



## Attitude and Community Participation in The Provision and Utilization of Green Open Spaces of The Yard in Palembang

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### Abstract

The existence of private green open spaces of the yard which involves community participation in the provision and utilization of green open space has not been synergized with the city government program for the achievement of green open spaces mandated by the statutory regulations. With the statutory regulations on community involvement, this research aims to examine the community attitudes and participation in the provision and utilization of green open space of the yard in Palembang by region with certain density. Data analysis used in this research is a quantitative analysis based on questionnaires which collected from respondents whom have private home yard. Non-parametric statistical tests using the Mann-Whitney test to analyze the differences between the regions. Statistical tests of correlation Spearman rank and Somers'd used to analyze the relationship between variables. The results showed the high score of community attitude, while the participation of the community belong in the low score. There is a significant difference between community in low density regions with community in high density regions as shown in the correlation between the level of community attitudes toward community participation in the provision and utilization of green open space.

Keywords: attitude, participation, green open space of the yard, Palembang

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### 1. Introduction

The city of Palembang with all the complex problems continues to make development in all fields. New developments sometimes also giving new problem. One of the misurban environmental problems, which is the availability and functionality of green open space that has not yet reached its effectiveness, as a result, flood and the high temperatures is not count as new environmental problem/issues [1]. Environmental issues, are not the City Government responsibilities only, mitigation is the responsibility for many parties. The various parties are expected to engage the private, both community as group and individual. The Republic of Indonesia in Act No. 26-Year 2007 on Spatial Planning contains the community involvement

in it. Furthermore, the city of Palembang in the Local Regulation No. 15-Year 2012 about Spatial Planning Palembang Year 2012-2032 contains the role of community in spatial areas such as spatial planning, space utilization, and control of space utilization [2].

According to the Indonesian Government Policy, the provision and utilization of green open space are required the public participation in both the public green open space and private. The existence of public green open spaces is more *top-down*, where people do not have responsibility to manage [3]. On the other hand, the existence of green open spaces involving community participation in the provision and utilization of private green open space has not been synergized with the city government program for the achievement of green open spaces mandated by the statutory regulations. This reality encourages to do research on community participation in provision and utilization

tion of green open space of the yard in Palembang, it is very important thing to do.

This research aims to examine community attitudes and participation in the provision and utilization of green open spaces of the yard in Palembang [1];[5]. As for the goal, necessary targets as follows: identified attitudes toward existence of green open spaces of the yard based on the region with the largest and smallest density, identified criteria of community participation in the provision and utilization of green open spaces of the yard based on the region with the largest and smallest density, the correlation between the level of attitude toward community participation in the provision and utilization of green open spaces of the yard in Palembang.

## 2. Materials and Method

This research was carried out in two districts named Gandus Subdistrict (region 1: regions with the smallest density) and Ilir Timur 1 Subdistrict (region 2: the region with the highest density). Each sub-district had selected by purposive two subdistrict with the highest number of house hold and the lowest number. In Gandus Subdistrict, selected Gandus district and Karang Jaya district, and in Ilir Timur 1 Subdistrict, selected 21 Ilir D1 district and 16 Ilir district. The community that became a sample is the Household Heads or represents it with the inclusion criteria, which has the green open spaces of the yard, can read and write and is willing to be a respondent. Based on these criteria in Region 1 and Region 2 obtained 102 respondents with a proportion of 50:50. Data collection was carried out from March until April 2018.

The data collected using questionnaire instrument that has been done on the validity and reliability test instrument. Data was tabulated and analyzed with descriptive and statistics. Statistical analysis was done using the Mann-Whitney test to analyze the differences between the regions. Statistical tests of correlation Spearman rank and Somers' d was done to analyze the relationships between variables. The variables in this study i.e. the variable of community attitude and participation. The attitude variable consists of 7 (seven) attitude statements, whereas the variable of community participation consists of 6 (six) criteria of community participation. Each criterion be quantified by using the Likert scale score.

