

The Lived Experiences of Dike Settlers in Barangay Daanghari, Navotas City

Hannah Nichole P. Librado*, Althea Colline M. Belen, June Grace S. Casaje-Pacunayen

Filemon T. Lizan Senior High School

*Corresponding Author

DOI: <https://doi.org/10.47772/IJRISS.2026.1026EDU0571>

Received: 02 September 2026; Accepted: 07 September 2026; Published: 18 September 2026

ABSTRACT

This study identified the reasons that influenced the dike settlers in Barangay Daanghari, Navotas City, to remain in the area, the challenges they experienced, and the coping mechanisms they employed. Using a qualitative phenomenological approach, ten (10) participants were interviewed through semi-structured questions, and their responses were analyzed using thematic analysis. The findings revealed that settlers remained due to strong ties to their hometowns, attachment to the community, limited relocation opportunities, and accessible livelihood opportunities. At the same time, they faced recurring challenges, including natural disasters, financial difficulties, and health concerns, that affected their daily lives. Despite these hardships, the settlers showed resilience through resourcefulness, improvisation, and community solidarity. Interpreted through Bronfenbrenner's Ecological Systems Theory, their experiences reflected the influence of family and livelihood at the microsystem, community reciprocity at the mesosystem, inconsistent government support at the exosystem, cultural values of *diskarte* and endurance at the macrosystem, and repeated exposure to hazards at the chronosystem. Overall, the study highlighted that the persistence of dike settlers was shaped by interconnected ecological systems that influenced their survival, identity, and decision to remain in the community.

Keywords - Informal Settlers, Dike Settlers, Slums, Reasons for Staying, Challenges, Coping Mechanisms

INTRODUCTION

Over the past years, a constant increase in urban growth has been observed in the Philippines. The urban population increased from forty-five point three (45.3%) in 2010 to fifty-one point two (51.2%) in 2015 and fifty-four percent (54%) in 2020 (UN-Habitat, 2023)[32]. Neglecting this issue has resulted in the expansion of self-built houses of the urban poor due to their urgent need for shelter, leading to congested settlements with limited access to formal tenure or land titles (Elfarnouk, 2015; Minwuyet, 2005; Sietchiping, 2005; Desalew, 2015; UN-Habitat, 2015, as cited in Akirso, 2020) [2]. Meanwhile, the Philippines faces communities with limited access to essential services, including water, sanitation, transportation, and waste management. This situation reveals the presence of approximately three point seven (3.7) million informal settler families (ISFs), with around half a million residing in hazardous areas of Metro Manila (UN-Habitat, 2023) [32]. Informal settlements are a recurring feature in many developing countries, emerging as immediate responses to housing shortages and economic pressures (Matamanda, 2019)[20]. In Ethiopia, such settlements not only accommodate low-income households but also create business opportunities for brokers, dealers, and wealthier individuals (Akirso, 2021; Silassie, 2019) [2] [29].

In the Philippines, urbanization is concentrated in its sixteen (16) most populated cities, resulting in uneven population distribution across urban areas (Philippine Statistics Authority, 2024)[25]. Although Navotas City is not among the top 16, it ranks 29th in the 2024 Cities and Municipalities Competitiveness Index (CMCI) (DTI, 2024) [11]. Nationwide, approximately three point seven (3.7) million Filipinos live in informal settlements, with about half a million residing in slums and high-risk areas (HUDCC/NHA, 2023)[15].

Dike settlers are people who have built their homes and lives along the dikes. In Navotas City, the municipal government built a three point five (3.5) kilometer coastal dike along Manila Bay to mitigate frequent flooding in the area. The dike extends from Barangay North Bay Boulevard North to Barangay San Roque, passing through Barangay Daanghari. The project was planned and designed by the local government and was funded by the national government (Navotas Comprehensive Land Use Plan, 2016-2025)[23].

Recent academic research on informal settlements in Metro Manila has largely overlooked the city of Navotas. This significant research gap hinders a comprehensive understanding of the unique experiences of informal settlers in this coastal city. While studies by Maningo (2021)[19], and Du and Greiving (2020)[13] have provided valuable insights into the challenges and coping mechanisms of informal settlers in Metro Manila, none of these studies has specifically focused on Navotas. This exclusion is particularly concerning given the city's geographic location and its significant population of informal settlers.

The objective of this study was to provide a comprehensive understanding of the experiences of dike settlers, exploring the factors shaping their settlements, their challenges, and their coping mechanisms.

