Factors Affecting the Capacity of Green Gang Managers in the Utilization of Yards for Green Open Space in Jakarta

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Abstract

This study aims to identify the Green Gang Manager capacity level and analyze the factors that affect the Green Gang Manager capacity in Jakarta. The technique of research includes a survey approach for 340 respondents in DKI Jakarta Province from 2,236 Green Gang Managers. Research in the five administrative towns of central Jakarta, East Jakarta, West Jakarta, South Jakarta and North Jakarta has been undertaken between December 2019 and February 2020. Techniques for data collecting through open interviews, in-depth interviews and focus group discussions. Inferential data analysis. Data analysis. PLS and Logical model analysis using Structural Equation Modeling (SEM). The results showed that the capacity of Green Gang Managers in DKI Jakarta Province was in the medium category. This indicates that the Green Alley Manager's capacity level is quite understanding regarding utilizing Green Open Space. Green Gang Managers' ability is influenced significantly and effectively by individual properties, support of stakeholders and Green Gang managers' involvement. Non-formal training and motivation are personal attributes that affect Green Gang Manager skills. The role of the government, the part of the community, the role of the media and the role of extension workers are all stakes that influence the capacity of the Green Gang manager. Planning, implementation, using outcomes and evaluation are the level of participation that influences the capacity of Green Gang managers.

Keywords: *Green Alley Management Capacity, Yard.*

A. INTRODUCTION

The city's development will result in a reduced level of land carrying capacity, thereby reducing the quality of life and community productivity (Dominelli, 2012). New problems also arise, such as traffic jams, slum areas, irregular building layouts, and changing productive agricultural lands. If not through planning, city development can cause an imbalance in the physical use of urban space, which will result in reduced Green Open Space (RTH).

The dynamics and demands of urban socio-economic development are usually followed by an increase in population from time to time (Bouillon, 2012). This causes the widespread use of land for residential urban areas to the outskirts of the city and reduces green open space and agriculturally productive land (Chandra & Diehl, 2019). On the other hand, the increasing demand for land for economic and housing purposes impacts the reduction of green open spaces in Indonesia's big cities (Surya, Syafri, Hadjiah & Sakti, 2020).

The city's green open space area has decreased due to the absence of ecological considerations in land use. This impacts reducing the amount of green open space on the environment, which implies a decrease in the quality of the environment in urban areas. At the same time, the existence of green open space is an essential part of the welfare of city residents (Monteiro, Santoso & Prabowo, 2021). Green open space in urban areas is an elongated area or pathway, the use of which is more relaxed, where plants grow, both those that grow naturally and those that are intentionally planted (Permen PU No. 05/2008).

There are currently considerable declines in the quantity and quality of green open space in larger towns in Indonesia, leading in environmental harm, which affects several elements of urban life including frequent floods, increased air pollution, and lower community output due to space. For engagement between society and society (Permen PU No. 05/2008). This follows the studies carried out by Budiman et al. (2014), who concluded that major cities including Jakarta, Bandung, Semarang, Surabaya and Yogyakarta did not fulfill the public and private norms for green open space.

In urban areas, the proportion of green open spaces is at least 30% composed of 20% green open space and 10% green space (Permen PU No 05/2008). Jakarta has a green open space area declining by 342,40 ha between 2011 and 2018 (Setiowati 2019). The aim of 30 percent of the green open area of the city area for 2030 was set by DKI Jakarta province (Government of the Province of Jakarta 2017). However, until 2019, there were only 14.9% of green space available and there is still no green open-spaces master plan (Hendrianto 2019). The paucity of green open in Jakarta has been reported by the Research Sampleiling et al. (2012) to interfere with economic and social aspects of society. DKI Jakarta (Pemprov DKI 2017) Provincial Government said that management of open areas in Jakarta is not optimum. Apart from the declining availability of land in Jakarta, there are several obstacles to the availability of open space in green areas, which include the decreased number of key agents in agriculture, not yet maximum support from stakeholders (communal, government agencies, universities, schools and the media).

