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Environmental and Health Challenges of Living on Dumpsite: A Study of Soluos Dumpsite, Lagos State

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A B S T R A C T

The fast-paced urbanisation in Lagos State has led to the encroachment of residential settlements onto the boundaries of major landfills, most notably the Soluos dumpsites in Igando. This study probes into the environmental and health challenges faced by residents living in proximity to these non-engineered landfills. Using a qualitative method of data collection, data were collected through in-depth interviews to gain rich insights into the realities of the residents and the prevalence of diseases among them. Findings reveal significant environmental degradation characterized by unbearable odour nuisance, frequent landfill fires releasing toxic fumes, and heavy metal contamination of groundwater (leachate infiltration) in nearby boreholes. Health assessments indicate a high prevalence of malaria, respiratory tract infections, skin rashes, and water-borne diseases such as typhoid and cholera among the sampled population. The study establishes a significant correlation between the duration of residency near the dumpsite and the severity of health outcomes. Furthermore, the proximity of the Alimosho General Hospital and local educational institutions to the site exacerbates the public health risk. The study concludes that the Soluos dumpsite in its current state is unsuitable for its environment and recommends immediate waste-to-energy interventions, regular fumigation and odour control and a phased decommissioning or closure of the site to protect the health of the Igando community

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INTRODUCTION

The metamorphosis of Lagos into a megacity has been characterized by a paradoxical relationship between rapid urbanization and ecological preservation. Nowhere is this tension more visible than in the Igando-Soluos corridor, where the aggressive encroachment of residential settlements onto unregulated landfills has forged a perilous intersection of environmental toxicity and human habitation. While the broader discourse on African urbanism frequently highlights the dangers of such waste-scapes, existing literature predominantly treats these communities as passive victims of institutional neglect. This creates a significant void; while the scientific community understands ''the what'' (the presence of pollutants), there remains a profound lack of empirical clarity regarding the ''how'' (the systemic failures of governance) and ''the who'' (the localized coping mechanisms of the residents).

Central to this investigation is the need to move beyond speculative harm and toward a data-driven baseline of environmental degradation. To this end, the study seeks to critically evaluate the extent of soil and groundwater contamination in the residential areas immediately peripheral to the Soluos dumpsite. By establishing this physical baseline, the research provides the necessary empirical weight to the anecdotal claims of environmental peril that define the Igando landscape. This environmental audit is not merely an exercise in toxicology but a prerequisite for understanding the physiological toll on the citizenry. Consequently, the research aims to assess the prevalence of respiratory, waterborne, and skin-related illnesses among residents, specifically framing these health outcomes as a direct, quantifiable consequence of prolonged dumpsite proximity rather than incidental urban ailments.

Furthermore, the persistence of vulnerability in Soluos is not merely a by-product of proximity to waste, but a symptom of a protection gap in urban governance. The Igando-Soluos corridor remains a site of under-explored legal empowerment and protective oversight, where the socio-institutional mechanisms designed to safeguard public health often falter. To address this, this study investigates the efficacy of existing waste management policies alongside the informal mitigation strategies developed by the residents themselves. By identifying these systemic gaps, the research seeks to uncover untapped opportunities for community-led urban planning. Ultimately, this work moves beyond a simple tally of health risks; it investigates the lived experiences and survival strategies of the urban poor to propose a roadmap for reform. By integrating grassroots resilience into formal policy frameworks, the study envisions a transition for Soluos from a site of social exclusion and toxicity into a pioneering model for community-led environmental resilience and waste-to-energy intervention.

LITERATURE RIVIEW

The environmental degradation at the Soluos dumpsite is a multi-dimensional crisis characterized by the interaction between decomposing waste and the local hydrogeology. The primary driver of ecological decay in the Igando area is the generation and subsequent migration of leachate. Salami and Susu (2019) define this toxic liquid as the byproduct of water filtering through decomposing organic and inorganic waste. Utilizing the Leachate Pollution Index (LPI), their research quantified the hazard, concluding that the Soluos site significantly exceeds safe regulatory limits. The movement of this contaminant is not static; it is a vertical and lateral process. Olorode and Alao (2013) utilized geo-electrical investigations to delineate how conductive leachate plumes penetrate the unsaturated soil zone. Their findings demonstrate that these plumes effectively infiltrate the groundwater table, turning the subsurface into a permanent sink for persistent pollutants. Long-term ecological risks at Soluos are compounded by the accumulation of heavy metals in the soil. Research by Majolagbe et al. (2016) highlights that concentrations of Lead (Pb), Cadmium (Cd), and Chromium (Cr) do more than just degrade soil fertility; they pose a systemic threat to the human food chain. Through the process of bioaccumulation, these metals enter local vegetation and livestock, eventually reaching human consumers. These technical findings provide a scientific baseline for the lived experiences of residents, who report a visible decline in environmental and personal health.

