 percent—were divorce cases. Among these, 77 percent were initiated by wives (*cerai gugat*), while only 23 percent were filed by husbands (*cerai talak*). However, despite this high volume of divorce litigation, only 11.19 percent of all rulings addressed the legal consequences of divorce, particularly matters involving women's and children's rights such as *iddah*, *mut'ah*, *madhiyah*, *hadhanah*, and deferred dowry.⁷ Furthermore, *Badilag* data from 2018 illustrate that out of approximately 447,417 divorce decisions, only about 1 percent included claims for child maintenance, another 1 percent concerned spousal support, and less than 1 percent dealt with the division of marital property.⁸ These figures reveal a significant discrepancy between the normative framework guaranteeing the post-divorce rights of women and children and the actual enforcement of those rights within Indonesia's judicial practice.

As one of the core judicial institutions within the Indonesian legal system, the Religious Courts face at least two fundamental expectations. First, they are mandated to uphold law and justice to the fullest extent possible.⁹ In fulfilling this mandate, the Religious Courts are required to

⁴ Yani Arfianti Siregar et al., "Legal Certainty of the Rights of Wives and Children After Divorce," *Jurnal El Syakhshi* 1, no. 1 (2023): 25–32.

⁵ Qodariah Barkah et al., "Abandonment of Women's Rights in Child Marriage; An Islamic Law Perspective," *Al-Ihkam: Jurnal Hukum & Pranata Sosial* 17, no. 2 (2022): 383–411.

⁶ Mursyid Djawas et al., "The Alimony Obligation of a Civil Servant and Non-Civil Servant Father towards Children Post-Divorce (The Study on Aceh Syar'iyah Court Decision Study of 2019)," *El-Usrah: Jurnal Hukum Keluarga* 6, no. 1 (2023): 91–114.

⁷ See MARINews, "Praktik Perlindungan Pemenuhan Nafkah Bagi Mantan Istri dan Anak Setelah Cerai Di Tiga Negara," *Mahkamah Agung Republik Indonesia*, 2025, retrieved online from <https://marinews.mahkamahagung.go.id/hukum/praktik-perlindungan-pemenuhan-nafkah-bagi-mantan-istri-odV>

⁸ Mohammad Akram Laldin, "Understanding the Concept of Maslahah and Its Parameters When Used in Financial Transactions," *ISRA International Journal of Islamic Finance* 2, no. 1 (2010): 61–84.

⁹ Raid Hasan Mohammed Bani Issa, Upi Komariah, and Cucu Susilawati, "Improving Accessibility and Justice: Reforming Indonesia's Religious Courts to Uphold Human

apply legal provisions to *in-concreto* cases through careful consideration of relevant and decisive facts, thereby ensuring that normative legal principles are implemented in a contextually appropriate manner. Second, the Religious Courts are expected to demonstrate heightened responsiveness to the protection of women's and children's rights, as these groups often bear the greatest impact of family disputes and divorce proceedings.¹⁰ Thus, the dual role of the Religious Courts embodies not only the enforcement of legal norms but also the realization of substantive justice that aligns with human rights and gender equality principles.

The issue of unfulfilled post-divorce rights for women and children is not new in the field of Islamic Family Law. Numerous studies have attempted to explain and address this persistent problem. Rahmawati et al examined the underlying factors contributing to ex-husbands' failure to fulfill their legal obligations toward former wives and children.¹¹ Abdullah et al found that the problem is particularly acute in the Muslim communities of Lombok,¹² while Wahyu et al explored the perspectives of legal practitioners in East Java regarding obstacles to realizing women's post-divorce rights.¹³ Syukrawati et al analyzed judicial decisions in Central Java to assess how courts have addressed such issues.¹⁴ Although these studies provide valuable insights into the socio-legal dimensions of post-divorce rights, none have specifically investigated the institutional role of the Religious Courts in addressing this issue at a systemic level.

Building upon this research gap, the present study takes a novel approach by analyzing the institutional mechanisms and judicial innovations employed by Indonesia's Religious Courts to ensure the realization of women's and children's rights after divorce. This research contributes to the discourse on social justice by demonstrating how judicial

Rights and Gender Equality," *International Journal of Intersectionality: Law and Gender* 1, no. 1 (2024): 1–15

¹⁰ Andi Akram et al., "Gender Mainstreaming through Guarantees of Legal Protection and Access to Justice for Women and Children in Religious Court," *Jurnal Hukum dan Peradilan* 12, no. 2 (2023): 267–292.

¹¹ Rahmawati Rahmawati et al., "Dis-Implementation of the Islamic Family Law in Fulfilling the Rights of Ex-Wives After Divorce in Indonesia," *Samarah: Jurnal Hukum Keluarga dan Hukum Islam* 9, no. 1 (2025): 538–559.

¹² Abdullah Abdullah et al., "Fulfillment of The Living Rights of Children the Victims of Divorce in the Muslim Community of Lombok, Indonesia," *El-Usrah: Jurnal Hukum Keluarga* 7, no. 1 (July 1, 2024): 253–271.

¹³ Wahyu Saputra, Muhammad Ali Murtadlo, and Aftab Haider, "Challenges in Upholding Women's Post-Divorce Rights: Experiences From Legal Practitioners in the Mataraman Region, East Java," *Al-Hukama* 14, no. 1 (- 2024): 46–73.

¹⁴ Syukrawati Syukrawati et al., "Post-Divorce Rights of Women and Children in Pekalongan City, Central Java: Challenges in Islamic Law Analysis," *Al-Ahkam* 34, no. 1 (2024): 121–46

responsiveness and cross-sectoral collaboration can transform legal recognition into substantive equality. Beyond the Indonesian context, the study offers a global contribution by presenting a model of faith-based judicial reform that integrates Islamic legal principles, gender-sensitive adjudication, and procedural innovation. This model can serve as a reference for other Muslim-majority jurisdictions seeking to strengthen family law enforcement and promote equitable post-divorce outcomes consistent with international human rights and justice frameworks.

