



UNDERSTANDING KAMPUNG TRANSFORMATION THROUGH DEVELOPMENT THINKING PERSPECTIVE: INSIGHTS FROM 'KAMPUNG BERKEBUN PAJAJARAN'

MEMAHAMI TRANSFORMASI KAMPUNG MELALUI PERSPEKTIF *DEVELOPMENT THINKING*: PEMBELAJARAN DARI 'KAMPUNG BERKEBUN PAJAJARAN'

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ABSTRACT

Learning about slum upgrading, with a particular focus on activity transformation, is critical for addressing slum problems resulting from rapid urbanization. Consequently, this research focuses on 'Kampung Berkebun Pajajaran', Bandung, as a case study of a successful slum transformation. Previous research has focused partially on specific aspects of transformation. This article employs the development thinking framework to analyze the complete picture, examining the interplay between the program, community's agency, initiatives, and external support structures. This framework equips researchers with a critical lens to provide a comprehensive analysis of the dynamics of activity transformation that occurred. The findings indicate that development thinking framework offers a more comprehensive understanding of the transformation from a broader perspective. The results demonstrate that the community prioritized values of solidarity, self-reliance, and collaboration to achieve progress. Their vision of reduced dependency materialized through the urban farming initiative, generating social, economic, and environmental benefits.

Keywords: Development Thinking, Kampung, Transformation, Community, Urban Farming.

ABSTRAK

Pembelajaran tentang perbaikan kawasan kumuh, dengan fokus yang spesifik tentang transformasi aktivitas, sangat penting untuk mengatasi masalah permukiman kumuh akibat dari pesatnya urbanisasi. Maka dari itu, penelitian ini berfokus pada "Kampung Berkebun Pajajaran", Bandung, sebagai studi kasus transformasi permukiman kumuh yang berhasil. Penelitian terdahulu hanya berfokus pada aspek-aspek tertentu dari transformasi. Artikel ini menggunakan kerangka development thinking untuk menganalisis gambaran yang lengkap, mengamati interaksi antara program, agensi masyarakat, inisiatif, dan struktur dukungan eksternal. Kerangka ini membekali peneliti dengan lensa kritis untuk memberikan analisis yang komprehensif tentang dinamika transformasi aktivitas yang terjadi. Temuan-temuannya menunjukkan bahwa kerangka development thinking menawarkan pemahaman yang lebih komprehensif tentang transformasi dari perspektif yang lebih luas. Hasil penelitian menunjukkan bahwa masyarakat memprioritaskan nilai solidaritas, kemandirian, dan kolaborasi untuk mencapai kemajuan. Visi mereka untuk mengurangi ketergantungan diwujudkan melalui inisiatif urban farming yang menghasilkan manfaat sosial, ekonomi, dan lingkungan.

Kata kunci: Development thinking, Kampung, Transformasi, Komunitas, Urban farming.

1. INTRODUCTION

Despite its links to improved living standards and greater economic prosperity, rapid urban growth in unprepared regions can exacerbate existing vulnerabilities and trigger negative consequences. One significant challenge is the emergence of slum settlements. Roughly 6% of Indonesia's urban population is estimated to be slum dwellers, typically located along the waterways (ADB, 2022). These communities are often characterized with limited access to essential services and infrastructure, particularly in critical areas like waste management, sanitation, and drainage (Unger, 2013). Along with declining soil and river conditions that diminish water absorption capacity, a condition that is known to worsen flood risks. ADB's (2022) study indicated a 75% increase in the population vulnerable to river flooding between 2015 and 2055.

Urbanization's multifaceted impacts extend to food security and nutritional outcomes. Loss of productive agricultural land due to urban expansion may have additional negative impacts on agricultural yields and food supply chains (FAO, 2023). This challenge intertwines with the struggle of urban slum communities, with income poverty prevailing as one of the primary causes. High food expenditure in metropolitan areas, often exceedingly roughly 70% of household income worsens vulnerability (Macalou et al., 2023). Poor environmental health further worsens this condition. Consequently, urbanization poses significant challenges to food security, nutritional well-being, and the affordability of healthy nutritious food choice (FAO, 2023).

Bandung is the capital city of West Java province with a population of 2.5 million people, ranking as Indonesia's fourth largest city (Ministry of Home Affairs of the Republic of Indonesia, 2023). Bandung was initially founded as a resort city in the 1800s by the Dutch East Indies government, due to its appeal of rich natural surroundings and pleasant climate (Voskuil, 2007). Over time, it has transitioned into a significant national hub for social, political, and economic activity (Tarigan et al., 2016). Notably, Bandung is also part of the Greater Bandung Metropolitan Region, the third largest in Indonesia, encompassing nearly 8.5 million inhabitants. As the most populous and expansive metropolis in West Java, Bandung is going through a similar trend. In terms of the urban expansion, Bandung is likewise growing rapidly (UN-Habitat, 2018).

Poor development planning has resulted in the emergence of similar issues with slum settlements in the city of Bandung (Auliannisa, 2009). With 26,000 housing units spread across 1.458,67 Ha of slum areas, Bandung is Indonesia's second largest city in terms of the number of slum dwellers, after Jakarta (Tarigan et al., 2016). As a result, the city's kampung areas have been victims of flooding events throughout the years (Nugraha, 2024; Jaelani, 2024). Moreover, the issue of food accessibility is also evident in Bandung as it essentially lacks a sufficient supply chain due to limited land availability. Almost 96% of the city's food is produced outside of its administration border. This has made Bandung susceptible to price volatility, inflation, poor food quality, and poverty (Sutriadi et al., 2022).

Based on the background, learning about slum upgrading is important, particularly with regard to the transformation of activities within the area. The importance of such transformation has been extensively discussed in previous research. For example, Sesotyaningtyas et al. (2015) emphasized the importance of changes in viewpoint, perspective, community behavior, and the establishment of community agreements in driving housing transformation in slum areas of Bang Bua, Thailand and Kampung Naga, Indonesia. Minnery et al. (2013), in their case study of three Southeast Asian countries including Indonesia, also raised the connection between slum upgrading and sustainable economic activities as one critical component in developing and implementing effective programs. Additionally, numerous studies have also highlighted the significance of community perceptions and participation in the success of slum upgrading initiatives (Jenkins et al., 2010; Permatasari et al., 2022; Swapan et al., 2023).

