

# Strategy to develop environmentally friendly City in The Peri urban area of Gambut District based on community participation

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## Strategy to develop environmentally friendly City in The Peri urban area of Gambut District based on community participation

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### Abstract

The level of community participation is still weak. Ideally, the Environmentally Friendly (EFC) program will be realized if community participation is high. EFC in PUA (Peri Urban Area) Gambut District is based on community participation so that PUA will be able to realize the development of an environmentally friendly city development plan in the Peri Urban Area, Gambut District, related organizations that can be carried out as it should. The method used in this study is a SWOT analysis (Strengths, Weaknesses, Opportunities, Threats). The results of the collection of strategies that involve the community in the construction of Environmentally Friendly City in PUA Gambut District using the government and stakeholders in the development of Environmentally Friendly City (EFC) in the PUA Gambut District through the fulfillment of development programs and infrastructure supporting the running of Environmentally Friendly City In order to survive as part of the air circulation system (city lungs) and microclimate regulator, ground air excavation so as to make the Gambut District area, socialization for related communities requires Green Open Space (GOS) both in terms of ecology, economy, social and culture, in order to improve green open space can be sustainable, socialization for the community with self-help groups regarding the prohibition of the results of the development of Environmentally Friendly Cities in PUA Gambut District.

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## Introduction

The idea of community participation today continues to increase because people throughout the world demand the right to be involved in the development process. In Indonesia, the development paradigm currently being developed is the paradigm of community empowerment with community participation as the core. This paradigm, the government no longer acts as a provider, but must be a facilitator of all development planning. The main actors in development must be the community itself. That is, trust and opportunities should be given more by the government to the community so that all potentials, both natural potential and human potential possessed by Indonesia can be grown and utilized to achieve National Development goals (Bratakusumah, 2005 in Akbar *et al.*, 2019).

The success of a development program is highly dependent on community participation. The success rate of a program will be high if the level of community participation is also high. Community participation itself will be influenced by several factors, including factors of age, cosmopolitan level, level of formal education, length of stay and level of respondents' knowledge of the program. This was shown by Amelia (2019) that these factors had influenced the participation of Margasari Village community in the Lampung Mangrove Center Program. While the level of community participation in the planning, implementation, evaluation of the implementation to enjoy the results and utilization are still in the category of being made the program is still not maximally successful.

Efforts to support the success of a program, community participation in development must be increased. Also included in the development of Environmentally Friendly Cities (EFC) in Peri Urban Areas (PUA) because along with the dynamics of urban development, nowadays development is increasingly leading to PUA which is characterized by a mixture of physical appearance in urban and rural areas, but unfortunately PUA itself has no plans clear development, even though the growth of the region is

far greater than other regions for that we need a policy that is able to control the use of space and the use of productive lands in the PUA (Kinanti, 2013).

One model of urban development is the Environment Friendly City (EFC). The concept of EFC is expected to provide comfort and a healthy environment for city residents (Satterthwaite, 1997) and in favor of the principle of Sustainable Urban development. EFC is a symbol of nature's closeness to development with the aim that each city in the world contributes to reducing carbon emissions by relying on community participation.

Gambut District is one of the PUA in Indonesia dubbed "Kindai Limpuar" meaning abundant rice barn was once the largest local rice producer in South Kalimantan Province and most of the land is Sustainable Food Agricultural Land (SFAL). Therefore we need a study that gives special attention to the PUA so that the occurrence of a form and process of physical development of new cities that lead to negative impacts can be controlled. Moreover, in the future the PUA will turn into a city entirely.

The sustainability of a public policy is also determined by people's participation in it. Especially when the government experiences limited potential and capacity, the community can be a provider of alternative resource support. This is also the background of the need to involve community participation in the development of EFC in PUA Gambut District. The limited Regional Budget of Revenue and Expenditure of Banjar Regency is the basis for integrating community participation as the main support for the success of EFC development in the PUA. The effort also refers to Regional Regulation Number 3 of 2013 concerning Banjar Regency 2013-2032 Spatial Planning and Green City Development Guidelines.

