"KAMPUNG VERTICAL" DESIGN IN URBAN VILLAGE AS URBAN RENEWAL STRATEGY (CASE STUDY: GANDEKAN VILLAGE, SEMARANG)

Edy Darmawan, M. Ikhsan Maulana Lubis Department of Architecture, Faculty of Engineering, Diponegoro University e-mail: edy darmawan@yahoo.com

ABSTRACT

Urbanization, or the movement of people from villages to cities, has caused many problems, both socioeconomic, environmental, and illegal housing, which is carelessly constructed due to the increasing need for housing. To overcome this situation, urban renewal can be an effective solution. This urban renewal focuses on vertical housing as a realignment of the residential housing design for the community. It focuses on the presence of a space that protects the environment and the health of residents and accommodates the activities of its community. Vertical villages are familiar in Indonesia, especially in urban village areas that are shabby. Therefore, this research proposed designing a vertical village in the Gandekan Village area of Semarang. Due to the growth of the population and the increasing advancement of Semarang City, many villagers moved in to obtain more decent jobs. Still, problems were also arising in this phenomenon.

Keywords: urbanization, vertical village, urban renewal.

INTRODUCTION

In Law No. 4 of 1992 Article 3, it is explained that settlements are part of the living environment outside the protected area, both in the form of urban and rural areas that function as settlements or residential spaces and places of activity that support life and livelihood. Settlements are also a place used by humans, both individuals and groups, as temporary and permanent housing to organize life (Hadi et al., 1987). In addition, settlements are also places used for the process of socialization of an individual to understand the norms and customs that apply to the community (Budiharjo, 1998). The development of settlements is in line with the rate of growth of the population. Many things, including the movement of people from the village to the city or urbanization, influence population growth. The increase in residents and migrants has also increased demand for residential houses or shelters.

Settlements such as *kampung* or villages are residential areas with a very high level of population density, which consists of houses with construction systems that are built temporarily or permanently. A city village is a settlement segment whose

population fits into the concept of a transitional society or can be interpreted as a transitional phase from rural to urban (Kraussc, 1980). In general, a city village is a settlement in an urban area that exists without participating in the infrastructure design and economic network of a city. Urban villages are also considered a rural settlement system with survival characteristics in the surrounding urban culture (Budiharjo, 1997).

Increased population and visitor growth are also related to environmental degradation and social conditions. When migrants do not have a fixed purpose, they will use illegally built land. This resulted in a shabby impression of the environment where they lived in the future.

Gendekan Village area is one of the oldest villages in Semarang, where the old buildings are well maintained today. The rapid rate of population growth followed by the increasing need of the community for settlement has resulted in development without considering suitable arrangements and planning, which leads to a shabby, disordered, and unhealthy environment in Gendekan village. A reasonable settlement is to create an area that can accommodate all the needs of the population to be able to live a decent life in the future. The development of cities and increasing population density have affected land prices in urban areas that continue to increase and forced the government and developers of residential areas to provide vertical housing. The main concern is that most people are moving and working around the location of their houses.

As a consequence, the renewal of Gendekan Village Still considers the place where residents live to be an area that is near the advanced location. Regarding this situation, considering the environmental and social context, the renewal of the village area is not aiming to relocate the population but rather the arrangement of the original area by improving the environmental, social, and economic quality. The rearrangement will provide a healthy residential area and a livable place for the community. This process will be carried out by bringing changes to areas that are environmentally degraded (Sihono, 2003).