## 3. Results And Discussion

### Community Attitudes Toward the Existence of the Green Open Space of the Yard

Attitudes evaluations of objects including good or bad, desirable or undesirable. Attitudes can evaluate people, behaviors, events, or any object, whether specific or abstract [4]. Attitudes, defined by social psychology as

“favorable or unfavorable evaluations of and reactions to objects, people, situations, or any other aspects of the world,” also enable us to predict and change people’s behavior [5].

Table 1 presents the attitude of two groups of people who live in regions with high density and low density toward the existence of the Green Open Space of the Yard. Based on table 1, shows that there is a difference in attitude between groups stated by the different significance of Mann-Whitney test. These differences are shown in the attitude being pleased with the presence of the green open space of the yard, supporting the existence of the green open space of the yard development, granting technical assistance and incentives and the granting of related education and training of green open spaces. While the approval statement to the presence of the green open space of the yard and a statement of the existence of a corresponding extension of open green space, as well as a statement of the existence of rules on the provision and utilization of green open spaces of the yard showing no significant differences.

**Table 1.** Significance different and the Mean Rank of Attitude

Statements of Attitude	Mean rank		Significance different
	Reg. 1	Reg. 2	
1. The statement agreed the presence of green open spaces of the yard	47,41	55,59	0,105
2. Delight the presence of green open spaces of the yard	42,33	60,67	0,000*
3. Support the development of green open spaces of the yard	46,32	56,68	0,047*
4. The statement of the existence of a corresponding extension of green open spaces	48,23	54,77	0,212
5. Granting of education and training related of green open spaces	43,67	59,33	0,003*
6. Granting of technical assistance and incentives	42,85	60,15	0,001*
7. A statement of the existence of rules on provision and utilization of green open spaces of the yard	48,33	54,67	0,231

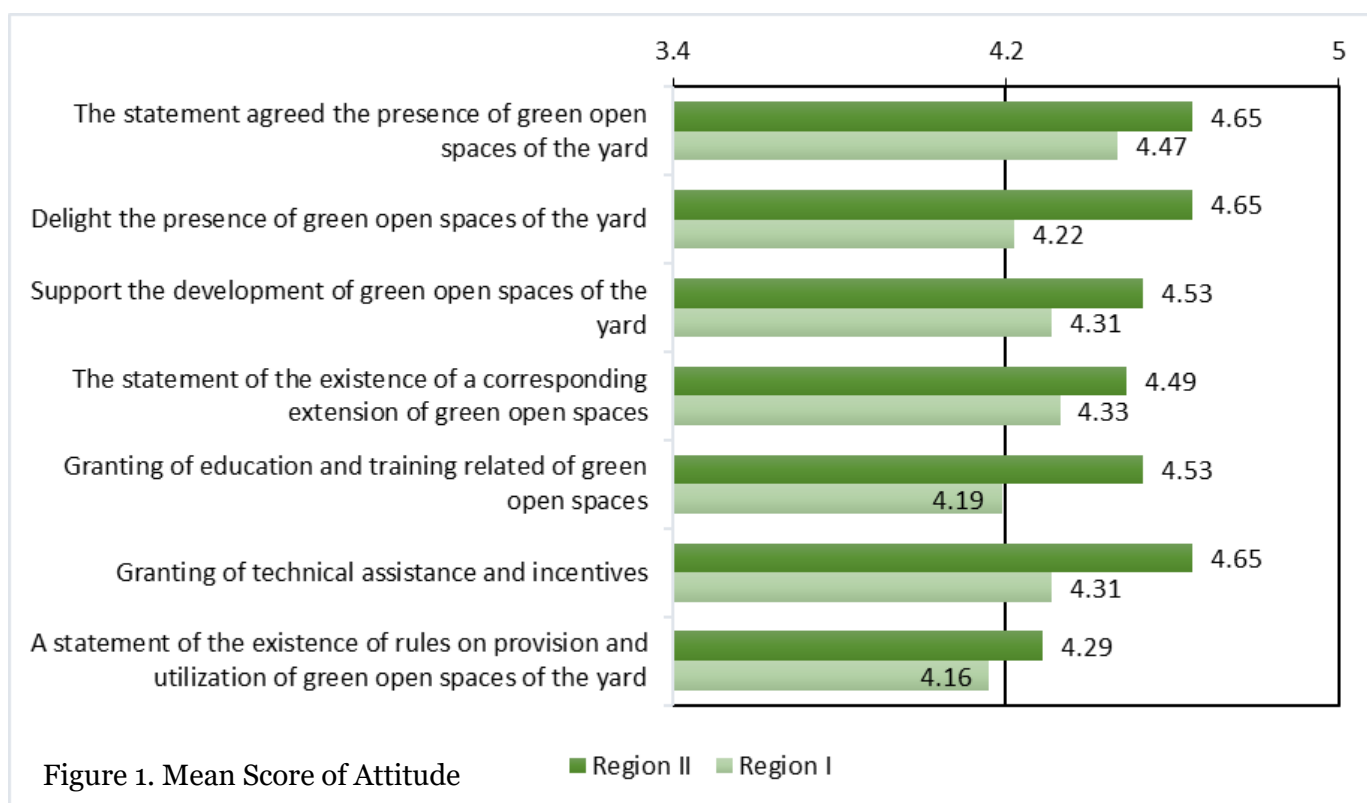
Remark: \* Significant value  $P < 0,05$  means that there is a difference in attitude between groups