The subsurface migration of pollutants has direct, measurable consequences for local water resources. Using multivariate statistical techniques, Osibanjo et al. (2011) analysed groundwater samples near the site and found that key parameters, including Total Dissolved Solids (TDS), Electrical Conductivity, and Iron (Fe), frequently exceed the thresholds established by the World Health Organization (WHO) and the Nigerian Standard for Drinking Water Quality (NSDWQ). Furthermore, the threat extends beyond chemical markers to biological contamination. Recent microbiological examinations by Tecno Scientifica (2024) revealed non-permissible levels of coliform bacteria in boreholes located as far as 400 meters from the dumpsite perimeter. This suggests that the radius of impact for waterborne pathogens is significantly wider than previously estimated in urban planning frameworks. A primary concern for residents near Soluos is the prevalence of skin and respiratory ailments caused by atmospheric and domestic exposure. Abiola (2021) observed that households in close proximity to the landfill experienced significantly higher rates of skin rashes and wheezing compared to distant control groups, attributing this to the inhalation of airborne particulates and chemical vapours. This respiratory distress is often exacerbated by open-air management practices; Aderemi and Falade (2012) argue that foul odours and toxic smoke from frequent waste burning at the site cause direct nausea and persistent headaches. Furthermore, the risk is not limited to air quality; Osibanjo et al. (2017) noted that chronic skin conditions are frequently the result of heavy metal exposure through contaminated groundwater used for domestic bathing.

The Soluos landfill serves as a prolific breeding ground for disease vectors, significantly increasing the infectious disease burden of Igando. Salami and Susu (2020) identified a direct correlation between residential proximity to the site, and the frequency of malaria, as stagnant leachate pools and discarded containers provide ideal habitats for mosquitoes. These findings are supported by ClinMed (2022), which reported that 42% of households within a 500-meter radius identified malaria and skin infections as their primary health challenges. These trends mirror regional findings in West Africa, such as the high prevalence of cholera, diarrhoea, and typhoid reported by Coffie (2010) near Ghana's Oblogo landfill, and similar malaria trends noted by Okafor et al. (2024) in Enugu. Beyond localized infections, the literature suggests deeper, systemic health risks associated with long-term residency near hazardous waste. The landmark EUROHAZCON study (Dolk et al., 1998) discovered a 33% increase in non-chromosomal birth defects among populations living within 3 km of hazardous sites, pointing toward potential reproductive risks for the Igando community. Consequently, Adeoye and Okeleke (2022) conclude that the Soluos 1–3 sites no longer meet Environmental Protection Agency (EPA) safety criteria, representing a failure of protective governance that significantly degrades the quality of life and socio-economic opportunities of the neighbouring population.

While the Lagos Waste Management Authority (LAWMA) operates under a strategic mandate to transition from open dumping to sanitary landfilling, the Soluos site remains a non-engineered facility. Salami and Susu (2019) contend that the site lacks the fundamental liner systems and leachate treatment infrastructure mandated by modern standards. This structural stagnation is worsened by socioeconomic biases in service delivery; Ojo (2014) notes that while Private Sector Participation (PSP) policies aimed to increase collection efficiency, they disproportionately favour high-income districts, leaving peripheral communities like Igando to serve as the city's primary waste sink. A secondary institutional failure exists in the realm of urban planning, specifically regarding the enforcement of No-Development Buffer Zones. Although designed to separate residential life from hazardous waste, Olasokan and Toki (2022) found that these zones in Igando have been entirely undermined by rapid, uncontrolled urbanization and weak enforcement of physical planning laws. The resulting lack of a buffer zone forces dwellings to share immediate boundaries with the dumpsite, rendering localized mitigation, such as periodic fumigation, largely ineffective against the constant influx of vectors and malodors (*The Guardian Nigeria*, 2023). Current discourse has shifted toward Waste-to-Wealth initiatives as a sustainable alternative, yet implementation remains stalled. The World Bank (2025) reports that these programs are hampered by significant infrastructural deficits and a lack of public trust in state-led recycling schemes. In the absence of structured state intervention, the most effective current mitigation is informal, driven by waste pickers who reduce non-biodegradable volumes. However, because these informal strategies lack official policy integration, the Igando community remains without a structured safety net, bearing the full brunt of the site's socio-environmental impact.