This study aims to present vertical housing as one of the urban renewal systems to respond to the negative impacts of urbanization and environmental degradation by considering the environmental and social context of Village Gendekan. To achieve this goal, researchers have taken several references related to themes such as (1) Ramadhani, A.R. & Oktafiana, B. (2021) which discusses Vertical Village in Lumumba Village, Surabaya; then (2) Nursyahbani, R. & Pigawati, B. (2015) which discusses the Study of Characteristics of Slums in Urban Village Case Study: Gandekan Village, Semarang; Then (3) there is As'ari, R. & Fadjarajani, S. (2018) which discusses Environmentally-Based Slum Settlement Arrangement; (4) Sobirin (2001) discusses Distribution of Settlements and Urban Infrastructure: A Case Study of the Dynamics of Urban Development in Indonesia; (5) Ramadhani, A.N. &, Fagih, M. (2019) which discusses The Effect of Physical Quality Improvement to Inhabitants Sense of Place; (6) Komarudin (1996) discussed about Tracing Housing and Settlement Development, Jakarta; (7) Widjaja, Pele (2013) discussed about Village-City Bandung; (8) Amri, Nurmaida (2013) discussed about Environmental Characteristics of Edge SlumsKolaka District River, Southeast Sulawesi; (9) Nur'aini, A.D. (2017) discussed about Urban Farming in Vertical Villages as an Efficiency Effort with Limited Land; (10) Surtiani, E. E. (2006) discussed about Factors Influencing the Existing of Slum Areas in the City Center Area (Case Study: Pancuran Area, Salatiga). The research results are expected to be a consideration for the government to reorganize an urban village settlement area due to solving urbanization-caused issues such as environmental degradation and the increasing need for housing and providing a liveable village area.

THEORY / RESEARCH METHODS

The Material

A. Urbanization

The Spatial Planning Dictionary (1997) explains that urbanization is a state of change or transformation of the overall structure of society that was initially dominant in rural areas to dominant in urban areas; in simple terms, it can be said that the population of a city is increased due to displacement from rural areas or population from other cities.

Urbanization is related to increasing the number of inhabitants and is always associated with the development of a city. The increase in the number of inhabitants is directly proportional to the increase in urbanization. The increase in urbanization results in an increase in the number of people who, if not controlled, will be able to cause various problems for the urban area, both from limited settlements and the disorganization of the area.

B. Village (Kampung)

Village (Kampung) is a residential area with a poor quality of living, both from the environment and the physical condition of the building. Informal settlement patterns and high population density coupled with the need for a network of available facilities lead to poor quality problems in a village (Heryati, 2011). The village is also a residential area with cultural preservation values with good potential, such as the culture of the social way of life and the structure of the village (Ahmed, 2017).

The advancement of the village area, such as village development, is usually formed naturally and informally, which can be seen from the composition of the building mass and its outer spaces (Setiawan, 2010). Despite the physical buildings being categorized as in poor condition, the village still has its characteristics, such as the uniqueness of the building, which can be classified as a separate cultural heritage for the residents. The diversity of natural, economic, and socio-cultural conditions is challenging for residents to continue living.\

C. Urban Village

Urban villages can be interpreted as residential areas similar to rural areas; the only distinction is that they are located in urban areas (Setiawan, 2010). Urban villages are

the same as villages in general; it is identical to the physical condition of buildings that are inadequate or disorganized with a slum impression. The urban village, on the other hand, also has specific identical characteristics, such as the history of the underlying reason why the village was able to exist.

An urban village, viewing the density of population intensity, limited land, facilities and land use patterns, must always be attentive by providing efficient land use. Providing efficient land use and accommodating the commercial activities of the people will ensure the sustainability of the village and can create a liveable condition of the city (Roychansyah & Diwangkari, 2009).

According to these explanations and definitions, an urban village is a residential area where the population still behaves like living in the countryside, and the physical condition of the buildings and the living environment could be more cohesive and organized. The population density and buildings have yet to have efficient land use.

According to Constantinos A. Doxiadis (1968), the essential elements of settlement are divided into five, namely:

- 1. Nature is land used to build a place to live and several other functions,
- 2. Man is a user; both individuals and groups who build a residence or who settle,
- 3. Society is a social activity or social interaction, such as social relations of the population in order to create social bonds as a community unit,
- 4. Shells are a place to live or settle for humans with various functions,
- 5. Moreover, Networks are facilities and infrastructure that facilitate and support environmental functions and human activities.