The Special Capital Region of Jakarta is one of the big cities in Indonesia that has not yet reached the minimum standard for the proportion of green open space, both public and private, as stipulated by the Government Spatial Planning Law. Various

efforts have been made by the Province (Pemprov) of Jakarta. One of them is issuing the Governor's Instruction Number 14 of 2018 (Sub) to increase green open space by carrying out urban agriculture and utilizing home yards and alleys around settlements. One of the implementations of the land use is the Green Gang Program in the yard. The green alley is an alley or small road lane planted with various types of horticultural plants, which are arranged in such a way as to form a unity of benefits and aesthetics in a residential area and residents' yards in urban areas (Meidiantie, 2019). The existence of green alleys is one of the developments of urban agriculture in Jakarta (Medianti 2017).

DKI Jakarta Province has the potential for the development of Green Gangs with limited land. As the largest city in Indonesia, Jakarta is an urban area complete with human resources, funds, and other supporting facilities. Zasadaa's research (2011) shows that people in urban areas, despite socio-economic pressures and changes in land use, still survive by living from agriculture and animal husbandry. There is a desire from urban communities for several farming functions, for example, for family food, recreation, and social needs. Urban communities have high participation in diversification.

It's just that optimizing the existence of Green Gang requires the support of community capacity as managers. Efforts are being made, among others, by formulating the right strategy, utilizing technology, and cooperation between development actors. The process that needs to be done is to increase the capacity of farmers through education and skills for members of farmer groups (Rusida 2016). The capacity building process is carried out regularly and constantly within the community development cycle so that awareness of growth becomes a culture in society (Oktavia et al., 2017). By increasing the capacity of the community through training and strengthening cooperation between stakeholders. Capacity building for managers is part of adaptation efforts, self-control, a collaboration between groups, and seeing the relationship between action and results (Morgan 2004).

The explanation above shows that the people of DKI Jakarta need green open space to exercise, interact and get healthy and fresh food (Bentall, Beusch & de Veen, 1999). However, the availability has not met the standard both in quality and quantity, It still lacks the role of stakeholders in promoting the use of yard land for green open spaces' sustainable usage and is linked to human resources capability (Twort & Ratnakaya, 2000). Based on the foregoing backdrop, this study aims at: (1) identifying the level of green alley management and (2) analyzing the capacity of DKI Jakarta's Green Street Managers.

B. METHOD

This study uses a quantitative approach and is supported by qualitative analysis. The research location of the Green Gang Manager is in DKI Jakarta Province. Sub-districts and sub-districts were chosen purposively with the consideration of getting the Green Gang Program and following up on the DKI Jakarta Regional Government program. Determination of the number of samples is done proportionally from each sub-district and village. The number of samples taken in the research area was 340 people. Research data collection was carried out from December 2019 to February 2020. Primary data was collected through surveys of research samples using questionnaires and in-depth interviews with relevant community leaders. While secondary data as supporting data is collected from the results of research that has been carried out, relevant literature reviews and data owned by related institutions and agencies; for example, the Sub-dept. of food security, marine and agriculture, the KPKP Service and extension workers who have duties in the research area. The data gathered were taped and analyzed by means of descriptive statistical analysis utilizing the SPSS Version 24, the Partial Least Square (PLS) Programme, inferential statistical analysis 3. One-way hypothesis testing was carried out by looking at the significance level of the value. The path coefficient indicated by the t-statistic value must be above 1.96 for an alpha of 5 percent.

Based on the results of the validity test using the Statistical Product and Service Solutions (SPSS) version 24 program, it was found that most of the statement items in the research instrument indicated that the questionnaire was suitable for further use. This can be seen from the calculated r-value, which ranges from 0.381 to 0.779; this value is more significant than 0.361 as stipulated. The resulting Cronbachs alpha value ranges from 0.509 to 0.879, indicating it is more critical than the r table (0.361).

C. RESULT AND DISCUSSION

1. Green Gang Manager Capacity

The capacity of the Green Alley Manager is a description of the individual's personal ability to support yard land management activities for the provision of private and public green open space. It is crucial to increase this capacity according to the development of time. This follows the philosophy of continuity in counseling starting from knowing, willing and able (Herawati et al., 2017). The level of management capacity includes technical, managerial, and social power in managing the activities of the Green Gang Program.

The level of Green Gang Manager capacity in DKI Jakarta Province is in the medium category. This shows that the capacity level of the Green Gang Manager is quite

understanding in terms of carrying out activities. In more detail, an explanation of each Green Gang Manager capacity level can be seen in Table 1.