METHODOLOGY

Research Design

This study employed a qualitative-phenomenological research design to comprehensively examine the lived experiences of dike settlers (Creswell & Creswell, 2018)[10]. Through interviews, the researchers gathered rich descriptive data regarding the participants' backgrounds, environments, and daily routines. This methodological framework facilitated an in-depth understanding of the settlers' reasons for residing near the dike, the specific challenges they encountered, and their corresponding coping mechanisms.

Research Participants

Prior to data collection, researchers consulted the barangay office and estimated that 200 families reside by the dike. Official population records were unavailable due to transient migration patterns resulting from recent coastal dike construction and subsequent relocation efforts to Bulacan.

The study employed purposive sampling (Tajik et al., 2024)[30] to select ten participants. This sample size was chosen to capture a diverse range of perspectives, aligning with Creswell's (2013)[9] recommendation of three to twenty-five individuals for phenomenological research. Inclusion criteria required participants to be at least 18 years old to ensure the capacity for legal consent, and to have resided by the dike for a minimum of ten years to guarantee rich, experiential insights. The selected participants ranged in age from their twenties to their sixties.

Research Instruments

The interview instrument underwent a two-phase validation process, including content and language evaluations. First, the researchers drafted questions aligned with the study's themes, which the research adviser reviewed for thematic consistency and appropriate tone. A research instructor then conducted the formal content validation. The researchers iteratively revised the instrument based on the validator's feedback, maintaining continuous communication to clarify all recommendations. The approved questionnaire was structured into three thematic sections: reasons (three questions), challenges (five questions), and coping mechanisms (five questions). Finally, a language instructor validated the phrasing and grammatical accuracy of both the English instrument and its Filipino translation.

Data Collection Method

Before conducting the interviews, the researchers visited the office of the Secretary of Barangay Daanghari. Through this visit, the researchers obtained information regarding the history and estimated population of the informal settlers currently residing along the dike. A site visit and preliminary inquiry were also conducted to assess the situation and determine the possible number of participants.

The interviews started on October 31, followed by November two (2) and three (3), with consideration for All Souls' Day on November 1. Each interview started at 3:00 P.M. and ended depending on the number of interviewees and the interview duration. Each day, only about two to four (2–4) participants were interviewed by the researchers due to their availability and the duration of the interviews, which ranged from five to thirty (5–30) minutes.

During the interview, the participants signed an invitation to participate. They were also asked for permission to be video recorded. If they disagreed, the researchers relied on voice recordings instead, which most participants permitted. Alongside these recordings, the interviewers also ensured that the information obtained was documented through note-taking to provide sufficient details in case of technical difficulties, such as inaudibility or sound interference. Lastly, the participants were assured that all data collected would be used solely for academic and research purposes. Anonymity was also maintained to ensure their safety.

Data Analysis

Data were analyzed using thematic analysis (Braun & Clarke, 2006) [6] through a six-step systematic framework adapted from Liamputtong and Ezzy (2005)[18]. To begin, audio-visual recordings and field notes were transcribed and repeatedly reviewed to ensure accuracy and facilitate data familiarization. Researchers then conducted multiple close readings of the transcripts to extract relevant data and highlight key phrases while eliminating extraneous information. These phrases were subsequently assigned descriptive codes and systematically grouped into well-defined categories. Finally, these categories were synthesized into overarching themes. Throughout this iterative process, the researchers continuously refined the codes, categories, and themes to prevent conceptual overlap. This rigorous approach maintained data integrity and ensured that the final themes authentically represented the participants' lived experiences without distortion.

Ethical Considerations

Prior to data collection, participants provided written informed consent and were given the option to have their interviews audio- or video-recorded. To ensure data accuracy and accommodate individuals who declined to be recorded, the researchers also took detailed field notes during the sessions.

All participant information and responses were kept strictly confidential in compliance with the Data Privacy Act of 2012 (Republic Act No. 10173)[27]. Furthermore, to ensure the reliability of the study's findings, data transcription and analysis were conducted with strict attention to accuracy and transparency.

RESULTS AND DISCUSSION

Findings

Reasons for Staying of Dike Settlers

Hometown

Participants cited deep-rooted connections to the area as a primary reason for remaining near the dike, with many having been born, raised, or having started their families there.