Green City Guide (2011) is explained, so that EFC can be realized there are eight attributes that must be followed and interrelated namely: (1) planning and designing a sustainable city (green planning and design); (2) procurement of green open space; (3) construction of green buildings that are energy

friendly (green building); (4) integrated waste management (green waste); (5) the use of environmentally friendly transportation (green transportation); (6) sustainable water management (green water); (7) utilization of energy sources that are efficient and environmentally friendly (green energy); and (8) developing a network of cooperation between the government, the community and the business community (green community).

The parameter of EFC development evaluation in PUA Gambut District is based on the Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number P.53/Menlhk/Setjen/Kum. 1/6/2016 concerning Guidelines for Adipura Program Implementation. Based on this regulation, monitoring in the field of waste management and green open space must be carried out in urban facilities and infrastructure, or at least in medium and simple settlements, arterial and collector roads, markets, shops, offices, schools, hospitals and/or puskesmas, bus terminals and/or urban transport terminals, urban forests, city parks, open channels, garbage banks or other waste management models and municipal scale waste management facilities. These monitoring locations are used as parameters for the assessment of EFC development in the PUA of Gambut District.

For the world of academia is highly expected role in bridging the role of government and society in environmental development in this case the development of green open spaces. Hope this research can provide input to the government to determine the strategy of developing environmentally friendly areas, especially in the Peat subdistrict of South Kalimantan.

### Materials and methods

#### Materials

Subjects are Managers, Field Implementers and communities involved, Objects are core plants and intercrops. While the tools used in this study are stationery, calculating equipment, cameras, laptops, GPS, maps of research locations, questionnaires, and statistical data processing programs.

#### Methods

*This research will be carried out since April*

2020 until September 2020. The research will be carried out in Gambut and Gambut Barat Gambut Districts. Site selection in this study uses the criterion based selection method (Kanto, 2003). The determination of the research location refers to the spatial pattern of Gambut District in Banjar Regency Regional Regulation Number 3 of 2013 concerning the Spatial Planning of the 2013-2032

Banjar Regency, which shows that the Gambut and West Gambut Villages mostly have urban settlement patterns and food crop agriculture.

#### Data collection

Data collection techniques in this study consisted of observations, interviews and document studies related to the condition of Environmentally Friendly City in The Peri Urban Area of Gambut. Sugiyono (2016) argues that data collection techniques are the most strategic step in research, because the main purpose of research is to obtain data. In general and dividing data collection techniques into four types namely observation, interviews, documentation and combination/triangulation.

Data collection techniques that will be used in research using three techniques presented by Sugiyono above, namely observation, interviews and documentation. The stages of research objectives for the analysis of these success factors include:

- a. Sketch of planting location includes planting area, type of plant, crop pattern and map of planting area,
- b. Identification of factors that influence success with the method of work identification in the field with the planting process

### Results and discussion

#### Formulation of Internal Factors

Based on the results of the study of documents, literature, questionnaires, FGD results and socio-cultural and economic conditions of the community in the study area, internal factors are obtained as presented in Table 1 below.

**Table 1.** Formulation of internal factors and the results of respondents' assessments of internal factors.

| No            | Internal Factor  | Value | Criteria |
|---------------|--|-------|----------|
| 1             | Green Open Space is part of the air circulation system (city lungs) and microclimate regulator, absorption of ground water so as to make the Gambut District and surrounding areas safe from flooding. | 9,0   | S        |
| 2             | The maintenance of mutual cooperation culture and the level of closeness between residents are very good, it is easy to cooperate in the development of environmentally friendly cities.               | 8,5   | S        |
| 3             | Improving comfort, beautifying the environment and forming factors of urban architectural beauty in Banjar District.   | 8,5   | S        |
| 4             | Being a means or object of ecotourism / recreation, a place and object to explore knowledge / education and training in learning nature.   | 8,0   | S        |
| 5             | The level of regional security is relatively good, not vulnerable to social conflict.  | 7,5   | S        |
| 6             | Public and social facilities are still lacking   | 6,0   | W        |
| 7             | The still low awareness of the community towards environmental cleanliness, there are still residents who litter.  | 5,5   | W        |
| 8             | The level of economic welfare is still relatively low, incomes below the MSE.  | 5,5   | W        |
| 9             | The community does not have the initiative to continue the government program to improve the environmental quality of the green space.   | 5,0   | W        |
| Average Value |  | 7,0   |          |

Note: values > 6.7 mean good, values < 6.7 mean less

Based on Table 22 shows the average of all internal factors that is equal to 7.0. Then the internal factors are divided into two parts. Factors that have a value above the average value, grouped as strength or strength (S). Values below the average are grouped as weaknesses (W).

