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Urban Slums Community Participation in Green Space Planning (Case Study: City without Slums/KOTAKU Program in Depok City)

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ABSTRACT

In Indonesia, the availability of Green Space minimum 30% of the total area, while in Depok only 15.53% of the total area. KOTAKU Program is a Government program, one of which is in the provision and arrangement of Green Space by involving active community participation, and in Depok City it is targeted to increase the extent of Green Space by 3,626 hectares (18.2%). The purpose of this study is to assess how the shape and level of community participation, as well as the factors that influence community participation in Green Space planning. This research uses a mixed method of qualitative and quantitative data, the results are presented in descriptive form. Primary data obtained from respondents and informants with purposive sampling, secondary data obtained from the literature. Quantitative data is analysed by Path Analysis. The results of the study indicate that generally the form of community participation is only in the form of ideas and information, while the level of community participation is in the stage of simulation, in the sense that although the community has the authority to convey the idea, but decision-making is the authority of the organizer of the activity, in this case the Local Government. All of the independent variables (age, sex, education level, income level, and occupation), significantly affect the dependent variable (community participation). There are two independent variables that dominantly have the greatest influence on dependent variable, that is education level equal to 17,69% and income level equal to 11,64%. This is because the slum community generally has a low level of education and only have income below the UMK Depok City. Residual variable which is another variable that is not studied, gives influence of 45,4% to public participation in Green Space planning.

1. Introduction

Population growth has resulted in an increase in space requirements, and increased space requirements triggered the growth and development of urban areas (Daldjoeni, 1996). With the development of urban areas, population growth in the city will occur faster than the physical development of the city, resulting in increased city load in terms of urban infrastructure and utilities, one of which has an impact on the emergence of slums in urban areas (Sadyohutomo, 2008). Law No.1 Year 2011 on Housing and Settlement Area states that slums are unfit settlements due to building irregularity, high building density, and quality of buildings and facilities that do not meet the requirements.

As one of the buffer areas of the Capital City of Depok has a high population growth rate. According to BPS data of West Java Province (2016), it was reported that in the period of 2010-2014 the population growth rate in Depok City was 3.71 percent, which is much higher than the population growth rate in West Java Province which is only 1, 56 percent. This implies a greater need for space for settlements, so that it can have an impact on the existence of Green Open Space (RTH) in Depok City. Kemen PU & PERA (2011) defines the Green Open Space as a longitudinal and / or clustered area with a more open use, where plants that grow either naturally or intentionally planted.

According to Depok City Office of Spatial and Settlement (2012) data, the number of green open space in Depok City has not yet reached the ideal percentage that must be owned by an urban.

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Figure 1. One of the Targeted Areas of KOTAKU Program

Table 1. Green Open Space in Depok City

Jenis RTH	Existing		Plan		Wide difference	
	(Ha)	(%)	(Ha)	(%)	(Ha)	(%)
Public RTH	1.855	9,2	4.025	20,1	2.170	10,9
Private RTH	1.256	6,2	2.712	13,5	1.457	7,3
Total RTH	3.111	15,5	6.737	33,6	3.626	18,2
Depok area	20.029					

Source : Depok City Government (2012)

The ideal of RTH above is based on Act Number 26 Year 2007 on Spatial Planning, which mandates that in urban spatial planning should contain a plan for the provision and utilization of green open space at least 30% of the city area, with a composition of 20 % Public RTH and 10% private RTH. Not equal to the area of green open space with the total area, making the city of Depok as one of the target city location Program City Without Slums / KOTAKU (Ministry of Public Works and PERA, 2016). KOTAKU is a national program in 271 districts / cities in 34 provinces that become "platforms" or slum-dwelling settlement base, which was carried out since 31 May 2016. One of the aspects that became the focus of the KOTAKU program was the provision / arrangement Green Open Space (RTH).

One of the principles in each stage of the KOTAKU Program, including in the RTH planning activities, is to promote community participation, from planning to evaluation of the results of the implementation. In line with these principles, Joga and Ismaun (2011) briefly explain the strategy to get a minimum of 30% of green open space can be done through seven components.