Participant 1 highlighted a profound familial attachment, stating, “Dito na kami tumanda eh, dito na rin kami mamamatay.” Her husband's upbringing in the area and her children's establishment in the community solidify her firm decision to stay despite ongoing challenges. Similarly, Participant 2 emphasized that being born and raised by the dike (“Ayon nga, dito na ako pinanganak”) fostered a strong sense of security and belonging. This lifelong familiarity outweighed environmental issues, such as visible waste, making the community a comforting and habitable home. Participant 6 demonstrated a strong emotional attachment to the continuity of place. Despite the loss of her husband, severe structural damage to her home, and relocation pressures, she chose to remain where her children grew up and married. She stated, “Ito, hindi ko na 'to... sinakripisyuhan ko kahit ganito. May maanuhan lang may masilungan.” She preferred to endure a

compromised living environment rather than impose on her adult children, highly valuing her independence and memories. Finally, Participant 9 expressed a practical yet deeply ingrained sense of belonging, noting he had lived and built his adult life in the area since early adolescence (“Dito na ako nagbinata lumaki ako dito no’ng trese palang”).

Strong Attachment to the Community

The social environment, particularly strong interpersonal bonds and community relationships, significantly influenced the settlers' decision to remain near the dike. For instance, Participant 3 emphasized that lifelong friendships and a deep familiarity with the neighborhood (“Natuwa lang ako sa lugar na ’to...”) were primary reasons for her continued residence.

Participant 7 expressed a strong emotional attachment to the community, citing established relationships and a deeply ingrained culture of mutual support. Highlighting a profound sense of belonging (“Sanay na ako dito, plus kilala ko na ‘yung mga kapit-bahay...”), she described communal practices such as sharing food and freely providing construction materials to neighbors with damaged homes. This solidarity was so significant that she preferred to remain with her neighbors even during evacuations, illustrating a collective resilience in which residents consistently assist one another despite their shared hardships. Similarly, Participant 9 valued local unity and cooperation (“Ayos naman samahan dito... nagkakaisang tao kami”). However, he noted that while this social cohesion is beneficial, it serves primarily as a secondary support for his livelihood rather than as the central driver of his decision to stay.

Inability to Relocate

The inability to relocate successfully was a primary factor that compelled settlers to remain beside the dike. While many are willing to move, systemic barriers such as limited housing availability, added financial burdens, and inadequate infrastructure at relocation sites often impede the process or force residents to return to their original homes.

For some, the delay was administrative. Participant 5 expressed a willingness to move but remained waitlisted due to a lack of available housing units (“Ilipat namin, wala pa kasing malilipatan pa”). Similarly, Participant 10 encountered processing issues that halted her transfer to Bulacan (“...kaso lang hindi kami natuloy”). Although she anticipated her financial struggles would persist regardless of location, she remained open to relocating should another opportunity arise. For others, successful relocation was undermined by unsustainable conditions at the new sites. Participant 2 returned to the dike after discovering the relocation site imposed new financial burdens, specifically land amortization (“Nung nalipat po sa relocation, ultimo lupa babayaran mo pa eh”), which exacerbated their financial constraints. Furthermore, Participant 7 cited severe underdevelopment in Bulacan, noting the lack of basic utilities such as water and electricity. Crucially, she highlighted a lack of livelihood (“Wala kasing hanap-buhay sa Bulacan eh”), contrasting this with the accessible informal employment available in their dike community. Conversely, some settlers were desperate to leave but were constrained by a complete lack of alternatives. Participant 8 urgently desired relocation due to local illegal drug activities and concerns for her grandchild's safety. However, with nowhere else to go (“Minsan, ayoko na sana pero wala tayong magagawa...”), she was forced to endure a highly unsafe environment, illustrating how limited relocation options trap vulnerable residents.

Accessibility of Livelihood

The accessibility of local livelihood opportunities was a critical determinant in the settlers' decision to remain close to the dike. The environment provided vital avenues for income generation, enabling residents to meet their daily necessities through various local trades and micro-enterprises. Participant 9 emphasized that the area was synonymous with economic survival, offering abundant localized work such as fishing, construction, and transportation (“Dito lahat ang hanap-buhay...”). He explicitly contrasted this with the relocation site in Bulacan, where employment was scarce, indicating that his continued residency was driven primarily by economic viability rather than mere community attachment. Similarly, Participant 7, whose

family originally settled in the area for employment, cited her local business as her sole source of income ("Sa negosyo lang lahat ng income"). While she was open to relocation if economic stability were guaranteed, past failures of relocation programs have fostered pragmatism and distrust, solidifying her decision to stay. Furthermore, Participant 8 highlighted the importance of accessible community-based hustles. With her husband working as a carpenter, she supplemented their daily income by selling food directly from her home and catering local events. Although these localized income streams were occasionally insufficient, the immediate accessibility of these economic opportunities remained a compelling reason for their continued residence in the dike community.