*Formulation of Internal Factors*

The results of the study of documents, literature, questionnaires, the results of interviews and socio-cultural, and economic community, then obtained external factors as can be seen in the following Table 2.

**Table 2.** Formulation of external factors and the results of respondents' assessment of external factors.

| No      | External Factor   | Value | Criteria |
|---------|---|-------|----------|
| 1       | The existence of an environmentally friendly city development program by the Regional Government of Banjar Regency has the potential to alleviate the slums of the region and will be more effective if the program is integrated with its goals and targets, namely realizing the Banjar District especially the PUA in Gambut District into an environmentally friendly area. | 9,5   | O        |
| 2       | Open entrepreneurial opportunities for the community (trading /services) in the midst of a dense population of urban areas.   | 9,0   | O        |
| 3       | The existence of the Intan Barakat Green Community Forum (FKH) whose program focuses on activities for the environment with the mission of realizing the city of Martapura as a Green City with Islamic Character based on space development.   | 8,5   | O        |
| 4       | The availability of development sites for Environmentally Friendly City   | 8,0   | O        |
| 5       | The threat of changing the function of green space becomes non- green space (which has a higher economic value) such as a service or industrial trade area.   | 6,0   | T        |
| 6       | Limited budget of the city government so that the handling of green space can not be done simultaneously even for adjacent administrative areas (causing social jealousy).  | 6,0   | T        |
| 7       | The uneven level of activity of BKM / KSM (non-governmental groups) which has become an extension of the implementation of various green open space programs from the government.   | 5,0   | T        |
| Average |   | 7,4   |          |

Note: a value > 7.0 means good, a value < 7, 0 means less good

The results of the FGD (Focus Group Discussion) and the questionnaire against the respondents obtained values for each external factor. This value is obtained

on average from all external factors which is equal to 7.4. Then the internal factors are divided into two parts. Factors that have a value above the average value, are classified as opportunities (O). Values that are below the average are classified as threats (T).

*Strategy Formulation*

Internal factor analysis of the development of Environmentally Friendly City (EFC) in PUA Gambut District is the first step in formulating a management strategy, this analysis is carried out to identify the

factors that are the strengths or weaknesses of a business. The results of identifying the strengths and weaknesses of a business can be used as a basis for determining business management and development strategies so that market opportunities can be utilized properly (Rangkuti, 2005). The results of the internal factor analysis (Internal Strategic Factors Analysis Summary/IFAS) for the Development of Environmentally Friendly City (EFC) in the PUA of Gambut District each have 5 strength factors and 4 selected weakness factors can be seen in Table 3.

**Table 3.** Internal factor analysis (IFAS) for the Development of Environmentally Friendly City (EFC) in the PUA of Gambut District.

| Internal Strategic Factor Analysis Summary (IFAS) |  |        |        |       |
|---|--|--------|--------|-------|
| No  | Internal factor Strength (S)   | Weight | Rating | Value |
| 1   | Green Open Space is part of the air circulation system (city lungs) and microclimate regulator, absorption of ground water so as to make the Gambut District and surrounding areas safe from flooding. | 0,09   | 4      | 0.36  |
| 2   | The maintenance of mutual cooperation culture and the level of closeness between residents are very good, it is easy to cooperate in the development of environmentally friendly cities.               | 0,08   | 3      | 0.24  |
| 3   | Improving comfort, beautifying the environment and forming factors of urban architectural beauty in Banjar District.   | 0,08   | 3      | 0.24  |
| 4   | Being a means or object of ecotourism / recreation, a place and object to explore knowledge / education and training in learning nature.   | 0,08   | 3      | 0.24  |
| 5   | The level of regional security is relatively good, not vulnerable to social conflict   | 0,07   | 4      | 0.28  |
|   | Total of Strength  | 0.40   |        | 1.36  |
| No  | External Factor Weakness (W)   | Weight | Rating | Nilai |
| 1   | Public and social facilities are still lacking   | 0,06   | 4      | 0.24  |
| 2   | The still low awareness of the community towards environmental cleanliness, there are still residents who litter.  | 0,05   | 3      | 0.15  |
| 3   | The level of economic welfare is still relatively low, incomes below the MSE.  | 0,05   | 3      | 0.15  |
| 4   | The community does not have the initiative to continue the government program to improve the environmental quality of the green space.   | 0,05   | 2      | 0.10  |
|   | Total of Weaknesses (W)  | 0.21   |        | 0.64  |
|   | Number of Strategies + Weaknesses (S + W)  | 0.61   |        | 2.00  |

