





The improvement in the quality of Urban Kampongs in Jakarta and the satisfaction level of residents:

Lessons from the case of Akuarium Vertical Kampong, North Jakarta

Ashadi¹, Anisa¹, Yeptadian Sari^{1*}, Suriani Ngah Abdul Wahab²

¹Department of Architecture, Faculty of Engineering, Universitas Muhammdiyah Jakarta, Jl. Cempaka Putih Tengah 27, Jakarta Pusat, DKI Jakarta, Indonesia

²Department of Built and Environment Studies and Technology, Universiti Teknologi MARA, 32610 Seri Iskandar, Perak, Malaysia



ARTICLE INFO	ABSTRACT
<p><i>Article history:</i> Received January 06, 2024 Received in revised form July 10, 2024 Accepted June 23, 2025 Available online August 01, 2025</p> <p><i>Keywords:</i> Akuarium Kampong Economic Environmental Social Urban Kampongs</p> <p>*Corresponding author: Yeptadian Sari Department of Architecture, Faculty of Engineering, Universitas Muhammdiyah Jakarta, Indonesia Email: yeptadian.sari@umj.ac.id ORCID: https://orcid.org/0000-0001-6824-3795</p>	<p><i>Urban kampongs, which are essential components of urban structures, undergo continuous changes alongside city growth and development. However, these areas often experience significant social issues in developing countries, including Indonesia. The Jakarta Provincial Government has recently undertaken efforts to improve the quality of urban kampongs in Jakarta, one of which is the revitalization of Akuarium Kampong. This once-dilapidated kampong has been transformed into a vertical kampong block with modern and improved building standards through a challenging process. Given the relatively representative physical condition of the buildings, a key question arises: How satisfied are the residents with these changes? Therefore, this study aimed to explore the relationship between the improvement in the physical quality of urban kampongs, specifically Akuarium Vertical Kampong, and the satisfaction level of its residents within the context of global sustainable development goals. A mixed-method approach was employed to achieve a comprehensive understanding, which combined quantitative and qualitative analysis. The results showed that the improved quality of Akuarium Kampong led to a reasonably high level of satisfaction among its residents, particularly regarding the physical and social environmental aspects. However, the economic aspect remained a challenge, as it does not yet meet satisfactory levels. Several factors contributed to this problem, with a significant issue being the absence of new income sources for most residents.</i></p>

Introduction

Urban kampongs have drawn significant attention largely due to the prevalence of slum-like and squatter conditions, as well as the concentration of informal sector activities (Suparlan 1996). The informal sector plays a pivotal role in urban kampongs, representing economic activities conducted by economically disadvantaged populations who operate outside formal

regulatory frameworks (Kuddus, Tynan, and McBryde 2020; Voigtländer, Breckenkamp, and Razum 2008; Rachmawati 2014). The rise of this sector is frequently linked to the inability of urban economic systems to absorb the growing influx of migrant labor (Komarudin 1997).

Inherently, urban kampongs offer an environment that allows residents to sustain traditional ways of life amid the rapid currents of urban modernization (Putera 2014; Budihardjo,



Purwanto, and Darmawan 2009). Recognizing and exploring the social, economic, and cultural potential of urban kampongs, along with a deeper understanding of their distinct settlement characteristics, can significantly enhance urban planning efforts, enabling better alignment with the actual needs and aspirations of residents (Kustiwan and Ramadhan 2019; Sumintarsih and Adrianto 2014).

Efforts to improve the quality of urban kampongs in Jakarta have a long and complex history. As early as 1921, the Batavia Government initiated the “Kampung Verbetering” program, aimed at improving housing and settlement conditions for the indigenous population (Ariwibowo 2019). A key historical figure, Mohammad Husni Thamrin, played a central role in advocating for the improvement of kampung conditions in Batavia during this period (Irawaty 2018; Widyarsono 2020; Soemarwi and Feran 2019). However, after Indonesia’s independence, the Kotapraja government refrained from taking substantial measures on this matter, likely due to its politically sensitive nature (Blackburn 2012).

During the administration of Governor Ali Sadikin (1966–1977), a major shift occurred in kampung improvement policy, with practical measures introduced to enhance residents' daily lives. This included the launch of the Kampung Improvement Program (KIP), specifically under the banner of the Mohammad Husni Thamrin (MHT) initiative (Hilman 2008).

In the past decade, the Jakarta City Government has adopted newer strategies for urban kampung improvement, particularly through the Community Action Plan (CAP), a community-driven planning tool for settlement enhancement. Complementing this, the Collaborative Implementation Program (CIP) has been implemented, promoting multi-stakeholder collaboration in upgrading housing and infrastructure. Although these programs primarily target legally recognized kampongs, political arrangements occasionally compel the Provincial Government to extend improvements to kampongs located on illegal land (Savirani and Aspinall 2017).

The Akuarium Vertical Kampung serves as a notable example of such an initiative and is considered a relatively successful project. However, the satisfaction of residents cannot be attributed solely to physical improvements. Non-physical dimensions particularly social and

economic factors play equally critical roles. Therefore, in evaluating the success of urban kampung revitalization, it is essential to recognize that physical transformation alone does not guarantee resident satisfaction. Adopting this comprehensive view allows for a more nuanced understanding of residents’ overall quality of life and well-being, extending beyond the built environment.