Challenges Experienced by Dike Settlers

Natural Phenomena

Dike settlers consistently faced severe challenges from natural phenomena, primarily typhoons and recurrent flooding. Participant 3 highlighted the necessity of annual evacuations to Barangay Daanghari Elementary School ("Madalas talaga kami dito mga bagyo, baha..."). He noted that while minor typhoons were manageable, rapidly rising waters necessitated immediate evacuation—a hardship often exacerbated by the inconsistent distribution of government relief goods. Similarly, Participant 6 emphasized her vulnerability to knee-deep floodwaters, which not only forced displacement but also caused hunger due to sudden food scarcity. The rapid onset of these floods frequently resulted in property loss; as Participant 10 recounted, waist-high waters compelled residents to flee quickly ("Yung bagyo, hmm, lagi kaming lumilikas"), often forcing them to abandon most of their possessions to save only essential belongings.

In addition to typhoons, residents were highly susceptible to fires originating in adjacent communities that rapidly spread to the dike. Participant 10 shared an incident where a fire from a nearby street ("Kalye Impyerno") reached their area and burned her home's walls, underscoring the settlers' vulnerability to external hazards despite their lack of direct involvement in causing them. However, prolonged exposure to these calamities had fostered a degree of resilience and preparedness. Participant 2 recalled a major fire in 2009 and noted that years of living in the area have taught them to anticipate and plan for such emergencies ("Sa sunog naman, naka-ready kame"), demonstrating the community's adaptive response to recurring environmental threats.

Health

Participants generally reported facing more physical than mental health challenges; however, they attributed their physical ailments to natural aging and typical diseases rather than the environmental conditions of the dike.

For instance, Participant 1 experienced age-related health declines, including weight loss, hypertension, and multiple hospitalizations ("Ay nako, sa sakit marami, High-blood ako eh. Tatlong beses na'kong naospital."). Similarly, Participant 6 reported developing arthritis ("Nagkakaroon lang ako ng arthritis"). Both participants perceived these health issues as natural consequences of aging rather than complications caused by their living environment. Mentally and emotionally, the settlers demonstrated significant resilience and contentment. Despite financial difficulties, Participant 3 maintained an optimistic and relaxed outlook, noting that her family generally remained in good physical health with only occasional, mild fevers ("Wala ring nagkakasakit kahit papaano"). Participant 6 also described feeling at ease and stress-free in her daily routine. Ultimately, the participants' accounts suggested that residing on the dike did not severely compromise their mental well-being or directly cause their reported physical ailments.

Financial

Although the dike environment offered various localized livelihood opportunities, settlers frequently experienced severe financial instability, leaving them struggling to meet their families' basic daily needs. Participant 1 highlighted the profound unpredictability of her family's finances, stating, ("Minsan meron, minsan wala.") Due to her advanced age and declining health, she can no longer engage in physically

demanding work, such as vending. She now relies on her children's income from fishing. However, because this livelihood was highly inconsistent, their overall household resources remained inadequate and unstable. Similarly, Participant 3 emphasized chronic financial shortages ("Ang hirap talaga sa financial, kulang minsan. Kulang talaga minsan...") despite engaging in multiple informal jobs. Even by combining her earnings as a nail technician and fish vendor with her husband's income as a pedicab driver, they continually struggled to sustain their household. This persistent financial deficit placed a significant emotional burden on her as a parent, necessitating constant resilience and the relentless pursuit of supplementary income to ensure her family's survival.

Coping Mechanisms

Work and Resourcefulness

Resourcefulness in livelihood was the primary coping mechanism for dike settlers. Despite irregular income, participants demonstrate remarkable adaptability through informal labor. Participant 2 highlighted coastal subsistence, foraging for seafood when cash is scarce ("Pag wala kang pera mangunguha ka ng tahong..."). Similarly, Participant 3 diversified her household income by working as a nail technician and fish vendor, supplementing her husband's pedicab earnings.

Others engage in manual labor, such as Participant 5, who sustained her family through low-paying laundry work ("Labada ko 100 lang yung isa") due to her husband's illness. Entrepreneurial ventures were also common; Participant 7 shifted to digital selling and local business after losing formal employment, while Participant 8 relied on small-scale food vending and occasionally borrowed capital to maintain operations. Furthermore, Participants 4 and 9 emphasized that resourcefulness often relies on family support and on diversifying informal jobs such as construction, fishing, and tricycle driving to manage the unpredictability of daily income.