This research adopts a mixed normative–empirical juridical approach implemented through two complementary stages. The first stage, library research, involves the systematic identification, collection, and critical analysis of relevant legal materials, including primary sources (statutes, court decisions, and Supreme Court circulars), secondary sources (scholarly articles and legal commentaries), and tertiary sources (legal dictionaries and encyclopedias). This stage aims to construct a robust theoretical and doctrinal framework on the protection of women’s and children’s rights after divorce within Indonesia’s Religious Court system.

The second stage, field research, is designed to empirically examine how these normative provisions are implemented in judicial practice. Data are gathered through document analysis, observation, and semi-structured interviews with judges, court officials, and related institutional actors across selected Religious Courts representing diverse regional jurisdictions. The integration of normative and empirical findings enables triangulation, thereby enhancing the validity and reliability of the conclusions. Through this two-stage design, the study ensures methodological coherence and depth, linking doctrinal analysis with institutional practice to produce findings that are theoretically grounded, empirically substantiated, and globally relevant to the discourse on judicial reform and social justice.

Ensuring the Rights of Women and Children After Divorce in Indonesia: Problems and Challenges

In both national and international legal frameworks, women are categorized as part of vulnerable groups, along with children and other socially or economically disadvantaged populations.¹⁵ This classification arises from the recognition that certain social, cultural, and economic

¹⁵ Michelle Heacock et al., “E-Waste and Harm to Vulnerable Populations: A Growing Global Problem,” *Environmental Health Perspectives* 124, no. 5 (2016): 550-555.

factors—combined with the heightened risk of gender-based violence—can expose women to systemic discrimination and rights violations.¹⁶ Historically, women’s rights have often been marginalized or constrained by social traditions, religious interpretations, and state policies that perpetuate inequality and limit access to justice.¹⁷

Under Indonesian law, once a divorce judgment attains permanent legal force (*inkracht*), the husband remains legally obligated to fulfill the post-divorce entitlements of his former wife and their children.¹⁸ These rights are expressly regulated by Law No. 1 of 1974 on Marriage and elaborated further in the *Compilation of Islamic Law (Kompilasi Hukum Islam)*. The legal provisions encompass financial maintenance (*nafkah*), child custody (*hadhanah*), and other related obligations designed to protect the welfare of both women and children after divorce.

However, the implementation of these provisions continues to face persistent challenges. In many cases, ex-husbands fail to comply with court-ordered maintenance, leaving women and children economically and socially vulnerable.¹⁹ Compounding this issue, many divorced women remain unaware of their continuing legal rights, which prevents them from pursuing enforcement through available judicial mechanisms.²⁰ The low level of legal literacy among women therefore contributes to the under-representation of post-divorce rights claims in the Religious Courts.²¹ This gap between legal entitlement and practical realization underscores the

¹⁶ Lawrence O. Gostin, Eric A. Friedman, and Sarah A. Wetter, “Responding to Covid-19: How to Navigate a Public Health Emergency Legally and Ethically,” *Hastings Center Report* 50, no. 2 (2020): 8-12.

¹⁷ David R. Williams, Naomi Priest, and Norman B. Anderson, “Understanding Associations among Race, Socioeconomic Status, and Health: Patterns and Prospects,” *Health Psychology* 35, no. 4 (2016): 407-411.

¹⁸ Mursyid Djawas et al., “The Legal Position of Children of Incest (A Study of Madhhab Scholars and Compilation of Islamic Law),” *Samarah: Jurnal Hukum Keluarga Dan Hukum Islam* 6, no. 1 (2022): 139-155.

¹⁹ Ethan Michelson, “Decoupling: Marital Violence and the Struggle to Divorce in China,” *American Journal of Sociology* 125, no. 2 (2019): 325-381. See also Sumanto, Samsudin, and Amirudin, “The Existence of the Religious Court in Handling Divorce Cases on the Reason of Domestic Violence”.

²⁰ See Siregar et al., “Legal Certainty of the Rights of Wives and Children After Divorce.” See also Clara Fischer, Syahrul Hakim, and Dewi Arum Lestari, “Judges as Agents of Change: The Role of the Judiciary in Protecting Vulnerable Groups,” *Indonesian Court and Justice Review* 1, no. 2 (2024); Oliver D’Angelo, Tania Ahmad Azhar, Felix Kreutzberg, and Aji Prasetya, “The Intersection of Gender and Minority Rights in Indonesia: A Case for More Inclusive Justice,” *Indonesian Minority Justice Review* 1, no. 3 (2024).

²¹ See Barkah et al., “Abandonment of Women’s Rights in Child Marriage: An Islamic Law Perspective.” See also Dayang Nur Alesya, and Muhammad Fakhri Hakim, “The Role of Theology in Promoting Gender Justice in Indonesia: Women’s Rights in Religious Contexts. *Indonesian Theological Justice Review* 1, no. 2 (2024).

need for stronger institutional enforcement, gender-sensitive judicial practice, and broader public education to ensure that the legal protections for women and children after divorce achieve their intended function of advancing social justice.

Once a court decision stipulating the fulfillment of women's and children's post-divorce rights has obtained permanent legal force (*inkracht*), its execution may proceed through two mechanisms. First, voluntary compliance by the husband, in which the former husband fulfills the obligations prescribed in the judgment without further enforcement measures. Second, execution through court order, which occurs when the husband fails to comply voluntarily, thereby entitling the former wife to file an application for judicial execution.