This study builds on previous research by Ashadi et al. (2021), which focused on the spatial organization and sustainability potential of Kampung Akuarium as a heritage tourism destination, considering the site's proximity to various historical landmarks. However, Ashadi et al. (2021) did not address the critical issue of resident satisfaction, an essential variable in assessing the overall sustainability of the Akuarium Vertical Kampung.

Evaluating the quality of urban kampongs should extend beyond an examination of physical environments and must incorporate the lived experiences and satisfaction levels of residents (Mohit and Azim 2012). There are two principal approaches to assessing residential quality: (1) evaluating the physical environment based on standard metrics, and (2) analyzing residents’ perceptions. The former is objective and rooted in factual criteria, while the latter adopts a more subjective lens, emphasizing residents’ perspectives (Nurdini 2010). This study integrates both methods, assessing the quality of the Akuarium Vertical Kampung through a combination of empirical data and perceptual insights. These are interpreted through a mixed-method framework that synthesizes quantitative and qualitative analytical results, as illustrated in figure 1.

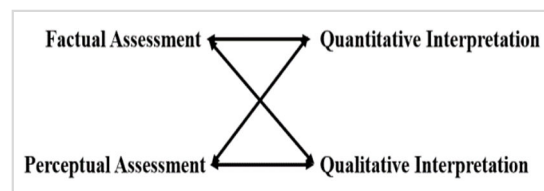


Figure 1. Diagram illustrating the analytical approach to assessing the quality of the akuarium vertical Kampung
Source: Adapted from analytical tools by Ashadi et al. (2022)

Methods

This study adopts a concurrent mixed-methods approach by integrating both quantitative and qualitative analyses. The methodological framework aligns with Creswell's typology of the Embedded Design Strategy; wherein quantitative and qualitative data are collected concurrently during a single phase of the research process (John W. Creswell and Creswell 2018; J. W. Creswell and Poth 2018).

The primary data collection instrument is a structured questionnaire designed to investigate three key dimensions: environmental, social, and economic aspects, each comprising a series of specific indicators. While the environmental and social aspects are suitably assessed through quantitative means, the economic dimension requires a qualitative inquiry due to its complex and contextual nature. To gauge the level of resident satisfaction, a psychometric evaluation was conducted using a Likert scale. A 7-point Likert scale was employed, ranging from "strongly disagree" to "strongly agree," to capture a nuanced spectrum of responses.

The sampling technique combines purposive and snowball sampling methods. Initially, purposive sampling was used to identify a group of respondents within the defined population scope. This process was then extended using snowball sampling, whereby each initial

respondent was asked to refer additional participants deemed relevant to the study.

The questionnaire encompasses three primary variables: environmental, social, and economic. However, following a preliminary survey and consensus with the residents of the Akuarium Vertical Kampong, the economic variable was excluded from the quantitative phase. Instead, only the environmental and social variables were examined through the questionnaire to determine residents' satisfaction levels and identify the underlying factors influencing their perceptions. These two variables are further delineated into a set of measurable indicators.

Akuarium Kampong

Akuarium Kampong is located on Jalan Pasar Ikan, within Hamlet 04 of Penjaringan Village, North Jakarta, and is surrounded by a number of culturally and historically significant landmarks. To the west lies the traditional Luar Batang Kampong; to the north, the area is bordered by Jakarta Bay and the Java Sea. The eastern boundary is marked by the historic Sunda Kelapa Port, while the southeast is home to the Fish Market and the Auction Museum. To the south are the Hexagon Building formerly used for spice storage and the Maritime Museum. Additionally, just a short distance further to the south, one finds the Old Town Center, which features the iconic Fatahillah Museum, also known as the Jakarta History Museum, as illustrated in [figure 2](#).