(Source: Primary data processing, July 2020) Information.

1) The weight scale starts from 1.0 (most important) - 0.0 (not important), all of the weights do not exceed the total value of 1.00. The assignment of weights is based on the influence of these factors on the development strategy.

2) Rating scale starts from number 4 (outstanding) - 1 (poor). Rating based on the influence of these factors on the condition.

Table 4 shows that the strength factor that has the highest value is green space being part of the air circulation system (city lungs) and microclimate regulator, groundwater absorption making the Gambut District and surrounding areas safe from flooding with a value of 0.36. The lowest value is the maintenance of mutual cooperation culture and the level of closeness between residents is very

good, easy to work together in the development of environmentally friendly cities, improve comfort, beautify the environment and form the factor of urban architectural beauty in Banjar District, becoming a means or object of ecotourism/recreation, housing and object of exploring science/education as well as training in studying nature with a value of 0.24. The weakness

factor shows that the highest value is the lack of public and social facilities with a value of 0.24. Factors The community does not yet have the initiative to continue government programs to improve the environmental quality of the green space with a value of 0.10 is the lowest factor. An external factor analysis (EFAS) for tourism development is presented in Table 4.

**Table 4.** Analysis of external factors (EFAS) for the Development of Environmentally Friendly City (EFC) in the PUA Gambut District.

| External Strategic Factor Analysis Summary (EFAS) |   |        |        |       |
|---|---|--------|--------|-------|
| No  | External Factor Opportunity (O)   | Weight | Rating | Value |
| 1   | The existence of an environmentally friendly city development program by the Regional Government of Banjar Regency has the potential to alleviate the slums of the region and will be more effective if the program is integrated with its goals and targets, namely realizing the Banjar Regency, especially the PUA in Gambut District, to become an environmentally friendly region. | 0,09   | 4      | 0.36  |
| 2   | Open entrepreneurial opportunities for the community (trading / services) in the midst of a dense population of urban areas.  | 0,09   | 4      | 0.36  |
| 3   | The existence of the Intan Barakat Green Community Forum (FKH) whose program focuses on activities for the environment with the mission of realizing the city of Martapura as a Green City with Islamic Character based on space development.   | 0,09   | 2      | 0.18  |
| 4   | The availability of development sites for Environmentally Friendly City   | 0.08   | 3      | 0.24  |
| Total of Opportunity (O)                          |   | 0.35   |        | 1.14  |
| No  | External Factor Threat (T)  | Weight | Rating | Value |
| 1   | The uneven level of activity of BKM / KSM (non- governmental groups) which has become an extension of the implementation of various green open space programs from the government.  | 0.06   | 3      | 0.18  |
| 2   | Limited budget of the city government so that the handling of green space can not be done simultaneously even for adjacent administrative areas (causing social)  | 0.05   | 2      | 0.10  |
| 3   | The threat of land use change for green space becomes non- green space (which has a higher economic value) such as service or industrial trade areas.   | 0.06   | 2      | 0.12  |
| Total of Threat (T)                               |   | 0.17   |        | 0.50  |
| Number of Opportunity + Threat (O+T)              |   | 0.52   |        | 1.64  |

(Source: Primary data processing, July 2020)

Table 4 shows the opportunity factor that has the highest value is the existence of an environmentally friendly city development program by the local government of Banjar District, which has the potential to alleviate regional slums and will be more effective if the program is integrated with its goals and targets, namely realizing the Banjar Regency, especially the PUA in the Peat District, into the area environmentally friendly and open opportunities for entrepreneurship for the community (trading/ service) in the midst of dense population of the city

area with a value of 0.36. The variable that has the lowest score is the Green Community Forum (GCF), Intan Barakat whose program focuses on activities for the environment with the mission of realizing the city of Martapura as a Green City with Islamic Character based on spatial development with a value of 0.18.