Theoretical Orientation

The Environmental Justice Theory

Environmental Justice Theory (EJT) provides a robust conceptual framework for analysing the unequal distribution of environmental risks and benefits across different social groups. At its core, the theory challenges the assumption that environmental harms are randomly distributed, arguing instead that exposure to environmental hazards is structured along lines of socioeconomic status, race, class, and political power (Bullard, 1990; Schlosberg, 2007). EJT emphasizes that marginalized populations—particularly low-income communities and politically disenfranchised groups—are more likely to live in close proximity to environmentally hazardous facilities such as landfills, toxic waste sites, and polluting industries, thereby bearing a disproportionate burden of environmental degradation (Mohai, Pellow, & Roberts, 2009).

The theory further posits that environmental injustice is not merely a product of market forces or urban growth but is deeply rooted in systemic governance failures, institutional neglect, and unequal access to decision-making processes (Agyeman, Bullard, & Evans, 2003). Communities that lack economic resources and political leverage are often excluded from environmental planning and regulatory oversight, rendering them vulnerable to persistent exposure to pollution and environmental health risks. This exclusion undermines both distributive justice—fair allocation of environmental goods and harms—and procedural justice—the right of affected communities to participate meaningfully in environmental governance (Schlosberg, 2013).

Within the context of the Soluos Dumpsite, Environmental Justice Theory offers a compelling explanation for the transformation of the Igando corridor into what can be described as an environmental sacrifice zone. Rapid urban expansion in Lagos has intensified land-use pressures, leading to the siting and continued operation of waste disposal facilities in peri-urban and low-income residential areas where land values are lower and resistance is minimal (Adeyemi, Olorunfemi, & Adewoye, 2014). Weak regulatory enforcement and inconsistent environmental monitoring by relevant authorities further exacerbate this situation, allowing hazardous waste management practices to persist with limited accountability (Ogwueleka, 2009).

Moreover, the socioeconomic vulnerability of residents in the Igando corridor—characterized by poverty, informal housing, and limited access to political representation—aligns closely with EJT's assertion that marginalized populations are systematically exposed to environmental risks (Bullard & Wright, 2012). The proximity of residential settlements to the Soluos Dumpsite increases residents' exposure to air pollution, groundwater contamination, and associated public health risks, while simultaneously limiting their capacity to seek redress or relocation. In this regard, EJT not only illuminates the structural inequalities that underpin environmental harm in the study area but also underscores the broader implications of environmental governance failures in rapidly urbanizing cities in the Global South.

Overall, Environmental Justice Theory provides a critical lens through which the environmental and social dynamics surrounding the Soluos Dumpsite

can be understood. By linking environmental degradation to issues of power, inequality, and institutional neglect, the theory highlights the need for inclusive environmental policies, strengthened regulatory frameworks, and community participation in waste management decisions to achieve sustainable and equitable urban development.

METHODOLOGY

This study employed a qualitative phenomenological research design to examine the lived experiences of residents living in close proximity to the Soluos 3 dumpsite. The phenomenological approach enabled an in-depth exploration of participants' perceptions and meanings attached to their socio-environmental and health realities, which are often insufficiently captured through quantitative methods.

The study was conducted at the Soluos 3 dumpsite in Igando, Alimosho Local Government Area (LGA), Lagos State. Alimosho is the most populous LGA in Lagos, and the spatial intersection of dense residential settlements with one of the state's largest landfill sites presents a critical context for environmental conflict and public health concern.

The study population comprised long-term residents who had lived within a 500-metre radius of the dumpsite for at least seven years. This duration was considered sufficient to ensure prolonged exposure and informed observations of environmental conditions and associated health outcomes.

Participants were selected using a purposive sampling technique to identify information-rich cases relevant to the study objectives. A total of twenty participants (N = 20), aged 18 years and above and resident in the Igando–Soluos corridor for a minimum of seven years, were recruited. The sample size was determined by data saturation, achieved when no new themes emerged from successive interviews.

Primary data were collected through in-depth interviews using a semi-structured interview guide. Verbal informed consent was obtained from all participants after full disclosure of the study's purpose and ethical considerations. Interviews were conducted in private, neutral settings, and audio-recorded with participants' permission to ensure accuracy. To maintain confidentiality, all respondents were assigned pseudonyms (e.g., P1, P2).

Data were analysed using thematic content analysis. Audio recordings were transcribed verbatim and repeatedly reviewed to achieve familiarisation. The transcripts were then coded, and related codes were clustered into overarching themes aligned with the study objectives, namely environmental justice, health risks, and governance gaps.

RESULT

Atmospheric and Vector-Borne Environmental Degradation

There was a significant consensus among participants regarding the sensory and biological impact of the Soluos 3 site. Residents described a stench that serves as a constant background to daily life, directly linked to air pollution and the proliferation of disease vectors.