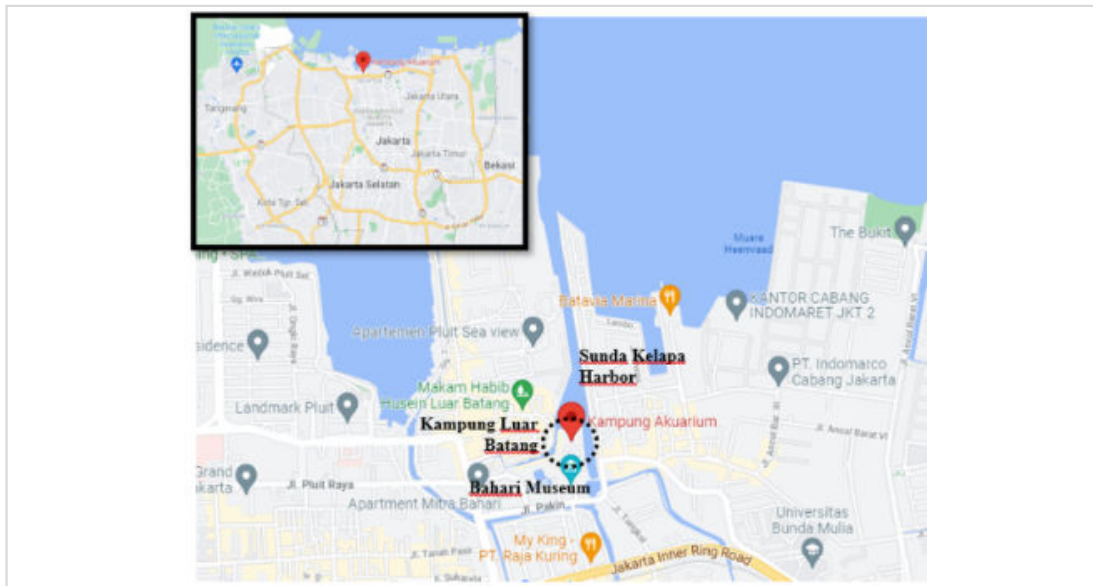


Figure 2. Location map of Akuarium Kampong

The planning, design, and construction of Akuarium Kampong were realized through a participatory and collaborative process involving both the local residents and the Jakarta Provincial Government. The residents actively contributed by proposing the initial conceptual design, which was subsequently refined and developed into a comprehensive planning framework by the Jakarta Housing and Settlement Area Agency. This collaborative model of redevelopment serves not only as a foundation for the revitalization of Akuarium Kampong but also as a potential prototype for future community-based settlement planning initiatives across Jakarta.

Historical background of Akuarium Kampong's residents

In the early 1900s, the area now known as Akuarium Kampong served as the site of the Batavia Fisheries Laboratory, officially referred to as Visscherij Station te Batavia. However, by the late 1970s, the site began to experience a steady influx of migrants, eventually evolving into a densely populated slum settlement by the late 2000s. In 2016, the Jakarta Provincial Government launched a revitalization initiative targeting the broader Cultural Heritage Area,

which included the eviction of Akuarium Kampong. As part of this effort, 103 households were relocated to public housing facilities in Marunda, Rawa Bebek, and Cipinang to provide improved living conditions. Nevertheless, several residents resisted the eviction and chose to remain at the original site, erecting makeshift tents as a form of protest and asserting their attachment to the long-established community.

In early 2018, three temporary shelter blocks designated A, B, and C were constructed to house residents who had remained following the demolition. Blocks A, B, and C contained 52, 48, and 24 units, respectively, each measuring 3.5 x 6 m² and equipped with a private toilet. These shelters collectively accommodated 103 households across a total of 124 units. On August 17, 2020, a groundbreaking ceremony was held to initiate the construction of two of the five planned permanent residential blocks. After delays caused by the COVID-19 pandemic, the development of Blocks B and D comprising 107 type-36 housing units was completed and officially inaugurated on August 17, 2021. As of December 2022, construction on Blocks A and E was still underway, as illustrated in [figure 3](#).

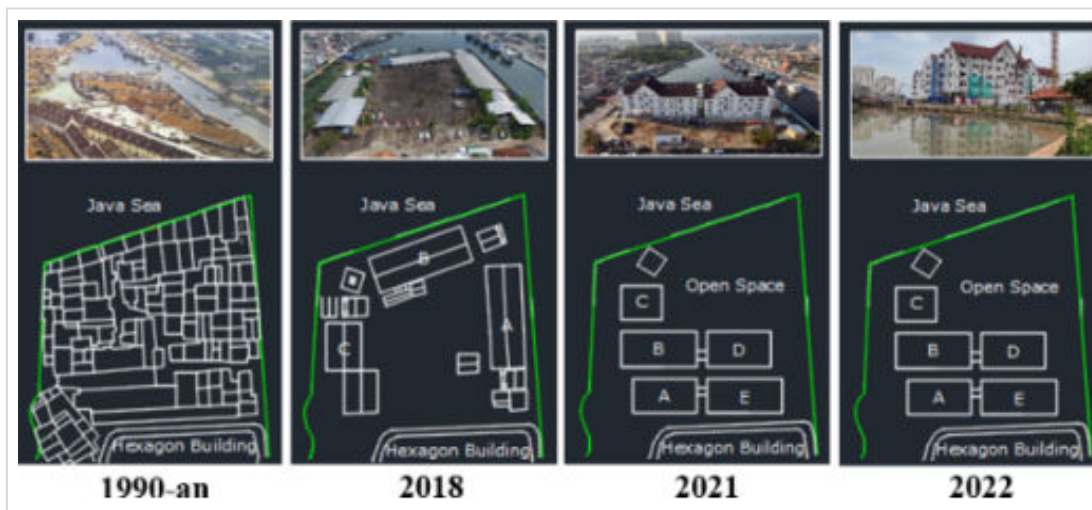


Figure 3. Spatial transformation of Akuarium Kampong
Source: Adapted from analytical tools developed by [Ashadi et al. \(2022\)](#)

The Akuarium Vertical Kampong consists of two blocks, each rising five stories high, providing a total of 107 residential units of Type 36. Each unit includes one bedroom, one living room, one bathroom, a kitchen, a family area, and a rear open terrace designed for laundry and

drying functions. Notably, in many of the units, the living room has been repurposed into an additional bedroom. On the ground floor, there are seven housing units three located in Block B and four in Block D designated for families with physically vulnerable members, including the

elderly and individuals with health conditions. Additionally, Block B's ground floor accommodates three commercial units, while Block D includes a dedicated space functioning as a documentary gallery, which exhibits cultural heritage artifacts from the Akuarium Kampong

area. Each floor is organized around a central corridor extending along the front of the units to both ends of the building, as illustrated in figure 4.



