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The Right to A Healthy Environment Vs. Climate-Induced Urban Child Poverty

Kassim Wahab [1], Tajudeen Sanni [2], Nur Fareha [3] & Saim Celik [4]

[1] Faculty of Law, Universitas Islam Sultan Agung (UNISSULA) Semarang, Indonesia, E-mail: wah.kas@gmail.com

[2] Faculty of Law, Universitas Islam Sultan Agung (UNISSULA) Semarang, Indonesia, E-mail: wah.kas@gmail.com

[3] Faculty of Law, Universitas Islam Sultan Agung (UNISSULA) Semarang, Indonesia, E-mail: wah.kas@gmail.com

[4] Faculty of Law, Universitas Islam Sultan Agung (UNISSULA) Semarang, Indonesia, E-mail: wah.kas@gmail.com

Abstract. *Climate change is accelerating rural-to-urban migration across Africa, the Mediterranean and Middle East. For children in migrant families, arrival in cities often means a trade-off: leaving climate-exposed rural areas for urban settlements that are themselves hotspots for heat islands, air pollution, and inadequate housing. This paper examines the tension between two emerging rights frameworks: the UN-recognized right to a healthy environment, and children's rights under the Convention on the Rights of the Child, specifically Articles 24 and 27 (adequate standard of living]. Focusing on secondary cities and urban peripheries that receive climate migrants, I argue that current adaptation and urban planning policies frequently overlook migrant children's disproportionate environmental exposure. Using a rights-based lens, the study asks: 1) How does climate-induced urbanisation shift environmental health risks onto children in informal or low-income neighborhoods? 2) To what extent do municipal adaptation funds and child protection systems integrate migration status and age as vulnerability factors? The paper concludes that without explicit recognition of "climate-migrant childhood" in urban policy, the right to a healthy environment risks becoming unevenly distributed by age, origin, and place of settlement.*

Keywords: *Climate Change; Child Peverty; Healthy Environment.*

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1. Introduction

Climate change is no longer a distant environmental threat; it has evolved into a global crisis that fundamentally redefines human mobility, urban demographics, and structural inequality. Across vulnerable regions-particularly Africa, the Mediterranean, and the Middle East-deepening environmental degradation, prolonged droughts, extreme heat events, and agricultural decline are accelerating rural-to-urban migration. Rural households, stripped of their traditional climate-dependent livelihoods, increasingly view urbanization not as an opportunistic pursuit of economic advancement, but as a critical survival strategy. However, the promise of urban refuge often proves illusory. Upon arrival in primary and secondary cities, climate-induced migrants are frequently displaced into informal settlements, informal peri-urban zones, and low-income neighborhoods characterized by severe infrastructural deficits, intense urban heat island effects, acute air pollution, and inadequate sanitation infrastructure.

Within this socio-spatial shift, children represent the most vulnerable yet systematically overlooked demographic. When migrant families settle in precarious urban margins, children undergo a structural trade-off: escaping rural environmental hazards only to be plunged into concentrated urban environmental health risks. Climate-induced urban child poverty is thus not merely an economic status, but a multi-dimensional vulnerability where low household income intersects with severe environmental deprivation. Children's developing physiology, higher metabolic intake, and behavioral patterns render them disproportionately susceptible to environmental toxins, heat stress, vector-borne diseases, and respiratory illnesses caused by poor air quality and substandard housing. Consequently, the rapid influx of climate-impacted populations into unprepared urban environments creates an urgent crisis at the intersection of public health, urban governance, and human rights.

From a legal and normative perspective, this crisis exposes a critical tension between emerging international environmental norms and established child protection frameworks. In 2022, the United Nations General Assembly formally recognized the universal right to a clean, healthy, and sustainable environment. Furthermore, the UN Committee on the Rights of the Child reinforced this commitment through General Comment No. 26 (2023), which explicitly highlights children's rights and the environment with a specific focus on climate change.

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These developments build upon foundational guarantees under the United Nations Convention on the Rights of the Child (UNCRC), notably Article 24 (the right of the child to the enjoyment of the highest attainable standard of health and protection from environmental pollution) and Article 27 (the right of every child to a standard of living adequate for physical, mental, spiritual, moral, and social development).

Despite these progressive international instruments, a substantial gap persists between normative legal recognition and local policy execution. Municipal adaptation strategies, urban master planning, and child protection systems in secondary cities and urban peripheries rarely integrate "age" and "migration status" as intersecting indicators of environmental vulnerability. Adaptation funds are overwhelmingly funneled into large-scale grey infrastructure projects rather than targeted social and environmental protection for marginalized children. As a result, the practical enjoyment of the right to a healthy environment remains deeply unequal-stratified by age, socio-economic background, legal status, and spatial settlement.