The five essential elements of the settlement are explained in the following points:

- 1. Nature is about climate, natural resources, topography, availability and quality of clean water, and open space for plants and live animals.
- 2. Humans have primary needs such as air, temperature, water, interaction space, security, beauty, morality, etc.
- 3. Society, which is related to population density, social strata, socio-culture, education, entertainment, and health.
- 4. Buildings related to the physical condition of houses, public facilities, offices, transportation, and recreation areas.
- 5. Infrastructure facilities, namely clean water system network, road, electricity, telecommunication, drainage, waste management, and toilets.

According to this theory, observations on settlements in urban villages can be conducted based on the characteristics of the occupants and the housing characteristics.

- 1. Occupant Characteristic
 - The identification of the characteristics of the occupants is an analysis of the social and economic conditions of the people who live in the urban village, which are discussed regarding:
- 2. Social conditions related to the education level of the urban village community and the type of their occupation.

- 3. Condition of population density and the number of people living in the urban village area.
- 4. Condition of the economy in their ability to meet daily needs by analyzing the source and amount of income from the type of their occupations.
- 5. Housing Characteristic
 Identification of housing characteristics in urban villages consists of an analysis
 of activities, functions, and events that occurred in residential areas.
 Identification is continued on the deviations examined, for instance, the
 condition of the building regarding its visual appearance in the residential area,
 the shape and area of the building compared to the number of occupants, and
 the maintenance of the residential unit in the settlement.

D. Vertical Village (Kampung)

Settlements in Indonesia are already facing land scarcity issues. Rapid population growth in line with the increasing need for housing has resulted in increasingly expensive land prices in urban areas. These problems have resulted in urban areas constructing vertical housing as an alternative solution for providing ideal housing in developing countries (Prasetyo, 2012). There are two choices in designing vertical housing, namely, onsite planning and relocation. Site design is redevelopment planning at the original location, while relocation is redevelopment in other areas and moving the community to a new environment. The ideal relocation plan refers to four things, namely:

- 1) Residents must be involved in selecting a location for development,
- 2) The selected location has a similar ecological condition to the previous resident location.
- 3) Arrangement of permanent housing involves residents who will be relocated,
- 4) The location of new settlements must have supporting facilities, both physical and social facilities and infrastructure, by the resident's move (Wasesa, 2011).

The problem that is most likely to happen with the relocation system is that most residents want to stay in their places. This is caused by the strong ties of the community to the environment where they live, the close location of work, social ties between communities, and the previous place of residence being inherited from the previous family who had lived there. Therefore, onsite realignment planning is a top priority.

E. Urban Renewal

Urban renewal is an activity to remodel or rearrange both primary and comprehensive, and the requirement for community participation (Law of the Republic of Indonesia Number 4 of 1992 concerning Housing and Settlements). Urban renewal can be defined as a process, function, and arrangement program (Arisngatiash & Muktiali, 2015). Urban rejuvenation or urban renewal as a process can be defined as an effort to rearrange some areas that have been built previously in order to improve the function and usefulness of the residential area. Urban renewal function is to control the development and rejuvenation of damaged settlements or areas that are

environmentally degraded to provide areas that accommodate community activities according to urban planning. Lastly, urban renewal as a program is a system that can be implemented with good, coordinated, and integrated planning.

In its planning, urban renewal must consider aspects of sustainable development in urban areas. These sustainability aspects include economic, socio-cultural, and environmental factors (Brooke & Best, 2014; Ramadhani et al., 2017) and can be further explained as follows:

- 1) Economic, social, and cultural aspects are included in the quality of the environment, accessibility to the site, availability of surrounding infrastructure, existing public policies, and considerations of environmental aspects.
- 2) Recognizing historical and social contexts is an effort to present planning designs with uniqueness and relevance to history, maintaining historic buildings, and balancing the preservation of existing things by embracing new ideas.
- 3) The parties involved are local communities, government, and private institutions. A book entitled Sustainable Housing for Sustainable Cities (Golubchikov, 2012), mentioned a series of sustainable housing plans are:
- 1) Consider the site's dimensions by ensuring the efficiency of energy, water and available resources. The application of green architecture in construction and selecting materials are also considered. Other things are about improving the sanitation of settlements and increasing housing resilience.
- 2) We are paying attention to social dimensions such as population empowerment, increasing community participation, health, living welfare, and settlement identity, as well as providing facilities, access to infrastructure, and public open spaces.
- 3) I was paying attention to cultural dimensions such as elevating cultural values in residential design, improving design aesthetics, and helping to develop the creativity of the community.
- 4) Paying attention to economic dimensions such as affordability of housing prices for different social strata, providing building designs that boost community productivity, supporting residents' economic activities, and education on the maintenance and management of residential buildings.

The Method

The research method is a scientific way to obtain data for specific purposes and uses (Sugiyono, 2013). This research is qualitative. Qualitative research is the process of producing research in the form of descriptive textual or verbal data from people and observable behaviors (Moleong, 2007). Qualitative research methods are research methods used to examine the status of natural objects, techniques that combine data collection, inductive data analysis and qualitative research results, emphasizing meaning rather than generalization (Sugiyono, 2009).

A qualitative approach is the process of research and methodological understanding of social phenomena and human problems. In this approach, the researcher creates a complex picture, examines words, reports from the respondent's point of view, and conducts research in natural situations (Creswell, 1998: 15). Bogdan and Taylor (Moleong, 2007: 3) argued that the qualitative method is a

research process that produces descriptive data in the form of human speech and text and observed behaviour.

Qualitative research is conducted under natural conditions and is inventive. In qualitative research, the researcher is the primary tool. Thus, researchers must have theory and insight to be able to ask questions and analyze and construct research objects more clearly. This study emphasizes more on the meaning and associated values. Qualitative research is used when the problem is unclear, to uncover hidden meanings, to understand social interactions, to develop theories, to ensure data validity, and to examine developmental history.

Data collection techniques carried out by researchers are by observation and documentation measures. This study is conducted through participatory observation towards the activities of the Gandekan Village Community. This method was used to collect data through digital or online observations. Observation is the act of measuring what is happening. This method is used to gather data about daily activities. Observation is part of a person's ability to use his observations as a result of observing both the senses of sight and hearing. The observation method is carried out by observing directly the research subject with the aim of getting a detailed picture in order to obtain accurate data to be used as material for research discussion.

RESULTS AND DISCUSSION

Residents Characteristics Analysis

In the past, the residents of Gandekan Village were only reserved for the families and workers of the Taspirin Merchant, but along with the development of industry and technology in Semarang City, the residents in Gandekan Village are increasingly diverse, not only from the natives but now half of the people who live in Gandekan Village are Chinese. The increase in population is one of the consequences of urbanization; migrants from various regions then marry and settle in that area.

Regarding socioeconomic aspects, Kampun Gandekan is still classified as having low-level characteristics in terms of education quality and income, and most of them are private employees—the low socioeconomic level of the residents is directly proportional to the population density.

1. Residents Age

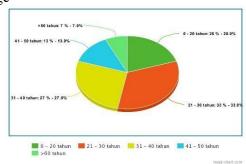


Figure 1. Chart of the age distribution of Gandekan Residents *Source: Result of analysis, 2022.*

Education

The educational background of Gandekan Village Semarang is categorized; the non-schooling group is the dominant educational background (61%), followed by elementary school graduates (11%), junior high schools (8%), and high school (20%).

3. Income

Gandekan Village is classified as a low-income community, from the survey and observations made by the community with income below Rp. 500,000, as much as 68%, earning Rp. 500,000 - Rp. 1,000,000, as much as 25%, and people who earn above Rp. 1,000,000, as much as 7% only.