During Natural Phenomena

Settlers employed varied strategies to cope with recurrent natural disasters. Some demonstrate proactive preparedness; Participant 2 normalized flooding with humor ("swimming-swimming nalang") and emphasized early disaster readiness. Participant 3 viewed early evacuation as a vital parental responsibility to protect her children ("Kailangan s'yempre unahan mo na ang bagyo").

Conversely, others relied on endurance or reactive strategies. Participants 1, 4, 5, and 6 routinely evacuated but remained vulnerable due to damaged belongings and reliance on inconsistent external aid. Participant 7 highlighted the severe psychological toll and anxiety caused by strong typhoons, even when physical damage is minimal. Meanwhile, Participant 8 prioritized stability, choosing to remain in her partially submerged home rather than endure crowded evacuation centers, illustrating endurance as a primary coping mechanism.

Support System

Support systems were essential but fragile. Kinship and neighborly solidarity often substituted for inadequate state assistance. Participants 2, 3, and 4 highlighted strong community reciprocity, sharing food and collectively rebuilding homes ("Tulong-tulong kung sino may mga kahoy-kahoy..."). Family members also provided crucial, albeit occasional, financial support (Participants 1, 6, and 8). However, support was inconsistent. Participant 5 has sole responsibility for her household due to her husband's illness and relies only minimally on neighbors. Participant 7 reported lacking any practical support, relying solely on friends for emotional support. Government aid across all accounts is perceived as sporadic and unreliable, reinforcing the settlers' reliance on informal, community-based networks.

Healthcare

Faced with chronic conditions and financial constraints, settlers largely normalized illness and relied on self-care rather than formal medical treatment. Participant 2 acknowledged the need for hypertension medication

but reframed illness and stress as inevitable, fleeting problems ("Problema lang yan eh... dadaan din yan"). Participant 3 downplayed sickness and relied on traditional remedies like massage ("Nagpapahilot ako minsan..."). Similarly, Participant 4 normalized her physical decline and hypertension, attributing her mother's survival after a stroke to the fresh air of the dike environment. Participant 5 highlighted the severe financial and emotional strain caused by her husband's chronic illnesses, framing their coping strategy purely around family endurance.

Leisure

Modest leisure activities provided vital emotional relief and fostered social bonds. Coping strategies range from solitary activities such as listening to music (Participant 2) and occasional shopping (Participant 7) to communal practices such as sharing meals (Participant 3) and neighborhood storytelling (Participant 9). For Participant 8, leisure is deeply tied to spiritual and social engagement through church activities. These small, intentional outlets offer significant distraction from anxiety and help maintain emotional balance amid vulnerability.

Habituating to the Situation

Habituation served as a profound psychological coping mechanism in which settlers reframed severe hardship as a natural, unavoidable aspect of life. Participants 1 and 4 explicitly accepted their struggles ("Natural lang naman"), prioritizing continuity and place-based identity over relocation. Participant 2 emphasized that familiarity and community trust make the harsh environment livable, even reframing visible waste as non-threatening. For Participant 8, habituation manifested as quiet endurance; despite recognizing local dangers like illegal drugs, the lack of alternatives forced her to accept and adapt to her environment ("wala tayong mapuntahan").

DISCUSSION

This study highlighted a complex interplay of social, economic, and personal factors that drove dike settlers' residential choices. Consistent with Husa (2023)[16], participants demonstrated a profound attachment to their birthplace and hometown, which provided a deep sense of security. Furthermore, aligning with İnal-Çekiç et al. (2023)[17], the settlers' decision to remain was heavily influenced by deep-rooted social bonds, community satisfaction, and lifelong relationships. Economically, proximity to livelihood opportunities was critical. As Mengist et al. (2023)[21] observed, informal settlements offered accessible, community-based employment. Dike settlers relied on their immediate surroundings for income—such as fishing and providing local services—thereby avoiding the financial burden of long commutes. Finally, flawed relocation programs remained a primary reason for staying or returning. Echoing Rosete (2021)[28] and Maningo (2021)[19], relocation efforts were hampered by inadequate infrastructure, the financial burdens of amortizing new land, and the loss of economic opportunities, underscoring the need for more meticulous and consultative housing planning.

Dike settlers primarily faced challenges related to natural phenomena, health, and finances. While Olayer et al. (2021)[25] emphasized poor housing materials, these participants highlighted their vulnerable location near a waterway, which exposed them to severe flooding and recurrent evacuations. Although Okaka and Odhiambo (2019)[24] linked such scenarios to loss of life and property, the settlers primarily experienced property damage. These disasters severely disrupted livelihoods, aligning with Carrasco and Dangol (2019)[7], and were often compounded by inconsistent government relief support. Contrary to Du and Greiving (2022)[12], who noted insufficient disaster preparedness in informal areas, the dike settlers had developed robust evacuation routines based on years of navigating recurring typhoons and fires.

