



Riung Participatory Design Model: Empowering Sustainable Urban Kampong Regeneration in Indonesia



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Abstract: The Riung Participatory Design (RPD) model has been developed as a strategy for fostering sustainable community development and regeneration in Indonesia's urban kampongs. This model integrates participatory design principles with design thinking methodologies to address the complex challenges faced by urban kampongs. The first stage of the RPD model, the Re-visit Participatory Art approach, investigates key dimensions such as relational dynamics, regional vitality, socio-cultural engagement, and territorial identity. Research findings highlight four significant factors: (1) robust community ties, wherein local residents collaboratively engage in problem-solving through the Indonesian cultural practice of 'gotong royong'; (2) the preservation and promotion of local traditions by the community; (3) the presence of symbolic artifacts that reflect local values and wisdom; and (4) the articulation of distinct territorial narratives within the kampong environment. In the second stage, the model employs a hybrid approach that combines participatory art with design thinking, mobilising communities for active participation in place-making processes. This approach was applied across three case study locations: Kampong Pelangi in Semarang (Central Java), Kampong Sukapura in North Jakarta, and Kampong Pondok Pucung in South Tangerang (Banten, West Java). The participatory evaluation conducted during the regeneration of these urban kampongs revealed the critical role of local actors in driving sustainable urban transformation. The study assesses community participation through the lens of eight characteristics of sustainable communities, thereby demonstrating the relevance of the RPD model in urban kampong regeneration. The findings indicate that an integrated and contextually adapted participatory design model is essential for addressing the unique socio-cultural and territorial dynamics of Indonesian urban kampongs. This research contributes to the understanding of how participatory design can be effectively employed to regenerate urban spaces while fostering sustainable, community-driven development.

Keywords: Riung Participatory Design (RPD); Urban village; Place making; Urban regeneration; Sustainable communities

1 Introduction

A city touches various dimensions of its dwellers, as a city should function as a shelter, a cradle of creativity, and an amicable place for communities. Urban issues, such as persistent slums and even the formation of new slums, still take place globally. Urban kampongs or urban villages, which spread across Indonesia's large cities, are communities that have managed to preserve their traditional ways of life. Since the 1980s, one of the consequences of urban growth in Indonesia is the declining number of traditional villages. The remaining villages that have long existed are now surrounded by new buildings and have become urban kampongs. Due to lower land prices and rental rates, urbanization has an impact on the growing population in urban kampongs. Unfortunately, most urban kampongs lack even the most basic amenities, such as access to clean water and waste management. The lack of site improvements, growing population, and inadequate administration, the kampong progressively turned into slums.

Building an ideal city is a never-ending debate among experts, professionals, and scholars. According to Burgess [1], it is not possible to meet every human quality in an urban setting by outsourcing the vision for urban development to consultants or professional planners. Failing to address the cultural needs of the end-user, urban dweller, or community could jeopardize their ability to perceive the social environment cognitively, thereby leading to sociological repercussions. The development of cities should have a holistic assessment and be planned towards

sustainability. Hirt and Zahm [2] reminded us about ‘Urban Wisdom’, which refers to the urban planning concept initiated by Jane Jacobs. Jacobs [3] argues that the urban planning process must involve local knowledge and be based on human experience in urban space. City planning does not only involve physical development but also the development of society by developing knowledge as well as the skills needed by a city. Jacobs conveys several principles of urban design. In the first principles of urban design and city planning, Jacobs [3] asserts that urban planners should be dominated by people who truly understand what makes a city work. The second and third principles of urban planning should involve people who have a deep understanding of the particular place and include people who truly care about the future of the place. Fourth, urban planning should be inclusive and reach as many people as possible. Fifth, urban planning should focus on current users. According to Worthington [4], public participation plays a critical role in fostering urban sustainability, as cities should be shaped by society. In the last several years, social sustainability and the implementation of sustainable development policies have come to be seen as critically dependent on public participation in project planning and interactive governance. The emphasis on the intrinsic value of public participation, as Rydin and Pennington [5] pointed out, is a continuation of a tradition that aims to increase public participation as a crucial component of better policy implementation and to expose planning procedures to democratic scrutiny.

1.1 Urban Regeneration

Urban regeneration, according to Roberts and Sykes [6], is an all-encompassing vision and activities in solving urban issues, enhancing physical, social, economic, and environmental conditions over a period of time, and undergoing phases of transformation. According to Healey [7], public participation in urban planning enables communities to voice their aspirations, which then influence the process of producing policies and implementing plans and programs. The urban generation approach allows for collaborative governance, or the interactive process by which governance in urban development challenges is defined. According to Rydin and Pennington [5], policy delivery in urban development should be more in tune with communities’ values and preferences. Policy implementation will be more effective by increasing the understanding of the cultural and socioeconomic characteristics of local communities. The best approach to understanding the community’s needs for urban development is to actively engage with the community itself. According to Sanoff [8], community involvement in the planning and design process should reach the level of genuine participation, which means cooperation, the formation of partnerships, good distribution of power, and citizen control. Sanoff [8] provides five principles of participatory design, namely: (1) Design does not aim to produce final results and solutions that cannot be altered but aims to build solutions that emerge from the ongoing dialogue of its users; (2) Participatory design has very diverse expressions; (3) Community forums must be continuously established, and all members of community groups must continue to be encouraged to participate; (4) Participatory design involve many issues of workmanship and methods (technology), therefore all parties and knowledge from various fields of science must be invited to collaborate; and (5) Comments, input and feedback from citizens must continue to be received on an ongoing basis. The final decision is not the end of the process. These decisions must continue to be regulated, evaluated, and adapted according to needs and changing dynamics. As a work tool model, Sanoff [8] proposes participatory action research (PAR - Participatory Action Research) because it is effective in producing citizen knowledge in a particular environmental context, which is then transformed into a design intervention based on the integration of design planning, research, and citizen participatory activities. According to Arnstein [9], there are eight levels of community participation; at the lowest level are manipulation and therapy, up in the middle level are informing, consultation, and placation, and at the highest level are partnership and citizen control. The highest level of citizen participation is when the level of cooperation between parties exists in the form of partnerships and sharing of authority (delegated power) until ultimately allowing the citizen to become decision-makers and have authority over how and how the decisions taken are implemented (citizen control). The implementation of the Community Action Plan and Community Implementation Plan should correlate with Arnstein’s three highest levels, which principles are to foster partnership and promote the most optimal citizen or community authority.