Threat factor that has the highest value The uneven level of activeness of the BKM/KSM (non-governmental groups) which is an extension of the implementation of various green open space

programs from the government with a value of 0.18 and the lowest is the limitations of the city government budget so that handling of green open space cannot be done simultaneously even for adjacent administrative areas (causing social jealousy) with a value of 0.10.

The IFAS and EFAS results above are continued by calculating the following: total strength and opportunity ( $S + O$ ) =  $1.36 + 1.14 = 2.50$ ; number of weaknesses and opportunities ( $W + O$ ) =  $0.64 + 1.14 = 1.78$ ; the amount of strength and threat ( $S + T$ ) =  $1.36 + 0.50 = 1.86$ ; number of weaknesses and threats ( $W + T$ ) =  $0.64 + 0.50 = 1.14$ .

Based on Table 26 the results of calculations from the score of internal factors in the Green City Development strategy (EFC) in the PUA Gambut District, namely the strength factor reduced by weaknesses obtained X value as a horizontal axis =  $1.36 - 0.64 = 0.72$  so the X-axis value in the SWOT diagram is 0.72.

The analysis of external factors is intended to identify the factors that are opportunities and threats faced by the Government. Opportunity is a business or activity that is built/operating profitably while threat is a challenge that arises due to environmental changes that can reduce the profit of a business (Philip Kotler, 2002 in Rahayu & Wanti, 2014).

The survey results to the location and the opinions of several respondents who were involved and who were not in the effort to develop an Environmentally Friendly City (EFC) at the PUA of Gambut District obtained several external variables that have different degrees of importance.

The results of the assessment of the weighting and rating of external factors by selected respondents are 4 opportunity factors and 3 threat factors selected as presented in the external strategy factor matrix which can be seen in Table 26, the calculation results of the

score scores of external and internal factors in the Green City Development strategy (EFC) in PUA Gambut District, namely the opportunity factor reduced by the threat factor obtained by the Y value as a vertical axis =  $1.14 - 0.50 = 0.64$  so the Y axis value in the SWOT diagram is 0, 64.

This value is in quadrant 1 is the preferred strategy in the development of Environmentally Friendly City (EFC) in the GPU Sub-District PUA because it has great strength and opportunities in the success of the Green City Development (GCD) development activities in the Gambut Sub-District PUA.

The SWOT matrix is built based on the analysis of external and internal strategic factors arranged into four main strategies, namely: SO, WO, ST and WT. Based on the results of the calculation of the scores on the matrix based on Tables 3 and 4, the strategy of the Development of Environmentally Friendly Cities (EFC) in PUA Gambut District is in the quadrant I position (0.72; 0.64).

Quadrant I (Aggressive Strategy) that is, the strength of the company must be able to take advantage of existing opportunities while overcoming all the weaknesses that arise and is a favorable situation, the company has the opportunity and strength so that it can take advantage of existing opportunities. The position of the Green City Development (EFC) in PUA Gambut District in the form of a SWOT analysis diagram as shown in Fig. 18 below.

Green City Development Strategy (EFC) at PUA Gambut District that can be carried out at this time as explained in Table 5.

The formulation of internal and external factors compiled a development strategy based on the combination of strengths with opportunities into SO strategies, strengths with threats into strategies ST, weakness with opportunity becomes WO strategy and weakness with threat becomes WT strategy. The details of these strategies are presented in Table 5.