Regarding well-being, while Dickson-Gomez et al. (2023)[12] and Olayer et al. (2021)[25] linked substandard environments to severe psychological stress, participants reported only mild stress, primarily tied to finances. They attributed physical ailments (e.g., hypertension, arthritis) to natural aging rather than environmental hazards. Finally, consistent with findings from Alene (2020)[3], Botes and Endjala (2020)[4], and Bandauko et al. (2021)[5], financial instability exacerbated their overall vulnerability. Despite engaging

in multiple side hustles, living costs and relocation expenses compounded their financial struggles, severely affecting their daily survival.

The settlers' coping mechanisms combined global informal settlement strategies with localized adaptations. Economically, participants relied on resourcefulness and diversified informal labor. This aligned with the survival strategies documented by Tesha (2020)[31] and Chinwe Sam-Amobi et al. (2024)[8], though the dike settlers specifically leveraged coastal resources rather than agriculture, demonstrating place-specific adaptation. In disaster response, while Adegun (2022)[1], Tesha (2020)[31], and Mpanje et al. (2022)[22] highlighted structural and absorptive adjustments, the settlers frequently employed non-structural coping strategies, such as endurance, normalization, and humor, to manage recurring threats. To mitigate hardships, mutual aid was vital. Consistent with Yu (2022)[34] and Endjala and Botes (2020)[5], community reciprocity served as a critical safety net, compensating for the fragility and inconsistency of state-sponsored aid.

Regarding health, whereas Dickson-Gomez et al. (2023)[12] and Olayer et al. (2021)[25] framed illnesses in informal settlements as environmental, the settlers normalized chronic diseases as inevitable, coping through endurance, self-care, and basic remedies rather than preventive healthcare. Psychologically, unlike the negative coping behaviors observed by Wainaina et al. (2021)[33] in Nairobi, the settlers employed positive leisure activities—such as communal meals, faith-based practices, and music—to maintain emotional stability. Ultimately, in contrast to the asset-based adaptation noted by Mpanje et al. (2022)[22], the settlers' overarching coping mechanism was habituation; they accepted hardship as a natural facet of life, a perspective deeply rooted in their continuous, place-based identity.

CONCLUSION

This study provided a comprehensive understanding of why informal settlers in Barangay Daanghari, Navotas City, remained in their location despite precarious circumstances. Their decision was driven by strong community attachments, hometown ties, accessible livelihoods, and systemic barriers to relocation. While the settlers faced multifaceted hardships—primarily natural disasters and financial instability—their reported physical illnesses and mild stress were natural occurrences rather than environmentally induced conditions. Despite these formidable challenges, they exhibited remarkable resilience, adaptability, and resourcefulness, relying extensively on communal networks for emotional, informational, and financial support. Ultimately, the findings illuminated the complex and challenging lived experiences of these dike settlers.

These interconnected factors demonstrated that their continued residency was deeply rooted in both practicality and place-based identity. When interpreted through Bronfenbrenner's Ecological Systems Theory[14], the settlers' survival and choices were influenced by overlapping, interacting systems:

The microsystem (family and livelihood) met daily needs and was immediately reinforced by the mesosystem (community reciprocity) through mutual aid, such as food sharing, rebuilding, and coordinated evacuations. These local bonds were, in turn, shaped by the exosystem (government aid); specifically, inconsistent institutional support compelled a heavier reliance on this communal solidarity.

At a broader level, the macrosystem (cultural values such as *diskarte* and habituation to hardship) normalized risk and fostered persistent endurance. Finally, the chronosystem (prolonged exposure to disasters) integrated these elements over time, as recurring calamities historically shaped preparedness routines and deepened cultural resilience.

Ultimately, these systems did not operate in isolation but continuously interacted. The gaps in institutional support amplified the importance of family and community, while deep-seated cultural values and long-term exposure to hazards collectively reinforced the settlers' firm decision to remain in place despite significant risks.