1.2 Social Sustainability and Sustainable Communities

Sachs [10] highlights that social sustainability must rely on the fundamental values of equality, democracy, and the successful appropriation of all human rights — political, civil, economic, social, and cultural. Polese and Stren [11] emphasize that urban development should be consistent with the harmonious evolution of civil society, creating an atmosphere that encourages the harmonious coexistence of culturally and socially different groups while also encouraging social integration, resulting in improved quality of life for all. Rapoport [12] affirmed that the ideal city is areas with diverse culture and subculture with the following design consequences. It is vital to understand the cultures of the many groups, their values, lifestyles, and activities. Urban design should be an open-ended design with some frameworks to connect and relate them. Open-ended architecture ideally generates spaces that allow for a greater range of cultural expression. Urban social spaces should allow freedom of action, participation, active-

creative adoption, and change. According to the ODPM [13], sustainable communities are places where people desire to live and work in the present and in the future. Sustainable communities address the diverse demands of current and future dwellers, providing a high quality of life that is safe, inclusive, and equal opportunity and quality services for all. In the components of a sustainable community: first, there is a balance between social, economic, and environmental components that are planned integrally; second, there are provisions for necessities for current and future generations, with respect to the wider region and globally.

One of the 17 Sustainable Development Goals, or SDG 2030, specifically SDG goal No. 11: Sustainable Cities and Settlements, the objective mentioned in 11.1, clearly states: Ensure access for all to adequate, safe, affordable housing, including slum area management, as well as access to basic urban services [14]. In line with the SDG 2030, the New Urban Agenda, or NUA, set a global commitment for multi-stakeholders to realize sustainable urban development goals [15]. NUA offers a new approach to building, managing, and organizing a city. In accordance with its main goal, Cities for All, NUA is committed to encouraging the development of cities and settlements that are more inclusive, non-discriminatory, and sustainable. It is a necessary goal that should be adopted by every urban planner and should be the main agenda for multi-stakeholders to structure and improve the quality of housing and slum settlements.

Amid Indonesia’s modernization, it is crucial to preserve the local values and transform urban kampongs to become sustainable places. Urban kampongs embody intrinsic cultural characteristics, which make Indonesian cities unique. The future of urban kampongs should be taken into account in Indonesian city development. Not just prevent it from becoming slums but to uphold its traditional values and to make urban kampong a creative force in cities. The RPD model recommended in this study incorporates urban kampong regeneration and sustainable community development as an integrative approach for urban planning in Indonesia. The model design is based on multiple case studies conducted in urban kampongs from 2015 to 2024 with two main research questions in mind: First, how the model shall guide multi-stakeholders and facilitators to implement and manage urban kampong regeneration programs, and second, what are the parameters for intervention approaches to foster sustainable community?

2 Methodology

2.1 RPD Model

This study examines empowerment strategy conducted in urban kampongs and explores how art-design process can be incorporated in participatory action model. This study proposed RPD model as empowerment strategy and planning assessment in urban villages. Riung is derived from the Indonesian Sundanese dialect, meaning togetherness. RPD combined design thinking and a participatory action model for placemaking. The participatory model aimed to empower the community, establish collaboration with multi-stakeholders, and foster participatory planning. The proposed RPD model is derived from multiple research studies in several urban kampongs conducted from 2015 to 2024 as described in Table 1.

Table 1. Participatory model development

Period	Research Sites	Participatory Model Introduced and Implemented	Research Findings and Strategies Refined
2016-2017	Kampong Pondok Pucung, Banten Province, West Java	Design as Generator	Mapping and participatory action
2017-2021	Kampong Pelangi, Semarang City, Central-Java	Re-visit Participatory Art model	Mapping and participatory action
2022-2023	Kampong Sukapura, North Jakarta	Riung design	Participatory Community Action Plan & evaluation
2024	Kampong Ciakar, Banten Province, West Java		

The first phase of the RPD model is the mapping stage, followed by participatory design as engagement stages and action plans. The first phase of the RPD model was based on the Design as Generator model, which was studied and implemented during 2016 to 2017 in Kampong Pondok Pucung, Banten Province, in West Java, Indonesia [16]. The intervention phase is intended to create a stimulus and activate local residents in the development plan for urban kampongs. The first phase of the RPD model is focused on the social innovation strategy, which includes regional mapping, participatory art, and action plans. The first phase of mapping is also based on the Re-visit Participatory Art model, which was studied and implemented from 2019 to 2021 in Kampong Pelangi, Semarang, Central Java, Indonesia [17]. The social innovation strategy in the Re-visit Participatory Art model focused on constructing place identity, local knowledge, exploring culture, and place history. Re-visit ART Participatory Art model, as

described in Table 2, is based on a study of traditional heritage, existing vernacular creativity, place history, and territorial narration. The culmination of these factors is regarded as collective identity expression and modeled as Relational, Vernacular, Symbolical, and Territorial (RVST) expressions for participatory art and design practices as an intervention strategy in urban villages [17]. Re-visit Participatory Art model is intended to create a stimulus and activate local residents in developing their village's identity. This model promotes participative development and involves understanding the place history and local culture.

Table 2. Re-visit participatory framework

Re-Visit (RVST) Framework			
Relational	Vitality & Vernacularity	Socio-Cultural & Symbolic Shape	Territorial Shape
<ul style="list-style-type: none"> - Community relations - Stakeholders' relations (government, internal and external stakeholders) - Sense of belonging - Spatial community - Relational expressions 	<ul style="list-style-type: none"> - Local uniqueness - Local identity & expressions - Authentic spatial patterns 	<ul style="list-style-type: none"> - Social amenity and symbolism - Social activities and social encounters - Cultural messages - Place attachments 	<ul style="list-style-type: none"> - Place / territory history - Functionality - Physical space - Place dependence - Territorial needs

The design process in the RPD model is developed in combination based on action stages found in Design as Generator according to Katoppo and Sudradjat [16] and Re-visit Participatory Art for Place Identity model according to Irwandi et al. [17]. Action stages in the Design as Generator model are divided into three phases, which are: Discover, Differentiate, and Implement [16]. At the Discover phase, facilitators communicate with residents and look for potential local figures or local communities who are willing to participate in the project. Facilitators must discover the place's background according to the local perspectives and problems encountered by the residents. At the different phases, local communities were encouraged to participate in the planning or placemaking process. During the Implementation phase, facilitators and multi-stakeholders, together with local communities, put the planning into practice. Action stages in Re-visit Participatory Art for Place Identity model consist of three phases: Dialog, Ideate, and Co-create, as described in Figure 1.