Therefore, this research was conducted in 'Kampung Berkebun Pajajaran', Bandung, along the Cilimus River Watershed (DAS). Once considered as one of the worst slum areas in Bandung, used to regular flooding, this community has attracted considerable attention due to its reputation for transforming into a more attractive and productive area. In 2021, Indonesia's Vice President conveyed his

appreciation, and the community was entrusted to host a visit by the Urban20 delegation (Ministry of State Secretariat of the Republic of Indonesia, 2021; Maulana, 2023). The government attributes this transformation to the urban farming program (Miftah, 2018). This study delves deeper into the success of 'Kampung Berkebun Pajajaran', with the aim of identifying transferable knowledge and strategies that can be applied to similar efforts elsewhere. In particular, it emphasizes the role of activity transformation as a critical aspect of slum upgrading, as demonstrated by the success of the 'Kampung Berkebun Pajajaran' initiative and the processes through which this transformation unfolded.

Several studies have explored the transformation process that has happened in Kampung Pajajaran through the lens of the government's program, putting emphasis on the implementation strategies and evaluation. Ramadhan & Putri (2019) examined the communication strategy employed during the implementation of the urban farming system. They identified a phased approach, consisting of: (1) knowledge stage where the government served as the primary source of information, (2) persuasion stage led by the RW chairman, (3) decision stage, (4) implementation stage, and (5) confirmation stage. Conversely, Ulfa et al. (2019) evaluated the government-led program. Their study identified areas for improvement in training, collaboration, and partnership to enhance local economic opportunities.

Others have focused their research on the process of innovation diffusion and adoption, as well as from the empowerment and learning perspectives. Sari (2020) identified that interpersonal or face-to-face communication as the dominant diffusion element impacting the speed of innovation adoption, highlighting the crucial role of change agents in facilitating communication channels. Suhaeti (2019) examined the empowerment processes within the program, which explored how the program fostered environmental, economic, and social empowerment. Milyane & Widiastuti (2019) investigated the environmental communication strategy employed to raise awareness about environmental cleanliness within the community. Furthermore, these studies highlight urban farming as a strategy to stimulate public awareness and participation in environmental protection.

Although previous studies have largely attributed the transformation to the urban farming program, the issue has been addressed only partially. To gain a more comprehensive understanding, it is necessary to explore the interplay between the program, community agency, their initiatives, and external support structures. This will allow us to fully understand the role of activity transformation and gain insights from the whole processes through which it occurred. This research aims to address this gap by examining the multifaceted elements that led to Kampung Berkebun Pajajaran's transformation, by shifting the focus to their journey as a community. It delves beyond the government's program to capture the development in the process. Are these initiatives the sole drivers of change, or do other factors contribute? How does development unfold within the community? If it is indeed transformative, what valuable lessons can be learned from this case study? By employing the development thinking framework, this research aims to answer these critical questions.

Development thinking covers a wide range of views about development, including various aspects, both theoretical and practical (Desai & Potter, 2014). Understanding the evolution of development thinking entails consideration of three aspects: development theories, development strategies, and development ideologies (Hettne, 1995). Development theories can be seen as logical propositions aimed at explaining past development and/or prescribing future development. They are embedded in the ideas and practices of development. Conversely, development strategies include concrete steps for achieving development goals. They involve agents and resources, structures and institutions, and the deliberate change stimulated. Various concepts and actions of development reflect different goals and objectives, based on different sets of values and criteria. These are what referred to as development ideologies (Desai & Potter, 2014).

Development thinking involves more than just theoretical interpretations of facts; it is also about values, aspirations, societal goals, and ultimately, what is moral, ethical, and right. Such a comprehensive framework is necessary due to the interdisciplinary nature of development studies (Desai & Potter, 2014). This research employs the development thinking framework to dissect the transformative journey of

Kampung Berkebun Pajajaran. This framework equips researchers with a critical lens to delve deeper into development programs and practices, fostering a rich and multidimensional understanding of the actual processes that unfold within the communities. Through the lens of development thinking, this research aims to comprehensively capture the dynamics of activity transformation within the context of slum upgrading in Pajajaran Subdistrict Kampung. By investigating multiple facets of development at the community level, it explores how local perspectives on their way of view and value system, criteria of progress, order and structure, resource and agents, and the deliberate changes initiated.

2. DATA AND METHODS

This article employed a descriptive qualitative research method utilizing a case study approach (Creswell & Poth, 2018) to capture the transformation that occurred in Kampung Berkebun Pajajaran through development thinking framework (Desai & Potter, 2014). Data collection focused on Kampung Berkebun Pajajaran, located within RW03 and RW04 (neighborhood units) of the Pajajaran Subdistrict within Bandung City's Cicendo District, alongside Cilimus River. A purposive sampling technique was implemented to identify key actors involved in the transformation. These individuals with deep understanding and experience relevant to the culture investigated or circumstances are selected to become the key informants. These informants are comprised of the initiators and managers of the urban farm, Pajajaran Subdistrict youth organization ('Karang Taruna Pajajaran'), and agricultural instructor from Bandung City's Government's Food Security and Agriculture Department.

The data and information were obtained through a combination of primary and secondary sources. The primary data collection instruments included in-depth interviews with the key informants, in which the participants were asked to share their experiences and perspectives related to the changes that they had experienced through the urban farming initiative, their roles in the process, their community value systems, and their idea of progress. Subsequently, the data and information obtained were corroborated through observations of the study area, thereby facilitating firsthand insights into the community's activities and practices. Additionally, analysis of relevant information and secondary data, as well as interviews with other key figures/actors, were conducted. Thereafter, the data and information obtained from informants' perceptions were analyzed using the content analysis method (Schreier, 2012). Content analyses were employed to obtain insights that were then identified objectively, systematically, and linked to the development thinking framework.

3. RESULT AND DISCUSSION

3.1. Kampung Pajajaran

The historical transition of settlements in Bandung, from rural to urban, is closely associated with the "Preanger Stelsel" policy. This policy mandated the relocation of indigenous populations to designated zones, fundamentally transforming Bandung into a modernization hub to serve Dutch and European interests (Kausan et al., 2019). Post-independence, "Bandung Lautan Api" pushed locals to reclaim the urban areas. Following a period of relative stability, Bandung transformed into a metropolis. This period triggered rapid and uncontrolled urbanization, attracting a wave of migrants seeking better life opportunities. Consequently, housing shortages emerged, leading many residents to build homes in unplanned areas lacking legal status. Over time, these settlements evolved into "urban kampung" characterized by informal economic activities and limited access to basic services and infrastructure (Kausan et al., 2019).

Kampung Pajajaran is one of the kampung arised from this process. It manifests itself as a densely populated residential area with very limited space. In the beginning, most of the residents were comprised of migrants from the Priangan region and beyond. By the early 2000s, residents predominantly comprised of individuals who had been there for several generations, those who were born and grew up in the area.