Figure 4. Floor plan of building blocks in akuarium Vertical Kampong
Source: Adapted from analytical tools developed by [Ashadi et al. \(2022\)](#)

Research on Akuarium Kampong remains relatively scarce, largely due to its relatively recent emergence in the late 1970s or early 1980s. Nevertheless, the forced eviction that occurred in 2016 has sparked scholarly interest, prompting a range of studies that primarily examine the area's physical transformation and the processes surrounding it. [Yustiara and Nirwansjah \(2019\)](#), for instance, investigated the environmental structuring of Akuarium Kampong in North Jakarta through the lens of the Behavior Setting approach ([Yustiara and Nirwansjah 2019](#)). Similarly, [Iqbal and Vonika \(2019\)](#) analyzed the dynamics of the relocation process in the context of the 2016 eviction of Akuarium Kampong ([Iqbal and Vonika 2019](#)). [Muhtadi and Anggara \(2020\)](#) focused their research on the implementation and evaluation of the Community Action Plan (CAP) program within the kampong ([Muhtadi and Anggara 2020](#)). Additionally, [Ashadi et al. \(2021\)](#) examined the spatial transformations occurring in Akuarium Kampong and their implications for the area's sustainability as a historical tourism destination ([Ashadi et al. 2021; 2022](#)). Despite these contributions, it is important to highlight that no research to date has

specifically addressed the residents' level of satisfaction in the Akuarium Vertical Kampong, given that it has only been inhabited for approximately one and a half years.

The primary objective of this study is to enrich the ongoing discourse on the sustainability of urban kampongs by complementing existing scholarship and introducing new analytical perspectives. Moreover, the findings are intended to function as an alternative reference for the planning and architectural design of an integrated tourism zone within Jakarta's Old City Area.

Results and discussion

The indicators of the variables and their operational definitions are presented in [table 1](#): Indicator table.

Table 1. Operational definitions and measurement indicators of research variables

Variable	Code	Indicator	Operational definition
Environmental	P1	It is nice to live in flats	Residents' perception of comfort and enjoyment in residing at Akuarium Vertical Kampong
	P2	The condition of the flats is more satisfying	Residents' satisfaction with the current physical condition of the flats
	P3	The living environment is more satisfying	Residents' overall satisfaction with the surrounding living environment
	P4	The natural environment is better	Perceived improvement in the natural environmental quality of the city
	P5	The children's play environment is better	Perception of enhancements in the quality of children's play areas
	P6	The gathering environment is better	Perception of improved communal gathering spaces
	P7	The trading environment is better	Perception of better conditions in the local commercial/trading environment
	P8	The sports environment is better	Perception of improved facilities and environments for sports activities
	P9	The vehicle parking environment is better	Perception of improvements in vehicle parking facilities and accessibility
	P10	The green area environment is better	Perception of enhanced green spaces within the residential context
	P11	The utilization of the maritime museum is better	Perception of increased and more effective use of the Maritime Museum
	P12	The utilization of the Sabandar tower is better	Perception of improved functionality and use of the Sabandar Tower
	P13	The utilization of the fish auction area is better	Perception of better utilization and accessibility of the fish auction area
	P14	The utilization of the Keramat Luar Batang mosque is better	Perception of more active and meaningful use of the Keramat Luar Batang Mosque
	P15	The utilization of the port is better	Perception of improved integration and utilization of the nearby port for the benefit of Akuarium Vertical Kampong
	P16	Dutch laboratory reuse	Perception regarding the adaptive reuse of the Dutch laboratory building
Social	P17	Gathering activities are still going well	Community gathering activities continue to function effectively post-construction
	P18	Customary activities are still going well	Traditional and customary activities remain active and preserved following redevelopment
	P19	Religious activities are still going well	Religious practices continue to be carried out effectively since the area's reconstruction
	P20	Neighborhood/Hamlet activities are still going well	Localized social activities at the neighborhood or hamlet level remain ongoing
	P21	Women's Organization activities are still going well	Women's group activities continue to operate effectively within the community
	P22	Integrated Service Post activities are still going well	Activities of the Integrated Service Post (Posyandu) remain functional and accessible
	P23	Harmony between residents is still going well	Social harmony and cohesion among residents have remained stable since the redevelopment

The respondents in this study comprise 35 selected residents of the Akuarium Vertical Kampong who have resided in the area since prior to its transformation into a vertical housing complex. These individuals possess direct and experiential knowledge of both the pre-eviction and post-redevelopment phases.