"The environment dey very bad and flies dey everywhere. I just sell food to some people now and they throw am away because of fly. After selling the food, the flies dey perch their foods. E no end there; the smell for morning time and when rain fall, e dey heavy for chest. Sometimes, you go see say water for well go change colour, and our children go dey scratch their skin every night. This dumpsite don spoil our market; people dey fear to buy food here because they think say we dirty, but no be our fault. We dey try cover the food, we dey buy insecticide, but the fly and the bad air pass our power. Government just leave us here make we dey suffer with the waste." *(IDI/Female/36/Trader/Igbo)*

Interpretation

"The narrative provided by the participant offers a multidimensional look into the socio-economic and physiological toll of residing in the Igando-Soluos corridor. Her account transcends a mere complaint about hygiene; it serves as a critical indicator of the environmental injustice prevalent in unregulated urban spaces. The participant highlights a direct causal link between environmental degradation and economic disenfranchisement. As a food trader, her livelihood is predicated on the perception of cleanliness. The "invasion of flies" serves as a biological marker of the dumpsite's proximity, leading to immediate financial loss when customers discard purchased meals. This illustrates that the Soluos dumpsite is not just a health hazard but an economic barrier that traps local entrepreneurs in a cycle of poverty, as they must expend more resources on mitigation (insecticides, covers) while facing a dwindling customer base. Her mention of the smell being "heavy for chest," particularly during high humidity or rainfall, aligns with the physiological risks of methane and hydrogen sulphide emissions common in decomposing waste. This "heaviness" suggests that the community is experiencing chronic respiratory strain, which often goes undiagnosed in formal medical records but remains a constant feature of their lived reality. The seasonal intensification, where rain triggers both olfactory distress and water colour changes, points to the leaching of toxins into the shallow groundwater tables used by the community. Perhaps the most poignant part of her testimony is the sense of institutional desertion. Her statement, "no be our fault," is a rejection of the passive victim trope. She outlines the active steps taken by residents (buying insecticides, covering food) to mitigate a crisis they did not create. This highlights the "protection gap" mentioned in the study's background; the residents are exercising localized resilience, but their efforts are being overwhelmed by the sheer scale of the unregulated landfill. Her words confirm that without formal urban planning and waste-to-energy interventions, individual coping mechanisms are insufficient against the systemic failure of municipal waste management.

Normalisation of Health Risks

A compelling theme emerged regarding how residents perceive and adapt to health risks. While diseases like typhoid and malaria are prevalent, there is a psychological shift toward the normalisation of these hazards and how these residents have acclimatised themselves to it.

"Even when I first came here, I was surprised to see how people here normalise moving around the dumpsite without proper covering – no masks, no boots, nothing. I thought I could stay different, you know? I was extra careful, always covering my nose and avoiding the black water on the road. But when I tried to maintain those standards, the environment still fought me; I fell seriously sick with a fever and chest pains that wouldn't go away. After I recovered and spent all my savings on treatment, I realized that you cannot fight this place alone. Now, when I came back, it became normal to me as well. You stop seeing the smoke, you stop smelling the rot, and you just walk through it because you have to survive. The danger is still there, but your mind just switches off the alarm because if you keep worrying, you will go mad before the pollution even kills you." – (IDI/Male/30/Tertiary Education)

Interpretation

The participant's initial attempt to act differently by wearing protective coverings represents an attempt at individualized mitigation. However, his subsequent illness serves as a turning point, proving that in a hyper-polluted landscape like Igando, individual precautions are often insufficient against the ambient toxicity of the area. The air and water do not discriminate; his narrative suggests that the dumpsite exerts a form of ecological dominance that eventually breaks down the resistance of even the most health-conscious residents.

The transition from being surprised to normalise is a classic example of habituation. In environmental sociology, this is often described as learned helplessness or cognitive shielding. For the residents of Igando, maintaining a constant state of high alert regarding their health is mentally exhausting. Therefore, normalising the hazard, stopping the use of masks or ignoring the smell, is not a sign of ignorance, but a psychological coping mechanism. By switching off the alarm, the participant is able to function socially and economically in a space that is objectively uninhabitable. The fact that this participant has a tertiary education adds a layer of intellectual tragedy to this study. It demonstrates that *knowledge of the risk does not equal the power to escape it.* Despite understanding the biological implications of the dumpsite, his socio-economic reality (the need to live and work in Igando) forces him into a state of forced negligence. This highlights a critical gap in urban governance: the state's failure to provide safe housing and waste management creates a situation where the most vulnerable, and even the educated, are coerced into a suicidal relationship with their environment.