To address these critical regulatory and policy gaps, this paper critically examines the intersection of child rights, urban climate adaptation, and environmental justice. Guided by a rights-based analytical lens, this study addresses two central research questions:

How does climate-induced urbanization shift environmental health risks onto children residing in informal or low-income urban neighborhoods?

To what extent do municipal adaptation frameworks and child protection systems integrate migration status and age as intersecting vulnerability factors?

By investigating these questions, this paper argues that without explicit legal and policy recognition of "climate-migrant childhood" within urban governance, the right to a healthy environment risks becoming a conditional privilege rather than a universal right. Ultimately, this study aims to propose actionable indicators and rights-based accountability mechanisms designed to bridge the gap between international child rights obligations and municipal climate adaptation strategies.

2. Research Methods

This study employs a qualitative research design integrating doctrinal legal research (yuridis normatif) and a socio-legal analytical approach. The combination of these methods is essential to bridge the gap between abstract international legal norms regarding environmental human

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rights and the structural, empirical realities of climate-induced urban child poverty in recipient secondary cities and urban peripheries.

2.1. Research Approach

a. Doctrinal Legal Approach (*Yuridis Normatif*): Used to examine the legal force, coherence, and scope of existing international human rights instruments and child protection standards. This approach critically evaluates the normative content of the UN-recognized right to a clean, healthy, and sustainable environment alongside specific provisions under the United Nations Convention on the Rights of the Child (UNCRC).

b. Socio-Legal Approach: Used to analyze how legal frameworks operate within complex social, economic, and environmental contexts. Since legal doctrines alone are insufficient to address structural inequalities, the socio-legal perspective facilitates an examination of municipal policy execution, climate adaptation funding distribution, and the lived spatial experiences of climate-migrant children in informal urban settlements.

2.2. Data Sources and Material Selection

The data for this study consists entirely of secondary data, categorized into three distinct legal and academic materials:

a. Primary Legal Materials (*Bahan Hukum Primer*): Authoritative legal instruments, including international treaties, conventions, declarations, and general comments. Key instruments analyzed include:

1) United Nations Convention on the Rights of the Child (UNCRC), specifically Articles 24 (Health and Environment) and 27 (Adequate Standard of Living).

2) UN General Assembly Resolution 76/300 on the Human Right to a Clean, Healthy, and Sustainable Environment (2022).

3) UN Committee on the Rights of the Child General Comment No. 26 on Children's Rights and the Environment with a Special Focus on Climate Change (2023).

4) Selected national legal frameworks and municipal climate adaptation mandates relevant to urban governance in vulnerable receiving regions.

b. Secondary Legal Materials (*Bahan Hukum Sekunder*): Peer-reviewed journal articles, scholarly books, reports by international development agencies (e.g., UNICEF, IPCC, UN-

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Habitat, IOM), and policy briefs addressing climate-induced migration, urban heat islands, child poverty indicators, and spatial environmental justice.

c. Tertiary Legal Materials (*Bahan Hukum Tersier*): Legal dictionaries, encyclopedias, and official legal indices used to clarify terminology and operational definitions.

3. Results and Discussion

3.1. The Structural Shift of Environmental Health Risks onto Children in Informal Urban Settlements

The process of climate-induced rural-to-urban migration is frequently framed as a form of autonomous adaptation-a rational household strategy to escape severe agricultural losses, water scarcity, and ecological degradation in rural origin areas. However, empirical and socio-legal analysis reveals that for children, this movement often constitutes a spatial transposition of risk rather than a genuine mitigation of harm. Upon arriving in secondary cities and urban peripheries across vulnerable regions in Africa, the Mediterranean, and the Middle East, climate-migrant families are overwhelmingly absorbed into informal settlements and low-income peri-urban peripheries. In these spaces, children experience a distinct multi-dimensional phenomenon: climate-induced urban child poverty.

Unlike adult poverty, which is primarily measured by financial income, child poverty in urban receiving areas is fundamentally characterized by environmental deprivation. Low-income urban peripheries are spatial hotspots for severe environmental hazards, including the microclimatic phenomenon known as the Urban Heat Island (UHI) effect, heavy ambient and indoor air pollution, uncontrolled vector breeding, and inadequate water, sanitation, and hygiene (WASH) infrastructure.