Table 1 Capacity Level of Green Alley Managers

Internal Factors	Category	Amount	
		Person	Percent
Technical	Very low (Score 6-11)	0	0
	Low (Score 12-15)	50	14.7
	Medium (Score 16-19)	169	49.7
	High (20-24 Score)	121	35.6
Managerial	Very low (Score 5-8)	2	0.6
	Low (Score 9-12)	76	22.4
	Medium (Score 13-16)	217	63.8
	High (Score 17-20)	45	13.2
Social	Very Low (Score 5-8)	1	0.3
	Low (Score 9-12)	48	14.1
	Medium (Score 13-16)	196	57.6
	High (Score 17-20)	95	27.9

Information: n = 340

2. Technical Capacity

Technical capacity is the ability of the Green Gang Manager related to the specialized cultivation of plants in the green alley. These technological capabilities include cultivating land, seed, plant, determining the criteria for land area, the right time for watering, plant maintenance, identification of pests, and choosing the right harvest time. In addition, the technical ability to apply environmentally friendly plant cultivation principles is also an important part.

Table 2 shows the technical capacity of the Green Alley Manager for plant cultivation activities in the green alley is in the medium category, namely 49.7 percent. This indicates that the Green Gang Manager has sufficient understanding and reasonable confidence in the technical aspects of plant cultivation, including the right time for watering plants, identifying plant pests/diseases, and the right time for harvesting crops. However, technical capabilities are also low because Green Gang Managers do not cultivate the soil for planting media (Kurmalawati, Yuliarti & Raijani, 2020).

Sufficient technical capability will support the success and independence of farmers. The ability of farmers to know, master, understand, and implement technical management principles will increase the success of farmers (Suprayitno et al., 2011).

3. Managerial Capacity

The managerial capacity of green alley managers for green alley program activities is in the medium category, which is 63.8 percent. This means that the Green Gang

Manager has sufficient managerial ability in managing his group management. Based on the results of the field visit in December 2019, it was known that the Green Gang Managers had not all implemented modern management, such as providing guest books and cash books.

Based on in-depth interviews, information was obtained that people who have carried out Green Gang Program activities tend to invite other residents to cultivate plants (Diehl & Oviatt, 2019). Although sometimes there is resistance, the movers are not deterred. They continue to socialize during social gatherings, recitations, and other informal gatherings (Harris, Lyon, Miller & Zhang, 2020). The results of Subagio's research (2008) found that the factors causing the low capacity of farmers were the lack of compatibility between innovation and the limitations of farmers in mastering economic assets.

4. Social Capacity

The social capacity of the Green Gang Manager is in the medium category, namely 57.6 percent. This means that, in general, the Green Gang Manager has sufficient understanding and skills to communicate. It is easy to adapt to the environment to anticipate the emergence of conflicts. However, they cannot collaborate with external parties, so there are not many government and private agencies that provide training assistance or funds to develop green alleys. The donation for plant seeds, pots, and hydroponics is only from the KPKP Service and the DKI Jakarta Sub-dept., which are members of the Green Gang Program.

Based on in-depth interviews, information was obtained that the community environment, such as farmer groups, schools, and RPTRA, prioritized plants, hydroponics, and pots. After which a survey of the location of the green alley will be carried out. If you meet the requirements, immediate assistance is given (Dong, Zhu, Li, Wang & Gajpal, 2019). As a means of social interaction, Gang Hijau becomes a means of gathering for the public on holidays to have light discussions because, on weekdays, they are both busy.

Then to communicate, the Green Gang Manager creates a WhatsApp Group (WA Group). The social skills of the Green Gang Manager are formed through an informal social learning process because they already know each other. So it can be said that, in general, farmers know, are willing and able to establish harmonious social relationships and interact with other individuals (Suprayitno et al. 2011).

5. Factors Affecting the Capacity of Green Alley Managers

Partial Least Square (PLS) analysis was conducted to determine the effect of individual characteristics, cosmopolitan, stakeholder support, and level of participation on the capacity of green alley managers. The first stage is first-order

confirmatory factor analysis (CFA), and the second stage is through PLS model analysis to test the significance of the hypothesis through the bootstrapping process.

The first stage analysis through the algorithm iteration process was carried out several times because when it was first carried out, several indicators had a loading factor value below 0.5 which indicated that these indicators were not valid and reliable. The hand does not reflect each latent variable, so it must be removed from the model. The measurement model (outer model) is presented in Figure 1. At the same time, the structural model (inner model) is shown in Table 2.