RECOMMENDATIONS

1. The researchers recommend improving local disaster preparedness and response programs to ensure the consistent and equitable distribution of relief assistance to all residents affected by the dike. Furthermore, given that relocation challenges significantly influenced the settlers' decisions to remain near or return to the dike, future programs should place greater emphasis on the readiness and habitability of relocation sites. The findings demonstrated that previous relocation areas lacked basic utilities, imposed additional financial burdens due to land payments, and were situated far from sources of livelihood. Therefore, local authorities should meticulously plan future relocation initiatives associated with city infrastructure projects and engage in in-depth consultations with affected communities. This would help ensure that resettlement sites are fully developed, economically viable, strategically located, and socially supportive before the transfer of residents, thereby reducing the cycle of return migration.
2. The authors suggest employing community-based research approaches to engage directly with the residents and gather deeper, more nuanced insights. Additionally, future studies should investigate the transitional experiences of individuals navigating government-mandated housing relocations—such as those displaced by the construction of the coastal dike—and delve further into the long-term impacts of the daily challenges these settlers face.

REFERENCES

1. Adegun, Olumuyiwa & Ikudayisi, Ayodele Emmanuel & Morakinyo, Tobi & Olawale, Olusoga. (2021). Urban green infrastructure in Nigeria: A review. *Scientific African*. 14. e01044. [10.1016/j.sciaf.2021.e01044](https://doi.org/10.1016/j.sciaf.2021.e01044).
2. Akirso, N. A. (2021). Squatter Settlement: Costs and Contributing Factors in Jimma Town, Oromia National Regional State, Ethiopia. *European Review of Applied Sociology*, 14(22), 11–19. <https://doi.org/10.1515/eras-2021-000>
3. Alene, E. T. (2022). Determinant factors for the expansion of informal settlement in Gondar city, Northwest Ethiopia. *Journal of Urban Management*, Vol 11, Issue 3. <https://doi.org/10.1016/j.jum.2022.04.005>
4. Bandauko, E., Kutor, S. K., Annan-Aggrey, E., & Arku, G. (2021). 'They say these are places for criminals, but this is our home': internalising and countering discourses of territorial stigmatisation in Harare's informal settlements. *International Development Planning Review*, 44(2), 217–239. <https://doi.org/10.3828/idpr.2021.9>
5. Botes, L., & Endjala, T. (2020). 6 - 'Surviving like a Bird': Livelihood Coping Strategies in an Informal Settlement of Windhoek, Namibia. *African Sociological Review-CODESRIA*. <https://doi.org/10.57054/asr.v24i1.1730>
6. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
7. Carrasco, S., & Dangol, N.,. (2019). Residents' self-initiatives for flood adaptation in informal riverbank settlements of Kathmandu. *International Journal of Disaster Risk Reduction*. 101156. [10.1016/j.ijdrr.2019.101156](https://doi.org/10.1016/j.ijdrr.2019.101156).
8. Chinwe Sam-Amobi, Obinna Ubani, Eze, T., Mba, E., & Henry, I. (2024). Understanding the Livelihood Strategies of Informal Settlers in Enugu Urban, Nigeria. *International Journal of Sustainable Development and Planning*, 19(1), 167–178. <https://doi.org/10.18280/ijstdp.190115>
9. Creswell, John. (2013). *Qualitative Inquiry & Research Design: Choosing Among Five Approaches*. SAGE Publications. 11.
10. Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications. <https://writingcenter.westcliff.edu/wp-content/uploads/2022/06/Creswell-Creswell-2018.pdf>
11. Department of Trade and Industry – Competitiveness Bureau. (2024). *Cities and Municipalities Competitiveness Index (CMCI) 2024: Navotas City profile*. Quezon City, Philippines: DTI.