This narrative directly supports the third objective of this study, which investigates the effectiveness of local mitigation strategies. This participant's experience proves that local, individual strategies are failing. It reinforces the study's call for institutional intervention and waste-to-energy transformation, arguing that the burden of safety should not rest on the shoulders of the residents, but on the structural redesign of the urban waste system. On the issue

of sensitization and enlightenment initiatives available to dumpsite residents, a participant noted:

"Information? It is not available at all. That is one of the biggest environmental disadvantages we face here in Igando. We don't have health officers or government people coming here to provide vital information that will benefit the people living and working on the edge of this dumpsite. Most people here are just struggling to eat; they lack the deep knowledge of what this constant, heavy smell is actually doing to their internal organs. You see, not all of them are educated, so they don't understand the long-term damage being caused to their respiratory systems or their blood. Information about things like this is very important, especially when it pertains to health, because that is a person's life....once health is gone, everything is gone. Like they will say...health is wealth. Even my shop, which is a bit of a distance away, I still feel the full effect of the dumpsite from the thick, toxic smell that comes out of it daily. It clings to your clothes and enters your throat. If I feel it like this, imagine the disaster for those who are living and working right on top of the waste. I remember one time; a massive fire broke out on the dumpsite. The black smoke covered the whole sky for days. Nobody came to tell us if the air was safe to breathe or if we should evacuate. We were just left in the dark, breathing in burnt plastic and chemicals, praying to God to save us because the authorities act as if we don't exist." (IDI/Male/53/Yoruba)

The testimony of this participant serves as a profound critique of the asymmetry of information in urban waste management. His insights move the conversation from physical pollution to the intellectual and communicative neglect that exacerbates the vulnerability of the Igando community.

The participant identifies a disadvantage that is not chemical or biological, but structural: the lack of public health communication. In environmental justice studies, this is known as Information Poverty. Even if residents are aware that the dumpsite is bad, they lack the technical data to understand the specific risks. The participant suggests that the state has failed in its duty to provide vital information, effectively leaving the community to navigate a high-risk environment with zero guidance. His distinction between the educated and uneducated highlights the socio-economic stratification of risk. He argues that formal education acts as a shield; without it, residents cannot translate the sensory experience (the smell) into a medical reality. This lack of understanding leads to a delayed reaction to illness, people do not seek help until the damage is irreversible because they were never taught to recognize the early warning signs of environmental poisoning. The participant's observation about his shop, which is not on the dumpsite but still suffers the full effect, demonstrates the transboundary nature of the hazard. It proves that the Soluos dumpsite does not respect property lines or buffer zones. His description of the smell clinging to clothes and entering the throat provides a visceral sense of how the environment violates the personal space and bodily autonomy of the residents.

The mention of the fire on the dumpsite is a critical data point. Landfill fires are notorious for releasing dioxins and furans, which are highly toxic. His account reveals a total breakdown in emergency response and risk communication. While a fire is an acute, visible disaster, the lack of government instructions during such an event reinforces the community's sense of

institutional invisibility. They are not just living in waste; they are living in a governance vacuum where their lives are treated as expendable. This narrative is foundational for the objective. It proves that current policies are failing not just in cleaning up the waste, but in the most basic task of citizen engagement. His testimony argues that "community-led urban planning" cannot happen until the government addresses this information gap and starts treating the residents of Igando as stakeholders rather than obstacles.

People working on the dumpsite including dumpsite scavengers have constantly put their health at risk at the expense of the economic advantage the dumpsite gives. One of the participants noted:

"The way I dey make am for here, na by picking iron and plastics with my friends. Every morning, before the sun come out strong, we go don enter the heart of the dumpsite. We go pick iron, plenty iron....even copper wire and aluminium, and we go scale am for money for the junction. No be just iron; we dey look for those white plastics and bottles too, because those ones dey weight well well. Sometimes, the work dey hard because the smoke from the fire go dey choke us, and the ground dey soft...your leg fi enter am. We no get boots or gloves; we just use our hands find what we go chop. If we pick plenty for one day, we fit make small money to send home or buy food. This place dirty but na our market; if we no pick, we no go eat. Even though the smell dey worry and sometimes we go get wound for leg" (IDI/Male/19/Hausa)

Interpretation

The testimony of this young participant provides a critical lens into the informal waste sector, revealing the complex relationship between extreme poverty, environmental risk, and economic agency. His narrative is a primary example of how marginalized populations transform environmental liabilities into survival assets.

The participant's reliance on picking iron and plastics illustrates a spontaneous, grassroots form of the circular economy. While formal urban planning in Lagos has struggled to implement effective recycling programs, these informal scavengers are performing a vital ecological service by diverting metals and plastics from the landfill back into the manufacturing value chain. However, this wealth comes at a staggering physical cost. The participant describes the dumpsite as his market, a poignant metaphor that highlights the total blurring of lines between a toxic wasteland and a place of commerce.