Nevertheless, they often retain ancestral ties to their families' originating "hometowns". Additionally, a smaller migrant population has recently emerged, drawn by marriage to local residents. Within Kampung Pajajaran, residents engage in various communal activities such as *kerja bakti* (communal work), *botram* (regular neighborhood picnics), *pengajian* (collective Quran recitation) and *ronda* (routine community patrols).

3.2. The Problem

Urban kampung often perceived as chaotic and characterized by impoverished living conditions (Nursyahbani & Pigawati, 2015). These communities face unique and diverse challenges. In Kampung Pajajaran, stories shared by key informants – Pak Wawan, formerly RW chairman (community leader), and Kang Izal, formerly head of the 'Karang Taruna' (local youth organization) – shed light on their struggles. Notably, inadequate infrastructure, particularly waste management system, has resulted in the accumulation of household waste within the settlement. This has in turn triggered the unfortunate habit of disposing of waste into the Cilimus River. The subsequent accumulation of waste within the settlement and the waterway has contributed to frequent river water overflows, culminating in severe flooding events.

"At that time, there were still significant volumes of waste accumulation (in the river), contributing to overflows and flooding events. This impacted residents in RWo3 and RWo4. It's even worse for residents in RWo4, as it's located below the river. They experience water surges that form some kind of "waterfalls", flowing directly into their homes." (Kang Izal, Interview)

Another problem Kampung Pajajaran faced is the issue of unemployment. As explained in the previous section, the residents of Kampung Pajajaran originated as migrants primarily from rural West Java. They are primarily driven by aspirations for improved employment opportunities within Bandung's urban landscape. However, in actuality, urban migrants often face fierce competition in the labor market. This means that not all newcomers successfully integrate into the formal workforce. Consequently, significant portion of Kampung Pajajaran's population experiences uncertain livelihoods, engaging in informal economic activities, odd jobs, or facing unemployment. In extreme cases, individuals may even resort to illicit activities such as drug sales, as highlighted by Pak Wawan during the interview process.

"Most men in this area engages in 'freelance' work, and most of them even facing unemployment. ...There was one of my residents who had recently released from incarceration due to drug-related charges." (Pak Wawan, Interview)

In 2015, the Bandung City Administration, through Decree Number 648/Kep. 286-DisTaRCip/2015, classified the Pajajaran Subdistrict kampung as a slum settlement. This area, that is crossed by the Citepus and Cilimus rivers, has a slum area spanning 20.12 hectares (Keputusan Walikota Bandung Nomor : 648/Kep. 286-DisTaRCip/2015 Tentang Penetapan Lokasi Lingkungan Perumahan dan Permukiman Kumuh di Kota Bandung, 2015). Consistent with the decree, Auliannisa (2009) also previously classified Kampung Pajajaran as one of the severe slum areas in their study. The lived experiences reported by our informants corroborated the prevalence of slum conditions at the time. Kang Izal shared his experience of being invited to a meeting, where representatives from six classified "worst slum" Subdistricts, were informed of the decree. This meeting, based on his perspective, served as a catalyst for the community and youth organization involvement in initiatives seeking positive change for their neighborhood.

“In 2015, I was invited to a meeting at Poltekesos in Dago, along with representatives from five other subdistricts, including subdistrict heads and social services personnel. Anticipating an award or some kind, I was surprised to learn that we were listed as one of the six worst slum areas in the city of Bandung. ... I think this trigger was the turning point, what triggered and motivated us to act. While acknowledging our limitations, we need to maximize the potential of our existing, densely populated neighborhood.” (Kang Izal, Interview)

Ultimately, the challenges faced by Kampung Pajajaran formed by a complex interconnected issue. Severe environmental degradation, driven by inadequate infrastructure, compounded the socio-economic problems of high unemployment. However, the official designation as a severe slum settlement in 2015 did not crush the community's spirit. As informant's testimonies reveal, it rather served as a powerful catalyst. This convergence of physical decay, economic problems, and public stigma created the critical trigger for the residents to take collective action, determined to transform their environmental and socio-economic conditions.

3.3. 'Kampung Berkebun Pajajaran'

The changes for Kampung Pajajaran began in 2014, initiated by Pak Wawan, the RW04 chairman who is also a Bhabinkamtibmas (community policing officer). Fuelled by his personal passion for plants, he began planting the riverbank with decorative plants. He claimed the Bandung City Government's "greening city" initiative as inspiration for his actions. Impressed by the aesthetic appeal, Pak Wawan's closest neighbours expressed interest in replicating them. However, the densely populated nature of the kampung presented a challenge, lacking sufficient land for widespread planting. To overcome this spatial limitation, a tactical solution emerged. They finally took the initiative to construct bamboo installations that they call *paranggong* extending over the Cilimus River that provides additional space for potted plants.

*“When I initially got the role as the RW chairman, it was the time when Ridwan Kamil was busy doing greening initiatives, building numerous parks. Driven by this (broader context), as a community leader, I thought I should initiate our own community garden project. This initial effort ultimately led our kampung to achieve awards in a local 'Green and Clean' competition. After that, the urban farming program emerged, organically attracting (a few) residents to engage in gardening activities, albeit in a spontaneous manner. We adopted bamboo structures which we call *paranggong* to address space limitations, creating additional planting space.” (Pak Wawan, Interview)*

Pak Wawan admitted facing some initial challenges, primarily from encouraging a change in mindset of the community about the greening initiative. Many residents, unfamiliar with agricultural practices and lacking sufficient land, expressed skepticism. Undeterred, Pak Wawan invested his personal time to raise awareness about the value of his initiative from environmental point of view, including anti-littering measures along the river. Initially, he even provided planting materials and seeds using his own funds and *luran Wajib Daerah* (regional compulsory contribution) that he managed as RW chairman to overcome residents' hesitancy to invest. His dual role as community leader and Bhabinkamtibmas helped this process by leveraging his existing authority. To address potential concerns regarding safety and environmental impacts related to river construction, the community also engaged in discussion with river activists and academics.

Leveraging his position as the head of Karang Taruna at the time, Kang Izal took part in the greening initiative. Through his network, he connected with the local district head, who then introduced them to the mayor of Bandung at that time. The administration then recognized the ongoing citizen initiative's

potential and its alignment with the city's objectives of promoting urban agriculture and enhancing settlements quality. As pioneers of the independent kampung greening initiative, Kampung Pajajaran was strategically chosen as one of the kampungs to spearhead the promotion of kampung urban farming practice in the city of Bandung. The government further supported the initiative's expansion by providing training, assistance, and support on cultivating fruits and vegetables using urban farming methods, either on the *paranggong* structures or vertical gardens affixed to residents' houses.