Data collection and qualitative analysis were conducted concurrently, with the researchers serving as the primary instrument directly observing phenomena and conducting interpretive analysis. Data were obtained through in-depth interviews and direct field observations, while the analytical process followed the Manual Data Analysis Procedure (MDAP). This

procedure encompassed several stages: transcription of the data, coding, categorization of information, formulation of findings, and the maintenance of analytical memos or reflective dialogues throughout the process.

The economic dimension of the study is treated as a particularly sensitive subject, necessitating a distinct and careful approach to both data collection and analysis. Consequently, the economic aspect is examined qualitatively. However, during interviews focusing on economic matters, respondents frequently articulated their perceptions concerning social and environmental aspects as well. Therefore, in the final stage, the study adopts a mixed method approach by integrating both qualitative and

quantitative analyses to capture the interrelated nature of these dimensions.

The initial phase of the qualitative analysis involves transcribing data gathered through field observations and interviews. This qualitative data is then described in a detailed, narrative manner, including supporting photographs and images, which precedes a deeper interpretive analysis. Following this, coding and categorization techniques are employed to identify recurring themes and emerging patterns within the data, which facilitate a comprehensive understanding of the findings.

The distribution of responses to the questionnaire reflects the residents' tendencies regarding satisfaction levels in the Akuarium Vertical Kampong, as illustrated in [figure 5](#).

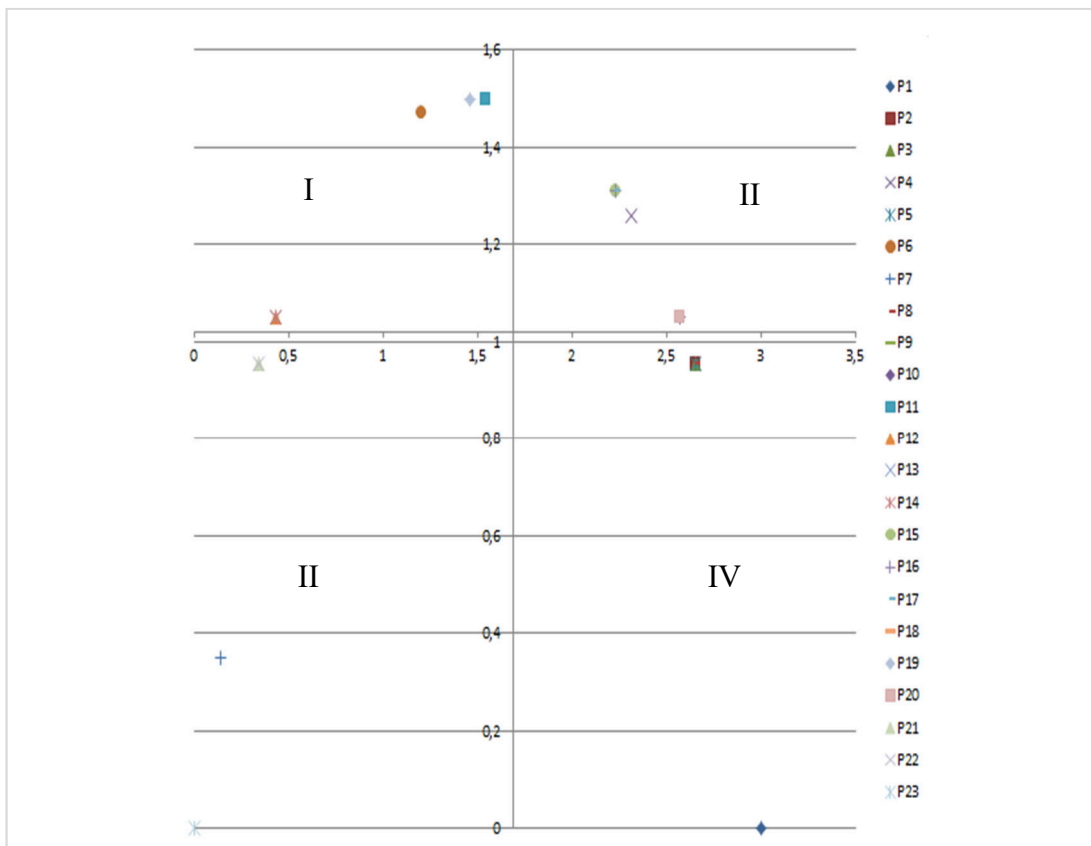


Figure 5. Distribution of questionnaire responses on resident satisfaction in the Akuarium Vertical Kampong
 Source: Adapted from analytical tools developed by [Ashadi et al. \(2022\)](#)

Based on the distribution, residents generally exhibit a positive level of satisfaction with the existence of the Akuarium Vertical Kampong. The placement of codes P1 and P2 in Quadrant

IV characterized by high mean scores and low standard deviations suggests a strong consensus among respondents regarding these indicators, signifying their substantial contribution to overall satisfaction. These specific indicators, identified

by the codes P1, P2, P3, P5, and P8, are detailed in [table 2](#).