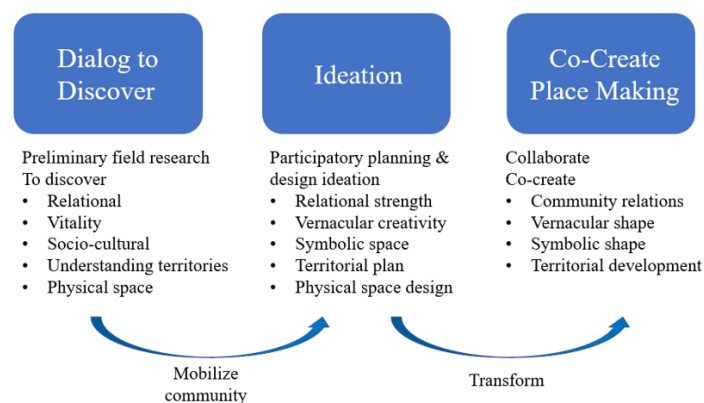


Figure 1. Action stage and iteration steps in RPD model

Table 3. Design thinking aspects in RPD model

Design Thinking Stages in Participatory Model			References
Discover <i>Temukan</i>	Differentiate <i>Bedakan</i>	Implement <i>Jadikan</i>	Design as Generator model [16]
Preliminary field research	Participatory activity planning	Design experimentation	
Dialog	Ideate	Co-create	Re-visit Participatory Art for Place Identity model [17]
Relational condition	Relational strength	Community's creation	
Vitality	Vernacular shape	Vernacular creativity	
Socio-cultural condition	Symbolic shape	Symbolic shape	
understanding territories	Territorial plan	Territorial development	

At the Dialog phase, facilitators must learn about the place's history, socio-cultural values, and local perspectives about the place. The Ideate phase in the re-visit model was inspired by the design thinking process according to Hasso Platner, Stanford Design School, specifically on the ideation process where designers brainstorm and look for the best among competing ideas. The ideation process in the re-visit model involves searching for relational factors, vernacular creativity, and symbolic and territorial shape. The Co-create phase involves planning and place-making processes. The design thinking aspects was derived from Design as Generator and Re-visit Participatory Art model, as described in Table 3.

2.2 Participative Stages of Urban Kampong Regeneration

Indonesian administrative municipalities, from larger government body to smaller unit, consist of provincial government, city (Kota) or regency (Kabupaten), district office (Kelurahan), community association (Rukun Warga), and the smallest body is the Neighbourhood Association (Rukun Tetangga). The study area selection of urban villages was based on recommendations by recent studies in each region, city council, or regency's database and archives in the district office. The participant selection of urban villages in Indonesia focused on existing communities registered at the Community Association (Rukun Warga) and Neighbourhood Association (Rukun Tetangga) based on the District Office's database. Various community members were gathered and invited to a focused group discussion, followed by enlisting community members to participate in a series of programs.

Urban kampong regeneration in the RPD model can be managed and evaluated in participative stages. The classification and stages of participation are divided into four categories as explained in Table 4.

Table 4. Participative stages in RPD model

Lower Participation		Higher Participation	
A. People Development	B. Strengthening Community	C. Active and Collaborative	D. Sustainable and Empowered
- Low awareness	- Few community	- Understand the problems	- Long term plan
- Little knowledge to solve the problems	- Aware of the problems	- Active in finding solutions	- solve the problems
	- Little knowledge to solve the problems	- Collaborate with stakeholders	- Sustainable roadmap
			- Collaborate with multi-stakeholders
- Number of active communities = 0	- Number of active communities ≥ 2	- Number of active communities ≥ 4	- Number of active communities ≥ 5
- Number of programs $\geq 10\%$	- Number of programs $n \leq 2$	- Number of programs $n \geq 3$	- Number of programs $n \geq 5$
- Participations $\geq 10\%$	- Participations $\geq 25\%$	- Participations $\geq 50\%$	- Participations $\geq 50\%$

A. People Development

The first rung of participation is people development, which is a stage where facilitators gather information from residents about their past experiences, problems encountered, aspirations and recommendations. Smaller or larger group discussions can be conducted accordingly. Facilitators initiate close communication and immersive collaboration between stakeholders and local communities should be established to engage further planning, and implementation.

B. Strengthening Local Potentials and Communities

The basic institutions that should be established in most Indonesian settlements are community associations (RW) and neighbourhood association (RT), thus the sufficient score for a settlement is 2 communities with active programs to serve the residents. The level of participation in various contexts is greatly influenced by the people's motivation towards the empowerment programs, thus community establishment and development are key factors for success. Institutional quality needs to be fostered through improving the quality of leadership, developing local actors and driving productive groups. At the people development stage, activities carried out by facilitators include: the first step in strengthening communities is to increase community awareness and knowledge about the ideal environment through various campaigns; the second step is forming community groups that can act as agents of change. Community groups consist of people who voluntarily unite themselves due to the existence of a unifying bond. Iteration of activities should converge into constructing vision, interests, and needs. The goal is to instil sense of belonging and sense of community ownership. Third, increasing the capacity of community groups through contextual training or mentoring programs, for example, by providing organizational learning.

C. Active and Collaborative

Joint action will be able to occur in community groups that are already established and networking between stakeholders should be encouraged. Joint action begins with encouraging community involvement in planning (democratic participation); accommodating various input suggestions and aspirations (inclusion); as well as increasing stakeholder involvement and bringing justice (social justice).

D. Sustainable and Empowered

The sustainability of empowered communities can be achieved by the provision of supporting and monitoring ecosystems. Collaborative action between local communities and external stakeholders should be established to take part in the evaluation process in planning and implementation of various activities. Facilitators' role is to encourage community groups to act independently and collaboratively. The collaborative supporting and monitoring ecosystem should provide complete information services in order to achieve well-informed communities regarding planning, implementation, and various housing or settlement regulations and standards. External and internal action can be monitored through evidence-based evaluation, which can be carried out in accordance with the goals and objectives of each empowerment program. Internal evaluation is carried out with the main aim of prioritizing self-accountability.

2.3 Sustainable Communities Assessment

The comprehensive assessment of building sustainable communities in urban kampong regeneration is based on 8 characteristics of sustainable communities according to ODPM [13], namely: (1) active, inclusive and safe, (2) well run, (3) environmentally sensitive, (4) well designed and built, (5) well connected, (6) thriving, (7) well served and (8) fair to everyone.

3 Results and Discussions

The RPD model, as described in Figure 2, can be used by urban planners, architects, artists, designer activists, or social workers as an empowerment strategy for urban communities, especially for urban kampongs or urban communities that are living in areas that have unique socio-cultural traits. The goal of the RPD model through urban regeneration and building sustainable communities is to foster citizens participation in the place-making process. The participative placemaking process involves designing for better places, designing more sustainable environments, and constructing place identity by strengthening local potentials.



Figure 2. RPD model for building sustainable communities and urban kampong regeneration

The model begins with the first stage by studying relational quality between residents, how many existing communities are in the region, and what are the programs that are already implemented. The second stage is exploring vitality in a region and its uniqueness or vernacularity. Vernacular expression, according to Heath [18], is a dynamic cultural process that is unique and developed locally. It is the result of the community's creativity in preserving distinctive ways of life that provide the community with a sense of identity and continuity. It uses pre-existing resources, which include cultural heritage adapted to the ever-changing environment or new social circumstances. Vernacular expressions can be transitional, such as producing a new regional art form as a response to new settings. The vernacular expression in the urban kampong can be identified in the everyday activities within communities, in the local stories, local myths, symbols, and local cuisine. The third stage is understanding symbolic shape and territorial understanding in a region. Public spaces, according to Paasi [19], evolve over time. Evolution of a region went through a process known as "re-symbolization", where citizens alter the meaning of public areas. The modern movement reinterprets public spaces, and preservation efforts may have an impact. Within

the existing circumstances, the local community is continuously reinterpreting and recontextualizing the intangible past. According to Raagmaa [20], conflicting institutional interests regarding the functions and meanings of space lead to regional shifts or formation. Through routine actions, citizens create the meaning of public spaces, which may be connected to either symbolic or functional elements.