From a physiological and developmental standpoint, children absorb environmental stressors far more acutely than adults. Their immature immune, respiratory, and thermoregulatory systems, combined with a higher metabolic intake of air and water relative to body mass, render them uniquely vulnerable to environmental toxins and extreme thermal stress. In poorly ventilated, informal housing constructed from heat-trapping materials like corrugated metal sheets, prolonged exposure to extreme heat leads to acute dehydration, heat exhaustion, and impaired cognitive development. Furthermore, high concentrations of ambient fine particulate matter (PM_2.5) in dense urban margins trigger chronic respiratory infections and stunt pulmonary growth, directly undermining the child's fundamental right to survival and development.

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This spatial shifting of environmental risk creates a severe tension with international legal guarantees. Under Article 24 of the United Nations Convention on the Rights of the Child (UNCRC), States Parties are explicitly obligated to take appropriate measures to diminish infant and child mortality, combat disease and malnutrition, and consider the dangers and risks of environmental pollution. Additionally, UNCRC Article 27 guarantees every child a standard of living adequate for their physical, mental, spiritual, moral, and social development. When climate-migrant children are systematically exposed to toxic, heat-stressed urban environments without adequate infrastructure, their right to an adequate standard of living is violated not merely by household income deficits, but by structural state neglect of their immediate living environment.

Consequently, the right to a clean, healthy, and sustainable environment-formally recognized in UN General Assembly Resolution 76/300-is rendered non-functional for urban migrant children. Rather than serving as a protective baseline, the environmental conditions in informal receiving settlements perpetuate a cycle of intergenerational poverty, where early childhood environmental trauma damages physical health and long-term educational attainment.

3.2. Institutional Gaps in Municipal Adaptation Frameworks and Child Protection Systems

Although international jurisprudence has progressively established the obligation of states to protect children from climate-related harm-most notably synthesized in the UN Committee on the Rights of the Child's General Comment No. 26 (2023)-a profound institutional and administrative disconnect persists at the local governance level. Municipal adaptation strategies and national child protection systems in climate-impacted regions consistently fail to integrate "age" and "migration status" as intersecting factors of extreme vulnerability.

A primary institutional obstacle lies in the structural allocation of municipal adaptation funds. Local municipal budgets in secondary receiving cities are predominantly oriented toward capital-intensive, macro-scale "grey" infrastructure-such as seawalls, major highway flood barriers, and commercial district drainage systems. These financial investments regularly bypass informal peri-urban settlements where climate migrants reside. Because municipal planning frameworks frequently view informal settlements as illegal encroachments, local authorities hesitate to deploy adaptation financing for basic environmental remediation, thermal-resilient social housing, or green urban spaces in these areas. Consequently, climate finance fails to reach the micro-environments where marginalized children spend their critical developmental years.

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Simultaneously, traditional child welfare systems operate in silos separate from climate adaptation bodies. Standard child protection mechanisms focus almost exclusively on civil registration, domestic abuse, basic primary education, and emergency food aid, treating environmental degradation as an external, irrelevant factor. They lack the institutional capacity, diagnostic indicators, and cross-sectoral mandates needed to identify and mitigate climate-induced environmental hazards affecting children.

Furthermore, migration status acts as an administrative barrier that compounds age-based vulnerability. Climate-induced internal migrants often lack formal registration in host municipalities. This legal invisibility restricts their access to state-subsidized healthcare, municipal emergency response protocols, and child nutrition programs. When municipal adaptation frameworks do not explicitly recognize internal climate migrants, migrant children become invisible within official vulnerability mapping and climate risk assessments.

As demonstrated in the table above, the failure of municipal governance to bridge environmental planning with child protection leads to a systemic infringement of non-discrimination principles under Article 2 of the UNCRC. When local adaptation policies withhold protective measures based on a family's settlement location or administrative status, the right to a healthy environment becomes stratified. In practice, environmental health becomes a commodity enjoyed by non-migrant, middle-to-high-income urban children, while climate-migrant children are forced to endure concentrated environmental degradation.

To bridge this institutional gap, local governments must replace siloed policymaking with an integrated legal framework that explicitly recognizes "climate-migrant childhood." This requires embedding child-sensitive indicators-such as localized air quality monitoring around schools, heat-resilient shelter guidelines, and barrier-free municipal services for non-registered families-directly into urban climate resilience strategies.

