Kampong KB Public Open Space Design Based on a Participatory

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Abstract. The aim of this paper is to write the Community Dedication activities carried out by the UNIKOM Architecture Study Program Team in assist Field Design in Kampong KB, Nyalindung Village, Bandung City. The Kampong KB was launched by the President of the Republic of Indonesia (Ir. Joko Widodo) in January 2016 with the aim of improving the quality of life of residents. One of them is Kampong KB in Nyalindung Village which is one of the Pilot Kampong KB throughout Indonesia. The method of implementation is the design approach, design ideas based on the behavior, and activities of the community. The initial design method was carried out by measuring, mapping, and interviewing a number of community leaders, as well as residents. The results obtained from the assistance of Kampong KB Sports Field Design are the Participatory Public Space Concept as the main concept. This concept is expected to increase the value of kinship and awareness of the importance of cooperation and communication that is involved between generations, bearing in mind that the community of citizens has diverse age ranges. This field is expected to be one of the indicators of the success of the Kampong KB, which is to increase family participation in group activities and the development of community cooperation in developing Kampong KB. So as to able to improve the quality of life, reduce population density and achieve a prosperous life, healthy and smart life.

1. Introduction
Kampong KB is a regional unit at the level of RW, hamlet or equivalent, which has certain criteria, where there is an integration of population programs, family planning, family development, and related sector development carried out systematically [1]. The Kampong KB was launched by the President of the Republic of Indonesia (Ir. Joko Widodo) in January 2016 with the aim of improving the quality of life of residents and reducing population density, so that the goals of a prosperous, healthy and smart life can be achieved. The criteria for the areas targeted by the KB program include densely populated areas, low participation in KB (family planning) programs, poor well-being levels and low access to family planning, lack of health and education. One of them in the city of Bandung there are 40 Kampong KB as an effort to succeed The Kampong KB program.

Nyalindung Village was appointed by the Government to be one of the Kampong KB pilot project at the Provincial level. Because seen from all administrative completeness, it has an active Posyandu, Poktan House (Activity Group) for the guidance of 8 family functions (religious function, social-cultural function, love function, protection function, reproductive function, socialization and education function, economic function, and environmental fostering functions) [2], my data house, mobile health center, open space facilities (sport field), and mosque. However, at this time public open space facilities as a sport field in Kampong KB of Nyalindung Village have not been able to fulfill the needs of the community's activities. Even though the Kampong KB sport field has a very important role as a public
open space to fulfill various activities of the community. The Sport field becomes a public open space that plays an important role in the daily lives of citizens. The quality of the sport field is correlated with the health of its inhabitants, including physical and mental health [3]. The sport field also provides many functions and provides opportunities for social interaction and contributes to creating a sense of social, community and environmental ties [4], business functions, entertainment, recreation, allowing accommodating various activities. Therefore, the quality of the sport field environment is good, it will directly affect the quality of life of its citizens [5].

The purpose of this paper is to write Community Dedication activities carried out by the Universitas Komputer Indonesia Architecture Study Program Team in assisting the Design of RW.09 Sports Field in Kampong KB, Nyalindung Village, Ciumbuleuit, Cidadap District, Bandung City with a participatory approach. The theme adopted for this sport Field Design is Participation. Participation in social activities refers to recreational, social, cultural, educational, economic and activity [6].

2. Method

Figure 1 shows the location of the Community Dedication project is the RW 09 Sport Field, located in Nyalindung Village, Ciumbuleuit, Cidadap District, Bandung City with a Field Area of ± 889 m² and a population of 800 people in the Village. This service takes place from November 2019 to the present. Writing this paper uses qualitative methods [7] by taking data through observation and interviews. Secondary sources such as the size of the field, the number of residents based on age groups are obtained from citizen association. Whereas primary sources, such as natural potential, land shortages, characteristics, behavior, activities and daily activities of residents in the field are obtained by observation and interview [8].

![Figure 1. Location of public open space RW 09, Nyalindung Village, Ciumbuleuit, Cidadap district, Bandung City](image)

This design approach is performed with participatory action research, where the writer team along with the community leaders doing planning and design of Sport Field together. Because the actual architecture is participatory, and it is positioned as a social situation, promoting empowerment, equality and social justice to improve the quality of life of the community [9]. The initial step of this activity is performed by the community by providing an initial design of the RW.09 field design. Figure 2 shows the initial design drawings which are still in the form of drawings from the community team which was then developed by the Architectural Engineering Study Team.
The next step is the development of the design carried out by the Community Dedication Team consisting of lecturers and students from the Universitas Komputer Indonesia Architectural Engineering Department. Figure 3.b shows 4 students helping Community Dedication activities from the Architectural Engineering Department. Students are fully involved in accepting the wishes of the community, in the design and improvement of designs that have been made by a team from the community. Before developing the design, the Community Dedication Team conducted a survey in the form of re-measurements in the field. Figure 3.a shows the mapping, observation and interview activities for residents and community leaders, to determine the characteristics and behavior of the daily activities of its citizens.

3. Results and Discussion
Social participation becomes a design approach in the development of sports field design and becomes social capital [10] and architecture becomes a reflection of the community in a place [11]. Therefore, this approach refers to recreational, religious, social, cultural, educational, health, economic and daily activities [6]. Based on that, various facilities emerged in the field to fulfill various community activities consisting of various age groups.