Case studies in several urban kampongs between 2015 and 2024, intervention by facilitators was conducted through a series of workshops initiated by researchers, academicians, artists, and designers. The series of collaborative workshops aims to address problems encountered by the residents and explore the village's potentials and place narratives. The participatory model was implemented in specific sites, and the engagement strategy involved: (1) fostering artistic expression and implementing it in a mural project, (2) establishing close communication and participation of villagers and stakeholders, and (3) collaboratively improving the village environment.

3.1 Case Study in Kampong Pondok Pucung

3.1.1 Dialog to discover

Preliminary field research to discover in Kampong Pondok Pucung 2012-2014:

a. Relational qualities: Pondok Pucung is a remnant of traditional kampong in South Tangerang, Banten, West Java, whereas it is now becoming urban kampong because of the modern urban development surrounding it. Despite the transition, the kampong still holds onto its traditional relational quality, which is called 'guyub', a warm close-knitted relationship between each member of the communities.

b. Vitality and vernacularity: The 'guyub' relational quality brought up the vitality of Pondok Pucung togetherness, known as 'gotong royong' value, shown mostly in the spirit of religious activities and celebration. The vernacularity of Pondok Pucung has grown dynamically with the 'guyub' relational quality and 'gotong royong' vital value towards modern-life interpretation. Other Pondok Pucung vitality is their seemingly infinite younger generations.

c. Socio-cultural: Pondok Pucung socio-cultural aspects are again related to the 'guyub' relational quality and 'gotong royong' vital value. This is because Pondok Pucung natives are usually built by a group of families, in this case Betawi clan. The strong family bond is why 'guyub' and 'gotong royong' existed throughout generations. Hence, the cultural value is coming from the Betawi culture, combined immensely with Islamic values.

d. Understanding territories: Pondok Pucung nowadays is divided into 7 traditional community areas (RW) but separated to become enclaves by the development of modern real estate.

3.1.2 Ideation

Participatory planning & design ideation process in Kampong Pondok Pucung 2014-2016:

a. Relational strength: Pondok Pucung relational strength relies on understanding the 'guyub' relational quality, 'gotong royong' vital value, and the potential of infinite younger generations – all towards a more relatable modern-life interpretation.

b. Vernacular creativity: In doing so, we can build vernacular creativity by combining all three aspects above. Younger generations creativity that reflects 'guyub' relational quality and 'gotong royong' vital value towards a more relatable modern-life interpretation.

c. Symbolic space: Togetherness and creativity is the symbolic space for Pondok Pucung that can be relatable to Pondok Pucung youth.

d. Territorial plan: Festival is the territorial build and develop by Pondok Pucung youth.

Based on that, the research team made several initiatives and collaborations with the Pondok Pucung community, especially the youth, starting with several environmental awareness activities in 2014-2015 (i.e., kampong greenery and planting projects, kampong waste management system), to the more focused on the children and the youth in 2016 (i.e., mapping the traditional playing activities, making murals, and initiating reading space).

3.1.3 Co-creation, place making

Collaborate & co-create process in Kampong Pondok Pucung 2017 till now:

a. Community institutions: In 2017, after several initiatives done by the researcher to open the imagination and creativity of the Pondok Pucung young generation, the Pondok Pucung youth finally decided to make their own organization, called 'Green Camp', aiming at preserving their kampong 'guyub' relational quality and 'gotong royong' vital value towards a more relatable modern-life interpretation.

b. Vernacular shape: The first initiative of 'Green Camp' is developing an activity called Ambreg, meant in local language: doing it altogether.

c. Symbolic shape: The activity is to build the younger generation's creativity through many mediums concerned with improving the younger generation's future.

d. Territorial shape: Hence, the emergence of the annual Ambreg youth creative festival.

Since then, the Ambreg youth creative festival has taken on many themes: 2017 creative printing skills, 2018 waste management project, 2019 creative hand-art clothes-making project, 2020 kite creative art and pandemic

socialization project, 2021 creative kit for lockdown activities, and the latest, the 2023 art and craft from waste project.

3.2 Case Study in Kampong Sukapura

3.2.1 Dialog to discover

Preliminary field research to discover in Kampong Sukapura 2020-2021:

a. Relational qualities: As in many urban kampongs in Indonesia, RW 10 Sukapura still holds onto its traditional relational quality, which is called ‘guyub’, a warm and close-knit relationship among each member of the community, despite various backgrounds. Nevertheless, as stated in the pre-test RW 10 Sukapura, the exclusively inward community tends to be cautious of outsiders.

b. Vitality and vernacularity: The ‘guyub’ relational quality then also brought up the vitality of togetherness, known as ‘gotong royong’ value. RW 10 Sukapura has this strong sense of togetherness because they are drawn into the same problem: legalization of their existence on the riverbank. However, as RW 10 Sukapura is part of the metropolitan city of Jakarta and has vast, diverse communities within, its vernacularity is vague. It is usually shown through Betawi local culture and Islamic religious activities.

c. Socio-cultural: RW 10 Sukapura socio-cultural aspects are deeply related to the ‘guyub’ relational quality, ‘gotong royong’ vital value, and its vague Betawi culture and Islamic religious activities.

d. Understanding territories: RW 10 Sukapura occupied the Cakung Lama riverbank illegally since the 1970s and divided into 7 traditional community areas (RT). It is isolated and has become an enclave of the city’s modern development.

3.2.2 Ideation

Participatory planning & design ideation in Kampong Sukapura 2021:

In 2021, the DKI Jakarta City Government initiated an urban kampong improvement plan in two stages: the Community Action Plan (CAP) and the implementation of CAP in the Collaborative Implementation Program (CIP). The researcher was asked by the DKI Jakarta City Government to initiate CAP with the RW 10 Sukapura community.

a. Relational strength: RW 10 Sukapura relational strength relies on understanding the ‘guyub’ relational quality and ‘gotong royong’ vital value towards the legalization of their existence and their potential relationship with the riverbank.

b. Vernacular creativity: By acknowledging RW 10 Sukapura relational strength, the research team, alongside the community, builds vernacular creativity to restore their relationship with the river.

c. Symbolic space: Legal existence and environmentally friendly living harmoniously with the river becoming the symbolic space for RW 10 Sukapura.

d. Territorial plan: Physical action towards cohabiting the river.