Table 2. Tendency of respondents regarding satisfaction with the Akuarium Vertical Kampong

No	Code	Indicator	Operational definition
1	P1	It is nice to live in flats	Residents' perceived sense of comfort and pleasure in residing at Akuarium Vertical Kampong
2	P2	The condition of the flats is more satisfying	Residents' satisfaction with the current physical condition and quality of the flats in Akuarium Vertical Kampong
3	P3	The living environment is more satisfying	Residents' perception of increased satisfaction with the broader living environment within Akuarium Vertical Kampong
4	P5	The children's play environment is better	Residents' perception of enhancements in the quality and availability of play spaces for children within Akuarium Vertical Kampong
5	P8	The sports environment is better	Residents' perception of improvements in the quality and accessibility of sports facilities and spaces in Akuarium Vertical Kampong

Source: Adapted from analytical tools developed by [Ashadi et al. \(2022\)](#)

Indicators P1, P2, and P3 reflect the respondents' satisfaction with the Akuarium Vertical Kampong, while contributing factors to that satisfaction are represented by P5 and P8. The responses consistently emphasize notable improvements in children's play areas and the availability of sports facilities following the redevelopment of the former Akuarium Kampong into a vertical housing complex. Overall, the responses predominantly focus on the physical attributes of the Akuarium Vertical Kampong. Accordingly, it may be concluded that respondent's express satisfaction with the physical environment of the vertical kampong based on their feedback.

Inferential factor analysis reveals a consistent pattern of responses, though this tendency is evident in only a single variable. Consequently, both SPSS (Statistical Program for Social Sciences) and Microsoft Excel produce identical results, prompting the decision to convert the analysis into descriptive statistics due to a factor score of zero. This outcome reinforces the conclusion that the physical environmental aspect plays a significant role in shaping the residents' satisfaction. Furthermore, integrated quantitative and qualitative analyses indicate that the three

dimensions of sustainability environmental, social, and economic are closely interconnected and exert mutual influence.

Residents' satisfaction with the physical environment is substantiated through a comprehensive analysis of questionnaire data, interview findings, and field observations conducted by the research team. The perception of satisfaction is rooted in tangible improvements to the physical conditions of both the residential units and their surrounding environment, particularly when compared to conditions before the redevelopment. These enhancements encompass not only the individual housing units but also, the quality and usability of outdoor communal spaces. The housing design thoughtfully incorporates the residents' daily activities and behavioral patterns. Broad corridors between housing units serve as informal social spaces, while communal areas located at the building termini support collective activities. This design strategy distinguishes the vertical kampong from conventional apartment buildings, emphasizing its unique spatial and social identity, as illustrated in [figures 6 and 7](#).



Figure 6. Comparison of residents' social activities: before eviction (top) and after transformation into a Vertical Kampong (bottom)
Source: [Ashadi et al. 2021](#)



Figure 7. Typical floor plan of one building block in Akuarium Vertical Kampong
Source: [Ashadi et al. 2021](#)

The integration of thoughtfully designed facilities and outdoor elements within the physical environment surrounding the residential units of Akuarium Vertical Kampong plays a pivotal role in enhancing residents' overall satisfaction. The incorporation of amenities such as sports facilities, children's play areas, green open spaces, parking lots, and other outdoor provisions enables inhabitants to participate in recreational pursuits and engage in meaningful social

interactions with neighbors and fellow community members.

Findings related to the social dimensions of Akuarium Kampong reveal that residents express a high level of satisfaction regarding the social activities and communal accommodations provided within the vertical kampong development. The architectural configuration effectively addresses, and in some instances surpasses, the occupants' expectations, particularly in terms of shared amenities.

Elements such as communal open areas designed for collective gatherings, generously sized corridors between housing units that encourage interpersonal interaction, and dedicated play zones for children significantly contribute to the enhancement of residents' social well-being. These communal spaces serve as vital platforms for fostering neighborly relations, nurturing a sense of collective identity, and reinforcing the social fabric of the community. Moreover, the availability of supporting public and social infrastructure further strengthens the social cohesion of *Akuarium Kampong*, ensuring that essential services and amenities are readily accessible to all residents.

The strong sense of unity among the inhabitants of *Akuarium Kampong* serves as a cornerstone for cultivating social sustainability within the community. The shared history and collective struggle to retain their right to remain in the kampong have forged a profound bond among the residents, fostering solidarity and communal resilience. This cohesion not only fortifies social integration within *Akuarium Kampong* but also significantly contributes to the psychological and emotional well-being of its residents. The prevailing sense of belonging, mutual support, and trust among neighbors establishes a tranquil and secure living atmosphere in which individuals feel protected and at ease.

However, from an economic standpoint, *Akuarium Kampong* has not experienced substantial improvement following the relocation, when compared to its pre-eviction conditions. Before displacement, many residents benefited from owning or leasing out two to three housing plots within the same vicinity, which served as a reliable source of income. The transition to vertical housing limited residents to a single unit of equivalent size, thereby eliminating the opportunity to continue such rental practices and resulting in a marked decline in household earnings.