"In 2015, I was in the Karang Taruna, we took a photo and sent it to the district head. He then contacted the mayor of Bandung. Once Kang Emil was sworn in as mayor, he came to our location, then he provided assistance, appreciated our efforts." (Kang Izal, Interview)

This program was then continued by the next administration, putting more emphasis on food inflation control and food security within their agenda. Partnering with Bank Indonesia, the Food Security and Agriculture Service launched the "Buruan SAE (Healthy, Natural, Economical)" program in 2019, specifically designed to boost urban farming efforts in the city of Bandung. This program aimed to improve family food security, generate economic opportunities, and foster a healthy environment by encouraging residents to engage in diverse agricultural activities, including horticulture, fruit cultivation, fish farming, and livestock. Under this program, Kampung Pajajaran once again received support, including training sessions, seeds and planting media assistance, as well as infrastructure improvements such as the expansion and maintenance of *paranggong* structures.

Following the implementation of the urban farming initiative with support from the government, the community was finally able to witness and experience the more tangible benefits that then solidified their support for the changes advocated by Pak Wawan and Kang Izal. Notably, residents experienced reduced household expenditure on groceries due to their ability to harvest fresh fruits and vegetables from their communal garden. Additionally, the initiative contributed to a cleaner and greener environment, evident in less waste accumulation found in the community and improved odor control along the riverbank. Furthermore, community members could generate extra income through the sale of surplus produce, including vegetables, fruits, and seeds. Pak Wawan emphasized that these concrete positive outcomes ultimately fostered widespread community acceptance and active participation in the urban farming efforts.

"As they witnessed the tangible benefits it generated, their enthusiasm surged. This was evident with residents even competing for resources help like soil, planting media, and seedlings. This enthusiasm contrasted with responses to other forms of assistance, such as rice aid, suggesting that residents perceived urban farming as offering more potentially profitable livelihood opportunity. In fact, we were overwhelmed with increasing demand for garden expansion." (Pak Wawan, Interview)

In 2020, BRI or Bank Rakyat Indonesia, one of Indonesia's largest state-owned banks, supported the urban farming initiative through its corporate social responsibility program, BRInita. This program supports efficient agricultural practices in densely populated areas by utilizing limited land effectively. BRI's intervention focused on providing physical infrastructure, including greenhouses, *paranggong* structures development using light steel materials, hydroponic and wall gardening tools, seeds, and other equipment (see Figure 2). Their participation facilitated the expansion of the initiative beyond RW04, reaching RW03 and RW08. This expansion also led to the creation of two enduring community groups: the PokBun or 'Kelompok Berkebun' (Gardening Group) in RW04, managed primarily by men, and the KWT or 'Kelompok Wanita Tani' (Women Gardeners Group) in RW03, managed primarily by women. These groups remain actively involved in managing and sustaining the urban farming practices in their respective areas.

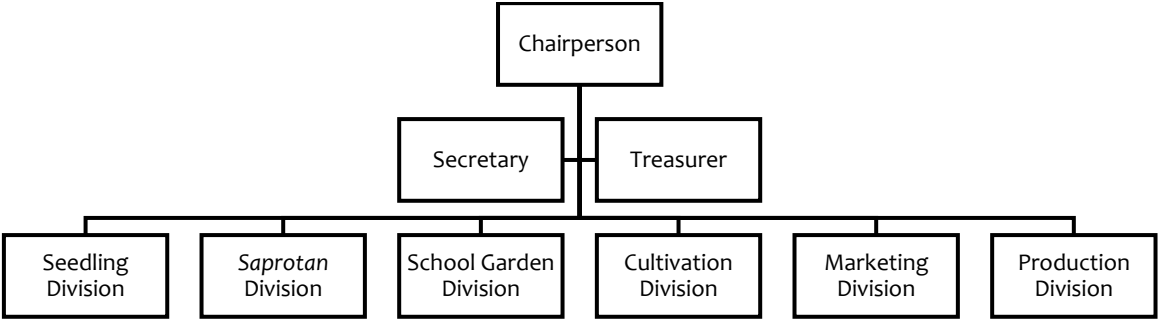


Figure 1. Organizational Structure of Kampung Garden Management Group



Figure 2. Urban Farm Paranggong over the Cilimus River

The striving community-driven initiative then attracted diverse forms of support as it became more established over time. Ranging from government agencies, non-profit organizations, to academic institutions. These resources have facilitated ongoing learning and experimentation within the community. The latest one, BAZNAS training introduced them to “Budidamber” technique of catfish farming in buckets. On the other hand, the community has also been keeping up with independent learning and experimentation in urban farming techniques. This involved exploration of diverse planting media, optimal planting site’s installation methods, and new approaches to achieving high-quality yields without chemical inputs. Bu Neni, leader of the KWT, said that they experimented and adapted YouTube tutorial videos, not merely adopting them. Her proactive knowledge sharing within the community then further catalysed their progress, fostering a collaborative learning environment. Today, the two gardening groups of RW03 and RW04 proudly manage their thriving urban farm, a testament to their dedication and collaborative learning spirit (see Figure 3).



Figure 3. Bu Neni Tending the Community Garden

3.4. Development Analysis

a) Value System, Way of View

Social network theory posits that denser networks within communities facilitate collaboration, trust-building, and cooperation towards shared goals (Putnam et al., 1993). Kampung Berkebun Pajajaran manifests this principle, demonstrating a robust network characterized by frequent communal activities aimed at achieving common objectives. These activities, such as *ronda* (community patrols) with the goal of neighborhood security and *kerja bakti* (communal work) that is done environmental upkeep, necessitate collaboration and foster the qualities of solidarity and togetherness (Rodiyah, 2008). Over time, these shared experiences contribute to shaping the community's value system, with solidarity and togetherness becoming the core cultural pillars of Kampung Berkebun Pajajaran's community.

Evidently, the robust social network of Kampung Pajajaran possesses a well-established history. In the 1970s, the residents of Kampung Pajajaran undertook self-funded community improvement projects through collective action. This longstanding tradition of cooperation for shared goals highlights the community's deeply ingrained spirit of collaboration (Kausan et al., 2019). Such cooperative practices have fostered a rich history of social networks, generating a societal structure and order that translates into social capital. As defined by Putnam et al. (1993) social capital refers to shared norms, networks, and trust that enable collective action towards common objectives. Through sustained collaboration, Kampung Pajajaran has accumulated social capital that further strengthens their ability to work together in pursuit of shared goals.

b) Criteria of Progress

Based on the value system, the criteria of progress that Kampung Pajajaran community articulated is generally linked to the pursuit of reduced level of dependency, encompasses two key dimensions: food security and financial independence. This aspiration is evident in the informants' responses, such as the expressed desire for true food security, currently unrealized due to the kampung garden's limited capacity to meet all residents' grocery needs. In more detail, the community explains their goal of further developing their current urban farming practices. The community hopes to turn the kampung into an agro-educational tourism destination, so that it can further stimulate the economy of the residents and optimize the existing potential. They envision how their kampung can become a tourist attraction. Because of its proximity to the airport and the Pasteur toll gate, they considered their kampung as actually having a very strategic location.