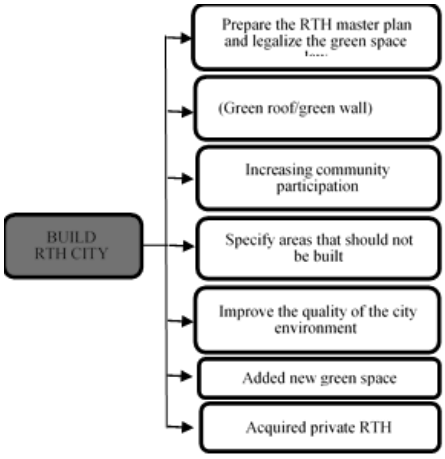

Figure 2. Strategy to RTH 30%
(Joga and Ismaun, 2011)

The figure above shows that community participation is one of the fundamental components that must be fulfilled to achieve the minimum green open space area of 30%, so community support should be involved from the beginning of planning. Wikarta (2004) states that RTH is a component of sustainable urban development, whose existence affects the balance of the environment, of course, to address the occurrence of depreciation of the green space is very necessary role of stakeholders in any decision-making.

In addition, in a study conducted by Wijaya (2013), states that in order to re-green a region through development and arrangement of green space, the government can not move alone, but must be supported by community participation. In another theory, Slamet (1993) states there are five factors that influence public participation, namely:

1) Gender
2) Age
3) Education Level
4) Income Level
5) Livelihood

In this study, to determine the level of community participation is used the Eight Stake Ladder of Community Participation from Choguill (1969).

Figure 3. Eight Stake Ladder of Community Participation
(*Choguill, 1969*)

Based on the above explanations, the study will examine how the shape and level of community participation in urban slum areas, as well as the factors that influence community participation in urban slums in the planning of Green Open Space in KOTAKU Program.

2. Materials and Methods

The design of this study used a mixed method by combining qualitative data obtained from interviews, literature studies and documentation, coupled with quantitative data obtained from the analysis of statistical questionnaire answers. Qualitative methods are used to obtain information on how the shape and level of community participation, while quantitative methods are used to analyze what factors influence community participation.

Sources of qualitative data obtained from interviews with resource persons through purposive sampling and from the results of literature studies and supporting documents. Quantitative data sources were obtained by means of surveys through purposive questionnaires to respondents. The sample respondents must meet the following criteria: Reside in slums that are the location of the research, understand the characteristics of the local community, and are willing to become informants.

Qualitative data collection techniques are conducted through interviews, observation and documentation. Quantitative data collection is done by using questionnaires through questionnaires submitted to respondents with closed questions.

The technique of sampling qualitative data is done by purposive sampling based on the consideration that the informant has relevance and knowledge related to public participation in the effort of city arrangement. Patton (1990, cited by Wirawan, 2012), states that in qualitative research there is no rule regarding the size of the sample, the size of the sample depends on what the researcher wants to know. Quantitative data collection techniques were conducted using questionnaires. The list of questions on the questionnaire is asked directly to the head of household / housewife who is in the respondent's research location.

Referring to the information of City Coordinator of KOTAKU Program Depok Region (2015), the number of head of household (KK) slum in RW 20 region is 245 families. Based on the number of population, the sample withdrawal is done by Yamane's formula (1967), as follows:

$$n = \frac{N}{1 + N(e)^2}$$

n = Number of samples sought
N = Population
e = percent leeway (determined by 10% or 0.1).

By using Slovin formula obtained the proportion of samples as much as 72 families. The determination of 72 households was conducted purposively through suggestions from local RT Chairman and direct observation in the field.

Research Variable

This study is limited by the determination of research variables, as follows:

1) Form of participation of urban slum communities in the planning of green open space through the KOTAKU Program, including: Ideas / thoughts, information / data, energy and finance. These variables are material and non-material that the community can contribute as a form of participation in urban slum settlement activities.
2) 2) Levels of participation of urban slum communities in green open space planning through the KOTAKU Program include: Empowerment, Cooperation, Conciliation, Simulation, Diplomacy, Information, Conspiracy, and self-management. The level of community participation refers to the Eight Ladder of Participation Level from Choguill.
3) The factors that influence the participation of urban slum communities in green open space planning through the KOTAKU Program, include: Age, gender, education level, occupation, and income level.