12. Dickson-Gomez, J., Nyabigambo, A., Rudd, A., Ssentongo, J., Kiconco, A., & Mayega, R. W. (2023). Water, sanitation, and hygiene challenges in informal settlements in Kampala, Uganda: a qualitative study. *International Journal of Environmental Research and Public Health*, 20(12), 6181. <https://doi.org/10.3390/ijerph20126181>
13. Du, J., & Greiving, S. (2020). Reclaiming On-Site Upgrading as a Viable Resilience Strategy- Viabilities and Scenarios through the Lens of Disaster-Prone Informal Settlements in Metro Manila. *Sustainability*, 12(24), 10600. <https://doi.org/10.3390/su122410600>
14. Guy-Evans, O. (2024, January). Bronfenbrenner's ecological systems theory. ResearchGate. https://www.researchgate.net/publication/383500583_Bronfenbrenner
15. Housing and Urban Development Coordinating Council (HUDCC) & National Housing Authority (NHA). (2023). Report on informal settlers in the Philippines. Quezon City, Philippines: HUDCC/NHA.
16. Husa, A. (2023). Home in the hills: rural stayers in the Missouri Ozarks and Nebraska Sandhills. *Rural Society*, 32(1), 30–44. <https://doi.org/10.1080/10371656.2023.2206733>
17. İnal-çekiç, T., Kozaman-Aygün, S., & Bilen, Ö. (2023). Reflections on “place attachment”: perceptions of urban redevelopment in an informal neighborhood in Istanbul. *Journal of Housing and the Built Environment*, 39(1), 1–20. <https://doi.org/10.1007/s10901-023-10037-x>
18. Liamputtong, P., & Ezzy, D. (2005). *Qualitative research methods* (2nd ed. pp. 270–3). Melbourne: Oxford University Press.
19. Maningo, R. (2021) Examining Urban Poor Voices: Displacement and Resettlement of Informal Settlers in Metro Manila. *Social Transformations: Journal of the Global South*, 2021, Vol 9, Issue 1, p125
20. Matamanda, R. A. (2019). Exploring Emerging Human Settlement Forms and Urban Dilemmas Nexus: Challenges and Insights from Hopley Farm, Harare, Zimbabwe.
21. Mengist, A., Nega, W., & Dires, T. (2023). Determinants for the escalation of informal settlements and its consequences in the suburbs of Butajira Town; Central Ethiopia. *International Journal of Urban Sustainable Development*, 15(1), 230–249. <https://doi.org/10.1080/19463138.2023.2227857>
22. Mpanje, D., Gibbons, P., McDermott, R., Omia, D. O., & Olungah, C. O. (2022b). Social capital undergirds coping strategies: evidence from two informal settlements in Nairobi. *Journal of International Humanitarian Action*, 7(1). <https://doi.org/10.1186/s41018-022-00115-0>
23. Navotas City. Comprehensive Land Use Plan (2015-2025)
24. Okaka, F. O., & Odhiambo, B. D. O. (2019). Health vulnerability to flood-induced risks of households in flood-prone informal settlements in the Coastal City of Mombasa, Kenya. *Natural Hazards*, 99(2), 1007–1029. <https://doi.org/10.1007/s11069-019-03792-0>
25. Olayer, Melcris & Abiera, Shynar & Dagohoy, Ronel & Montiel, Anthony & Capuyan, Sherry & Silverio, Jefferson. (2021). The Plight of Informal Settlers in the Coastal Areas of Panabo City: A Basis for Intervention. V. 241-249. 10.47772/IJRISS.2021.5715.
26. Philippine Statistics Authority. (2024). 2024 Census of Population and Housing: Highlights of urban growth and distribution. Quezon City, Philippines: Philippine Statistics Authority.
27. Republic Act 10173- Data Privacy Act of 2012. <https://privacy.gov.ph/data-privacy-act/>
28. Rosete, A. T. (2021, October 31). Manila Urban Settlements Office's Risk Identification and Mitigation for Pre-and-Post Relocation and Resettlement. *International Journal of Management and Education in Human Development* <https://ijmehd.com/index.php/ijmehd/article/view/173>
29. Silassie, D. (2019). Addis Ababa University the factors contributing for expansion of informal settlements: The case study of yeka sub-city, Addia Ababa Ethiopia.
30. Tajik, O, Golzar, J and Noor, S. (2025). Purposive Sampling. *International Journal of Education & Language Studies*, (), 1-9. doi: 10.22034/ijels.2025.490681.1029
31. Tesha, D. (2020) Households Livelihood Coping Strategies in the Urban Informal Settlements the Case of Mlalakuwa Dar-es-Salaam Tanzania. *The International Journal of Social Sciences and Humanities Invention*. 7. 6046-6075. 10.18535/ijsshi/v7i07.05.
32. UN-Habitat, City Government of Legazpi, & United Nations Human Settlements Programme (UN-Habitat). (2023). UN-Habitat Philippines Country Report 2023 [Report]. UN-Habitat Philippines. https://unhabitat.org/sites/default/files/2023/06/5._un-habitat_philippines_country_report_2023_final_compressed.pdf

-
33. Wainaina, C. W., Sidze, E. M., Maina, B. W., Badillo-Amberg, I., Anyango, H. O., Kathoka, F., Khasowa, D., & Okoror, C. E. M. (2021). Psychosocial challenges and individual strategies for coping with mental stress among pregnant and postpartum adolescents in Nairobi informal settlements: a qualitative investigation. *BMC Pregnancy and Childbirth*, 21(1). <https://doi.org/10.1186/s12884-021-04128-2>
 34. Yu, D. P. L. (2022). The social production of public space in an informal settlement a case study of sitio pechayan, Metro Manila Architecture by distance PhD school of the built environment.