Based on it, the research team and the RW 10 Sukapura community made the Community Action Plan (CAP), which consisted of design ideation on how the dwellings should be, the improvement of infrastructure (i.e., roads and sewage systems, etc.), the improvement of the environmental qualities (i.e., vertical greenery, murals, etc.), and the improvement of services and facilities (i.e., community center, open space, etc.).

3.2.3 Co-creation, place making

Collaborate & co-create in Kampong Sukapura 2021 till now:

a. Community institutions: To show that the community is ready to implement the CAP in the next year, in 2021 the community altogether takes independent and collaborative action to revitalize their dwelling relations with the river.

b. Vernacular shape: Capitalizing on their ‘guyub’ relational quality and ‘gotong royong’ vital value towards the legalization of their existence, the community cleans their dwelling environment. The community is even pushing forward to demolish part of their home, where it coincides with the riverbank, as part of reconciling their relationship with the river. They called their initiatives ‘Wiskaya Lestari’ (prosper and sustainable).

c. Symbolic shape: The activities mentioned above are done voluntarily and independently by the community members. It showed their ‘guyub’ relational quality and ‘gotong royong’ vital value determination to become legal citizens. They celebrated their new revitalized relationship with the river in the form of ‘Festival Warga Berdaya’ (Empowered Community Festival).

d. Territorial shape: Besides beautifying their surrounding environments with murals and greenery, the RW 10 Sukapura community cut their homes 3 m wide back-off from the river voluntarily and at their own expense. This action happened comprehensively within the community even though there is no confirmation from the government for the implementation of the CAP in the next year.

Acknowledging the RW 10 Sukapura community’s commitment towards living harmoniously with the river, the government implemented almost all that was planned in the CAP the following year. As an effect of this, the kampong local economy has seen growth, and new SMEs have emerged. The initiatives went on to become one of

the success stories in dense and poor urban kampong improvement and empowerment. Many local and international institutions have come to the kampong to have partnerships and collaborations. The last one would be with Singapore Polytechnic in 2023, where it produced prototypes for social innovation design answering several issues in RW 10 Sukapura.

3.3 Case Study in Kampong Pelangi 2017-2021

3.3.1 Dialog to discover

Preliminary field research to discover in Kampong Pelangi:

a. Relational qualities: There were communities already established in Kampong Pelangi since 2017. There are three communities fostered by the Community Association (Rukun Warga). The first was Family Empowerment and Welfare Community (PKK); the second was the Sustainable Tourism Community (POKDARWIS), and the third was the Youth Community (Karang Taruna). The community held several programs, including promoting Kampong Pelangi to the public in Festival Kampong Pelangi in 2017 [21].

b. Regional vitality and vernacularity: There are traces of cultural heritage being preserved by residents in Kampong Pelangi. There were independent communities established by Kampong Pelangi's residents that focused on preserving and fostering Javanese tradition, namely: PAKAS Semarang River Conservation Community, Paguyuban Jathilan, a traditional Javanese dance community; Paguyuban Karawitan, a traditional Javanese music Community, and a Javanese cuisine community.

c. Socio-cultural: The demography of Kampong Pelangi's residents mostly consists of small families, with a variety of occupations such as flower merchant, hawker stall, grave caretaker, and motorcycle repair shop.

d. Understanding territories: Kampong Pelangi is located in a hill called Brintik Hill, and because of its high vantage point, the area often serves many purposes. According to a Semarang historian, Achmad Rukardi, the Kampong Pelangi region was once a busy port known as Bergota Port in the 9th century. The historical facts described that in the past, the Semarang River, which passes through Kampong Pelangi, was once utilized as water transportation to distribute timbers for building materials during the Dutch colonial era. During the fight for Indonesia's independence in the 1940s, Brintik Hill was used by the military as an outpost.

3.3.2 Ideation

Participatory planning & design ideation in Kampong Pelangi 2021:

a. Relational strength: During the participative art project in Kampong Pelangi 2021, mural artists collaborated with local residents and historians to express Kampong Pelangi's identity. The participative project was named PAKAS, an abbreviation of Panggilan Kali Semarang, or Semarang River Calling.

b. Vernacular creativity: Javanese cuisine, traditional dance, and music were curated, and the community conducted rehearsals to participate in the next Kampong Pelangi Festival.

c. Symbolic space: The Kampong Pelangi area is part of the Bergota cemetery, and many notable figures in Central Java's history were buried there; thus, pilgrimage tours to the cemetery were often conducted. Plans about promoting the Bergota pilgrimage tour for the next Kampong Pelangi Festival were discussed.

d. Territorial plan: The historical geography of Kampung Pelangi intersects with the history of Semarang City, and this is an important territory narrative that should be revived. The place narration about the historical geography of Kampung Pelangi can be a strong bond to the larger context and an important factor that creates a sense of belonging, pride, and rootedness among the residents of Kampung Pelangi, which can motivate place sustainability.

3.3.3 Co-creation, place making

Collaborate & co-create in Kampong Pelangi 2021 till now:

a. Community institutions: PAKAS, or Semarang River Conservation Community, was created in 2021. In the following months, PAKAS community collaborated with academicians and mural artists and held a fishing competition in 2021 to create cohesion among residents and to raise awareness and raise funds to conserve the Semarang River. The mural theme created to represent the efforts of Semarang River conservation.

b. Vernacular shape: The vernacular creativity represents the unique characteristics of the place, which differentiate it from other places. There were several communities that exist in Kampung Pelangi, residents practicing and developing skills in creative communities such as in traditional music performances, traditional dance, and local culinary.

c. Symbolic shape: The PAKAS, or "Panggilan Kali Semarang," participatory art project exercised in 2021 had triggered a new form of tourism in Kampung Pelangi, a 'Historical and Religious tour' to Bergota cemetery and a historical tour of Semarang River.

d. Territorial shape: The "Panggilan Kali Semarang" event in 2021 consists of several activities such as mural painting, place history discussions, culinary exhibitions, fishing competitions, pilgrimages, and religious tours. Six artist communities from Semarang participated in the mural project. The mural subject matter represents the Semarang River and Semarang history.

3.4 Participative Stages in Urban Kampung Regeneration from Case Studies

The participative stages in urban kampung regeneration in each of the case studies can be seen in Table 5.