Qualitative data analysis is done according to stages: data reduction, Display data, and decision making and verification. Quantitative data analysis is done by Path Analysis, which is used to analyse relationship pattern between variables with the aim to know the direct and indirect effect of a set of independent variables (exogenous) to the dependent variable (endogen).

Selection of research location is in RW 20 Depok Village, District of Pancoran Mas. This is based on the Decree of Mayor of Depok No. 591 Year 2015 dated July 9, 2015 on Stipulation of Housing and Urban Slums, explaining that RW is the RW in Depok City which has the widest slum area of 13.21 hectares. The object of this research is the Head of Family (KK) / Housewife who resides in RW 20, Depok Village, Pancoran Mas Subdistrict that fall into slum category. As for the period of study, planned to be conducted in August-September 2017.

3. Results and Discussions

The location of RW 20 adjacent to New Depok Station, Depok City Terminal, Depok City Government Office, and adjacent to Margonda Road which is the main access road from and to Jakarta, has made this area a strategic location and attracts immigrants to settle. With more migrants to the region, it has led to greater space requirements, resulting in the emergence of slums using existing open land, including the Green Open Space in the region.

Figure 4. RTH Function Transfer for Settlements and Waste Disposal

Based on information obtained from informants, mentioned that of the total area of RW 20 about 25 hectares. Of this area, 70 percent is used for settlements, while the remainder is for environment, open space and other public facilities.

Table 2. Land Utilization at The Research Location

Use	Land Area (Hectares)
Settlement	15
Road environment	6,5
Open space	3
Others public facilities	0,25

Source : Depok City Government (2014)

With the increasing slum settlements existing in RW 20, it has implications for inadequate social, economic and environmental conditions in the region. Inadequate environmental aspects of the region can be seen from a number of things, such as: Inadequate drainage channels, poorly managed waste facilities, unsuitable building conditions, and reduced availability of green open space.

The KOTAKU program aims to build an integrated system for handling slums, where local governments lead and collaborate with stakeholders in planning and implementation, and promote

community participation. Currently, KOTAKU Program has been in the planning stage towards the preparation of implementation. The planning stages are at the same time key in developing joint problem solving and building stakeholder commitments in slum settlement through the preparation of slum handling and prevention plans.

refers to the process of participation at the community level above, so in this study that focuses on the aspects of planning, it can be argued that the relationship between individual participation with the formulation of planning at each stage in the KOTAKU Program is, as follows:

Based on the results of research can be submitted that the characteristics of society in planning activities, generally divided into two categories, namely the community who are actively participating and not participating. Active participation can be demonstrated by the contribution of ideas, information, expertise, personnel, or combinations of some of these things provided by the community, either directly or through community representatives, in this case through the Community Self-Help Agency (BKM) at the kelurahan level . Contributions delivered by the community through the Community Self-Help Agency (BKM), then forwarded to the Local Government before the design activities implemented in the field.

Through the survey conducted, the results obtained that the dominant form of community participation in the form of the contribution of ideas or information, which is delivered from the interpretation of thoughts and experiences of the community on the suitability of provision and arrangement of green open space in the slum area. Ideas and information submitted by the community are among others related to the determination of the location and extent of green open space that may be applicable in the study sites, as well as other considerations relevant to the green space planning in the slum areas. Nasdian (2014) explains that ideas or thoughts are a contribution that can be given in every stage of the activity, given in designing a program that is guided by the way of thinking of the community independently for the realization of effective participation.