His description of the work, ''smoke from the fire,'' ''ground wey fit swallow your leg,'' and ''no boots or gloves'', paints a vivid picture of occupational health neglect. In the absence of personal protective equipment, his body becomes the primary tool for labour, absorbing the shocks of the environment. The wounds from broken bottles and the inhalation of toxic fumes are normalized as the cost of doing business. This directly supports the second objective of this study, regarding the prevalence of skin-related and respiratory illnesses, proving that these ailments are not just environmental but occupational in nature for the Igando youth. The participant's identity as a 19-year-old Hausa male points to the internal migration patterns that fuel the informal labour market in Lagos. Often, young men from the North migrate to the South in search of economic opportunities, only to find themselves in high-risk, low-barrier-to-entry jobs like waste scavenging. This adds a layer of social exclusion to your

study; these workers are essential to the city's waste reduction but remain invisible to the legal and protective frameworks of the state.

Perhaps the most important take away from this participant is the readiness of the human capital. The participant and his friends already possess an intimate, on-the-ground knowledge of waste characterization. They know exactly where the metals, plastics, and combustibles are. This supports this study's goal of a waste-to-energy intervention. Instead of displacing these workers, a community-led model would involve formalizing their labour, providing them with personal protective equipment, and integrating their collection skills into a modern energy-conversion facility. His narrative proves that the raw material (both the waste and the willing labour) is already there; what is missing is the institutional bridge to make it safe and sustainable.

Physical Safety Hazards and Infrastructural Failure

Beyond chemical and biological threats, the findings pointed to a mechanical hazard: the physical danger posed by waste-collection logistics. Roughly one-third of the participants emphasised that the infrastructure of waste management, specifically the movement of heavy trucks, is a lethal threat.

'The truck for dirty dey always block the road and plenty car accidents don happen for here. Several times, them dey cause traffic and sometimes, e dey cause death of a person. You go see those big-big trucks, they go park anyhow for the narrow road, some of them no even get light for night. When people dey rush go work or when children dey come back from school, na there the danger dey. Sometimes, because of the dirty wey don overflow from the dumpsite reach the main road, the ground go dey slippery like oil; motors go just slide enter gutter or jam person. This traffic no be just small delay...sometimes we go sit for one place for two hours because of one truck wey spoil for middle of the road. No be only the smell dey kill us; the way they take manage the movement of the waste itself, e dey take lives. We don shout for government to expand the road or give them another gate, but they no answer. Na so we go dey watch our brothers and sisters die for road wey lead to their own house." — (IDI/Female/36/Igbo)

Interpretation

The testimony provided by this participant expands the scope of environmental hazard to include logistical mismanagement and spatial conflict. Her narrative illustrates that the Soluos dumpsite is not a self-contained entity but an invasive force that disrupts the right to the city and the basic safety of the Igando populace.

The participant describes a form of logistical violence where the mechanics of waste disposal, the movement of heavy trucks, become a direct threat to human life. In many urban planning frameworks, waste management is seen as a back-end service, but in Igando, it is a front-facing hazard. The ''big-big trucks'' parking without lights and blocking narrow arteries transform a residential road into a high-risk industrial zone. This confirms that the negative externalities of the landfill are not limited to health but extend to the destruction of public safety and infrastructure. A unique insight provided here is the mention of the slippery ground caused by waste overflow. This suggests that leachate (the toxic liquid that drains from landfills) and organic waste are compromising the structural integrity of the asphalt. This creates a lethal environment where vehicular control

is lost, leading to car accidents and death. This is a critical data point for the first objective of this study; it shows that contamination is not just underground in the water table, but surface-level on the roads, creating a physical slip-and-crash hazard that complements the chemical hazards.

The ''two-hour'' traffic delays mentioned by the participant represent a massive loss of social and economic capital. For the residents of Igando, time spent in traffic is time taken away from work, family, and rest. Furthermore, the psychological stress of witnessing the death of a person due to avoidable logistical failures contributes to a collective sense of trauma and neighbourhood decline. This highlights the social exclusion mentioned earlier in the background of this study, where the residents are forced to sacrifice their time and safety to accommodate the city's waste. Her statement regarding the plea for a gate or road expansion directly feeds into our investigation of existing waste management policies. It reveals a disconnect between the Lagos State Waste Management Authority (LAWMA) logistics and the reality of community safety. Her testimony argues that any future waste-to-energy intervention must include a total redesign of the transportation network. The roadmap for transformation this study proposes must address not just how the waste is burned or buried, but how it arrives at the site without killing the residents in the process.