According to Yasardin, several fundamental obstacles hinder the effective enforcement of these decisions.²² First, many divorce petitions filed by wives do not explicitly request the legal consequences of divorce—such as *iddah* maintenance, *mut'ah*, child support, and division of joint property—often due to limited legal understanding, particularly among women unfamiliar with the procedural requirement to articulate such demands in the *petitum*. Additionally, deep-rooted social stigma associating maintenance claims with *nusyuz* (wife's defiance) discourages many women from asserting these rights.²³

Second, judges in the Religious Courts frequently refrain from deciding on post-divorce entitlements because of adherence to the principle of ultra petitum, which restricts rulings to claims explicitly stated in the lawsuit. Although Article 41(c) of Law No. 7 of 1989 and Article 59 of the *Compilation of Islamic Law (KHI)* grant judges *ex officio* authority to award such rights, judicial reluctance persists due to concerns about formal procedural violations.²⁴

Third, numerous divorce cases proceed in absentia (*verstek*), as one party—typically the defendant—does not attend the hearing. In such

²² Yasardin Yasardin, "Praktik Perlindungan Pemenuhan Nafkah Bagi Mantan Istri dan Anak Pasca Perceraian di Indonesia," *Paper*, Presented on Webinar Internasional Mahkamah Agung Republik Indonesia, Mahkamah Syar'iyah Brunei Darussalam dan Mahkamah Syar'iyah Malaysia, held on Jakarta, March 19, 2025.

²³ Arwa Syaima, Widiyanto Widiyanto, and Nemer Alotaiby, "The Development of Marital Rape in Islamic Family Law Reform," *Mizan: Journal of Islamic Law* 8, no. 2 (2024): 139-156.

²⁴ Hotnidah Nasution and Ahmad Rifqi Muchtar, "Access to Justice for Women and Children in Divorce Cases in the Indonesian Religious Courts," *Ahkam: Jurnal Ilmu Syariah* 20, no. 2 (2020): 361-384. See also Cahya Wulandari, and Winarsih Winarsih, "Women's Rights in Indonesia: Gender-Based Violence and the Challenge of Legal Protection," *Contemporary Issues on Indonesian Human Rights Law and Policy* 1, no. 4 (2024).

instances, judgments often address only the dissolution of marriage, without a comprehensive examination of economic capacity or the real needs of the wife and children.

Fourth, a major structural obstacle lies in the high cost of execution petitions, which is frequently disproportionate to the monetary value of the alimony awarded. This financial barrier prevents many women from enforcing judgments effectively, leaving their legally recognized rights unenforced. Moreover, current enforcement mechanisms rely primarily on executorial seizure of assets, which proves ineffective when the former husband lacks identifiable assets or is employed in the informal sector. The Religious Courts have no statutory authority to compel third-party institutions—such as employers, banks, or local agencies—to deduct income or enforce payment obligations. Inter-institutional coordination with agencies like the Ministry of Manpower, the Financial Services Authority, or village administrations remains weak due to the absence of a clear legal framework governing such cooperation.²⁵

The implementation of child maintenance awards is often unsustainable, as ex-husbands may delay or repeatedly evade payments, forcing the custodial parent to re-apply for execution. Effective and enduring enforcement of judicial decisions therefore requires the development of a coordinated institutional network linking the Religious Courts with administrative, financial, and law-enforcement bodies. The current lack of integration and technical regulation prevents court verdicts from achieving their full legal effect, leaving many women and children without the material justice that the law intends to provide.

In this context, according to Amran Suadi²⁶, several structural and institutional factors continue to obstruct the effective implementation of court decisions concerning women's and children's rights after divorce. First, many women do not pursue their post-divorce entitlements due to limited understanding of the legal provisions governing such rights. This indicates the persistently low level of legal literacy among communities, particularly within vulnerable social groups.

Second, the execution process for alimony or maintenance orders remains financially burdensome. The costs associated with execution—

²⁵ Amran Suadi, "Protection of Women's and Children's Rights Based on System Interconnection: A New Paradigm of Execution of Women and Children's Rights after Divorce," *Jurnal Hukum dan Peradilan* 11, no. 3 (2022): 499–522.

²⁶ Amran Suadi, "Tanggapan Ilmiah dalam Webinar: 'Praktik Perlindungan Pemenuhan Nafkah Bagi Mantan Istri dan Anak Pasca Perceraian di Indonesia, Brunei Darussalam dan Malaysia,'" *Presented on Webinar Internasional Mahkamah Agung Republik Indonesia, Mahkamah Syar'iyah Brunei Darussalam dan Mahkamah Syar'iyah Malaysia*, held on Jakarta, March 19, 2025.

including attorney fees, court administrative charges, and the expenses of summoning the defendant—are often unaffordable for women, effectively restricting their access to justice.

Third, Indonesia still lacks an integrated institutional framework linking relevant state bodies—such as the judiciary, ministries, and government financial institutions—to ensure the coherent and consistent enforcement of post-divorce decisions. The absence of inter-agency coordination mechanisms results in fragmented policies and weak institutional accountability.

Finally, Suadi in further highlighted that there is no comprehensive national policy dedicated to protecting the rights of women and children after divorce. This policy gap leads to inconsistencies between substantive legal regulations and their technical implementation, causing judicial decisions in many cases to lose their practical force.²⁷ These conditions collectively underscore the urgent need for institutional reform and the establishment of a unified governance system to operationalize post-divorce rights enforcement in Indonesia effectively.

Supreme Court Policies and Efforts to Fulfill the Rights of Women and Children After Divorce

The protection of women's and children's rights after divorce has become a central component of the Supreme Court of the Republic of Indonesia's judicial reform agenda.²⁸ As part of its continuing effort to strengthen gender equality and access to justice within the Religious Court system, the Supreme Court has issued a series of *Surat Edaran Mahkamah Agung* (SEMA) to guide judicial practice and ensure consistent enforcement of post-divorce rights.