"We want to achieve that dream, hopefully this ideal can be achieved from the results of Buruan SAE. We want to achieve the goal of true food security, not just theoretically." (Bu Neni, Interview)

"If you look from the frontside, from Djundjuran street and Pasteur toll gate, all we get is the traffic jam. The airport is also nearby, but (I think) no one will come here to visit. As an area that is located in the two main accesses of Bandung, Djundjuran Road and Husein Airport, we are still not a destination (for tourists). In the future, we also want to develop." (Kang Izal, Interview)

"Our aspiration is to establish a truly resilient tourist kampung. ... We expect synchronized collaboration between agencies (in government). Currently, we lack involvement from the Tourism Agency and the Environment Agency. We wish that tourists arriving at the airport would immediately recognize our kampung as an attractive destination due to our unique garden feature. We're hoping for partnerships with hotels to promote visits to our kampung. We imagine "Bandros" (Bandung tourist buses) picking up visitors from hotels and the airport to bring them directly to our garden early in the morning. Those are our

aspirations. We need these agencies to designate us as (some kind of) a pilot project. The community is highly motivated and enthusiastic (to develop this initiative). This would significantly boost the local economy and increase visitor, fulfilling our ultimate hope.”
(Pak Wawan, Interview)

The community also wishes to elevate their management of Kampung Berkebun Pajajaran to a more professional level as mentioned by Bu Vivi, the government’s agricultural instructor. The informants attributed this limitation to their lack of entrepreneurial capacity, organizational skills, and product diversification. They expressed concerns about underutilizing the value of their produced resources. It is evident in the garden’s reliance on sources beyond generated sales. The initiative’s financial sustainability currently relies on a combination of sales, *iuran* (community contribution), and supplemented by occasional external donations and assistance. In this aspect, the community also identifies the need for enhanced infrastructure development. They acknowledge limitations in advancing tourism opportunities due to current constraints in essential infrastructure such as the *paranggong*, water supply, and transportation accessibility.

“We have intentions to produce something (processed product), but I am not (yet) an expert in (that kind of) production.” (Bu Neni, Interview)

“(The garden) has not been managed professionally, because they have different backgrounds with different occupations. Maybe it can be supported, as Pak Wawan mentioned, by linking parties who can support the community’s aspiration.” (Bu Vivi, Interview)

“What we lack now is a matter of infrastructure. For example, (so far) it is done by ourselves or other parties here (from around community), but we do not know about the durability of the buildings that are constructed. ... For us, we only have the Cilimus River, the water source that we have not processed, we also hope that we can process and utilize the water from the river as well.” (Kang Izal, Interview)

“The water (volume) is (too) little. We had the idea to build a tall water tank. But then we must install more electricity too, we have to pay more every month. We are saving up little by little so that we can use a high-water tank that can spray well.” (Bu Neni, Interview)

The community’s criteria for progress are deeply rooted in the pursuit of self-reliance, extending beyond subsistence to encompass both food security and financial independence. As the informant testimonies reveal, their ambition is to evolve the “Kampung Berkebun” initiative from a source of supplemental food into a professionally managed agro-educational tourism destination. They recognize their strategic location near the airport and major roads as untapped potential. However, they also identify critical barriers to this vision, their lack of entrepreneurial capacity, the need for product diversification, and significant lack of infrastructure, including durable structures and a reliable water supply. They expressed concerns about underutilizing the value of their produced resources. This struggle is common in similar urban greening initiatives; a study on the Gayamsari eco-village in Semarang, for instance, found that the economic dimension of their program had the lowest achievement score (Yuliastuti et al., 2017). Ultimately, their vision for progress is a holistic one, requiring not only their own motivation but also collaboration with government agencies to transform their aspirations into a sustainable reality.

c) *Structures – Institutions – Resources – Agents*

Initially, the drive for change originated from within the community itself. Key figures such as Pak Wawan, leveraging his position as the head of RW, and Kang Izal, drawing upon his role as the head of Karang Taruna, spearheaded the initiative. During this phase, the community utilized the *Iuran Wajib Daerah* (community fund) managed by RW to finance their “greening” project. In this phase, they also consulted river activists and academics, to address concerns regarding their river development plan. Then, Kang Izal leveraged his government network to connect with the district head, who subsequently introduced them to the city mayor. This interaction marked the entry of the government as one of the key stakeholders. Their involvement materialized through the ‘Kampung Berkebun’ program, which was later succeeded by the Buruan SAE program, a collaboration with Bank Indonesia. Consequently, this led to the formation of a formal management structure, the *Kelompok Berkebun (PokBun)* of RW04.

The government’s support served as a catalyst for further growth, ultimately attracting the involvement of private sectors. BRI emerged as a key supporter through its CSR program, BRInita. This collaboration facilitated the expansion of the urban farming initiative into RW03, necessitating the formation of a new management structure: the ‘Kelompok Wanita Tani’ (KWT) led by Bu Neni. These institutions collaborate to provide comprehensive support, encompassing, capital support through *iuran* or community contribution, construction and maintenance of *paranggong*, equipment, seeds, planting media, fertilizers, and other essential supplies. Notably, the collaborative effort extends beyond material assistance, with all parties involved offering training and assistance in urban farming practices. Later, the community further developed their knowledge by independently seeking information through online resources, particularly YouTube channels, to refine their urban farming practices.

The structure and institutional aspects of this initiative evolved organically from a grassroots effort into a sophisticated multi-stakeholder partnership. What began with the community’s internal resources and leadership was strategically amplified by government intervention and further by private sector’s support. This external support created an environment where residents were empowered to supplement formal training with their own independent learning. This dynamic interplay between top-down institutional support and persistent bottom-up community agency has been fundamental in driving the project’s success.

d) *Deliberate Changes*

Kampung Pajajaran community experienced changes through the development of urban farming *paranggong* over the Cilimus River. Notably, this transformation was not an instantaneous consequence of the light steel *paranggong* construction. Rather, it was a gradual process driven by collective efforts spearheaded by Pak Wawan and Kang Izal. Initially, greening initiatives began with Pak Wawan’s modest effort of planting attractive plants, which inspired his closest neighbors to follow suit. Kang Izal then took the initiative to the district head who then introduced them to the then-mayor of Bandung. This pivotal interaction exposed the kampung to a multitude of support opportunities, including those provided by the Bandung City Government, Bank Indonesia, and BRI, among others. This influx of external support significantly empowered the community to expand and further develop their urban farming initiative.