The evaluation of the measurement and structural models carried out on the results of the PLS analysis shows that the capacity of the Green Gang Manager is influenced by individual characteristics, cosmopolitan level, stakeholder support, and participation level. The structural equation of the factors that affect the capacity of green alley managers is Y1 = 0.184X1 – 0.143X2 + 0.147X3 + 0.566X4 + 0.569. The R2 value of 0.431 indicates that 43.1 percent of the green alley management capacity is influenced by the factors studied in this study. In comparison, 56.9 percent is influenced by other factors outside of this study.

Green Gang Manager capacity is reflected by all latent capacity variables consisting of technical, managerial, and social abilities. This is because all the latent variables have a loading factor above 0.5, as stipulated.

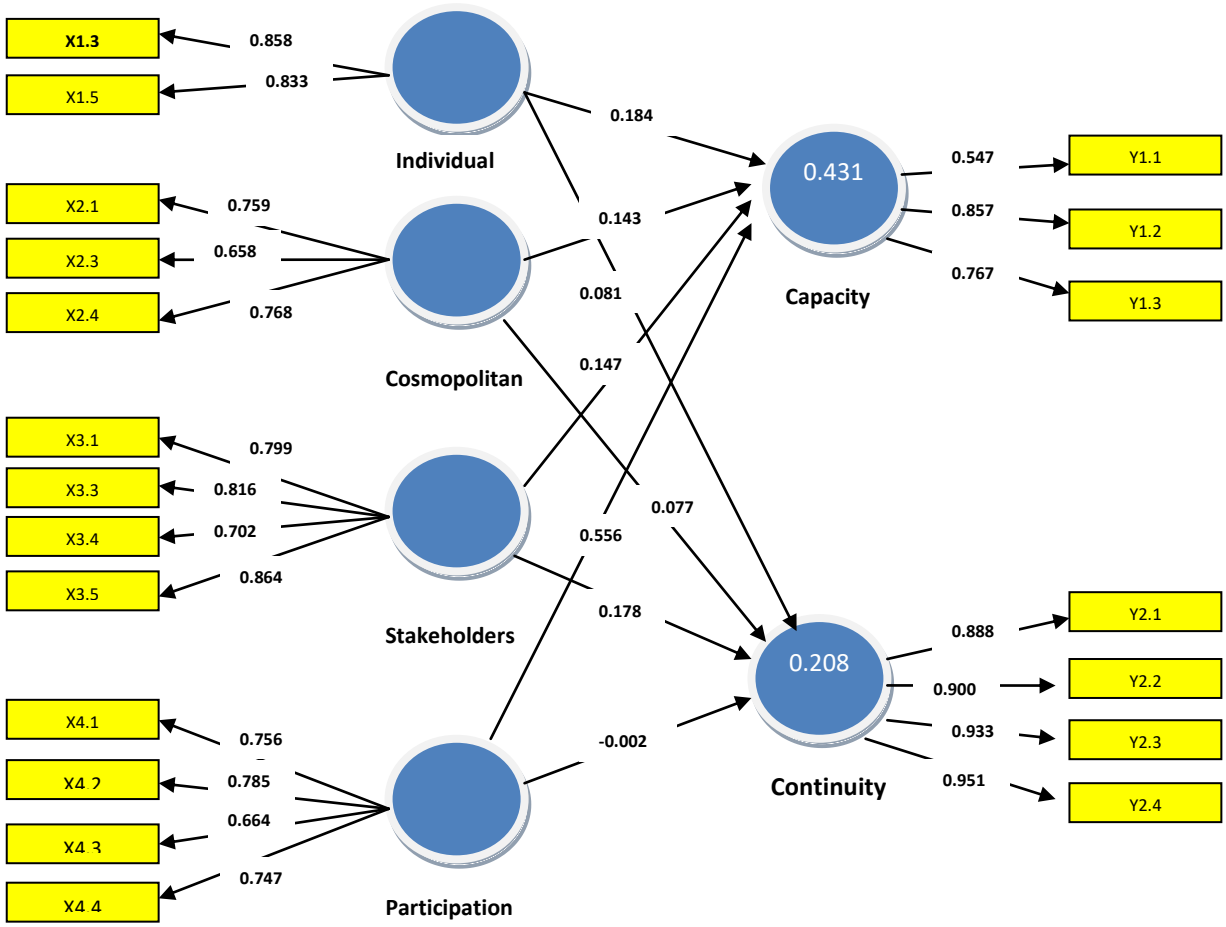

Figure 1 Measurement Model (Outer Model)