Table 5. Participative stages in urban kampung regeneration from case studies

Stages	Mobilize People Development	Transform & Strengthen the Community	Evaluate 1: Active & Collaborative	Evaluate 2: Sustained & Empowered
Kampung Pondok Pucung	Kampung Pucung is a remnant of traditional kampung, surrounded by modern urban development. The kampung still holds onto its traditional relational quality, which is called ‘guyub’, a warm and close-knit relationship between each member of the community. The research team found that the kampung has the young generation as the potential for developing the future of the kampung.	2014-2016 Kampung Pucung communities, led by a team of researchers, initiated several activities to increase community awareness. The activities focused on green environment, water management, and building youth’s and children’s creativity.	In 2017 Kampung Pondok Pucung youth established a youth organization called Green Camp, which focuses on initiating creative activities, public and religious activities as well. At the end of 2017, the youth community collaborated with researchers and initiated the Ambreg youth creativity festival (Ambreg means gathering). Participation of young participants with the programs was increased to 50%. In 2022 the Kampung Sukapura riverbank community’s CAP started to be implemented by the government, through a program called the Collaborative Implementation Program (CIP). The first stage of CIP is officially forming the community group that will lead the CIP implementation alongside the government. During the year of 2022-2023 the community and the government built proper roads, sewage, lighting, greenery, murals as physical improvement, and built local organizations, local SMEs, etc., as social and economic initiatives improvement.	Ambreg festival owned and developed into yearly event that has been going continuously until now, with themes: 2018: greenery 2019: SMEs model 2020: creativity and how to respond to the C-19 pandemic 2021: creativity while in the lockdown 2023: creative waste recycling system 2024: waste bank
Kampung Sukapura	Kampung Sukapura is regarded as a riverbank slum area by the North Jakarta municipal government. The kampung improvement program was then initiated in 2021, where the researcher team involved. The program is focusing on improving physical, social and economic aspects of the kampung.	The research team uses RVST and RPD to build and increase the collaboration with the Kampung Sukapura riverbank community for 9 months (March - December, 2021). The collaboration aims at developing a Community Action Plan (CAP) in which the community itself, guided by the research team, planned on how they need to improve their kampung physically, socially and economically. The community also formed their community organization to make sure the CAP would be implemented.		At the end of 2021, CAP, the research team encouraged the kampung’s community to act independently to improve their kampung. The initiatives include cutting their homes 3 m backwards from the river, initiating green environment programs, murals, and a community festival called ‘Warga Berdaya’ (means: empowered community). After the festival (2022-2023) the kampung’s community continued their collaboration with the government. Independent initiatives such as collaborating with NGOs to organize their waste, developing and formalizing their SMEs, etc.

Continued

Kampong Pelangi	<p>Before 2017, Kampong Pelangi is regarded as a riverbank slum area located in Brintik Hill in Semarang city, central Java.</p> <p>Since 2017, researchers gathered information from residents about their knowledge of Kampong Pelangi, which includes: problems encountered, aspirations and recommendations.</p>	<p>Since 2017, six communities were established and strengthened: Family Empowerment and Welfare (PKK); Tourism Community (POKDARWIS); Youth Community (Karang Taruna).</p> <p>In 2019, Paguyuban Jathilan and Karawitan traditional Javanese dance and music community was established. Semarang River Conservation Community was established in 2021.</p>	<p>FGD and Workshops were organized. Collaboration was established between stakeholders (academicians, local artists) to engage in further planning, and implementation about the Kampong Pelangi Festival and organize the “Semarang River Calling” event in 2021.</p>	<p>Kampong Pelangi’s Bergota community was established in 2022 and organize a pilgrimage tour in Bergota cemetery. Community groups were encouraged to act independently, especially within the PAKAS (Semarang River Conservation Community) and collaboration with the wider community network in Semarang city.</p>
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Table 6. Pre-test and post-test in Kampong Pondok Pucung, West Java

I. Pre-Test (measured in 2012)
<p>a. Active, inclusive and safe – Pondok Pucung is moderately active, tends to be exclusive for the locals, but is safe for other communities.</p> <p>b. Well run – Pondok Pucung has exclusive leadership from the elders or from the formal government officials.</p> <p>c. Environmentally sensitive – Pondok Pucung has a deteriorating environmental problem, especially from waste management and the fast-paced loss of open spaces.</p> <p>d. Well designed and built – Pondok Pucung is built without planning by the local community, with more in accordance with the land ownership.</p> <p>e. Well connected – Pondok Pucung is separated from the modern real estate development but given limited accessibility to it.</p> <p>f. Thriving – Pondok Pucung has lost its thriving indigenous local economy a long time ago due to the modern real estate development. However, modern development is also opening possibilities.</p> <p>g. Well served – Though exclusive because of the family clan nature, Pondok Pucung is quite open to other services.</p> <p>h. Fair to everyone – Pondok Pucung is exclusive to specific family clans, but the modern development made the kampong more open to other communities, though with precautions.</p>
II. Post-Test (measured in 2023, the latest Ambreg youth creative festival)
<p>a. Active, inclusive and safe – Pondok Pucung youth is active, still has the tendency to be exclusive for the locals but is more open and safer to other communities.</p> <p>b. Well run – The activation of Pondok Pucung youth has added leadership regeneration and dimensions, which in turn will be the roadmap for having a more inclusive participation, representation and leadership.</p> <p>c. Environmentally sensitive – Since the many initiatives implemented in Pondok Pucung since 2014 until now, Pondok Pucung sees an improvement in its environmental quality, though there are still incomplete problems yet to solve.</p> <p>d. Well designed and built – With all the initiatives, Pondok Pucung has more opportunities to access government development programs.</p> <p>e. Well connected – Pondok Pucung connectivity is still dependent on the modern real estate development.</p> <p>f. Thriving – All the initiatives for Pondok Pucung youth mostly focus on improving the economic aspect of the youth. It has sparked 2-3 business initiatives, though it still has a very limited impact.</p> <p>g. Well served – Through its youth community, Pondok Pucung is improving for having public, private, community, and voluntary services.</p> <p>h. Fair to everyone – The initiatives are making Pondok Pucung more open to other communities, especially because the younger generation is the change driver for this.</p>

3.5 Sustainable Communities Pre-Test and Post-Test Assessment from Case Studies

3.5.1 Kampong Pondok Pucung, South Tangerang, Banten, West Java

Pondok Pucung, in South Tangerang, Banten, West Java, is one of the remaining kampongs that is enfolded by the modern urban development. The researcher has been initiating RPD since 2012 there until now. The typology of Pondok Pucung RPD is community and academic driven, activities were designed collaboratively between

researchers, university students and Pondok Pucung residents. The first pre-test was conducted in 2012 and latest post-test was conducted in 2023, as shown in Table 6.

3.5.2 Kampong RW 10 Sukapura, North Jakarta, DKI Jakarta

RW 10 Sukapura in North Jakarta, DKI Jakarta, is a typical dense and poor urban kampong in Jakarta, the capital city of Indonesia. The researcher has been initiating RPD since 2021 until now. The typology of Pondok Pucung RPD is government, community and academic driven. The first pre-test was conducted in 2020 and latest post-test was conducted in 2023, as shown in Table 7.