4. Job type weekly wages

For residents of Gandekan Village, the type of job is divided into several categories. For the first category, the scavenger, almost 26% of the residents survived by collecting scrap metal and earning Rp.47,000 daily. For the second category, street vendors, with different types of sales, including traditional food, snacks, drinks, etc., with a weekly revenue of Rp. 350,000. The third category is odd jobs, where the income is uncertain. The fourth category is unemployment. The unemployment rate in Gandekan Village is relatively high, at 23% of the population. The last category is a factory worker with an income per week of Rp. 300,000.

Residents Activity Analysis

The daily activities of the residents of Gandekan Village are working, and the children are playing in the afternoon. The occupation of the majority of residents is carried out in this area as well, which means that this village is their place to work and reside. Other activities, such as big holidays, are also held in this village, such as commemorating Indonesia's Independence Day.

Environmental State Analysis

In general, the arrangement of dwellings in Gandekan Village still needs to be well organized, especially in the area around RT (Neighbourhood Association/ *Rukun Tetangga*) 1. The construction of buildings does not consider road and river boundaries. In addition, there is no vegetation or open land in the surrounding environment that can be used for community gatherings or activities. The condition of the facilities is also of concern, such as the quality of drainage, clean water, and the condition of the house.

a) Clean Water

Based on the survey, it was concluded that the residents are using water sources from PDAM (45%), from shallow wells (45%), and 10% do not have clean water sources. The need for drinking water is obtained by buying retail in gallons/buckets. Some residents still use public toilets, and some who already have private bathrooms and toilets are also in poor condition and need a septic tank.

b) Housing Condition

Most of the dwellings in Gandekan Village are occupied by buildings that still need to be liveable as they do not meet the requirements of residential hygiene standards. Structural conditions like this are more often seen in the RT 1 area. The definition of unlivable is a building that is semi-permanent or semi-permanent; the urban area is small and narrow, and there is no separation among parts. There is no separation of shared space and private space, a lack of maintenance of the owners for the building where they live, and a lack of legal ownership evidence from the city government for the buildings they occupy. However, several houses in Gandekan Village have historical value from the Tasripin family heritage and display architectural patterns that the Middle East influences. The original building is still preserved and is different from the villages in other urban villages because it is home to some of the Taspirin descendants in Gandekhan village.

c) Drainage

The village drainage canal is an artificial drainage hidden and has a direct channel to the river through a ditch. Accessibility or drainage size is wide enough but gets narrower when you go to the area behind the settlement. In general, the houses in this village still need more open space, so only a few buildings have proper sanitation, while the rest dispose of sanitation waste directly into the river. Drainage conditions could be dirtier during the rainy season as garbage will be gathered and clog the available drainage.

Village Vertical Design Concept

1) Design

In implementing a vertical village, the first floor will be a public space for residents. The community will be involved in managing the space, such as providing stalls, restaurants, shops, playgrounds, and waste management. The goal is to provide a solution in response to the situation of the Gandekan Village community, and on the other hand, it will help the local economy and establish cooperation with the government in its implementation. In addition, community awareness can also be formed to protect the environment where they live and work. For residential floors, it is designed with other functions such as communal spaces and implementing an integrated utility system.

The design will maintain the existing atmosphere. The available materials are also reused, such as materials from community houses that are combined, such as mosaics. This will present a rustic design character on the building envelope. The building will be constructed into a four-story building so that stairs can reach the means of vertical movement. The construction will start from the frame structure, and the development will start from the various and dynamic geometric forms of existing dwellings. This vertical village will also maximize natural lighting and cross ventilation to maintain air quality.

2) Building Concept

The building was developed into modules that consider the function of the family level of the community in Gandekan Village. The development of the modules starts from a square shape as a planar module with a size of 4m x 4m. The size was selected as the occupancy area of the existing residents is about 4m and the safest rigid structure module with a span of 4m.



Figure 2. Module 1 Building Source: Result of analysis, 2022.

The module was developed into 1.5 modules to facilitate people who have small families that can accommodate husband and wife with a room size of about 24 m².

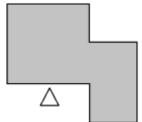


Figure 3. Module 1,5 Building Source: Result of analysis, 2022.