Table 2 The Significance Value of the Latent Variable Capacity of the Green Open Space Program Manager

No	The Respective Influence Matrix Latent variable	Path Coefficient	T- Count	Significance
1	Individual Characteristics => Management capacity	0,184	4,801	Significant
2	Cosmopolitan => Managing capacity	-0,143	2,354	Significant
3	Stakeholder support => Management capacity	0,147	2,295	Significant
4	Participation rate => Management capacity	0,566	11,055	Significant

Information: t-count value > t-table value (1.96) = significant, = 5 percent

Individual characteristics have a positive and significant effect on the capacity of the Green Gang Manager. Unique features are reflected by non-formal education and motivation. The higher the non-formal education and reason, the higher the power of the manager. Non-formal education is seen from the counseling and training activities that are followed. Although non-formal education is rarely carried out in

the research area, when there is an implementation of training and counseling activities, the manager's knowledge of green alleys increases.

Extension workers or informants during training usually provide information that follows the manager's wishes, such as plant cultivation procedures, to understand the information. The data is finally applied in green alley activities. Managers highly expect the presence of extension workers to have new knowledge about green alleys. According to Sunartomo (2016), the relationship between farmers and extension workers is related to how extension workers can change the knowledge, skills, and attitudes of farmers to become independent.

The motivation of the manager also influences increasing the capacity of the Green Gang Manager. The higher the reason, the capacity of the green alley manager will increase. The motivation is seen from the manager's desire to do green alleys, such as getting fresh vegetables, suppressing the air population, or just doing a hobby. The manager's strong desire is to have a high enough interest in utilizing marginal land to be more helpful to increase their abilities. Therefore, increasing the motivation of managers is essential so that the capabilities of the Green Gang Managers increase. As Ruhimat (2015) stated, efforts to improve the cause of farmers in the application of the agroforestry system can be made by growing farmers' capacity to the agroforestry system.

The cosmopolitan level has a significant and negative effect on the capacity of the Green Gang Manager. Cosmopolitanism is reflected by contacts outside the community, group availability, and media exposure. The less the Green Gang Manager interacts with the outside world, the higher the capacity it has. This is because the power of the Green Gang Manager is already high, so there is no need to interact with the outside world. This is like the research of Lestari et al. (2019); the cosmopolitan level of agro-tourism farmers has a very significant adverse effect on the capacity to evaluate farmers' information.

Cosmopolitan, which has a negative effect, is an exciting thing in this study. Infrequent contact outside the community makes the management capacity high. This shows that it is better not to need a lot of contact with the outside world in carrying out this activity because it can cause information bias. More and more information makes managers confused about what should be done so that, in the end, it is not implemented. In addition, the more contact with the outside world, the more comments about the green alley.

Group exposure is also interesting because it has a negative effect. This is because the interaction in the group is currently not very active. Interaction in groups is very rarely done because it is more individual in carrying out activities. Generally, green alley activities are carried out independently in the homes of each manager, plus counseling activities are also rarely carried out. The media exposure also has a negative effect because general managers already understand the cultivation

procedures that extension workers have taught, so it does not become a problem when managers are not active on social media. The more frequent interaction with the outside press can also create information bias which confuses managers in carrying out green alley cultivation activities.

Stakeholder support has a positive and significant impact on the capacity of green alley managers. Stakeholder support is reflected by the role of the government, the part of the community, the role of the media, and the role of extension workers. The higher the support from the government, the community, the media, and extension workers, the capacity of green alley managers will increase. The government plays a significant role in green alley cultivation activities. This can be seen from several green alley management activities assisted by the government, such as when making proposals for the needs of plant seeds. In addition, the government provides conditions for hydroponic cultivation, such as paragon. The government that offers a variety of facilities needed for green alleys can increase the enthusiasm of managers so that, in the end, the capacity of managers will increase. Green alley managers take advantage of these various facilities to learn new things, which will increase their power. The government plays a role in this in the context of empowering the surrounding community. According to Darmansyah et al. (2014), the government has a responsibility in terms of community empowerment. The primary process of community empowerment is the granting of authority and community capacity building.