Additionally, in the pre-eviction setting, many dwellings also operated as micro-business venues, such as small-scale grocery stores or snack vendors, which allowed residents to generate supplementary income without leaving their homes. This mode of livelihood has become unfeasible in the vertical kampong due to communal agreements established during participatory planning discussions, specifically, the restriction that buying and selling activities

must take place within private housing units and not spill into shared corridors. Residents intending to engage in commerce are now required to lease commercial space on the ground floor. Another critical economic factor relates to the nearby market adjacent to *Akuarium Kampong*, which also underwent disruption due to the eviction. This market previously offered employment and business opportunities for many residents, but as of 2023, it remains under reconstruction. The continued unavailability of this marketplace has hindered residents' efforts to regain stable income streams, exacerbating their economic dissatisfaction.

Furthermore, the economic resilience of *Akuarium Kampong's* inhabitants has been adversely affected by external macroeconomic pressures, most notably, the repercussions of the COVID-19 pandemic. The convergence of these internal structural limitations and external economic challenges has intensified the residents' economic vulnerability and discontent.

The broader setting of *Akuarium Kampong* is situated within a heritage tourism corridor frequented for educational, recreational, and religious purposes. This cultural tourism trajectory, which includes *Akuarium Kampong*, carries latent potential to contribute to the area's economic revitalization. Nonetheless, the pandemic's severe disruption of the tourism sector has resulted in a drastic decline in visitor numbers and related activities, thereby diminishing the economic benefits typically associated with such heritage-driven visitation.

In summary, the physical and social dimensions of *Akuarium Kampong* emerge as the domains with the highest levels of resident satisfaction. The provision of efficient, inclusive, and human-centered architectural infrastructure, combined with a cohesive and united community, plays an indispensable role in ensuring the overall well-being and satisfaction of its residents.

Conclusions

In conclusion, the physical architectural advancements implemented in *Akuarium Vertical Kampong*, located in North Jakarta, have significantly contributed to enhancing resident satisfaction. The well-conceived architectural design has successfully established communal spaces that actively support social engagement,

thereby fostering a strong sense of community and social cohesion among inhabitants. Nevertheless, from an economic standpoint, residents remain dissatisfied with the prevailing conditions. Many perceive that their economic situation has not improved since the displacement from their original settlements.

It is essential to acknowledge that sustainable urban development is underpinned by three interrelated pillars: the physical environment, social dynamics, and economic viability. These dimensions are intrinsically connected and exert reciprocal influence on one another. Therefore, to achieve a truly sustainable and inclusive urban transformation, it is imperative to address the economic challenges faced by the community. In particular, the creation of job opportunities that align with the microeconomic activities traditionally practiced by urban kampong residents is of critical importance.

Given its strategic location in proximity to a historical tourism district, Akuarium Vertical Kampong possesses latent potential to contribute meaningfully to the broader goals of sustainable urban development. Leveraging this geographic advantage, in conjunction with targeted economic interventions, can support a more holistic and resilient urban revitalization process that benefits both the built environment and the socio-economic fabric of the community.

Acknowledgments

Gratitude is addressed to the Rector of Universitas Muhammadiyah Jakarta, and LPPM UMJ for funding and facilitation. Gratitude is addressed to the Partner University, namely Universiti Teknologi Mara (UiTM). Gratitude is also addressed to the Faculty of Engineering, Architecture Study Program for their support and facilities so that the research can run smoothly. This research was funded by LPPM UMJ based on UMJ Rector's Decree No. 27 of 2023 dated January 25, 2023 concerning the Determination of Lecturers Receiving the UMJ International Collaborative Research Program (Join Research) for the 2022/2023 Academic Year.

References

- Ariwibowo, Andika. 2019. "PERKEMBANGAN BUDAYA KOSMOPOLITAN DI BATAVIA 1905-1942." *Handep: Jurnal Sejarah Dan Budaya* 3 (1): 55–74. <https://doi.org/10.33652/handep.v3i1.66>.
- Ashadi, Ashadi, Ratna Dewi Nur'aini, Finta Lissimia, Anisa Anisa, and Suriani Ngah Abdul Wahab. 2022. "Perubahan Tata Ruang Dan Fungsi Kampung Akuarium, Jakarta." *ARSITEKTURA* 20 (1): 51. <https://doi.org/10.20961/arst.v20i1.55928>.
- Ashadi, A., Wahab, S. N. A., Anisa, A., Nur'aini, R. D., & Lissimia, F. (2021). *Perubahan Tata Ruang dan Keberlanjutan Kampung Aquarium Menuju Destinasi Wisata Sejarah*. Arsitektur UMJ Press.
- Blackburn, Susan. 2012. *Jakarta: Sejarah 400 Tahun*. 2nd ed. Jakarta: Masup Jakarta.
- Budihardjo, Eko, Edi Purwanto, and Eddy Darmawan. 2009. *Percikan Para "Begawan", Arsitek Indonesia Menghadapi Tantangan Globalisasi*. 1st ed. Bandung: Alumni.
- Creswell, J. W., and C. N. Poth. 2018. *Qualitative Inquiry & Research Design: Choosing Among Five Approaches*. 4th ed. Sage.
- Creswell, John W., and J. David Creswell. 2018. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 5th ed. SAGE Publications Asia-Pacific.
- Hilman, Imam. 2008. "Program Perbaikan Kampung: Proyek Muhammad Husni Thamrin di Jakarta Tahun 1969-1979." Depok: Fakultas Ilmu Pengetahuan Budaya Universitas Indonesia.
- Iqbal, Muhammad, and Nike Vonika. 2019. "Dinamika Proses Relokasi Di DKI Jakarta Studi Kasus: Kampung Akuarium Di Penjaringan, Jakarta Utara." *Jurnal Ilmiah Perlindungan Dan Pemberdayaan Sosial* 1 (1): 32–52.
- Irawaty, Dian Tri. 2018. "Jakarta's Kampongs: Their History and Contested Future." Los Angeles: University of California.
- Komarudin. 1997. *Menelusuri Pembangunan Perumahan Dan Permukiman*. 1st ed. Jakarta: Yayasan Realestat Indonesia.
- Kuddus, Md Abdul, Elizabeth Tynan, and Emma McBryde. 2020. "Urbanization: A Problem for the Rich and the Poor?" *Public Health*