Changes also occur institutionally, as evidenced by the formation of two urban farm management organizations. The first is Pokbun (‘Kelompok Berkebun’), who oversees the garden in RW04, while KWT (‘Kelompok Wanita Tani’) manages the garden in RW03. Notably, these management groups have received formal recognition through a decree issued by the Pajajaran Subdistrict. Informants emphasized that the establishment of these two organizations serves more than only the purpose of administering the kampung garden. Along with the presence of the *paranggong*, the kampung garden managers became the kampung’s trusted individuals, participating in kampung management responsibilities for collective activities such as routine picnics, social gatherings, Quran recitation, patrols, and public service affairs such as *posyandu* (community healthcare center) and funerals. Furthermore, the revenues from the sale of the village garden benefit the kampung through extra *iuran* (contribution).

These deliberate changes have subsequently catalyzed a transformation in the activities undertaken in Kampung Pajajaran. Previously lacking in collective communal initiatives and economic activities, the kampung has now adopted urban farming practices into their daily activities. This transformation has demonstrably yielded benefits for the community in terms of social, economic, and environmental spheres. Socially, the cultivation and maintenance of the kampung garden fosters enhanced social cohesion. Regular interactions associated with gardening activities strengthen resident relationships, cultivating a stronger sense of community and a more cooperative spirit. Additionally, the *paranggong* functions as a vital communal space, providing a much-needed social hub. This space facilitates frequent gatherings, both planned and spontaneous, formal and informal. From an economic standpoint, the garden's produce is distributed or sold at low prices for local consumption which reduces household expenses, particularly for groceries. Furthermore, the kampung garden offers employment opportunities for the community's men, many of whom hold informal or part-time jobs.

"After we implemented urban farming, groceries shopping (expenses) decreased, ...for examples the vegetables for the household, we can just harvest chilli, or vegetables. ...There is also economic value because many people purchase our products." (Pak Wawan, Interview)

"We integrate the men (of our community) who work 'freelance', even many who are unemployed. So, this activity provides them with an opportunity to generate income." (Pak Wawan, Interview)

From the environmental aspect, prior to the initiative, the kampung environment and Cilimus River were plagued by waste accumulation. However, the introduction of urban farming activities, particularly along the riverbank with *paranggong*, fostered a sense of environmental stewardship among residents. Cleaning the river became a prerequisite for establishing the *paranggong*, thereby instilling a routine of river maintenance within the community. Consequently, the practice of littering in the river has ceased due to reduced accessibility. Furthermore, the informants noted a significant reduction in flood intensity throughout the rainy season, not only within RW03 and RW04, but also in neighboring RWs, attributed to improved water flow facilitated by the urban farming practices along the Cilimus River. The environmental transformation extends beyond waste management and flood control, with residents experiencing a noticeable improvement in air quality, characterized by a shift from a hot, unpleasant environment to a fresh and cool atmosphere.

"Once the residents began engaging in activities above the river, we naturally (first) focused on going down first, to ensure the soil was stable enough, we eventually needed to go down to the river. This led to a community effort to clean the river, which clearly intensified residents' involvement with the Cilimus River. ... After the development, flooding events have significantly diminished. ... Previously stagnant river flow within our community would take a longer time to recede, resulting in extensive flooding across several RWs (neighborhood units). After the implementation of the urban farming project, there is significant impact in reduced of floods." (Kang Izal, Interview)

"So now we have residents along the riverbank who are ready to jump in (to clean the neighbourhood) without being ordered. They are ready with their boots. ... The effect on the river is very apparent, now it is harder (to litter) because it is covered (by the paranggong). This significantly reduces waste. ... Then the air becomes fresh, it's different from before, ...with urban farming, the best thing to do is to harvest veggies in the morning, it's very good." (Pak Wawan, Interview)

The development of urban farming in Kampung Pajajaran illustrates a community-led transformation with multifaceted impacts. What began as a physical intervention, the construction of *paranggong*, catalyzed a series of positive changes across all aspects of community life. Institutionally, it led to the formation of formal management bodies that became central to community governance. Socially, it cultivated deep cohesion and cooperation by creating vital new communal spaces and activities. Economically, it improved household food security and provided crucial income opportunities. Finally, and perhaps most strikingly, it reconfigured the residents' relationship with their environment, replacing neglect with active stewardship and resulting in tangible ecological benefits, from flood mitigation to improved air quality.

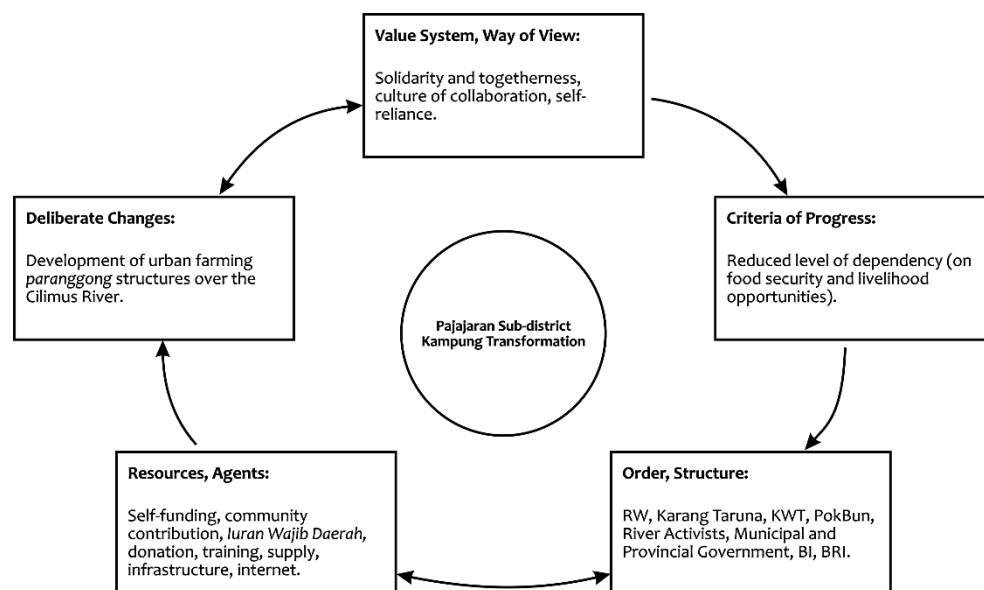


Figure 4. Development Thinking Framework of Kampung Berkebun Pajajaran

The transformation of Kampung Pajajaran is a case of intentional, community-driven development, deeply rooted in a pre-existing value of solidarity of togetherness, culture of collaboration, and self-reliance, illustrating a strong sense of social capital. This capacity was strategically mobilized through a blend of the community's bottom-up agency with top-down support from governmental and private sector institutions. This partnership enabled the community to pursue its articulated goals of achieving greater self-reliance on food security and livelihood opportunities. Ultimately, the urban farming became the catalyst for a series of tangible improvements, creating positive benefits of enhanced social cohesion, improved economic security, and profound environmental restoration. Thus, the story of Kampung Pajajaran offers a powerful model of how leveraging inherent social capital through collaborative structures can effectively address urban challenges (see Figure 4).