First, SEMA No. 3 of 2015 mandates that child support determined by the court must include an annual increase of 10–20 percent to accommodate inflation and rising living costs, excluding education and healthcare expenses. SEMA No. 4 of 2016 authorizes judges to determine child support *ex officio*, particularly when the child resides with the mother, in accordance with Article 156(f) of the *Compilation of Islamic Law* (KHI).

²⁷ Suadi.

²⁸ See Mahkamah Agung Republik Indonesia, “MA Berkomitmen Memenuhi Hak-Hak Perempuan dan Anak,” *Mahkamah Agung Republik Indonesia*, 2021, retrieved from <https://www.mahkamahagung.go.id/id/berita/4604/ma-berkomitmen-memenuhi-hak-hak-perempuan-dan-anak>

SEMA No. 1 of 2017 clarifies that all financial obligations arising from divorce must be explicitly stated in the verdict and fulfilled prior to the pronouncement of *talak* (the divorce vow).

Further, SEMA No. 3 of 2018 allows wives in *cerai gugat* (wife-initiated divorces) to claim *mut'ah* and *iddah* maintenance provided they are not proven to be *nusyuz* (disobedient). SEMA No. 2 of 2019 empowers judges to stipulate that a husband's financial obligations be settled before the issuance of a divorce certificate, and requires that this condition be clearly recorded in both the claim and the reasoning sections of court rulings. SEMA No. 5 of 2021 strengthens child protection measures by permitting mothers to request asset seizure as a form of guarantee for child support, explicitly identifying the assets in the petition. Lastly, SEMA No. 1 of 2022 introduces an essential safeguard for children's housing rights in joint property disputes: when the contested property serves as the only family home, the division of assets may be granted but its execution delayed until the child reaches adulthood (21 years of age) or marries.

To operationalize these provisions, the Supreme Court encourages judges to adopt two key strategies: (1) requiring the husband to fulfill his financial obligations prior to *talak* pronouncement, and (2) delaying the declaration of *talak* and setting a deadline—up to six months—for settlement of these obligations, in accordance with Article 131(4) of the KHI.²⁹ Collectively, these reforms demonstrate the Supreme Court's institutional commitment to advancing substantive gender justice by aligning procedural mechanisms with the material protection of women's and children's post-divorce rights.

Best Practices of Religious Courts in Fulfilling the Rights of Women and Children After Divorce in Indonesia

Efforts to protect and fulfill the rights of women and children after divorce have become an important concern across various jurisdictions. In Malaysia, for example, the Family Support Division (Bahagian Sokongan Keluarga – BSK) operates as a special unit under the Department of the Shariah Judiciary Malaysia (*Jabatan Kehakiman Syariah Malaysia*—

²⁹ See Amran Suadi, "Peranan Peradilan Agama dalam Melindungi Hak Perempuan dan Anak Melalui Putusan Yang Memihak dan Dapat Dilaksanakan: The Role of Religious Court in Women and Children Rights Protection Through Partial and Executable Decision," *Jurnal Hukum dan Peradilan* 7, no. 3 (2018): 353-374

JKSM).³⁰ The BSK plays a crucial role in ensuring that court-ordered child support and spousal maintenance are effectively enforced. Through a combination of consultation, mediation, supervision, and protection mechanisms, this institution functions as a state instrument that guarantees compliance with judicial decisions.³¹ Its operational framework includes legal advisory services, case management systems, and financial administration for alimony payments, demonstrating an integrated model of post-divorce rights protection.

While Indonesia does not yet have a specialized institution equivalent to Malaysia's BSK, several Religious Courts have independently developed innovative mechanisms to ensure more effective enforcement of women's and children's post-divorce rights. These localized initiatives reflect growing institutional awareness and a shift toward cross-sectoral policy collaboration.

1. Best Practice in Surabaya Religious Court

In 2022, the Surabaya Religious Court signed an MoU with the Surabaya City Government as a form of joint commitment in protecting the rights of women and children after divorce, which was then renewed in 2023. The MoU regulates various matters, including the protection of the rights of women and children, data synchronization, and rights fulfillment programs for those affected by divorce, as well as intervention and monitoring programs for families affected by divorce.³² The implementation of the agreement is done through several steps:³³

- 1) First, the inclusion of the Population Identification Number (NIK) in the divorce decision.

³⁰ Agustin Hanafi and Mohamad Hedhayatullah Bin Mohamad, "Peran Bahagian Sokongan Keluarga dalam Masalah Pemenuhan Nafkah Isteri Pasca Perceraian (Studi Kasus di Mahkamah Tinggi Syariah Kedah, Malaysia)," *Media Syari'ah* 20, no. 1 (2020): 57-74.

³¹ Zulzaidi Mahmud, Ahmad Hidayat Buang, and Afifah Baharuddin, "Cabaran Penguatkuasaan Penghakiman Mahkamah Syariah: Kajian Peranan Bahagian Sokongan Keluarga Terhadap Hak Wanita dan Kanak-Kanak di Sarawak," *Malaysian Journal of Social Sciences and Humanities (MJSSH)* 6, no. 10 (2021): 252-267.

³² Dinkominfo Surabaya, "Pengadilan Agama Surabaya Dan Pemerintah Kota Surabaya Bersinergi Lindungi Hak Perempuan Dan Anak," *PRISMA: Pusat Informasi Sahabat Perempuan Kartini Surabaya*, 2023, <https://prisma.surabaya.go.id/pengadilan-agama-surabaya-dan-pemerintah-kota-surabaya-bersinergi-lindungi-hak-perempuan-dan-anak/>

³³ See MARINews, "Praktik Perlindungan Pemenuhan Nafkah Bagi Mantan Istri dan Anak Setelah Cerai di Tiga Negara".