3.3. Rights-Based Accountability Framework and Indicators for Inclusive Urban Climate Adaptation

To resolve the structural tension between urban adaptation policy and child poverty, local governance must move beyond passive human rights declarations toward an operationalized, rights-based accountability framework. Under international law, particularly the principle of progressive realization (UNCRC Article 4), states and municipal authorities possess an affirmative legal duty to allocate the maximum extent of available resources to protect vulnerable children from environmental harm. Bridging the divide between international

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jurisprudence and local municipal execution requires establishing concrete child-sensitive climate indicators and legal accountability mechanisms.

A rights-based approach demands that municipal climate resilience strategies replace generic vulnerability metrics with age-aggregated and spatially sensitive indicators. Rather than measuring adaptation success solely through macro-economic resilience or municipal infrastructure expenditure, cities must measure outcomes through the direct impact on children's immediate micro-environments. Indicator Category Operational Metric / Standard Legal Basis (UNCRC & UNGA) Municipal Policy Goal Micro-Environmental Quality Spatial density of localized $PM_ {2.5} monitoring and thermal refuges within 500m of informal school zones. UNCRC Art. 24 (Environmental Pollution) & UNGA Res 76/300Neutralize urban heat islands and toxic air exposure in low-income neighbor hoods. Infrastructural Equity Percentage of informal/peri-urban migrant households with direct access to safe WASH infrastructure. UNCRC Art. 27 (Adequate Standard of Living) Eliminate water- and vector-borne health risks among migrant children. Administrative Access Zero-barrier access rate to municipal health, nutrition, and emergency services regardless of registration status. UNCRC Art. 2 (Non-Discrimination) Eradicate legal invisibility barriers for internal climate-migrant families. Participatory Governance Institutional channels for child and youth consultation in municipal adaptation planning. UNCRC Art. 12 (Child's Right to be Heard) & General Comment 26Incorporate youth-lived experiences into local climate action plans. Beyond quantitative indicators, institutional accountability requires legal and procedural safeguards to hold municipal actors accountable for environmental neglect. First, municipal planning bodies must mandate Child Rights Environmental Impact Assessments (CR-EIA) prior to the approval of major urban development or climate adaptation funds. A CR-EIA evaluates whether proposed spatial plans or infrastructure projects adequately safeguard low-income migrant children or if they risk exacerbating spatial displacement and environmental exposure. Second, local governments should establish independent oversight bodies, such as a Municipal Environmental Ombudsperson for Children. Acting as a specialized administrative watchdog, this office receives complaints regarding environmental rights violations in informal settlements, monitors local compliance with UNCRC General Comment No. 26, and possesses legal standing to challenge discriminatory municipal resource allocations in administrative courts. Finally, operationalizing this framework necessitates a strategic shift in climate finance distribution. Municipalities must institutionalize "child-ringfenced adaptation budgeting," ensuring that a binding minimum percentage of municipal climate adaptation funds is directly funneled into micro-infrastructure projects within informal receiving settlements. By aligning municipal planning metrics, legal oversight, and budget allocation with child rights obligations,

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urban centers can ensure that the right to a clean, healthy, and sustainable environment is guaranteed to every child, regardless of age, origin, or spatial settlement.

4. Conclusion

This study demonstrates that climate-induced rural-to-urban migration across vulnerable regions in Africa, the Mediterranean, and the Middle East often results in a spatial transposition of risk rather than a resolution of ecological displacement. For children of migrant families, arrival in secondary cities and urban peripheries forces a severe trade-off: escaping rural agricultural collapse only to be exposed to acute urban environmental hazards, including intense urban heat island effects, severe air pollution, and inadequate sanitation infrastructure. This intersection of low household income and structural environmental deprivation defines climate-induced urban child poverty-a status that directly undermines children's physical development, health, and fundamental rights under Articles 24 and 27 of the UN Convention on the Rights of the Child (UNCRC). Furthermore, the legal analysis reveals a critical disconnect between normative international legal frameworks-such as UN General Assembly Resolution 76/300 and CRC General Comment No. 26-and local governance execution. Municipal climate adaptation strategies overwhelmingly prioritize large-scale grey infrastructure in formal commercial zones, while child protection systems continue to treat environmental degradation as an external factor. Because informal receiving settlements are often marginalized or unrecognized by urban planning frameworks, and because internal migration status presents administrative barriers, the universal right to a clean, healthy, and sustainable environment becomes deeply stratified along lines of age, origin, and spatial settlement. To operationalize the right to a healthy environment and prevent climate adaptation from becoming a selective privilege, municipal authorities, urban planners, and child welfare institutions must adopt targeted, cross-sectoral interventions. This study proposes the following actionable legal and policy recommendations:

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