**Table 5.** SWOT Analysis Matrix for the Development of Environmentally Friendly Cities (EFC) at PUA Gambut District.

|          | Internal  | Strength (S)  | Weakness (W)   |
|----------|---|---|--|
| External |   | <p>a. Green Open Space is part of the air circulation system (city lungs) and microclimate regulator, absorption of ground water so as to make the Gambut District and surrounding areas safe from flooding.</p> <p>b. The maintenance of mutual cooperation culture and the level of closeness between residents are very good, it is easy to cooperate in the development of environmentally friendly cities.</p> <p>c. Improving comfort, beautifying the environment and forming factors of urban architectural beauty in Banjar District</p> <p>d. Being a means or object of ecotourism/recreation, a place and object to explore knowledge/education and training in learning nature</p> <p>e. The level of regional security is relatively good, not vulnerable to social conflict.</p>   | <p>a. Public and social facilities are still lacking</p> <p>b. The still low awareness of the community towards environmental cleanliness, there are still residents who litter.</p> <p>c. The level of economic welfare is still relatively low, incomes below the MSE.</p> <p>d. The community does not have the initiative to continue the government program to improve the environmental quality of the green space.</p>  |
|          | Opportunity(O)  | Strategy (S-O)  | Strategy (S – T)   |
|          | <p>a. The existence of an environmental y friendly city development program by the Regional Government of Banjar Regency has the potential to alleviate the slums of the region and will more effective if the program is integrated with its goals and targets, namely realizing the Banjar Regency, especially the PUA in Gambut District, to become an environmental y friendly region.</p> <p>b. Open entrepreneurial opportunities for the community (trading / services) in the midst of a dense population of urban areas.</p> <p>c. The existence of the Intan Barakat Green Community Forum (FKH) whose program focuses on activities for the environment with the mission of realizing the city of Martapura as a Green City with Islamic Character based on space development.</p> <p>d. The availability of development sites for Environmentally Friendly City</p> | <p>a. Utilizing the support of government and stakeholders in the development of Environmentally Friendly City (EFC) in PUA Gambut District through the fulfillment of facilities and infrastructure programs to support the Environmentally Friendly City (EFC) to be sustainable as part of the air circulation system (city lungs) and micro climate regulator, absorption of ground water to make the Gambut District and surrounding areas safe from flooding.</p> <p>b. Establish collaboration (collaboration) between the city government, academics, practitioners and the program implementation team in the field to compile the theme of development/development of green space in each village/village so that village and infrastructure improvement programs are more integrated and do not clash</p> <p>c. Optimizing the use of information systems in the green space to bridge the government and the community such as an appeal to keep green open space so that they can both keep the open green space running optimally,</p> <p>d. Utilization of the availability of land for green space development can be maximized by providing innovations to make it more attractive for people to visit in order to maintain, enjoy, recreation and utilize green space to improve the community's economy.</p> | <p>a. Involving local communities in the development of Environmentally Friendly City (EFC) in the PUA Gambut District will help increase public awareness of the environment, and utilize areas that are empty with plants such as Ketapang Kencana, Kiara Payung and Red Buds of protective trees/ornamental trees and fruit trees.</p> <p>b. Increasing the capacity and role of the internal/local community (such as BKM or KSM) in carrying out its function as a liaison between the government and the community,</p> <p>c. Provide stimulants to increase the attractiveness and role of external communities and NGOs to participate in the development of Environmentally Friendly Cities (EFC) at the PUA District of Gambut,</p> <p>d. Integrate and synchronize green open space development programs from various funding sources so that the financing scheme is more effective and efficient, right on target and does not occur double founding.</p> |

| Threat (T)   | Strategy (W-O)  | Strategy (W-T)  |
|--|---|---|
| <p>a. The uneven level of activity of BKM/KSM (non- governmental groups) which has become an extension of the implementation of various green open space programs from the government.</p> <p>b. Limited budget of the city government so that the handling of green space cannot be done simultaneously even for adjacent administrative areas (causing social jealousy).</p> <p>c. The threat of land use change for green space becomes non- green space (which has a higher economic value) such as service or industrial trade areas.</p> | <p>a. The government needs to conduct socialization to the community related to the importance of Green Open Space both in terms of ecology, economy, social and culture, so as to increase public awareness to better maintain sustainable green space.</p> <p>b. Utilizing the role of community participation to control and supervise green open space development in accordance with plans that have been budgeted by the government so that development can be carried out optimally,</p> <p>c. Arranging and controlling settlement areas dominated by building plots without land status (illegal) around the green space area gradually and without having to always be accompanied by eviction,</p> <p>d. Utilize skilled human resources to carry out the construction of Environmentally Friendly City (EFC) at PUA Gambut District so that they can indirectly reduce the unemployment rate.</p> | <p>a. Dissemination to the community by cooperating with non- governmental groups regarding the prohibition on damaging the results of the development of Environmentally Friendly Cities (EFC) at PUA Gambut District,</p> <p>b. Optimizing and increasing budgets related to green open space development at the central, provincial and city government levels.</p> <p>Conduct periodic inventory and evaluation of determining the priority of green space to be non- green space (which has a higher economic value) such as service trade or industrial areas so that the determination of the area can be clearly not affected by land conversion factors.</p> |