When asked about governmental interventions in the condition of the dumpsite and broader environment, a participant noted:

"I never see anyone. Since all these years wey I don dey here, we no see government people for around here at all. No be say we dey hide; we dey here dey breathe this bad air every day, but e be like say we be ghosts to them. You no go see health inspector come check our water, you no go see environment people come talk to us about how to stay safe, and even the people wey supposed to manage the waste, they only care about the trucks, they no care about the humans living beside the trucks. When election time reach, they go come with promises, but once they enter office, they forget say Igando exist. Even when the smoke from the dumpsite cover everywhere like thick cloud, nobody dey come ask how we dey do or if we need medicine. We are just on our own. If you get money, you treat yourself; if you no get, you stay like that. It is as if the government don carry us join the waste, they don dump us and they don forget us." — (IDI/Female/47/Yoruba)

Interpretation

The testimony of this participant is a core component for this study which specifically addresses the socio-institutional gaps mentioned in the background of this study. Her account reflects a phenomenon often described in urban sociology as Planned Neglect or the creation of a State of Exception.

The participant's repetitive use of ''I never see'' and ''We no see'' suggests more than just a lack of physical presence; it points to a total breakdown of the social contract. In a functioning urban environment, the state is made visible through its agents, health inspectors, urban planners, and environmental officers. In Igando, the state is invisible, yet its failures are hyper-visible in the form of the massive Soluos dumpsite. This creates a psychological burden on the residents, who feel that they have been de-prioritised in the hierarchy of citizenship. One of the most profound parts of her expanded narrative is the idea that the government has dumped the people along with the waste. This illustrates the dehumanization that occurs in marginalized urban corridors. When a

community is located next to a landfill, the stigma of the site often transfers to the people. By failing to provide health interventions or information, the state implicitly signals that the lives of these residents are disposable. This directly feeds into this study's goal of moving beyond a simple tally of health risks to examine the systemic gaps in governance.

The participant's mention of election time vs. office time highlights a deep-seated political cynicism. It shows that the only time the invisibility is lifted is when the community's votes are needed. This cycle of opportunistic engagement followed by prolonged abandonment prevents any long-term, community-led environmental resilience from taking root. Without a consistent institutional presence, the localized coping mechanism are desperate necessities for a people who realize that no help is coming. This interview is the strongest evidence for this study's third objective investigating the effectiveness of existing policies. Her answer is clear—the policies are non-existent on the ground. This justifies your research's call for a "roadmap for transforming Soluos." It proves that "waste-to-energy" interventions cannot just be technical; they must be administrative. There must be a "re-entry" of the state into Igando, not just to manage the trash, but to acknowledge and protect the human beings living within its shadow.

Although, when the same question was asked, another participant provided the following response.

"Every Thursday, we do environmental sanitation, especially around this my shop area; we don't joke with it at all. Some of the union members in our association usually come here early in the morning to ensure it is done by everyone around here. They are always supervising us, moving from shop to shop to ensure everyone don't miss it, because they know say if we no clean our own front, the dirt from the dumpsite go just swallow us finish. We no dey wait for government truck or LAWMA to come give us order; the union get their own laws. If you open shop during sanitation time or if you no pack your gutter, they go fine you or even lock your shop for some days. We dey use our own money buy brooms, shovels, and disinfectants to fight the smell and the flies. Even though the big dumpsite still dey there dey look us, we believe say this small-small cleaning wey we dey do na him dey keep us alive. It is about discipline; if we leave everywhere dirty because the government don fail us, then disease go just kill all of us for one day. So, the union dey try their best to keep some kind of order for this corridor." (IDI/Male/30/Yoruba)

Interpretation

The testimony of this participant is a pivotal finding for this study, as it addresses the localized coping mechanisms and grassroots resilience mentioned in the background of study. It reveals that where the formal state fails, non-state actors (unions and associations) step in to provide essential services and regulation.

The participant describes a system of Para governance, where trade unions and community associations take on the roles traditionally reserved for the government. The Thursday Sanitation is a legacy of Nigerian state policy, but here, it is enforced not by the police, but by the union. This demonstrates that the Igando community is not a chaotic space of social exclusion, but a highly organised one. The motivation for this self-imposed discipline is survivalist in

nature. The participant notes that if they don't clean their surroundings, the dirt from the dumpsite go swallow us. This reflects an acute awareness of the encroachment of waste into the commercial sphere. The community is engaged in a constant, daily border war with the landfill. By using their own funds for tools and disinfectants, they are essentially paying an informal tax to maintain a baseline of public health that the state has failed to provide.

The mention of fines and locking shops indicates a sophisticated level of social capital. There is a collective agreement that individual negligence affects the whole community. In sociology, this is known as Collective Efficacy. This is a rich finding because it suggests that the residents of Igando are not just victims; they are active regulators of their environment. This supports the study's argument that community-led environmental resilience is not just a theoretical possibility; it is already happening in an informal capacity. This participant's testimony provides the roadmap for one of the proposed interventions. If the government wants to implement a waste-to-energy project or a formal recycling scheme, they do not need to start from scratch. They can partner with these existing union structures which already have the authority, the discipline, and the buy-in of the local traders. This interview proves that the human infrastructure for a sustainable Soluos already exists; it only requires formal recognition, technical support, and institutional backing.