The development of the module was continued into two modules to facilitate people who already have children with an area of 32 m².

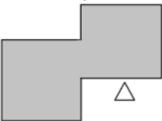


Figure 4. Module 2 Building Source: Result of analysis, 2022.

The modules were later developed into 2.5 modules and three modules for families with more than two children with sizes of 40 m² and 48 m².

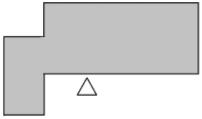


Figure 5. Module 2,5 Building *Source: Result of analysis, 2022.*

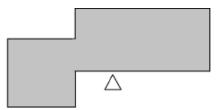


Figure 6. Module 3 Building. Source: Result of analysis, 2022.

CONCLUSIONS

Vertical housing development is inevitable. Urban areas are forced to develop vertical housing for future development. Vertical housing fulfills the needs of the social context by relocating the original area and improving the quality of the community by improving the quality of the environment, society and economy, rather than relocating the surrounding population, which is believed to be possible. According to the survey, Gandekan Village is more accessible for residents, but they do not consider transitioning to a new environment.

The recommendation for this research is that it has been proposed to develop Gandekan Village into a vertical village so that it has several different modules according to the population's needs. The module starts with a flat 4-meter cube with an area of 16 square meters. The modules have been expanded to 1.5 as the smallest unit in the core family, two modules for the expansion family, and 2.5 and 3 for the more prominent expansion family. The mass is set to reciprocate rhythmically and adopts a residential mass structure to capture passive ventilation that distributes sunlight to the unit. Most buildings should be able to take on the shape of the village itself with a new vertical design.

REFERENCES

- Ahmed, S., "Urban Morphologies Design Qualities and the Decision Making Process Relationship Tpma Kamiat: Case of Karachi, Pakistan", *Journal of Engineering Science and Technology International Research Journal*, 2017.
- Amri, Nurmaida, "Environmental Characteristics of Edge Slums Kolaka District River, Southeast Sulawesi", Universitas Hasanuddin, Makassar. 2013.
- Arisngatiasih and Muktiali, M., "Pola Pemanfaatan Ruang Pada Usaha Berbasis Rumah (UBR) di Klaster Batik Jenggot Kota Pekalongan". *Jurnal Wilayah dan Lingkungan*, 3(3), 175, 2015. https://doi.org/10.14710/jwl.3.3.175-188.
- As' ari, R., & Fadjarajani, S., "Environmentally-Based Slum Settlement Arrangement", Geography Journal: Information Media for Geographical Profession and Development, 15(1), 2018.
- Brooke, G., Best, G., *Urban Renewal Guidebook*. Australia: KMPG, 2014. ISBN: 9781481999526.