- Reviews 41 (1): 1.
<https://doi.org/10.1186/s40985-019-0116-0>.
- Kustiwan, Iwan, and Afrizal Ramadhan. 2019. "Strategi Peningkatan Kualitas Lingkungan Kampung-Kota Dalam Rangka Pembangunan Kota Yang Inklusif Dan Berkelanjutan: Pembelajaran Dari Kasus Kota Bandung." *Journal of Regional and Rural Development Planning* 3 (1): 64. <https://doi.org/10.29244/jp2wd.2019.3.1.64-84>.
- Mohit, Mohammad Abdul, and Mohamed Azim. 2012. "Assessment of Residential Satisfaction with Public Housing in Hulhumale', Maldives." *Procedia - Social and Behavioral Sciences* 50:756-70. <https://doi.org/10.1016/j.sbspro.2012.08.078>.
- Muhtadi, Muhtadi, and Alvin Anggara. 2020. "EVALUASI PROSES PROGRAM COMMUNITY ACTION PLAN DALAM UPAYA MENINGKATKAN KUALITAS LINGKUNGAN DI KAMPUNG AKUARIUM JAKARTA UTARA." *JURNAL AL-IJTIMAIYYAH* 6 (1): 31. <https://doi.org/10.22373/al-ijtimaiyyah.v6i1.6674>.
- Nurdini, A. (2010). Penilaian Kualitas Hunian Sewa Secara Faktual dan Perseptual: Pilihan Konsumen yang Optimal, Terbelenggu, dan Menuntut. In Harun, I. B. (Eds.), *Realita dan Visi ke Depan Perumahan dan Permukiman di Indonesia*, KKPP ITB, Bandung: SAPPK ITB.
- Putera, Yoedhistira Andri. 2014. "Ambiguitas Ruang Kampung Pluis Jakarta Selatan Dalam Perspektif Privat-Publik." *E-Journal Graduate Unpar* 1 (2): 101-10.
- Rachmawati, Tutik. 2014. "Informal Sector and Local Government Revenue: The Contribution of Street Vendors." *Jurnal Administrasi Publik* 11 (1).
- Savirani, Amalinda, and Edward Aspinall. 2017. "Adversarial Linkages: The Urban Poor and Electoral Politics in Jakarta." *Journal of Current Southeast Asian Affairs* 36 (3): 3-34. <https://doi.org/10.1177/186810341703600301>.
- Soemarwi, Vera W. S., and Kristian Feran. 2019. *Menyisir Kebijakan Perumahan Bagi Masyarakat Berpenghasilan Rendah Di Jakarta*. Ciliwung Merdeka.
- Sumintarsih, and Ambar Adrianto. 2014. *Dinamika Kampung Kota Prawirotaman Dalam Perspektif Sejarah Dan Budaya*. Yogyakarta: Balai Pelestarian Nilai Budaya (BPNB).
- Suparlan, Parsudi. 1996. *Diklat Antropologi Perkotaan*. Jakarta: Jurusan Antropologi FISIP-UI.
- Voigtländer, Sven, Jürgen Breckenkamp, and Oliver Razum. 2008. "Urbanization in Developing Countries. Trends, Health Consequences and Challenges." *Journal of Health & Development* 4 (1-4): 135-63.
- Widyarsono, Toto. 2020. *Melawan Dalam Volksraad: M.H. Thamrin Dan Gerakan Nasionalis Kooperasi di Indonesia 1927 - 1941*. 1st ed. Yogyakarta: Matapadi Presindo.
- Yustiara, Dhisa, and Rullan Nirwansjah. 2019. "Pendekatan Behavior Setting Pada Penataan Lingkungan Kampung Akuarium Dalam Desain Rumah Susun." *Jurnal Sains Dan Seni ITS* 7 (2). <https://doi.org/10.12962/j23373520.v7i2.33112>.

Author(s) contribution

Ashadi contributed to the research concepts preparation, methodologies, investigations, data analysis, visualization, articles drafting and revisions.

Anisa contribute to the research concepts preparation and literature reviews, data analysis, of article drafts preparation and validation.

Yeptadian Sari contribute to the research concepts preparation and literature reviews, data analysis, of article drafts preparation and validation.

Suriani Ngah Abdul Wahab contribute to methodology, supervision, and validation.