- 2) Furthermore, child maintenance payments have been agreed to be made every six months and are explicitly stated in the verdict.
- 3) The Surabaya Religious Court has integrated data on divorce decisions with the Surabaya Single Window Alfa (SSW Alfa) application. This application plays an important role in monitoring, providing special warnings if these rights have not been fulfilled, and delaying administrative services until the party concerned obtains a certificate from the Surabaya Religious Court.
- 4) The application of this administrative sanction is strengthened by the provision that, for parties who do not fulfill the contents of the decision related to these rights, the Surabaya City Government has the authority to refuse to provide services to change population identity on KTP and Family Cards and refuse to provide licenses and other public services.

2. Best Practice in Bengkulu Religious High Court

The Bengkulu Religious High Court established the digital platform “E-Mosi Caper,” a joint initiative with the Bengkulu Provincial Government, formally launched in November 2022.³⁴ The platform serves as a cross-agency monitoring tool enabling efficient supervision of post-divorce obligations stipulated in court rulings.³⁵ This technology allows for real-time verification and data sharing between the Religious Courts, provincial agencies, and financial institutions such as Bank Bengkulu, representing a significant step toward digital transparency and accountability in family law enforcement.

3. Best Practice in Gresik Religious Court

The Gresik Religious Court cooperates with the Gresik Regency Government in implementing divorce decisions, especially against the State

³⁴ Endad Musaddad et al., “Guaranteeing the Rights of Children and Women Post-Divorce: A Comparative Study Between Indonesia and Malaysia,” *Volkgeist: Jurnal Ilmu Hukum dan Konstitusi* 8, no. 1 (2025): 1–14

³⁵ See Pengadilan Tinggi Agama Bengkulu, “Penandatanganan Kerja Sama Pengadilan Tinggi Agama Bengkulu, Pemerintah Provinsi Bengkulu Dan Bank Bengkulu Untuk Penerapan Aplikasi E-Mosi Caper: Revolusi Perlindungan Hak Perempuan Dan Anak Pasca Perceraian,” *Pengadilan Tinggi Agama Bengkulu*, 2024, <https://www.pta-bengkulu.go.id/seputar-peradilan/1895-penandatanganan-kerja-sama-penerapan-aplikasi-e-mosi-caper-oleh-pengadilan-tinggi-agama-bengkulu-pemerintah-provinsi-bengkulu-dan-bank-bengkulu>

Civil Apparatus (ASN) who work within the Gresik Regency Government. One of the concrete forms of this cooperation is by carrying out salary deductions for ASNs who have become the losing party in a divorce or contested divorce case, and are required to provide maintenance to their former wives and children. The deduction is made directly through the treasurer or payroll section of the agency where the ASN works, then distributed to the rightful party in accordance with the ruling that has permanent legal force.

Furthermore, the Gresik Regency Government also provides support through restrictions on population administration services and licensing for parties who do not implement the contents of court decisions. These restrictions include the postponement of identity changes on Family Cards (KK) and Identity Cards (KTP), as well as the suspension of the granting of other administrative permits until the parties concerned fulfill their obligations. In order to optimize monitoring and effectiveness of decision implementation, Gresik Religious Court built a data collection system for divorce cases based on the Population Identification Number (NIK). This system is connected to various regional agencies such as the Population and Civil Registry Office, BKD,

DPMPSTP Office, and other relevant regional apparatus, so that the process of verification and supervision can be carried out in a comprehensive and coordinated manner. This data integration allows cross-sector administrative tracking and becomes a reference in providing or limiting public services to disputing parties.

One of the most prominent innovations of the Gresik Religious Court is the collaboration with 50 companies in the Gresik Regency area. In this collaboration, companies are committed to:

- 1) Conduct internal supervision of the implementation of obligations to fulfill the rights of women and children stipulated in Religious Court decisions, especially by employees who are parties to divorce cases;
- 2) Plan the integration of legal clauses related to court decisions into the terms and conditions of employment in the company as a form of commitment to the protection of women's rights and children in a systemic and sustainable manner.³⁶

³⁶ See Khanif Rosidin, "Gandeng 50 Perusahaan, PA Gresik Pecahkan Rekor MURI Pemenuhan Hak Anak Pasca Cerai," *Info Gresik*, 2024, <https://infogresik.id/gandeng-50-perusahaan-pa-gresik-pecahkan-rekor-muri-pemenuhan-hak-anak-pasca-cerai/>

4. *Best Practice in Bontang Religious Court*

The Bontang Religious Court has established a strategic partnership with a major industrial company in its region, PT Pupuk Kalimantan Timur (Pupuk Kaltim).³⁷ This collaboration has the following working mechanism:

- 1) After a divorce case has been decided and obtained permanent legal force, PA Bontang officially sends a copy of the verdict to PT Pupuk Kaltim, especially if one of the parties (usually the ex-husband) is a company employee.
- 2) Based on the verdict, PT Pupuk Kaltim deducts the salary of the employee concerned in accordance with the amount and period stipulated in the court decision.
- 3) As a form of accountability, PT Pupuk Kaltim provides a semi-annual report to PA Bontang, which contains information on the implementation of payment obligations.

To the private sector, the Bontang Religious Court also established a pattern of institutional cooperation with the Bontang City Government, through the relevant regional apparatus that handles the staffing and finance of the state civil servant (ASN).³⁸ The cooperation mechanism is carried out in the following stages:

- 1) After the divorce verdict has permanent legal force, PA Bontang submits the official document of the verdict to the Regional Secretariat of Bontang City through the Civil Service and Human Resources Development Agency (BKPSDM).
- 2) BKPSDM followed up on the decision by submitting a payroll deduction notification to the Regional Financial and Asset Management Agency (BPKAD) as a form of administrative recording and reporting.
- 3) Furthermore, BKPSDM forwards the verdict to the treasurer of the office/agency where the ASN works, who is responsible for making salary deductions according to the contents of the verdict.