Community groups in the region 2 (Ilir Timur 1 Subdistrict) tend to have a better attitude than community groups in region 1 (Gandus Subdistrict) in the statement of being pleased with the presence of green open spaces of the yard, supporting the existence of the development of green open spaces of the yard, granting of education and training, as well as the granting of technical assistance and incentives. The overall attitudes of the community region 2 are likely better than the attitudes of the community in the region 1.

The difference in attitude was affected by the difference in knowing about green spaces between groups

of community. Communities in the Region 2 knows more about green open spaces better than communities in region 1. Based on the results, there are significant differences between communities to understand that the green open space have various functions and benefits, as example, acts as water absorption and the oxygen producer, owning the neighbourhood park, and the necessity to have a yard in each residential house.

encouragement from outsiders, with the development of green open spaces of the yard, community can assess the characteristics of the green open space of the yard are getting better. The encouragement from outside parties can be a help to stimulate the development of green open spaces of the yard. The existence of a corresponding extension of green open spaces will provide and improve community



The attitude which states agree or not with the existence of green open space of the yard were related to the person's subject toward the existence of green open spaces of the yard or it means the feeling of self-belonging against something. The statement in line which stated by Rensis Likert [1] with the frame of thought that a person's attitude towards an object is a feeling of support (favorable) or feeling does not support (unfavorable) on the object. The attitude has 3 (three) components as stated by [6], one of which is the affective component. Being pleased with the presence of green open spaces of the yard, is a reaction of the respondent's feelings. Respondents felt happy with the existence of green open spaces of the yard realized by arranging the environment around their house as beautiful as and as comfortable as possible.

Community support is tend to give initiative or

knowledge about of green open spaces. The extension also will be stimulated the community to influence others in relation to the provision and utilization of green open spaces of the yard. Thus, the existence of an intensive and ongoing counselling related green open spaces will push the community willingness and increase its participation in the provision and utilization of green open spaces of the yard [2].

Providing education and training related to green open spaces has the influence to increase community knowledge about of green open spaces and improve skills in providing and utilizing the green open spaces of the yard. Giving technical assistance and incentives are the effort to encourage community participation in the provision and utilization of open green space yards. Technical assistance also teach show to setup the environment and a good yard and how to select any type of plant. Incentives assistance can be giving the stimulation

of seedling plants. Up to this point, there are no further provisions regarding technical assistance and incentives are given yetto the community whom were involved in the provision and utilization of green open spaces of the yard in Palembang through regulation.

The results showed that the community agrees with the rules on the provision and utilization of green open space of the yard in Palembang. Based on the statements shown in graph (Figure 1) above that the level of the overall community attitude in region 1 or Region 2 agree and support the existence of green open spaces of the yard.