The use of development thinking framework effectively illustrates the whole picture of the transformation process within the initiative. This perspective provides researchers with tools to capture the broad dynamics of transformation from a community-centered perspective. By examining community perceptions across the development process, researchers can better understand transformation through a broader perspective. However, while the framework might provide useful insights, it may not be sufficient for investigating knowledge agents in the innovation process. Transitional perspectives, such as Geels' (2005) Multi-Level Perspective (MLP) may be useful for a more nuanced exploration. This presents a potential direction for further research on Kampung Berkebun Pajajaran and slum upgrading efforts in general. Nonetheless, the versatility of the framework allows for smooth integration with various

perspectives, making it ideal for analyzing interdisciplinary issues such as sustainable development which emphasizes social, environmental, and economic aspects simultaneously.

4. CONCLUSION

Despite the presence of external support, the community's longstanding social capital emerges as the primary driver behind the sustainability of urban farming activities and the observed community transformation. The enduring value systems within the community, characterized by a strong sense of community and togetherness, serve as a testament to the long-standing social cohesion. This internal strength proved to be a crucial factor, particularly when faced with challenging living conditions, including poor environmental conditions and limited economic opportunities. Leveraging these assets, the initiators effectively mobilized the community by capitalizing on all available opportunities, from engaging government networks to collaborating with private actors. Thus, the development process manifests a community-driven approach that belongs to the grouping of bottom-up and alternative approaches.

Moreover, economic considerations emerged as one of the primary motivators for community participation in the transformation process. This is evident in the informants' narratives, which describe a gradual shift in residents' attitude. Initial reluctance to participate gave way to growing enthusiasm as the initiative's economic benefits materialized. These benefits stemmed from the sale of harvested vegetables, fruits, and seeds. Furthermore, the informants' aspirations for the future, which represent the community's idea of progress, underscore the economic dimension of the transformation. Their vision of developing the kampung garden into an eco-edu-tourism destination reflects their desire for a sustainable source of livelihood for the community, highlighting the economic goals underpinning their efforts.

Despite the economic motivations, the engagement with urban farming has fostered a reconnection with nature within the community and improved food security. This activation also brought support from the government and private institutions through training and resources. The community also seeks knowledge independently, especially through online platforms. As a result, the community has achieved a certain degree of self-sufficiency in food production. However, the community has not fully realized its economic potential due to lack of financial independence and entrepreneurial skills. Ultimately, the findings highlight the critical role of activity transformation in facilitating neighborhood improvements within slum upgrading efforts. In particular, the 'Kampung Berkebun' initiative has spurred significant progress in Kampung Pajajaran. The transformation has generated positive outcomes for the community across social, economic, and environmental dimensions.

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6. REFERENCES

- ADB. (2022). *Building Resilience of the Urban Poor In Indonesia*.
- Auliannisa, D. (2009). *Permukiman Kumuh di Kota Bandung*. Skripsi, Universitas Indonesia.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative Inquiry & Research Design: Choosing Among Five Approaches*. SAGE Publications, Inc.
- Desai, V., & Potter, R. B. (2014). *The Companion to Development Studies*. Routledge.
- FAO. (2023). The State of Food Security and Nutrition in the World 2023. In *The State of Food Security and Nutrition in the World 2023*. FAO. Retrieved from <https://doi.org/10.4060/cc3017en>.
- Geels, F. W. (2005). *Technological Transitions and System Innovations : A Co-Evolutionary and Socio-Technical Analysis*. Edward Elgar.