Community is the main concept in the development of Sports Field design. This concept is based on sociodemographic living conditions, natural potential, activities and daily activities of the residents of Nyalindung Village. This concept is expected to improve the quality of life, the value of kinship and
awareness of the importance of cooperation and communication [12] that are intertwined between generations, bearing in mind that the community of citizens has diverse age ranges.

Figure 4. The activities of its citizens

Figure 4 shows the sports field located in Kampong KB is the center of the activities of its citizens. Ranging from sports activities such as Volleyball and Futsal, socializing, market days, Eid Al-Fitr Prayer and Eid Al-Adha Prayers, Workshops such as lantern study, Meetings between citizens, government and partners (private) and Urban Farming Activities. This field is more often carried out by Youth Organization activities which are groups of adolescents and young adults. One of the characters of public space that is liked by the group is Flexible. Flexible characters are public space characters that enable them to do more than one activity.

Therefore, in the development of the Sports Field, several supporting facilities have been made that can accommodate all these activities. Figure 5 shows the facilities that will be developed in the Sports field Design to accommodate various activities. Among them are sports fields, multi-functional installations such as children's playground, pull-ups, podium, stands, resting areas, urban farming areas (ornamental plants, superior crops of villages, herbs), fertilizer processing areas, and fruit areas. All of these facilities refer to social participation based on the daily activities of its citizens in order to be able to participate in every activity held in the sports field [6].

Figure 5. Siteplan of RW.09 sport field

The field has contoured land, Figure 6 shows the contour at the bottom of the field there is a sloping land that has not been optimally cultivated so that this area is used as a medium for farming /
urban farming for the residents of Kampong KB. Especially geographically, the location of the Kampong KB is close to Lembang, which is the center for producing various types of agricultural products in the city of Bandung. But now Lembang is experiencing a decline in the agricultural land area due to changes in land use [13]. Therefore, residents in Kampong KB can plant superior plants from Kampong KB itself, so they can enjoy the results. Such as herbal plants, avocado trees which become their superior plants, fruit plants and various types of diverse vegetation that can have a positive impact on stress reduction and psychological health benefits [14]. This facility provides many advantages including energy and water savings, and greater productivity [15].

Figure 6. The contour at RW.09 sport field

In order to green architecture movement, then to reduce organic waste, reduce operating costs and maintain cleanliness [15], then the land is provided a place to process or make compost. Falling leaves and other types of plants can be used as organic fertilizer for superior plants in Kampong KB. KB family members can make compost itself so they do not need to buy fertilizer. That way, residents can independently grow crops and make compost fertilizer for survival in improving the quality of their environment. The field in Kampong KB is routinely used for exercising every evening. Starting from futsal, volleyball, to badminton. All people, from children to teenagers and even parents, can use the field to exercise. The quality of the physical environment in the field is one of the basic considerations for the convenience of the field for the elderly age group. To increase the value of a high preference for an open space, it is very important to consider security [16]. Support of friends and family to increase participation and pleasant physical activity is very important for all age groups [17]. Thus, in this field, a children's playground is created which functions to train motoric sensors of children, with a safe design, without endangering children and the elderly.

Social activities for the elderly age group can reduce the risk of death, disability, depression and improve cognitive health [17]. So, there are stands on the side of the field as a place to watch sports activities, or just sit and relax. Intergenerational interaction activities are preferred by the elderly, such as playgrounds that can serve the needs of the elderly and children. For example, Figure 7 shows the existence of a park bench as a place where they watch their grandchildren playing swing in the playground [18].
In designing parks, accessibility is an important factor [19]. Accessibility refers to four elements, including location, barrier-free, ease of road and circulation. Thus, parks that are located in easily accessible environments can often be visited by the elderly in encouraging daily activities. In addition, the walls around the field can be used as media for the expression of KB family residents with mural art shown in Figure 8. So that the field can be very contemplative for young people and young adults in developing their creativity such as sketching, making mural art paintings as well as for exercising [20].

At the front of the field, there is a Posyandu whose activities are related to children's activities so that in the field children play facilities are made. This playground can train a child's motor nerves so that children can move actively. This playground is close to the stands so that parents can take care of their children who are playing by sitting in the stands while watching sports activities that are being held on the field. This children's play facilities can certainly be enjoyed by teenagers and other residents if they want to warm up before exercise by pulling up. Therefore, the play facilities are equipped with mines. At the bottom of the children's play area, a ramp is made to maintain security when the child will access this area [16,19].

This field is located right in front of the Posyandu, which has very crowded activities every week. Figure 9 shows the Posyandu not having land for parking, so this field can be used as a parking lot when there is a Pusling activity in the Posyandu. The parking area in this field will be one of the factors that influence the level of visit preference or people coming to a place [21].
Figure 9. This field is located in front of the Posyandu

This field uses 4 floodlights that are installed in the upper part of the stands as lighting for activity at night. Field management is given entirely to the community. Maintenance and management of parks, cleanliness, sanitation facilities and adequate lighting for walking and sitting in the field can increase the value of community preference and high participation [22]. That way, this field will become a social space for the community to build a strong community together in improving the quality of their lives.

4. Conclusion
In accordance with the purpose of establishing the Kampong KB, the Community Concept with a social participatory approach on the public open space is expected to be able to improve the quality of life of citizens, reduce population density so that a prosperous life can be achieved by healthy and smart living. This program will not have maximum success without the support of high citizen participation. One indicator of the success of the Kampong KB is to increase family participation in group activities and the growing cooperation of the community in developing a Kampong KB. Therefore, the concept of community is expected to increase the participation of its citizens to be more active in various activities in the Kampong KB.

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