### Community Participation in the Provision and Utilization of Green Open Spaces of the Yard

General terms of participation of the community contains the notion of community participation or actively took part in an activity [1]. Arnstein proposing the participation is based on the distribution of power between community and the government, whichcommunity participation is synonymous with the power of community (citizen participation is the citizen power) [1]. Further [7] stated the main kinds of participation that warrant major concern are participation in decision-making, participation in implementation, participation in benefitand participation in evaluation [2] and have defined the participation as a voluntary contribution by the people in one or another of the public programme or in criticizing its contents [3].

Table 2 presents the community participation in the provision and utilization of green open spaces of the yard from two groups of community who live in regions with high density and low density. Data presented illustrates significance different of community participation criteria among community groups region 1 and region 2.

Based on table 2, the difference is only shown on the criteria for participation in improving environmental quality in residential area in terms of planting plants. It looks that communitygroups Region 2 is better than Region 1 in terms of participationto improve the quality of the environment in residential area in terms of planting plants. On the criteria of providing counselling, making absorption wells, waste management, optimizing the land yards, berm, other vacant land with various types of plants, as well as activelyparticipate in community lovers of green open spaces there is no significant difference

between groups of community.

Table 2. Significance different and the Mean Rank of Participation

The Criteria of Community Participation	Mean rank		Significance different)
	Reg. 1	Reg. 2	
1. Provide counseling on the role of the private green open space in the improvement of environmental quality	52,04	50,96	0,732
2. Participate in improving environmental quality in housing in the terms of planting plants	41,88	61,12	0,000*
3. Participate in improving environmental quality in housing in the terms of making absorption wells	53,50	49,50	0,252
4. Participate in improving environmental quality in housing in the terms of waste management	47,62	55,38	0,114
5. Fill as optimal as possible land yards, berm and other vacant land with various types of plants directly or in pots	46,72	56,28	0,065
6. Participate actively in community of green open space lovers	51,50	51,50	1,000

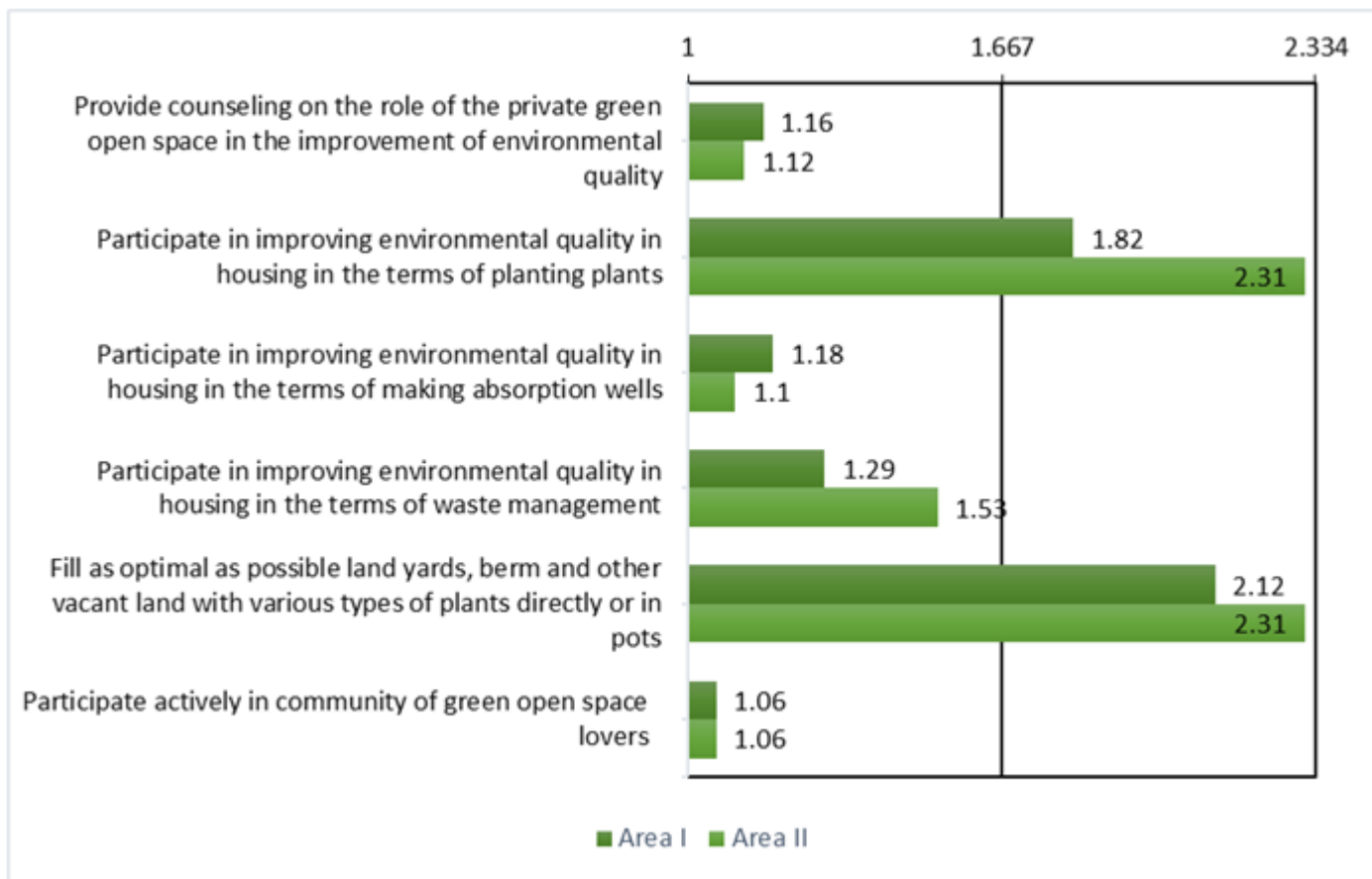
Remark: \* Significant value  $P < 0,05$  means that there is a difference in attitude between groups