- Hettne, B. (1995). *Development theory and the three worlds: towards an international political economy of development* (2nd edition). Longman Scientific and Technical.
- Jaelani, J. (2024, January 12). *Banjir, Kawasan Bandung Utara, dan Penggusuran*. BandungBergerak.Id. Retrieved from <https://bandungbergerak.id/article/detail/159525/banjir-kawasan-bandung-utara-dan-penggusuran>.
- Jenkins, P., Abiko, A., Frediani, A. A., & Moraes, O. (2010). Urban upgrading interventions and engaging residents in fuzzy management: Case studies from Novos Alagados, Salvador, Brazil. *Habitat International*, 34(1), 105–114. DOI: <https://doi.org/10.1016/j.habitatint.2009.07.005>.
- Kausan, B. Y., Wijayanti, P. A., & Atno, A. (2019). Kampung-Kota Dan Permukiman Kumuh Di Kota Bandung Tahun 1965-1985. *Journal of Indonesian History*, 8(1), 53-61. DOI: <https://doi.org/10.15294/jih.v8i1.32211>.
- Macalou, M., Keita, S. I., Coulibaly, A. B., & Diamoutene, A. K. (2023). Urbanization and food security: evidence from Mali. *Frontiers in Sustainable Food Systems*, 7. DOI: <https://doi.org/10.3389/fsufs.2023.1168181>.
- Maulana, Y. (2023, December 9). *Pertanian Kota dan Wajah DAS Cilimus yang Kian Berseri*. DetikJabar. Retrieved from <https://www.detik.com/jabar/berita/d-7080666/pertanian-kota-dan-wajah-das-cilimus-yang-kian-berseri>.
- Miftah. (2018, May 23). *Cicendo Ubah Kampung Kumuh Jadi Lahan Ekonomis*. Portal Bandung. Retrieved from <https://www.bandung.go.id/news/read/4685/cicendo-ubah-kampung-kumuh-jadi-lahan-ekonomis>.
- Milyane, T. M., & Widiastuti, N. (2019). Shape of Environmental Communication In The Citarum Harum Program (Case Study of The Citarum River Edge Community in Cicendo District and Cibeunying Kaler District at Bandung City). *Proceeding of The 5th Conference on Communication, Culture and Media Studies*, 14–16.
- Ministry of Home Affairs of the Republic of Indonesia. (2023). *Visualisasi Data Kependudukan*. Retrieved from <https://gis.dukcapil.kemendagri.go.id/peta/>.
- Ministry of State Secretariat of the Republic of Indonesia. (2021, September 29). *Wapres Apresiasi Kawasan Agrowisata Urban Farming di Bandung*. Setneg.Go.Id. Retrieved from https://www.setneg.go.id/baca/index/wapres_apresiasi_kawasan_agrowisata_urban_farming_di_bandung.
- Minnery, J., Argo, T., Winarso, H., Hau, D., Veneracion, C. C., Forbes, D., & Childs, I. (2013). Slum upgrading and urban governance: Case studies in three South East Asian cities. *Habitat International*, 39, 162–169. DOI: <https://doi.org/10.1016/j.habitatint.2012.12.002>.
- Nugraha, A. (2024, January 11). *Banjir Bandang Terjang Kampung Braga Bandung, Ratusan Rumah Terdampak*. Liputan6.Com. Retrieved from <https://www.liputan6.com/regional/read/5503108/banjir-bandang-terjang-kampung-braga-bandung-ratusan-rumah-terdampak?page=2>.
- Nursyahbani, R., & Pigawati, B. (2015). Kajian Karakteristik Kawasan Pemukiman Kumuh di Kampung Kota (Studi Kasus: Kampung Gandekan Semarang). *Teknik PWK (Perencanaan Wilayah Kota)*, 4(2), 267–281. DOI: <https://doi.org/https://doi.org/10.14710/tpwk.2015.8463>.
- Pemerintah Kota Bandung. (2015). Keputusan Walikota Bandung Nomor: 648/Kep. 286-DisTaRCip/2015 Tentang Penetapan Lokasi Lingkungan Perumahan dan Permukiman Kumuh Di Kota Bandung.
- Permatasari, N. D., Lestari, F., Karenina, A., & P Nasution, A. (2022). Identifikasi faktor-faktor yang mempengaruhi perubahan kampung dari semi kumuh menjadi kampung kreatif (studi kasus: Kampung Bekelir, Kelurahan Babakan, Kota Tangerang). *Region : Jurnal Pembangunan Wilayah Dan Perencanaan Partisipatif*, 17(2), 346-359. DOI: <https://doi.org/10.20961/region.v17i2.54876>.
- Putnam, R. D., Leonardi, R., & Nanetti, R. Y. (1993). *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton University Press.
- Ramadhan, G., & Putri, Y. R. (2019). Strategi Komunikasi Dalam Implementasi Sistem Urban Farming Di Rw 04 Kelurahan Pajajaran Kecamatan Cicendo Kota Bandung. *E-Proceeding of Management*, 6(2), 5370.
- Rodiyah, I. (2008). Pengaruh Nilai Kebersamaan Budaya Lokal, Lingkungan Kerja, dan Motivasi terhadap Kreativitas Kerja Pegawai di Badan Kepegawaian Kabupaten Sidoarjo. *Kalamsiasi*, 1(1).
- Sari, C. R. N. (2020). Proses Difusi dan Adposi Inovasi Program Kampung Berkebun (Studi Kasus: Kampung Berkebun RW 04, Kelurahan Pajajaran, Kecamatan Cicendo, Kota Bandung). *Thesis*, Institut Teknologi Bandung. <https://digilib.itb.ac.id/gdl/view/51343>.
- Schreier, M. (2012). *Qualitative Content Analysis in Practice*. SAGE Publications. Retrieved from [https://www.daneshnamehicsa.ir/userfiles/files/1/9-%20Qualitative%20Content%20Analysis%20in%20Practice%20\(2013,%20SAGE%20Publications\).pdf](https://www.daneshnamehicsa.ir/userfiles/files/1/9-%20Qualitative%20Content%20Analysis%20in%20Practice%20(2013,%20SAGE%20Publications).pdf).
- Sesotyaningtyas, M., Pratiwi, W. D., & Setyono, J. S. (2015). Transformasi Hunian Dengan Perspektif Spasial Dan Tatanan Budaya: Komparasi Permukiman Kumuh Bang Bua, Thailand Dan Kampung Naga, Indonesia. *Geoplanning: Journal of Geomatics and Planning*, 2(2), 116-123. DOI: <https://doi.org/10.14710/geoplanning.2.2.116-123>.

- Suhaeti, S. (2019). Pemberdayaan masyarakat kampung berkebun Penelitian di RW 04 Kelurahan Pajajaran Kecamatan Cicendo Kota Bandung. *Skripsi*, UIN Sunan Gunung Djati. Retrieved from <https://etheses.uinsgd.ac.id/id/eprint/23194>.
- Sutriadi, R., Fahmi, F. Z., Arifianto, A., & Muttaqin, F. I. (2022). Buruan Sae, a Green Action towards a Communicative City in Bandung City, West Java Indonesia. *IOP Conference Series: Earth and Environmental Science*, 1015(1). DOI: <https://doi.org/10.1088/1755-1315/1015/1/012023>.
- Swapan, M. S. H., Sadeque, S., Iftekhar, Md. S., & Sooben, N. (2023). Predictors of the Intention to Participate in Slum Upgrading Projects: Perceptions of Slum Dwellers in Mauritius. *Urbanisation*, 8(1), 41–60. DOI: <https://doi.org/10.1177/24557471231169126>.
- Tarigan, A. K. M., Sagala, S., Samsura, D. A. A., Fiisabilillah, D. F., Simarmata, H. A., & Nababan, M. (2016). Bandung City, Indonesia. *Cities*, 50, 100–110. DOI: <https://doi.org/10.1016/j.cities.2015.09.005>.
- Ulfa, K., Rusdiyana, E., & Saefuloh, W. (2019). Evaluasi Kegiatan Urban Farming Program Dinas Pangan dan Pertanian Kota Bandung. *Prosiding Konser Karya Ilmiah Nasional 2019*.
- Unger, A. (2013). Children's health in slum settings. *Archives of Disease in Childhood*, 98(10), 799–805. DOI: <https://doi.org/10.1136/archdischild-2011-301621>.
- UN-Habitat. (2018). *Global Future Cities Programme: Bandung City Context Report*.
- Voskuil, R. P. G. A. (2007). *Bandung, citra sebuah kota*. Departemen Planologi ITB bekerja sama dengan PT. Jagaddhita.
- Yuliasuti, N., Wahyono, H., Syafrudin, S., & Sariffuddin, S. (2017). Dimensions of Community and Local Institutions' Support: Towards an Eco-Village Kelurahan in Indonesia. *Sustainability*, 9(2), 245. DOI: <https://doi.org/10.3390/su9020245>.