³⁷ See Dirjen Badilag, "Lindungi Hak Anak Dan Perempuan Pasca Perceraian, PT. Pupuk Kaltim Laksanakan PKS Dengan Pengadilan Agama Bontang," *Badilag Mahkamah Agung Republik Indonesia*, 2024, <https://badilag.mahkamahagung.go.id/seputar-peradilan-agama/berita-daerah/lindungi-hak-anak-dan-perempuan-pasca-perceraian-pt-pupuk-kaltim-laksanakan-pks-dengan-pengadilan-agama-bontang-1-7>

³⁸ See Pengadilan Agama Bontang, "Tandatangan Nota Kesepahaman Dengan Pemerintah Kota Bontang, Ketua PA Bontang: Perlindungan Anak Dan Perempuan Pasca Perceraian Bagi ASN Daerah Harus Melalui Pemotongan Gaji," *Pengadilan Agama Bontang*, 2024, <https://pa-bontang.go.id/berita-seputar-pengadilan/2043-tandatangan-nota-kesepahaman-dengan-pemerintah-kota-bontang-ketua-pa-bontang-perlindungan-anak-dan-perempuan-pasca-perceraian-bagi-asn-daerah-harus-melalui-pemotongan-gaji>

- 4) To maintain sustainability and supervision of implementation, BKPSDM routinely submits reports on the implementation of deductions and distribution of entitlements to the Bontang PA every semester, including obstacles that may be encountered in the field.

The cooperation model implemented by PA Bontang with the private sector and local government shows how institutional synergy can strengthen the effectiveness of religious courts, especially in ensuring the implementation of women's and children's rights after divorce is real and measurable. Not only stopping at the verdict, PA Bontang seeks to encourage sustainability of responsibility through systematic control and monitoring mechanisms. This practice is also in line with the spirit of Supreme Court Regulation (PERMA) Number 3 of 2017, which encourages a judicial approach that is sensitive to gender justice and women's vulnerability in the national legal system.

Collectively, these regional best practices demonstrate that institutional synergy—through partnerships between the judiciary, local government, and private sector—can significantly enhance the enforcement of post-divorce rights. These models align with the principles of gender-responsive justice and the vision of Supreme Court Regulation (PERMA) No. 3 of 2017, which emphasizes sensitivity to women's vulnerabilities within the national judicial framework. Beyond their domestic significance, these initiatives offer a globally relevant model of localized, inter-institutional collaboration in advancing the social justice goals of Islamic Family Law reform.

Conclusion

The protection of women's and children's rights after divorce constitutes a concrete expression of the state's commitment to upholding human rights and advancing social justice. After the dissolution of marriage, ex-wives and children possess legally enforceable entitlements that are frequently neglected by former husbands. These rights may be pursued through a separate lawsuit, cumulatively within the divorce petition, or enforced via the judge's *ex officio* authority. However, the realization of these rights in practice still encounters multiple obstacles, including limited legal awareness, incomplete *petita*, judicial reluctance arising from fear of issuing *ultra petitem* decisions, high execution costs, and weak inter-agency coordination.

In response, the Supreme Court has adopted a range of progressive measures, particularly through the issuance of several circulars (SEMA) that

reinforce the legal position of women and children as vulnerable rights-holders. Institutional innovations such as the MoU between the Surabaya Religious Court and the Surabaya City Government and the adoption of the E-Mosi Caper application by the Bengkulu Religious High Court illustrate concrete best practices that help ensure that post-divorce rights are not merely declaratory but actually implemented. Accordingly, sustained synergy between the judiciary, local governments, and social as well as private sector institutions is essential to prevent the emergence of new pockets of poverty and social disintegration that often follow divorce, and to position Indonesia's family law system as a reference point for gender-responsive judicial reform in the global context.

References

- Abdullah, Abdullah et al., "Fulfillment of The Living Rights of Children the Victims of Divorce in the Muslim Community of Lombok, Indonesia," *El-Usrah: Jurnal Hukum Keluarga* 7, no. 1 (July 1, 2024): 253-271. <https://doi.org/10.22373/ujhk.v7i1.22281>
- Akram, Andi et al., "Gender Mainstreaming through Guarantees of Legal Protection and Access to Justice for Women and Children in Religious Court," *Jurnal Hukum dan Peradilan* 12, no. 2 (2023): 267-292. <https://doi.org/10.25216/jhp.12.2.2023.267-292>
- Alesya, Dayang Nur, and Muhammad Fakhri Hakim, "The Role of Theology in Promoting Gender Justice in Indonesia: Women's Rights in Religious Contexts. *Indonesian Theological Justice Review* 1, no. 2 (2024). <https://doi.org/10.65815/h1xk7r60>
- Asnawi, M Natsir. "Implementasi Jurimetri dalam Penentuan Jumlah Nafkah Anak," *Jurnal Hukum dan Peradilan* 5, no. 3 (2016): 331-350. <https://doi.org/10.25216/jhp.5.3.2016.331-350>
- Barkah, Qodariah et al., "Abandonment of Women's Rights in Child Marriage; An Islamic Law Perspective," *Al-Ihkam: Jurnal Hukum & Pranata Sosial* 17, no. 2 (2022): 383-411 <https://doi.org/10.19105/al-lhkam.v17i2.6725>
- D'Angelo, Oliver, Tania Ahmad Azhar, Felix Kreutzberg, and Aji Prasetya, "The Intersection of Gender and Minority Rights in Indonesia: A Case for More Inclusive Justice", *Indonesian Minority Justice Review* 1, no. 3 (2024). <https://doi.org/10.65815/qk324706>
- Dinkominfo Surabaya, "Pengadilan Agama Surabaya Dan Pemerintah Kota Surabaya Bersinergi Lindungi Hak Perempuan Dan Anak," *PRISMA: Pusat Informasi Sahabat Perempuan Kartini Surabaya*, 2023, <https://prisma.surabaya.go.id/pengadilan-agama-surabaya-dan-pemerintah-kota-surabaya-bersinergi-lindungi-hak-perempuan-dan-anak/>