Table 7. Pre-test and post-test in Kampong RW 10 Sukapura, North Jakarta, DKI Jakarta

I. Pre-Test (measured in 2020)
<p>The research team started to be involved in Jakarta’s dense and poor urban kampong in 2018. In 2019-2020 the DKI Jakarta city government asked the researcher team to begin preliminary research at 4 dense and poor urban kampong areas in North Jakarta, including RW 10 Sukapura.</p> <p>a. Active, inclusive and safe – RW 10 Sukapura is active, tends to be exclusively inwards, though it consists of vast and tolerant communities. However, it can be very cautious toward newcomers or outsiders.</p> <p>b. Well run – RW 10 Sukapura has effective inwards participation, representation, and leadership. Nevertheless, the attitude towards government officials or other outside institutions tends to be cynical.</p> <p>c. Environmentally sensitive – RW 10 Sukapura is placed on the riverbank, where it should not be according to the regulation. It has a deteriorating environmental problem, especially from waste management and river pollution.</p> <p>d. Well designed and built – 10 Sukapura is built without planning by the local community, violating regulations and having land ownership problems.</p> <p>e. Well connected – RW 10 Sukapura is isolated from city services because of its legal problems, but still has limited accessibility to it.</p> <p>f. Thriving – Regardless of the chaotic living environment, RW 10 Sukapura has flourishing and diverse local economy.</p> <p>g. Well served – The same situation as in the connectivity, RW 10 Sukapura has very limited access to services.</p> <p>h. Fair to everyone – As mentioned in points a and b, RW 10 Sukapura tends to be exclusively inwards, though it has vast variations of communities within.</p>
II. Post-Test (measured in 2023, after arranging and witnessing international cooperation)
<p>a. Active, inclusive and safe – Since the initiatives, RW 10 Sukapura is more active and becoming inclusive towards partnering with outside institutions.</p> <p>b. Well run – RW 10 Sukapura has effective participation, representation and leadership. The attitude towards government officials, policy, or other outside institutions tends to be critical and open-minded.</p> <p>c. Environmentally sensitive – All the initiatives aimed at revitalizing RW 10 Sukapura relations with the river, thus improving the quality of life and dwelling in the area.</p> <p>d. Well designed and built – RW 10 Sukapura is voluntarily cut off from their homes, back-off 3m wide from the river, while at the same time the government made a physical development, i.e.: road, sewage, etc.</p> <p>e. Well connected – RW 10 Sukapura is still separated from the city modern development, but now has improved infrastructures that in turn improved the connectivity of the area.</p> <p>f. Thriving – The physical improvement, RW 10 Sukapura, has pushed for a more flourishing and diverse local economy.</p> <p>g. Well served – RW 10 Sukapura has still limited access to services but improved since the initiatives began in 2021.</p> <p>h. Fair to everyone – 10 Sukapura is now more open to collaborating with external communities, especially after many exposures from local and international partners.</p>

3.5.3 Kampong Pelangi Semarang, Central Java

Kampong Pelangi is a dense 4-hectare urban kampong located on Brintik Hill in Semarang City. During the 1980s, the area of Kampong Pelangi was used as a public cemetery known as Bergota Cemetery. Due to its affordable land price, many people settled in the Bergota area, and later the settlements known as Kampong Wonosari. Today it is filled with approximately 300 houses, and before 2017 it was considered a slum. In 2017, Kampong Wonosari underwent major revitalization by the Semarang City municipal government. Bridges and paved roads were built, and by late 2017 houses’ façades were painted and thereafter known as Kampong Pelangi. The typology of Kampong Pelangi’s RPD is government, community and academic driven. The first pre-test was conducted in 2019 and latest post-test was conducted in 2021, as shown in Table 8.

The urban regeneration process, according to previous case studies in urban kampongs, may vary and must be designed collaboratively with local leaders and residents, and this process must be conducted with constant emphasis on a bottom-up approach. Some urban kampongs can be categorized as sustainable and empowered, such as the youth community in Kampong Pondok Pucung and Kampong Pelangi. Ambreg youth creative festival, which was created by Pondok Pucung youth community, is already an independent local institution and has been continuously creating unique programs. However, the collaboration is not yet evolving from the initial collaboration between

external stakeholders and the Pondok Pucung youth community members. The Ambreg youth creative festival did inspire local government to do mural initiatives in many kampongs in southern Tangerang between 2017 and 2019. Nevertheless, it is still an independent initiative not yet supported by the government or attracting other institutions to be involved. Thus, the Ambreg youth creative festival still has a problem in terms of expanding its reach and scalability. Since 2017, through a series of participative programs, Kampong Pelangi has improved significantly, from physical revitalization, which began in 2017, to building strong communities since 2019, which resulted in organizing festivals such as the Kampong Pelangi Festival in 2019, followed by Semarang River Calling (PAKAS) in 2021 and the Bergota Pilgrimage Tour. The time span of participatory action during RPD intervention with the RW 10 Sukapura community is shorter than what is needed in the Pondok Pucung youth community, yet it can also be categorized as sustainable and empowered. First, the initiative of cutting off their homes 3 meters wide from the riverbank and beautifying their dwelling surroundings is autonomous. The ‘Festival Warga Berdaya’ was one example of creating a unique program, with many to follow. The community has already taken an initiative to create local institutions to pursue their legal status and has many collaborations with multi-stakeholders locally and internationally. The differentiation between RW 10 Sukapura and Pondok Pucung relies mostly on government involvement that has large capital. This involvement already enlarges the scope of the urban kampong regeneration, thus having a bigger and wider impact towards the change in the community, whether in physical or human capital empowerment. As a tail effect, it attracted varied and wider collaborators, thus opening many more possibilities.

Table 8. Pre-test and post-test in Kampong Pelangi Semarang, Central Java

I. Pre-Test (measured in 2019)
The research team started data collection in Kampong Pelangi in 2017-2019. In 2019-2021, collaborative programs were initiated between Kampong Pelangi’s community, academicians, and art community.
a. Active, inclusive and safe – By 2017, Kampong Pelangi was actively promoting the area as tourist destinations, specifically as ‘selfie spot’ as most of the houses’ façades were decorated with murals.
b. Well run – Kampong Pelangi has programs supported by municipal government.
c. Environmentally sensitive – The lower part of Kampong Pelangi is located on the Semarang riverbank. River pollution by the residents and from nearby neighborhoods has caused floods to occur annually in the lower part of Kampong Pelangi.
d. Well designed and built – Kampong Pelangi area was never designated as a housing area, therefore, constructions were not well managed and have very minimal basic facilities such as clean water and waste management.
e. Well connected – Kampong Pelangi’s location is very strategic. It is located near the government administrative district.
f. Thriving – Regardless of the basic living environment, Kampong Pelangi has a diverse local economy.
g. Well served – Before 2017, Kampong Pelangi had very limited access to basic services such as electricity and clean water.
h. Fair to everyone – Kampong Pelangi consists of 2 community associations (RW), RW 03 and RW 04. RW 03 has a more strategic location as it is visible from the main road. During the revitalization in 2017, RW 03 got most of the revitalization program from the government; on the contrary, RW 04 got less attention due to its secluded location.
II. Post-Test (measured in 2021)
a. Active, inclusive and safe – Since the initiatives by the PAKAS community, RW 04 Kampong Pelangi is more active and inclusive towards partnering with outside institutions.
b. Well run – Kampong Pelangi has effective participation, several communities have active collaborative programs.
c. Environmentally sensitive – The PAKAS community has managed to collaborate with government and multi-stakeholders to conserve the Semarang River.
d. Well designed and built – Kampong Pelangi’s physical condition has improved significantly since 2017 yet still requires improvements in managing waste and river pollution.
e. Well connected – Kampong Pelangi in 2021 is more connected to the Semarang tourist village (Kampong Wisata) network.
f. Thriving – The physical improvement of Kampong Pelangi since 2017 has pushed for a more flourishing and diverse local economy.
g. Well served – In 2021, many of Kampong Pelangi’s residents acquired land certificates from the government that show a good governance and partnership between municipal government and community associations.
h. Fair to everyone – Kampong Pelangi Communities serves many necessities through a variety of programs, from administrative services and cultural programs to local economy improvement programs.