Community support also encourages capacity building for green alley managers. Community support can be seen from the intensity of discussions when there are green alley extension activities by extension workers. The community often attends, although outreach activities are rarely carried out. The presence of the community becomes a place for exchanging ideas between members so that managers will increase their capacity in managing green alleys. The company of the community also shows that there is still community awareness to increase capacity among them. According to Dwiyanto and Jemadi (2013), mobilizing community independence requires public attention through the concept of capacity development, which is an effort to increase the community's ability.

The role of the media also influences increasing the capacity of managers. However, the role of the media in this study is still relatively low because the part of the media is nothing more than reporting when there are visits from related officials. The existence of the media should be to promote activities so that many people are interested in doing this activity. In addition, the media has not played a role as a source of information to increase the capacity of green alley managers. On the other hand, the role of the media, which only covers visits by related officials, impacts capacity building because it motivates managers to continue developing their businesses. The subordinate position of the media is similar as stated by Oktavia (2019) that the access of agribusiness actors is still low due to the low availability of

information media that presents programs containing freshwater fishery agribusiness and the difficulty of agribusiness actors in obtaining information from the existing media.

The role of extension workers is constructive in terms of capacity building of green alley managers. The existence of extension workers in delivering innovations related to green alleys, assisting managers when carrying out activities, and facilitating managers with other parties significantly impact capacity building. Green alley activities cannot be separated from the role of extension workers, so that extension workers are always a place for managers if they want to ask questions. According to Listiana (2017), the role of extension workers is significantly related to the level of application of IPM technology for lowland rice. The activity of the extension agent in carrying out the main tasks and functions of the extension worker in analyzing, stimulating, facilitating, and motivating farmers can increase the capacity of farmers.

The level of management participation also has a positive and significant effect on the capacity of green alley managers. The story of the involvement is reflected by all research sub-variables consisting of planning, implementation, utilizing results, and evaluation. The higher the participation of the green alley program, the higher the capacity of the green alley manager. As stated by Ruhimat (2017), the involvement of all members of farmer groups is the second factor that directly influences the institutional capacity of farmer groups.

Participation at the planning stage affects the capacity of managers. Planning is seen from the involvement of managers in the preparation of activities or contribute ideas or ideas during meetings of the implementation of the green alley program. Although participation at this stage is generally low, involvement here can increase the capacity of green alley managers. The more often the manager attends, the more he will know about the green alley program. This amount of information makes the capacity of managers increase.

The implementation of green alley activities is seen from the beginning of cultivation to harvest. Although the participation of managers is low, it can increase the capacity of managers. The more active managers are involved in this activity, the more knowledge and skills will improve. The manager of Gang Green, who often selects seeds, will understand more about quality seeds. Managers who actively use agricultural technology tools will be more skilled. Likewise, with watering, fertilizing, weed control, and harvesting activities.

At the participation stage, the level of utilizing the results can improve the skills of the manager. The use of plants from the green alley follows the objectives, namely to obtain food ingredients, obtain healthy vegetable ingredients, collection of ornamental plants, and the ease of securing family medicinal plants and variations of family cooking menus. Involvement in the evaluation of green alley programs can also increase the capacity of green alley managers. The increasing power can be from

technical and managerial capacity. Technical ability with the evaluation, the manager understands the cultivation procedure from the initial stage to harvest and then can compare with previous harvests or other commodities. While the managerial aspect, the manager understands the strategies for planning a program based on the program evaluation carried out.

D. CONCLUSION

The capacity of Green Gang Managers in DKI Jakarta Province is in the medium category. This shows that the capacity level of the Green Alley Management is quite understanding in terms of the use of yard land for green alleys for the availability of green open space in Jakarta. Individual characteristics have a positive and significant effect on the capacity of green alley managers. Unique features are reflected by non-formal education and motivation. Stakeholder support has a positive and significant impact on the ability of green alley managers. Stakeholder support is reflected by the role of the government, the part of the community, the role of the media, and the role of extension workers. The level of management participation also has a positive and significant effect on the capacity of green alley managers. The story of the involvement is reflected by all research sub-variables consisting of planning, implementation, utilizing results, and evaluation.

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