- Dirjen Badilag, "Lindungi Hak Anak Dan Perempuan Pasca Perceraian, PT. Pupuk Kaltim Laksanakan PKS dengan Pengadilan Agama Bontang," *Badilag Mahkamah Agung Republik Indonesia*, 2024, <https://badilag.mahkamahagung.go.id/seputar-peradilan-agama/berita-daerah/lindungi-hak-anak-dan-perempuan-pasca-perceraian-pt-pupuk-kaltim-laksanakan-pks-dengan-pengadilan-agama-bontang-1-7>
- Djawas, Mursyid et al., "The Alimony Obligation of a Civil Servant and Non-Civil Servant Father towards Children Post-Divorce (The Study on Aceh Syar'iyah Court Decision Study of 2019)," *El-Usrah: Jurnal Hukum Keluarga* 6, no. 1 (2023): 91-114. <https://doi.org/10.22373/ujhk.v6i1.9493>
- Djawas, Mursyid et al., "The Legal Position of Children of Incest (A Study of Madhhab Scholars and Compilation of Islamic Law)," *Samarah: Jurnal Hukum Keluarga dan Hukum Islam* 6, no. 1 (2022): 139-155. <https://doi.org/10.22373/sjkh.v6i1.11904>
- Fischer, Clara, Syahrul Hakim, and Dewi Arum Lestari, "Judges as Agents of Change: The Role of the Judiciary in Protecting Vulnerable Groups," *Indonesian Court and Justice Review* 1, no. 2 (2024). <https://doi.org/10.65815/01x9v021>
- Gostin, Lawrence O., Eric A. Friedman, and Sarah A. Wetter, "Responding to Covid-19: How to Navigate a Public Health Emergency Legally and Ethically," *Hastings Center Report* 50, no. 2 (2020): 8-12. <https://doi.org/10.1002/hast.1090>
- Hanafi, Agustin, and Mohamad Hedhayatullah Bin Mohamad, "Peran Bahagian Sokongan Keluarga dalam Masalah Pemenuhan Nafkah Isteri Pasca Perceraian (Studi Kasus di Mahkamah Tinggi Syariah Kedah, Malaysia)," *Media Syari'ah* 20, no. 1 (2020): 57-74. <https://doi.org/10.22373/jms.v20i1.6501>
- Heacock, Michelle et al., "E-Waste and Harm to Vulnerable Populations: A Growing Global Problem," *Environmental Health Perspectives* 124, no. 5 (2016): 550-555.
- Ibrahim, Badruddin Hj, and Azizah Mohd, "The Child's Right to Maintenance: The Extend of the Family's Responsibilities in Islamic Law and according to the Family Law Provisions of Muslim Countries," *Arab Law Quarterly* 25, no. 4 (2011): 401-422. <https://doi.org/10.1163/157302511x593512>
- Issa, Raid Hasan Mohammed Bani, Upi Komariah, and Cucu Susilawati, "Improving Accessibility and Justice: Reforming Indonesia's Religious Courts to Uphold Human Rights and Gender Equality," *International Journal of Intersectionality: Law and Gender* 1, no. 1 (2024): 1-15. <https://doi.org/10.63005/y9goj416>
- Khanif Rosidin, "Gandeng 50 Perusahaan, PA Gresik Pecahkan Rekor MURI Pemenuhan Hak Anak Pasca Cerai," *Info Gresik*, 2024, <https://infogresik.id/gandeng-50-perusahaan-pa-gresik-pecahkan-rekor-muri-pemenuhan-hak-anak-pasca-cerai/>

- Laldin, Mohammad Akram, "Understanding the Concept of Maslahah and Its Parameters When Used in Financial Transactions," *ISRA International Journal of Islamic Finance* 2, no. 1 (2010): 61–84. <https://doi.org/10.55188/ijif.v2i1.91>
- Mahkamah Agung Republik Indonesia, "MA Berkomitmen Memenuhi Hak-Hak Perempuan dan Anak," *Mahkamah Agung Republik Indonesia*, 2021, retrieved from <https://www.mahkamahagung.go.id/id/berita/4604/ma-berkomitmen-memenuhi-hak-hak-perempuan-dan-anak>
- Mahmod, Zulzaidi, Ahmad Hidayat Buang, and Afifah Baharuddin, "Cabaran Penguatkuasaan Penghakiman Mahkamah Syariah: Kajian Peranan Bahagian Sokongan Keluarga Terhadap Hak Wanita dan Kanak-Kanak di Sarawak," *Malaysian Journal of Social Sciences and Humanities (MJSSH)* 6, no. 10 (2021): 252–267. <https://doi.org/10.47405/mjssh.v6i10.1075>
- MARINews, "Praktik Perlindungan Pemenuhan Nafkah Bagi Mantan Istri dan Anak Setelah Cerai di Tiga Negara," *Mahkamah Agung Republik Indonesia*, 2025, retrieved online from <https://marinews.mahkamahagung.go.id/hukum/praktik-perlindungan-pemenuhan-nafkah-bagi-mantan-istri-odV>
- Michelson, Ethan, "Decoupling: Marital Violence and the Struggle to Divorce in China," *American Journal of Sociology* 125, no. 2 (2019): 325–381. <https://doi.org/10.1086/705747>
- Musaddad, Endad et al., "Guaranteeing the Rights of Children and Women Post-Divorce: A Comparative Study Between Indonesia and Malaysia," *Volksgeist: Jurnal Ilmu Hukum dan Konstitusi* 8, no. 1 (2025): 1–14. <https://doi.org/10.24090/volksgeist.v8i1.12214>
- Nasution, Hotnidah, and Ahmad Rifqi Muchtar, "Access to Justice for Women and Children in Divorce Cases in the Indonesian Religious Courts," *Ahkam: Jurnal Ilmu Syariah* 20, no. 2 (2020): 361–384. <https://doi.org/10.15408/ajis.v20i2.15702>
- Pengadilan Agama Bontang, "Tandatangan Nota Kesepahaman dengan Pemerintah Kota Bontang, Ketua PA Bontang: Perlindungan Anak dan Perempuan Pasca Perceraian Bagi ASN Daerah Harus Melalui Pemotongan Gaji," *Pengadilan Agama Bontang*, 2024, <https://pa-bontang.go.id/berita-seputar-pengadilan/2043-tandatangan-nota-kesepahaman-dengan-pemerintah-kota-bontang-ketua-pa-bontang-perlindungan-anak-dan-perempuan-pasca-perceraian-bagi-asn-daerah-harus-melalui-pemotongan-gaji>
- Pengadilan Tinggi Agama Bengkulu, "Penandatanganan Kerja Sama Pengadilan Tinggi Agama Bengkulu, Pemerintah Provinsi Bengkulu dan Bank Bengkulu Untuk Penerapan Aplikasi E-Mosi Caper: Revolusi Perlindungan Hak Perempuan Dan Anak Pasca Perceraian," *Pengadilan Tinggi Agama Bengkulu*, 2024, <https://www.pta-bengkulu.go.id/seputar-peradilan/1895-penandatanganan-kerja-sama-penerapan-aplikasi-e-mosi-caper-oleh-pengadilan-tinggi-agama-bengkulu-pemerintah-provinsi-bengkulu-dan-bank-bengkulu>