Figure 5. Community Participation in FGD and Training Activities

With the contribution of suggestions and information from the community, also understands that the awareness and mindset of the community on the arrangement of the environment has increased in order to get a more decent dwelling environment. The people's desire to give the above ideas and information is also related to the motivation of the community to make changes, since the existing conditions in the slum areas lack social, economic and environmental feasibility. Referring to the results of the review conducted, can be submitted in summary form of community contribution in the planning stages of KOTAKU Program, as follows:

Based on the results of research can be submitted also that the level of community participation in the planning stage of activity has not reached Empowerment level as expected by the organizers, but community participation is still at the level of Dissimulation (Dissimulation). This is based on the facts in the field that the decision-making authority is in the hands of the Regional Government as the organizer of KOTAKU Program, while the community only as a contributor of ideas, ideas and information. In accordance with the Eight Chart Theory of Participation Level of Choguill (1969), the degree of Dissimulation means that although the role and authority of the community in conveying ideas, ideas and information is enormous, but overall decision-making becomes the organizing authority. To know the factors influencing the level of participation, done by path analysis through calculation manually and also with help using tools of Program of SPSS 19. Related to that, independent variable (X) in this research is Gender (X1), Age (X2), Education (X3), Employment (X4) and Revenue (X5), while the dependent variable (Y) is the level of community participation in urban slum areas in green open space planning. The result of calculation through path analysis can be shown, as follows:

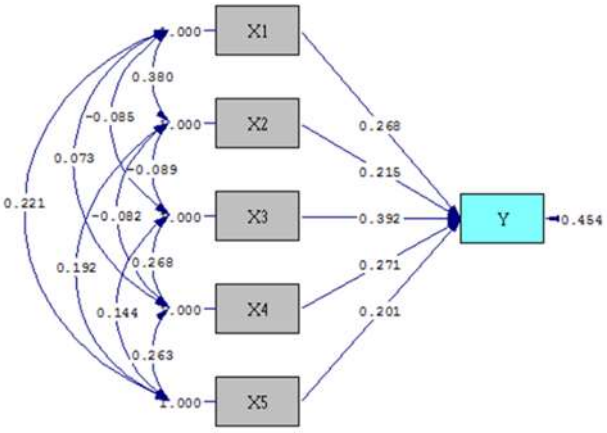

Figure 6. Path Analysis Diagram

Based on the above table, it can be concluded that the direct and indirect influence, as follows:

1. Gender (X1) has significant effect on Community Participation Rate (Y), with total influence of 10,22%, consist of direct influence equal to 7,20% and indirect influence equal to 3,03%.
2. Age (X2) has a significant effect on the Community Participation Rate (Y), with a total influence of 6.44%, consisting of 4.64% direct influence and indirect influence of 1.80%.
3. Educational Level (X3) has significant effect on Community Participation Level (Y), with total influence of 17,69%, consist of direct influence equal to 15,35% and indirect influence 2,34%.
4. Type of Work (X4) has a significant effect on the Community Participation Rate (Y), with a total influence of

11.68%, consisting of a direct influence of 7.35% and an indirect influence of 4.33%.

5. Income Level (X5) has a significant effect on the Community Participation Rate (Y), with a total influence of 8.60%, consisting of a direct influence of 4.02% and an indirect effect of 4.58%.
6.

4. Conclusion

The most dominant form of community participation in green space planning in the KOTAKU Program is in the form of ideas and information contributions. However, the suggestions for environmental improvement are still limited to matters relating to the interests of the individual, not to the interests of society as a whole.

In general the level of community participation is in the stage of simulation. At this level there has been two-way communication and dialogue between the community and the Local Government as the organizer of the activity, as well as the community given the authority to convey ideas. However, the authority in making decisions on the implementation of activities in the field to the authority of the Regional Government, while the community only as a support and reference information.

From the calculation of path analysis, it is known that all X variables (age, sex, education level, income level, and occupation) significantly influence Y variable (community participation). Of the five independent variables, there are two variables X that dominantly have the greatest influence on the variable Y, the education level (X3) of 17.69% and income level (X4) of 11.68%. While the residual variable which is other variable not included in calculation but give influence to variable Y, giving influence 45,4% to society participation in Program KOTAKU in Depok Village.

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