The assessment on a scale of 1 to 3 for the criteria of participation, obtained an average score of providecounselling on the criteria included in the low category, both in region 1 and region 2. Itisbecause community generally reluctant to give counselling about the role of private green open spaces in the improvement of environmental quality. Attitude and behavior based on the assumption that the house’s yard is the privacy of the people who ownit and itcanbe interfered [8]. Average score for criteria participatein improving environmental quality in residential area in terms of making the absorptionwellsbelongtolowcategory. The community generally do not know the technical manufacture of absorption wells. Although the procedures for planning the rainwater absorption wells to yards contained in the SNI: 03-2453-2002. The information was not fully accepted by community,it isalsoneededcostmaking. Communities are more likely to drain the rainwater on the lowerland or drain iton existing drainage.

The criteria take part in improving the quality of the residential environment in terms of waste management by category low. Generally, the community in handlingthe waste does not do anysoring, transporting, even processing waste [9]. The community generally accommodate garbage in a single container for all different types of trash households, then handed itover to waste

transport officer and then the waste dumped into Landfills.

influence the attitudes and behavior of the plundering of the community towards the yards the



Recycle things such bottles, buckets of used as potted plants are rarely found in this place. The lowest point is on community participant criteria to actively provides counseling in community of green open space lovers, amount of 1.06 in region 1 or region 2, with a low category. The community generally have not start to form the non-profit community, a small part of the community who loves green open space and actively involved in the community are those who have the opportunity and the willingness to improve the knowledge of green open space [10].

Based on the above graph (Figure 2), highly participation is the criteria to fill as optimal as possible the yards, berm and other vacant land with various types of plants directly in soil or in pots, followed with the criteria to take part in improving the quality of the residential environment in terms of planting plants. It is because community generally encouraged the existence of mutual system in force in the community. In addition to the local government encourages of green in environmental rateneighbourhood, hamlet or urban village. These motifs

house owned. The community fill as optimal as possible of land yards with the encouragement of doing planting can add to the aesthetic value of the home, accustomed to the environment of lush, airy and comfortable, and are affected by seeing the neighbor's yards are decorated with different types of plants.