DISCUSSION

This study's exploration of the Soluos 3 dumpsite reveals a "syndrome of neglect" where environmental, biological, and social hazards coalesce.

Water Quality and Health

Participants provided vivid descriptions of darkened and unabsorbable borehole water, directly linking this to the prevalence of typhoid and malaria. This aligns strongly with Osibanjo et al. (2017) and Babs-Shomoye and Kabir (2016), who established that leachate infiltration in Lagos landfills renders groundwater toxic. Through the lens of Environmental Justice Theory (EJT), this represents a distributional injustice. The Igando community bears the physiological cost of the city's waste without the procedural protection of clean water infrastructure. This suggests that providing medical treatment alone is insufficient; policy must pivot toward mandatory groundwater remediation and the provision of state-treated piped water to disentangle residency from disease.

The Normalisation of Toxicity

A significant finding of this study is the psychological adaptation to filth and odour. Respondents described the unleashing of odour during rain as a routine event. This dangerous normalisation contradicts the assumption that residents stay only because they are unaware of risks. Instead, it supports World Bank (2019) findings that economic entrapment forces a psychological tolerance of hazards. This study contributes a new dimension to EJT: **Cognitive Injustice**. When a community is forced to normalise trauma (like child kidnapping or toxic air) to survive, the systemic neglect has moved from the environment into the psyche of the residents. Health interventions in Igando must include mental health support and community sensitisation to break the cycle of desensitisation that prevents residents from demanding better conditions.

Grassroot Urbanism vs. Institutional Abandonment

The description of the dumpsite as a ''country on its own'' reveals a thriving, yet perilous, informal governance structure. The presence of makeshift shelters and recycling ties into Fagbohun's (2010) argument that unregulated spaces become sovereign areas of insecurity. The traumatic account of child kidnapping underground serves as a chilling empirical validation of this theory. While literature often focuses on the *economic* utility of waste picking, this study highlights the Security Gap. It shows that environmental neglect directly facilitates criminal exploitation. Soluos 3 cannot be managed simply as a waste problem. It requires an integrated urban planning approach that treats the site as a residential zone requiring formal policing, street lighting, and social services.

CONCLUSION

This study unmasked the perilous lived realities of residents surviving at the intersection of environmental degradation and institutional neglect at the Soluos 3 dumpsite. While the community demonstrates remarkable resilience, constructing a form of grassroots urbanism in an abandoned space, this adaptability should not be mistaken for acceptance. The findings confirm that prolonged exposure to leachate, toxic odours, and mechanical road hazards has created a public health crisis that is currently normalised by the inhabitants. Ultimately, the situation at Soluos is symptomatic of a broader structural failure in Lagos's urban governance. The transition from a toxic liability to a community asset is not merely a technical challenge but a moral and political necessity. Addressing these challenges is a strategic step toward environmental justice, ensuring that the quest for a ''Mega City'' does not come at the expense of its most vulnerable populations

RECOMMENDATIONS

Based on the bottom-up insights provided by the Igando residents and the analytical findings of this study, the following high-level recommendations are proffered:

1. Transition to Waste-to-Energy (WtE): The state should move beyond open dumping by investing in WtE technologies. Capturing methane for local power generation would mitigate odour and fire risks while providing an economic incentive for site management.
2. Decommissioning and Buffer Zone Enforcement: A phased closure of Soluos 3 is recommended. Immediate physical planning must enforce a 500-meter non-development buffer zone to separate residential life from active waste processing areas.
3. Traffic and Logistics Management: To reduce the documented collateral hazards of waste trucks, dedicated off-loading zones and restricted transit hours should be implemented to protect pedestrian safety.
4. Groundwater Remediation: Prioritize the provision of state-treated piped water to the Igando-Alimosho corridor to eliminate reliance on leachate-contaminated boreholes.

5. Routine Chemical Suppression: Until the site is closed, regular professional fumigation and the application of odour-suppressant chemicals must be institutionalized to reduce vector-borne diseases and respiratory distress.
6. Inclusive Governance: Adopt a Participatory Governance Model where resident associations are represented in LAWMA's decision-making processes, ensuring the community's voice is heard.
7. Formalisation of the Informal Sector: Integrate waste-pickers into the formal value chain through vocational training and health insurance, transforming survival-based livelihoods into dignified, green-collar jobs.

Suggestion for Further Research

A quantitative health longitudinal 5-year study should be conducted to track the specific respiratory and dermatological changes in children born within 1km of the Soluos site.

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