(Source: Primary data processing, July 2020)

Table 5, can be explained that the development of Environmentally Friendly City (EFC) in PUA Gambut District is determined in 4 (four) categories while still making the Aggressive Strategy as a reference. The description of the strategy is as follows:

1). *SO strategy (maximizing power to take advantage of opportunities)*

- a. Utilizing the support of government and stakeholders in the development of Environmentally Friendly City (EFC) in PUA Gambut District through the fulfillment of facilities and infrastructure programs to support the Environmentally Friendly City (EFC) to be sustainable as part of the air circulation system (city lungs) and micro climate regulator, absorption of ground water to make the Gambut District and surrounding areas safe from flooding.
- b. Establish collaboration (collaboration) between the city government, academics, practitioners and the program implementation team in the field to compile the theme of development/development of green space in each village/village so that village and infrastructure improvement programs are more integrated and do not clash

- c. Optimizing the use of information systems in the green space to bridge the government and the community such as an appeal to keep green open space so that they can both keep the open green space running optimally,
- d. Utilization of the availability of land for green space development can be maximized by providing innovations to make it more attractive for people to visit in order to maintain, enjoy, recreation and utilize green space to improve the community's economy.

2) *ST Strategy (maximizing strength to reduce threats)*

- a. Involving local communities in the development of Environmentally Friendly City (EFC) in the PUA of Gambut District will help increase public awareness of the environment, and utilize areas that are empty with plants such as Ketapang Kencana, Kiara Payung and Red Buds of protective trees/ornamental trees and fruit trees.
- b. Increasing the capacity and role of the internal/ local community (such as BKM or KSM) in carrying out its function as a liaison between the government and the community,

- c. Provide stimulants to increase the attractiveness and role of external communities and NGOs to participate in the development of Environmentally Friendly Cities (EFC) at the PUA District of Gambut,
- d. Integrate and synchronize green open space development programs from various funding sources so that the financing scheme is more effective and efficient, right on target and does not occur double founding.

3) *WO strategy (maximizing opportunities to reduce weakness)*

- a. The government needs to conduct socialization to the community related to the importance of Green Open Space both in terms of ecology, economy, social and culture, so as to increase public awareness to better maintain sustainable green space.
- b. Utilizing the role of community participation to control and supervise green open space development in accordance with plans that have been budgeted by the government so that development can be carried out optimally,
- c. Arranging and controlling settlement areas dominated by building plots without land status (illegal) around the green space area gradually and without having to always be accompanied by eviction,
- d. Utilize skilled human resources to carry out the construction of Environmentally Friendly City (EFC) at PUA Gambut District so that they can indirectly reduce the unemployment rate.

4) *WT Strategy (minimize weaknesses to avoid threats)*

- a. Dissemination to the community by cooperating with non-governmental groups regarding the prohibition on damaging the results of the development of Environmentally Friendly Cities (EFC) at PUA Gambut District,
- b. Optimizing and increasing budgets related to green open space development at the central, provincial and city government levels.
- c. Conduct periodic inventory and evaluation of determining the priority of green space to become non-green space (which has a higher economic value) such as service trade or industrial areas so that the determination of the area can be clearly not affected by land conversion factors.

The final stage of the SWOT analysis is to determine the key success factors by looking at the relationship of the strategy with strategic actions or action actions for the Development of Environmentally Friendly Cities (EFC) at PUA Gambut District. The strategic actions referred to are actions carried out based on active behavior, specific actions designed to achieve goals clearly and measurably so that they are related to rationality, maximization, success oriented. Determination of the key factors for success of a strategy will be selected the highest value from the sum of the linkages of the strategies with the three factors above shows that based on the sequence of scores from highest to lowest score, 4 management strategies with the highest score are the key to success for the basis for formulating the City development strategy model Environmentally Friendly (EFC) at PUA Gambut District 4 the formulation of the strategy is as follows:

1. Utilizing the support of the government and stakeholders in the development of Environmentally Friendly City (EFC) in PUA Gambut District through the fulfillment of facilities and infrastructure programs to support the Environmentally Friendly City (EFC) to be sustainable as part of the air circulation system (city lungs) and regulators microclimate, absorption of ground water so as to make the area of Gambut District and surrounding areas safe from flooding.
2. Involving the local community in the development of Environmentally Friendly Cities (EFC) at PUA Gambut District will help increase public awareness of the environment, and utilize areas that are empty with plants such as Ketapang Kencana, Kiara Payung and Red Buds of protective trees/ornamental trees and fruit trees - fruits.
3. The government needs to conduct socialization to the community related to the importance of Green Open Space both in terms of ecology, economy, social and culture, in order to increase public awareness to better maintain sustainable green space.
4. Dissemination to the community by cooperating with non-governmental groups regarding the

prohibition on damaging the results of the development of Environmentally Friendly Cities (EFC) at PUA Gambut District.

### Conclusion

The model of the development strategy of Environmentally Friendly City (EFC) in the PUA of Gambut District is to utilize the support of the government and stakeholders in the development of Environmentally Friendly City (EFC) in the PUA of Gambut District through the fulfillment of facilities and infrastructure to support the running of the Environmentally Friendly City (EFC) so that they can be sustainable as part from the air circulation system (city lungs) and microclimate regulator, groundwater absorption so that the area of Gambut District and its surroundings are safe from flooding, involving local communities in the development of Environmentally Friendly City (EFC) in the PUA Gambut District will help increase public awareness of the environment, and utilizing areas that are empty with plants such as the Ketapang Kencana, Kiara Payung and Red Buds, protective trees/ornamental trees and fruit trees, the government needs to disseminate information to the public regarding the importance of Green Open Space in terms of ecology, economy, social and culture, a gar increase public awareness to better maintain sustainable green space, socialization to the community by working with non-governmental groups about the prohibition of damaging the results of the development of Environmentally Friendly Cities (EFC) at PUA Gambut District.

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### References

**Akbar S, Program D, Administration S, School N, Science T, Program M, Administration S, School N, Science T.** 2019. Analysis of development planning in the Banyan river village Rengat sub-district Indragiri Hulu. 1–10.

**Amelia S.** 2019. Factors related to community participation in the Lampung Mangrove Center (LMC) program in Margasari Village, Labuhan Maringgai District, Lampung Regency. In the Journal of Information and Chemical Modeling **53(9)**.  
<https://doi.org/10.1017/CBO9781107415324.004>

**Kanto S.** 2003. Sampling, Validity and Reliability in Qualitative Research. In Qualitative Research Data Analysis, Philosophical and Methodological Understanding in the Mastery of Application Model (B. Bungin (ed.); Matter of Pe). RajaGrafindo Persada.

**Kinanti S.** 2013. Development of Urban Peri Regions: Study of Demographic Perspectives and Social and Economic Conditions of the Community (Case Study: Depok District, Sleman Regency). Pwk Engineering (Urban Area Planning) **2(3)**, 727-737.

**The Minister of Environment and Forestry of the Republic of Indonesia Number.** P.53/Menlhk/Setjen/Kum.1 / 6/2016

**Green City Guide.** 2011. Ministry of Public Works and People's Housing. Directorate General of Cipta Karya Directorate of Building Management.

**Rahayu D, Wanti S.** 2014. Competitive Advantage Strategy Analysis with SWOT Analysis Analysis at Spartan Gym Pekanbaru. Online Journal of Faculty of Economics, University of Riau Students **1(2)**, 1-15.

**Rangkuti F.** 2005. Swot analysis of the technique of dissecting a business case: reorienting the concept of strategic planning for the 21st century **101**, 1-6.

**Satterthwaite D.** 1997. Sustainable Cities or Cities Contributing to Sustainable Development? Urban Studies, **34(10)**, 1667-1691.  
<https://doi.org/10.1080/0042098975394>

**Sugiyono.** 2016. Quantitative, qualitative and R&D research methods in Bandung: Alfabeta.  
<https://doi.org/10.1017/CBO9781107415324.004>

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