Measurement of the level of community participation in the provision and utilization of green open space of the yard in Palembang with sum average score of 6 criteria, the results obtained by the level of community participation is included in the low category, both in region 1 and region 2.

### The Correlation between Level of Attitude toward Community Participation

Table 3 below presents a correlation between the level of attitude toward community participation in the provision and utilization of green open spaces of the yard from two groups of community who live in regions with



high density and low density. Data presented illustrates the correlation of the level of the community's attitude on each of the participation criteria among community groups region 1 and region 2.

between the level of attitude toward community participation on these criteria in the region 2 larger than the region 1.

Table 3. Correlation between Level of Attitude toward Community Participation

The Criteria of Community Participation	Level of Attitude			
	Region 1		Region 2	
	<i>Spearman</i>	<i>Somers' d</i>	<i>Spearman</i>	<i>Somers' d</i>
1. Provide counseling on the role of the private green open space in the improvement of environmental quality	0,189	0,164	-0,055	-0,049
2. Participate in improving environmental quality in housing in the terms of planting plants	0,347*	0,327*	0,508**	0,483**
3. Participate in improving environmental quality in housing in the terms of making absorption wells	0,108	0,101	-0,187	-0,168
4. Participate in improving environmental quality in housing in the terms of waste management	0,114	0,110	-0,039	-0,037
5. Fill as optimal as possible land yards, berm and other vacant land with various types of plants directly or in pots	0,299*	0,284*	0,555**	0,538**
6. Participate actively in community of green open space lovers	0,058	0,043	0,000	0,000

\*\*Correlation is significant at the 0.01 level (2-tailed)

\*Correlation is significant at the 0.05 level (2-tailed)

Based on table 3 shows the relationship of the level of the community's attitude towards community participation in the provision and utilization of green open spaces of the yard, there is a significant difference between the group of community in region 1 with the group community in the region2. On the region 1 based on correlation of Spearman and Somers'd there is a positive relationship level attitude toward community participation in improving environmental quality in housing in terms of planting plants with a value of 0.347 Spearman correlation with the weak closeness relationship. On the region 2, the highest-level attitude toward community participation in the planting plants with a value of 0.508 Spearman correlation with closeness relationship are strongly enough. Thus, the correlation of level attitude towards community participation on the criterion of planting plants in the region of 2 larger than the region 1 [11].

The correlation between the level of the community's attitude with the participation of fill as optimal as possible of land yards, berm and other vacant land with various types of plants directly and/or on potted plants showed a significant difference between community groups in region 1 with region 2. On the region 1 has the value of the Spearman correlation 0.299 with weak closeness relationship, whereas on the region 2 has correlation Spearman 0.555 with closeness relationship is strongly enough. Thus, the relationship

Community participation on the criteria provide counselling role of private green open spaces in the improved quality of the environment, participation in improving the quality of the environment in terms of the to make of the absorption well, waste management, and participate actively in the community of lovers of green open space almost no significant correlation with the level of attitudes [12].

#### 4. Conclusion

The difference in attitude between communitywhomlivesin the region withhigh density and with low density region is affected by the knowledge gaps of green open space between communitygroups. Communities in high density region knowsbetter than the community in the regionof low density. Significant difference on the understanding that the green open spacehavefunctions and benefits as water absorption and the oxygen producer,owns the neighbourhood park, and the necessity to have a yard in each residential house.The difference oncommunity participation only shown on the criteria of participation whomimprove the quality of the environment in terms of planting plants,that community groups in the region with high densitydo better than region

with low density.

There is a significant difference between the community groups in region of low density with community groups in high density regions in terms of correlation on the level of the community's attitude and participate in the provision and utilization of green open spaces of the yard. The correlation between the attitude level toward community participation to fill as optimal as possible land of yards, bermand other vacant land with various types of plants directly and/or on potted plants show the difference significant, as well as on the criteria of participation improves the quality of the environment on residential area in terms of planting the plant.

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