- Rahmawati, Rahmawati et al., "Dis-Implementation of the Islamic Family Law in Fulfilling the Rights of Ex-Wives After Divorce in Indonesia," *Samarah: Jurnal Hukum Keluarga dan Hukum Islam* 9, no. 1 (2025): 538-559. <https://doi.org/10.22373/sjhk.v4i2.8110>
- Saputra, Wahyu, Muhammad Ali Murtadlo, and Aftab Haider, "Challenges in Upholding Women's Post-Divorce Rights: Experiences From Legal Practitioners in the Mataraman Region, East Java," *Al-Hukama* 14, no. 1 (2024): 46-73. <https://doi.org/10.15642/alhukama.2024.14.1.46-73>
- Siregar, Yani Arfianti et al., "Legal Certainty of the Rights of Wives and Children After Divorce," *Jurnal El Syakhshi* 1, no. 1 (2023): 25-32. <https://doi.org/10.69637/jelsy.v1i1.10>
- Suadi, Amran. "Peranan Peradilan Agama dalam Melindungi Hak Perempuan dan Anak Melalui Putusan Yang Memihak dan Dapat Dilaksanakan: The Role of Religious Court in Women and Children Rights Protection Through Partial and Executable Decision," *Jurnal Hukum dan Peradilan* 7, no. 3 (2018): 353-374. <https://doi.org/10.25216/jhp.7.3.2018.353-374>
- Suadi, Amran. "Protection of Women's and Children's Rights Based on System Interconnection: A New Paradigm of Execution of Women and Children's Rights after Divorce," *Jurnal Hukum dan Peradilan* 11, no. 3 (2022): 499-522. <https://doi.org/10.25216/jhp.11.3.2022.499-522>
- Suadi, Amran. "Tanggapan Ilmiah dalam Webinar: 'Praktik Perlindungan Pemenuhan Nafkah Bagi Mantan Istri dan Anak Pasca Perceraian di Indonesia, Brunei Darussalam dan Malaysia,'" *Presented on Webinar Internasional Mahkamah Agung Republik Indonesia, Mahkamah Syar'iyah Brunei Darussalam dan Mahkamah Syar'iyah Malaysia*, held on Jakarta, March 19, 2025.
- Sumanto, Dedi, Titin Samsudin, and Fikri Hi. Asnawi Amirudin, "The Existence of the Religious Court in Handling Divorce Cases on the Reason of Domestic Violence," *Jambura Law Review* 3, no. 2 (2021): 214-230. <https://doi.org/10.33756/jlr.v3i2.11651>
- Syaima, Arwa, Widiyanto Widiyanto, and Nemer Alotaiby, "The Development of Marital Rape in Islamic Family Law Reform," *Mizan: Journal of Islamic Law* 8, no. 2 (2024): 139-156. <https://doi.org/10.32507/mizan.v8i2.3168>
- Syukrawati, Syukrawati et al., "Post-Divorce Rights of Women and Children in Pekalongan City, Central Java: Challenges in Islamic Law Analysis," *Al-Ahkam* 34, no. 1 (2024): 121-146. <https://doi.org/10.21580/ahkam.2024.34.1.20624>
- Williams, David R., Naomi Priest, and Norman B. Anderson, "Understanding Associations among Race, Socioeconomic Status, and Health: Patterns and Prospects.," *Health Psychology* 35, no. 4 (2016): 407-411.
- Wulandari, Cahya, and Winarsih Winarsih. "Women's Rights in Indonesia: Gender-Based Violence and the Challenge of Legal Protection,"

Contemporary Issues on Indonesian Human Rights Law and Policy
1, no. 4 (2024). <https://doi.org/10.65815/yqe5k217>

Yasardin, Yasardin, "Praktik Perlindungan Pemenuhan Nafkah Bagi Mantan Istri dan Anak Pasca Perceraian di Indonesia," *Paper*, Presented on Webinar Internasional Mahkamah Agung Republik Indonesia, Mahkamah Syar'iyah Brunei Darussalam dan Mahkamah Syar'iyah Malaysia, held on Jakarta, March 19, 2025.

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