4 Conclusions

The proposed RPD participatory model explained in this study is expected to be able to determine citizen participation in collaborative idea formation and evaluation data at each stage. This model can also show roles for facilitators (urban planners, architects, artist designers, or social workers) in the community and be a catalyst

that sparks creative movement to local communities. The participative empowerment program needs to begin with a series of activities that target the growth of citizens' enthusiasm, inviting residents to participate in a series of programs being carried out. The time span from the beginning stage to transforming levels, in each research site, is widely varied. The subject matter produced in participatory art or design reflects not only the ideas from an artist or designer but also reflects communities. The interactive process in creating art or design described in the preceding section is believed to be able to identify citizen participation in collaborative idea generation. This approach can also demonstrate facilitators' role in nurturing community expressions, which may serve as a catalyst for creative movement in local communities.

Local community leaders play an important role that can accelerate residents' participation levels towards transformation and sustainability. Participatory design practice is the practice in which there is no longer a barrier between the designer/architect and the future user as well as between the design and its use. Creativity will always be present to always recreate everyday contexts in the interwoven designs. Design action is always inclusive and accessible, present as interventionist design, as well as choosing a political position and becoming a catalyst in social processes. In this case, the design becomes a generator and will become a living space, a 'closed' public space (public space of proximity), to become a catalyst space that must be created continuously.

Data Availability

The data used to support the research findings are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

References

- [1] P. Burgess, "The expert's vision: The role of design in the historical development of city planning," *J. Archit. Plann. Res.*, vol. 14, no. 2, pp. 91–106, 1997.
- [2] S. Hirt and D. Zahm, *The Urban Wisdom of Jane Jacobs*. New York: Routledge, 2012.
- [3] J. Jacobs, *The Death and Life of Great American Cities*. UK: Jonathan Cape, 1992.
- [4] J. Worthington, "Identity and branding: What's in a name?" in *The Academy of Urbanism-Learning from Place: Urban Identity*. New York: Routledge, 2011, pp. 68–80.
- [5] Y. Rydin and M. Pennington, "Public participation and local environmental planning: The collective action problem and the potential of social capital," *Local Environ.*, vol. 5, no. 2, pp. 153–169, 2000. <https://doi.org/10.1080/13549830050009328>
- [6] P. Roberts and H. Sykes, *Urban Regeneration: A Handbook*. London: SAGE Publication Ltd, 2008. <https://doi.org/10.4135/9781446219980>
- [7] P. Healey, *Collaborative Planning: Shaping Places in Fragmented Societies*. London: Macmillan Press Ltd, 1997. <https://doi.org/10.1007/978-1-349-25538-2>
- [8] H. Sanoff, *Community Participation Methods in Design and Planning*. Canada: John Wiley & Sons, Inc., 1999.
- [9] S. R. Arnstein, "A ladder of citizen participation," *J. Amer. Inst. Planners*, vol. 35, no. 4, pp. 216–224, 1969. <https://doi.org/10.1080/01944366908977225>
- [10] J. D. Sachs, *The Age of Sustainable Development*. New York: Columbia University Press, 2015. <https://doi.org/10.7312/sach17314-toc>
- [11] M. Polese and R. Stren, *The Social Sustainability of Cities: Diversity and the Management of Change*. Toronto: University of Toronto Press, 2000. <https://doi.org/10.3138/9781442682399>
- [12] A. Rapoport, *Human Aspects of Urban Form: Towards a Man-Environment Approach to Urban Form and Design*. Oxford: Pergamon Press, 1977. <https://doi.org/10.1016/C2013-0-02616-3>
- [13] Office of the Deputy Prime Minister (ODPM), *Sustainable Communities: People, Places and Prosperity*. London: HMSO, 2005. <https://www.bipsolutions.com/docstore/pdf/9450.pdf>
- [14] United Cities and Local Government, "The sustainable development goals: What local governments need to know," 2015. https://www.citiesalliance.org/sites/default/files/2019-01/UCLG%202015%20The_sdgs_what_localgov_need_to_know.pdf
- [15] United Nations Habitat III, "New Urban Agenda," 2017. <https://habitat3.org/wp-content/uploads/NUA-English.pdf>
- [16] M. Katoppo and I. Sudradjat, "Combining Participatory Action Research (PAR) and Design Thinking (DT) as an alternative research method in architecture," *Procedia Soc. Behav. Sci.*, vol. 184, pp. 118–125, 2015. <https://doi.org/10.1016/j.sbspro.2015.05.069>

- [17] E. Irwandi, S. Sabana, A. R. Kusmara, and T. Sanjaya, "Shaping place identity in urban village through RVST participatory art model," *Arts Des. Stud.*, vol. 95, pp. 25–33, 2021. <https://doi.org/10.7176/ADS/95-04>
- [18] K. Heath, *Vernacular Architecture and Regional Design*. London: Routledge, 2009. <https://doi.org/10.4324/9780080939841>
- [19] A. Paasi, "The institutionalization of regions: A theoretical framework for the understanding of the emergence of regions and the constitutions of regional identity," *Fennia Int. J. Geogr.*, vol. 164, no. 1, pp. 105–146, 1986. <https://fennia.journal.fi/article/view/9052>
- [20] G. Raagmaa, "Regional identity and social capital in regional economic development and planning," in *41st Congress of the European Regional Science Association: "European Regional Development Issues in the New Millennium and Their Impact on Economic Policy"*, Zagreb, Croatia, 2001. <http://hdl.handle.net/10419/115254>
- [21] E. Irwandi, S. Sabana, A. R. Kusmara, and T. Sanjaya, "Urban villages as living gallery: Shaping place identity with participatory art in Java, Indonesia," *Cogent Arts Humanit*, vol. 10, no. 1, p. 2247671, 2023. <https://doi.org/10.1080/23311983.2023.2247671>