- Budiharjo, Eko, *Urban Spatial Planning*. Bandung: Alumni, 1997. ISBN: 9789794143247.
- Budiharjo, Eko, Sejumlah Masalah Permukiman Kota. Alumni: Bandung, 1998.
- Creswell, J. W, Qualitative Inquiry and Research Design: Choosing among Five Traditions. London: Sage Publication, 1998.
- Doxiadis, Constantinos A, Ekistics, An Introduction to the Science of Human Settlement. New York: Oxford University, 1968.
- Golubchikov, Sustainable Housing for Sustainable Cities. Kenya, 2012. ISBN: 9789211324884.
- Heryati, "Kampung Kota sebagai bagian dari Permukiman Kota Studi Kasus: Tipologi Permukiman RW 01 RT 02 Kelurahan Limba B dan RW 04 RT Kel. Biawu Kecamatan Kota Selatan Kota Gorontalo". *Jurnal Universitas Negeri Gorontalo*, 8(3), 2011, 11-13.
- Komarudin, *Tracing Housing and Settlement Development*, Jakarta: Yayasan REI, 1996. ISBN:9789798879012.
- Krauss, Gerald, *The Kampung of Jakarta, Indonesia: Study of Spatial Patterns in Urban Poverty*. Pittsburgh: University of Pittsburgh, 1975, 31-35.
- Law No. 4 of 1992 concerning Housing and Settlements.
- Moleong, L. J., *Metodologi Penelitian Kualitatif Edisi Revisi Cetakan Kedua Puluh Empat.* Bandung: PT Remaja Rosdakarya. 2007.
- Nur'aini, A.D., (2017). Urban Farming in Vertical Villages as an Efficiency Effort with Limited Land (Doctoral dissertation, Institut Teknologi Sepuluh Nopember).
- Nursyahbani, R., Pigawati, B., "Study of Characteristics of Slums in Urban Village Case Study: Gandekan Village, Semarang", *Urban Planning*, Vol.4, No.2, 2015, Hal.267-281.
- Prasetyo, S., Rusunawa Planning for Workers in Slums in Semarang City. 2012.
- Ramadhani, A.N. & Faqih, M., "The Effect of Physical Quality Improvement to Inhabitants Sense of Place". *EMARA: Indonesian Journal of Architecture*, 2019, 5: 32–40.
- Ramadhani, A.N.,..., Hayati, A., "Behavior Setting and Spatial Usage Analysis on Sombo Low-Cost Flat's Corridor", *Journal of Architecture & Environment*, 16, 061, 2017.
- Ramadhani, A.R., Oktafiana, B., "Vertical Village in Lumumba Village, Surabaya", *Architectural Journal NALARs*, Vol.20, No.2, Juli 2021:109-118.
- Roychansyah, M.S. and Diwangkari, A., *Kampung Oriented Development Model: A Rapid Appraisal of Local 20 Communities*. UNS: PIPW LPPM UNS, 2009.
- Setiawan, B., Kampung Kota dan Kota Kampung(an) Potret Tujuh Kampung di Kota Yogyakarta. Yogyakarta: Pusat Studi Lingkungan Hidup Universitas Gajah Mada, 2010.
- Sihono, 2003. Peran Serta Masyarakat dalam Pengelolaan Prasarana Pasca Peremajaan Lingkungan Permukiman di Mojosongo Surakarta. Tesis Program Pasca Sarjana Magister Teknik Pembangunan Wilayah dan Kota. Universitas Diponegoro.
- Sobirin, (2001). Distribution of Settlements and Urban Infrastructure: A Case Study of the Dynamics of Urban Development in Indonesia, Universitas Indonesia, Jakarta.

- Sugiyono, Metode Penelitian Kuantitatif Kualitatif dan R&D. Bandung: Alfabeta, 2009.
- Sugiyono, Educational Research Methods: Quantitative, Qualitative, and R & D Approaches. Bandung: Alfabeta, 2013. ISBN:9798433718.
- Surtiani, E. E., "Factors Influencing the Existing of Slum Areas in the City Center Area (Case Study: Pancuran Area, Salatiga)", Doctoral dissertation, Postgraduate program at Diponegoro University, 2006.
- The Spatial Planning Dictionary, 1997.
- Wasesa, S. A, *Relokasi dan Kuasa Atas Ingatan (Erlangga, Ed.)*. Yogyakarta: Ekspresi, 2011.
- Widjaja, Pele, *Village-City* Bandung. Yogyakarta: Graha Ilmu, 2013. ISBN: 97860226210089.
- Yunus, Hadi Sabari. 1987. Geografi Permukiman dan Beberapa Permasalahan Permukiman di Indonesia. Yogyakarta: Fakultas Geografi, Universitas Gadjah Mada.n and T. Corresponding, "The Contextual Issues in the Islamic Architecture of Bengal Mosques," *GJAT*, vol. 3, no. 1, pp. 41–48, 2013.

Darmawan, Lubis : "KAMPUNG VERTICAL" DESIGN IN URBAN VILLAGE AS URBAN RENEWAL STRATEGY (CASE STUDY: GANDEKAN VILLAGE, SEMARANG)

This Page is Intentionally Left Blank